# NON-BINDING ENGLISH TRANSLATION OF THE GERMAN ORIGINAL VERSION FOR CONVENIENCE PURPOSES ONLY

#### **CONTRACT REPORT**

Joint report

of the Executive Board of

STADA Arzneimittel Aktiengesellschaft, Bad Vilbel,

and

the management of

Nidda Healthcare GmbH, Frankfurt am Main,

pursuant to

section 293a Aktiengesetz (German Stock Corporation Act)

on the Domination and Profit and Loss Transfer Agreement

between

STADA Arzneimittel Aktiengesellschaft and Nidda Healthcare GmbH

19 December 2017

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The Executive Board of STADA Arzneimittel Aktiengesellschaft (hereinafter *STADA*, together with the enterprises controlled by STADA within the meaning of section 17 of the German Stock Corporation Act (AktG) the *STADA Group*) and the management of Nidda Healthcare GmbH (hereinafter *Nidda Healthcare*) have jointly prepared the following report (hereinafter the *Contract Report*) pursuant to section 293a AktG on the domination and profit and loss transfer agreement (hereinafter the *Agreement*) between Nidda Healthcare as the controlling company and STADA as the controlled company (collectively hereinafter the *Contractual Parties*).

#### A. Introduction

Nidda Healthcare Holding GmbH (formerly operating under Nidda Healthcare Holding AG until the registration of the change of legal form on 23 October 2017) (hereinafter *Nidda Holding*), a holding company and the direct parent company of Nidda Healthcare, which is jointly controlled by funds that are advised by Bain Capital Private Equity (Europe), LLP and Cinven Partners LLP, published its decision on 10 April 2017 to submit a voluntary public takeover offer to all shareholders of STADA (hereinafter the *STADA Shareholders*).

Previously, Bain Capital Private Equity (Europe), LLP, acting in the name of the funds advised by it and by its affiliates (collectively with all affiliates *Bain Capital*), and Cinven Partners LLP, acting as an advisor of the Sixth Cinven Fund Companies (collectively with all affiliates *Cinven*), each in the name of the funds they advise, concluded a syndicate agreement on 13 March 2017 (hereinafter the *Syndicate Agreement*) in which they combined in a strategic partnership regarding a voluntary public takeover offer and the acquisition of all shares issued by STADA. Furthermore, they agreed the financing and the corporate governance structure of Nidda Holding and that of its direct and indirect parent companies, both before and after closing a voluntary public takeover offer.

On 27 April 2017, Nidda Holding published a voluntary public takeover offer to the STADA Shareholders for the acquisition of their no-par value registered shares (hereinafter the *Initial Takeover Offer*). Amongst other things, closing the Initial Takeover Offer was subject to the condition that a minimum acceptance threshold of 75% of all shares issued by STADA would be reached.

After this minimum acceptance threshold had not been reached at 12:30 hours on 7 June 2017 (one day before the expiry of the regular acceptance period at 24:00 hours on 8 June 2017), Nidda Holding decided to amend the Initial Takeover Offer and the reduce the minimum acceptance threshold of the Initial Takeover Offer from 75% to 67.5%. On 26 June 2017, Nidda Holding announced that the reduced minimum acceptance threshold of 67.5% of the Initial Takeover Offer had not been reached and that the Initial Takeover Offer had thereby expired.

Between 30 June and 10 July 2017, Nidda Holding concluded a total of eleven irrevocable undertakings with STADA Shareholders who held a total of 12,221,410 STADA shares and thus roughly 19.6% of the share capital and the voting rights and who irrevocably undertook to accept a new voluntary public takeover offer by Nidda Holding for all STADA shares they held and any they might acquire in future.

With the consent of STADA and the German Federal Financial Supervisory Authority (BaFin), on 10 July 2017 Nidda Holding published the decision to submit a new voluntary public takeover offer (hereinafter the Takeover Offer) to the STADA Shareholders. The Takeover Offer was published on 19 July 2017 and was subject to the closing condition that a minimum acceptance threshold of 63% of all shares issued by STADA would be reached. The acceptance period ended at 24:00 hours on 16 August 2017. The additional acceptance period began on 19 August 2017 and ended at 24:00 hours on 1 September 2017. At the end of the acceptance period, the Takeover Offer was accepted for 39,749,517 STADA shares, and at the end of the additional acceptance period, the Takeover Offer was accepted for additional 66,813 STADA shares, i.e. for a total of 39,816,330 STADA shares, which corresponds to a share of approximately 63.87% of the voting rights and the share capital of STADA. In addition, in the period from 21 to 23 August 2017, Nidda Holding concluded purchase contracts on the stock exchange for a total of 878,883 additional STADA shares, in which it acquired ownership on 23, 24 and 25 August 2017, respectively.

On 24 August 2017, Nidda Holding announced that it intended to conclude a domination and profit and loss transfer agreement between Nidda Holding or one of its affiliates as the controlling company and STADA as the controlled company. The Executive Board of STADA resolved on the same date to enter into negotiations with Nidda Holding on concluding such an agreement, and disclosed this resolution by an ad-hoc announcement on 24 August 2017.

On the morning of 25 August 2017, Nidda Holding contributed all 40,207,789 STADA shares held by it at this time (i.e. the 39,749,517 STADA shares that had been tendered by the end of the acceptance period and transferred to Nidda Holding and additional 458,272 shares acquired on the stock exchange the ownership in which had already been transferred to Nidda Holding at that time) as a contribution in kind to its newly established wholly-owned subsidiary, Nidda Healthcare. Additional 487,424 STADA shares (i.e. the additional 420,611 STADA shares acquired on the stock exchange the ownership in which was transferred on 25 August 2017 only after the aforementioned contribution to Nidda Holding, and the 66,813 STADA shares tendered by the end of the additional acceptance period and transferred to Nidda Holding) were contributed by Nidda Holding to Nidda Healthcare by way of further contribution agreements of 28 August 2017 and 15 September 2017 (for details, see section B.II.8.).

Upon a joint application by the Executive Board of STADA and the management of Nidda Healthcare, the Regional Court (*Landgericht*) Frankfurt am Main, by way of a decision dated 21 September 2017, selected and appointed ADKL AG, Wirtschaftsprüfungsgesellschaft, Breite Straße 29-31, 40213 Düsseldorf as the joint contract auditor (hereinafter the *Contract Auditor* or *ADKL*) to audit the Agreement.

The Agreement, which is the subject matter of the present joint Contract Report, was concluded on 19 December 2017. The Supervisory Board of STADA had established a DPLTA committee on 23 October 2017 and delegated the requirement of supervisory board consent under § 7(1) in conjunction with paragraph 8 of Annex 2 A to the Executive Board rules of procedure (as of 14 September 2017) to

the DPLTA committee. The DPLTA committee consented to the conclusion of the Agreement before it was signed in its meeting on 19 December 2017. When adopting its resolution, the Supervisory Board had available to it

- (i) the final draft of the Agreement,
- (ii) the final draft of this Contract Report,
- (iii) the signed version of the expert opinion by ValueTrust Financial Advisors SE, Theresienstraße 1, 80333 Munich (hereinafter the *Valuation Expert* or *ValueTrust*) dated 18 December 2017 (hereinafter the *Expert Opinion*) as well as
- (iv) a written confirmation by the Contract Auditor that the determination of the recurring compensation payment (*Ausgleichszahlung*) and the compensation (*Abfindung*) in the Agreement that are within the range mentioned in the Expert Opinion, will be confirmed as being appropriate in the report on the audit of the Agreement to be executed on 21 December 2017 (hereinafter the *Audit Report*).

Through the Agreement, STADA subordinates the managerial control of its company to Nidda Healthcare and undertakes to transfer all of its profits to Nidda Healthcare. Nidda Healthcare undertakes to assume a STADA annual net loss and to pay appropriate recurring compensation (*Ausgleich*) or appropriate compensation (*Abfindung*) to the outside STADA Shareholders. The shareholders' meeting of Nidda Healthcare consented to the Agreement on 19 December 2017. The consent resolution of the STADA general meeting is to be adopted on 2 February 2018. Pursuant to section 294(2) AktG, the Agreement becomes effective upon registration in the commercial register at the registered office of STADA.

#### **B.** Contractual Parties

#### I. STADA and the STADA Group

#### 1. Overview

The emphasis of the STADA Group's business model is the health care market and particularly the pharmaceutical market and, as a result, is focused on one of the global growth industries with relatively little dependence on economic trends. For reasons of costs and risk, rather than concentrating on researching and developing innovative active ingredients, STADA focuses on researching and developing pharmaceutical products where industrial property rights, particularly patents, no longer exist (known as "generics").

The STADA Group is divided into the segments Generics and Branded Products. In the Generics segment, the STADA Group sells pharmaceuticals which contain the same active ingredient as the equivalent pharmaceuticals from initial suppliers and exhibit the same therapeutic effectiveness and safety but which can be supplied at significantly cheaper prices following the expiry of the patent or other commercial property rights. The product portfolio in the Generics segment comprises amongst other things Tilidin Naloxon, Atorvastatin, Pantoprazol, Epoetin

Zeta and Diclofenac. The eight largest markets by turnover within the Generics segment in the 2016 financial year and in the first nine months of 2017 were Germany, Italy, Spain, Russia, Belgium, France, Vietnam and Serbia. In the Branded Products segment, the STADA Group focuses alongside expansion of its portfolio of successful Branded Products, on increasing internationalisation of successful brands. In addition, innovative products are continuously introduced in order to exploit additional growth opportunities which exist in niche and non-regulated markets. The product portfolio in the Branded Products segment includes APO-Go, Grippostad, Snup, Fultium and Vitaprost. The five largest markets by sales within the Branded Products segment in the 2016 financial year were Germany, Great Britain, Russia, Italy and Vietnam; in the first nine months of 2017, these were Germany, Great Britain, Russia, Italy and the United States of America.

As at 31 December 2016, STADA held 117 domestic and foreign interests group-wide in companies and employed 10,923 employees group-wide. As at 30 September 2017, the number of domestic and foreign interests in companies was 112; the number of Group-wide employees was roughly 11,117 as at the reporting date of 30 September 2017. In the 2016 financial year, the STADA Group generated adjusted Group sales of EUR 2,167.2m and adjusted EBITDA of EUR 398.0m. In the 2016 financial year, the Generics segment accounted for 59.4% of adjusted Group sales and Branded Products for 40.6%. In the first nine months of 2017 the adjusted Group sales were EUR 1,641.1m with adjusted EBITDA of EUR 347.5m. In the first nine months of 2017, the Generics segment accounted for EUR 960.8m (58.5%) of adjusted Group sales and the Branded Products segment for 680.3m (41.5%).

# 2. History and development of the business

The roots of STADA go back over 120 years to the year 1895, when several pharmacists got together with the goal of economically producing common preparations. Common products were then produced in participating pharmacies in Berlin, Dresden, Würzburg and Darmstadt, amongst others. The founding of the German Pharmaceutical Association saw the in-house preparation of pharmaceutical specialities become regulated in terms of the preparation process, packaging and labelling, and price.

In the course of the political "co-ordination" of regional specialist enterprises, the German Pharmaceutical Association was transferred to the Professional Community of German Pharmacists (St.d.A.) in 1933. After a large number of corporate law restructurings, the medium-sized enterprise existing today was established in 1995 with its registered office in Bad Vilbel. In 1997, the initial public offering began with the placement of non-voting preference shares, concluding with the placement of ordinary shares with restricted transferability in 1998. The new financial resources enabled STADA to become increasingly international from 1999 onwards.

In 2001, STADA began to develop biogenerics (today: biosimilars) with the involvement of private venture capital. Beyond this, STADA pressed ahead with international expansion, resulting in sales in 2001 exceeding EUR 500m for the first time. In the same year, preference shares were converted into ordinary shares and the company was admitted to the MDAX segment of Frankfurt Stock Exchange. In the following year, STADA acquired the second largest Spanish generics supplier,

Bayvit S.A. In 2004, STADA's acquisition of approximately 97.5% of the shares in the Russian pharmaceutical company Nizhpharm OJSC was a strategically important step in expanding the business in Russia. Up to and including 2007, additional important steps were made towards international expansion, such as the acquisition of the Serbian Hemofarm Group. In 2010, STADA placed the first corporate bond, which enabled various additional national and international acquisitions to be funded, amongst other things. In 2011, STADA entered into co-operation to develop two biosimilar products with Gedeon Richter AG, a Hungarian multinational pharma and biotech company. One year thereafter, STADA implemented additional measures as part of the cost-efficiency programme initiated in 2011, such as the sale of one Irish and two Russian production sites. In 2013, STADA entered personalised drug therapy with "STADA Diagnostik". In addition, STADA acquired Thornton & Ross Ltd., the fifth largest provider on the British market for non-prescription products (OTC).

In order to bundle the STADA Group IT services, 2013 saw STADA establish an IT shared service centre in Serbia. Additionally, STADA expanded its biosimilar range and placed a second corporate bond. In 2014, STADA established the logistics and distribution centre in Dubai and, for the first time, achieved sales of more than EUR 2bn. In 2015, STADA placed a further corporate bond in order to refinance the corporate bond from 2010 expiring that same year. Additionally, STADA licensed the biosimilar Pegfilgrastim from Gedeon Richter AG in order to expand its biosimilar activities. Beyond this, STADA expanded its branded product portfolio by acquiring the Austrian company SCIOTEC Diagnostics Technologies GmbH. In 2016, STADA received a "positive opinion" for a biosimilar, Teriparatid. STADA also acquired the British branded products company Natures Aid Ltd.

In mid-2017, STADA combined some of its German activities in order to increase efficiency and strengthen the national business. As part of this, STADA GmbH was merged with STADAvita GmbH and STADApharm GmbH with cell pharm Gesellschaft für pharmazeutische und diagnostische Präparate mbH, each maintaining the name of the transferring companies, and the organisational and distribution structures bundled in the new STADA GmbH and the new STADAPHARM GmbH respectively.

### 3. Legal form, registered office, financial year and company objects

STADA is a German stock corporation (*Aktiengesellschaft*) with its registered office in Bad Vilbel, Germany, registered under number HRB 71290 with the commercial register at the Local Court (*Amtsgericht*) of Frankfurt am Main, Germany. The financial year of the STADA is the calendar year.

According to the articles of association, the company objects of STADA are

• the development, manufacture and distribution of and the trade in products of all types for the worldwide healthcare market, particularly in the pharmaceutical, biotech, chemical and cosmetic industries, medicinal and laboratory technology, clinical requisites as well as the dietary foodstuffs and confectionary industries.

- the establishment, operation, acquisition and sale of and participation in enterprises with activities in the worldwide healthcare market, particularly in the pharmaceutical, biotech, chemical and cosmetic industries, medicinal and laboratory technology, clinical requisites as well as the dietary food-stuffs and confectionary industries.
- the development and performance of services of all kinds for the worldwide healthcare market, for consideration; the company may also develop and perform services without consideration – particularly for patients and consumers and for medical and pharmaceutical professionals – provided that these are suited to complementing, promoting or supporting the company's other enterprises;
- the procurement, acquisition, taking out or granting of licences as well as the trading in intangible assets regarding the worldwide healthcare market, particularly software and internet applications and pharmaceutical product marketing authorisations, trademarks, industrial property rights and comarketing rights for products, particularly in the pharmaceutical, biotech, chemical and cosmetic industries, medicinal and laboratory technology, clinical requisites as well as the dietary foodstuffs and confectionary industries; the Company may also grant licences to pharmacies directly or indirectly via its subsidiaries, pursuant to which they are authorised to assume individual manufacturing processes for selected products themselves;
- the undertaking of all business activities that appear necessary or expedient for achieving the Company purpose.

Beyond this, STADA is entitled to acquire interests of any form in undertakings of the same or related nature domestically or abroad, as well as to establish branches or representative offices.

# 4. Capital, shareholders and stock exchange trading

#### 4.1 Share capital

The share capital amounts to EUR 162,090,344.00 and is divided into 62,342,440 registered no-par value shares (*auf den Namen lautende Stückaktien*) (*STADA Shares*), each with an arithmetic notional value of EUR 2.60 of the share capital.

#### 4.2 Authorised Capital

Pursuant to § 6(1) of the articles of association, the Executive Board is authorised, with the approval of the Supervisory Board, to increase the share capital of STADA on one or more occasions by 4 June 2018 by up to EUR 77,134,304.00 through the issue of up to 29,667,040 registered shares against contributions in cash or in kind. The STADA Shareholders are fundamentally entitled to the statutory subscription right. Pursuant to section 186(5) sentence 1 of the German Stock Corporation Act (AktG), the new shares can also be acquired by one or more banks or companies determined by the Executive Board with the obligation to offer them to the STADA Shareholders for subscription (indirect subscription right). However, the Executive Board is authorised with the consent of the Supervisory Board to exclude subscription rights of the STADA Shareholders in the following cases:

- for fractional amounts;
- in the case of capital increases against cash contributions up to an amount that in total does not exceed 10% of the share capital that exists at the time this authorisation becomes effective or – if this amount is lower – 10% of the share capital that exists at the time that the relevant authorisation is exercised, if the issue price of the new shares is not significantly lower than the stock exchange price of already listed shares carrying the same rights within the meaning of section 203(1) sentence 1 and sentence 2 AktG in conjunction with section 186(3) sentence 4 AktG. Shares are to be credited against this 10% limit which are acquired due to authorisation by the general meeting and sold during the term of this authorisation pursuant to section 71(1) no. 8 sentence 5 AktG in conjunction with section 186(3) sentence 4 AktG during the term of the authorisation. Furthermore, shares are to be credited against this limit which are to be issued for the purpose of servicing bonds with warrants or conversion rights or obligations, provided the bonds are issued during the term of this authorisation excluding subscription rights, with section 186(3) sentence 4 AktG applying accordingly;
- in the case of capital increases against contributions in kind for the granting of new shares in the context of corporate mergers or for the purpose of the direct or indirect acquisition of enterprises, parts of enterprises or interests in enterprises and of other assets (including loan liabilities and other liabilities);
- to the extent necessary to grant holders or creditors of bonds with warrants or conversion rights or obligations issued or to be issued by the Company or its Group companies in future a subscription right to new shares to the extent they would be entitled after exercising their warrants and/or conversion rights or after fulfilment of any option or conversion obligations.

In total, the arithmetic nominal amount of share capital made up of shares issued during the term of the authorisation against contribution in cash and/or in kind excluding subscription rights of the STADA Shareholders may not exceed 20% of the share capital of STADA that exists at the time of the resolution by the general meeting.

Beyond this, the Executive Board is authorised with the consent of the Supervisory Board to decide on the further details of the capital increase and the conditions of share issuance, particularly the issue price.

#### 4.3 Conditional Capital 2013

Pursuant to § 6(2) of the articles of association, STADA's share capital is conditionally increased by up to EUR 69,188,340.00 through the issuance of up to 26,610,900 registered shares (*Conditional Capital 2013*). The conditional capital increase shall only be performed insofar as the holders or creditors of bonds with warrants and/or convertible bonds, participating bonds and/or participation rights with warrants and/or conversion rights or obligations which STADA or its Group companies issue on the basis of the authorisation resolution of the general meeting of 5 June 2013 by 4 June 2018, exercise their warrants or conversion rights under

these bonds or bond holders subject to option or conversion obligations fulfil their option or conversion obligations, with this applying in all cases insofar as the Conditional Capital 2013 is required in accordance with the terms of the bonds. In addition, the issuance of the new shares shall occur at the relevant option or conversion price to be determined in accordance with the aforementioned authorisation resolution. The new shares shall participate in the profit from the start of the financial year in respect of which, at the time of their issuance, no resolution has yet been passed on the use of the distributable profit. The Executive Board, with approval by the Supervisory Board, is authorised to determine the remaining details of execution of the conditional capital increase.

# 4.4 Treasury shares

By virtue of the resolution by the general meeting of 5 June 2013, STADA was authorised pursuant to section 71(1) no. 8 AktG to repurchase treasury shares up to a total of 10% of its share capital as of the date of the resolution or as of the date on which the authorisation is exercised. The acquired shares together with other treasury shares owned by STADA or to be allocated to the Company pursuant to sections 71d and 71e AktG may at no time account for more than 10% of the share capital. STADA may not use the authorisation for the purpose of trading with treasury shares. The authorisation applies until 5 June 2018. The Executive Board was also authorised to sell the acquired shares or to use them in any other way with the consent of the Supervisory Board. The authorisation to acquire treasury shares may be exercised in whole or in part, on one or several occasions, to pursue one or more purposes, by STADA or, equally, by its direct or indirect subsidiaries or on its or their behalf by third parties. The specific form of the acquisition of treasury shares, their sale and other use are governed by the resolution of the general meeting of 5 June 2013.

As at the signing date of this Contract Report, no use has been made of the above authorisation to buy back shares. As at 31 December 2016, STADA held 85,043 treasury shares, which corresponds to approximately 0.14% of the share capital; as at 30 September 2017, STADA held 84,311 treasury shares, which corresponds to approximately 0.14% of the share capital.

#### 4.5 Material Financing Agreements with change of control clauses

On 29 May 2013, STADA placed an unsecured fixed-rate corporate bond with a volume of EUR 350m (the *STADA Bond 2013*). The STADA Bond 2013 has a five-year term with an annual interest rate of 2.25% and is admitted for trading on the regulated market of the Luxembourg Stock Exchange (ISIN: XS0938218400). The STADA Bond 2013 matures on 5 June 2018.

STADA also placed an unsecured fixed-rate corporate bond with a volume of EUR 300m on 31 March 2015 (the *STADA Bond 2015*). The STADA Bond 2015 has a seven-year term with an annual interest rate of 1.75% and is admitted for trading on the regulated market of the Luxembourg Stock Exchange (ISIN: XS0938218400). The STADA Bond 2015 matures on 8 April 2022.

Alongside the STADA Bond 2013 and the STADA Bond 2015, the following other material (value-dated) financing measures are already being utilised by STADA at

the time of the conclusion of the Agreement: (i) bonds totalling EUR 526m managed by Landesbank Hessen-Thüringen – clearing house (Helaba) and Landesbank Baden-Württemberg (LBBW), (ii) three additional bonds with a combined value of EUR 65m and (iii) one additional loan agreement with a value of EUR 25m (all bonds and the loan agreement together with the STADA Bond 2013 and the STADA Bond 2015 referred to collectively as the *Material Financing Agreements* and individually a *Material Financing Agreement*).

None of the above listed Material Financing Agreements with change of control clauses limit the conclusion of a domination and profit and loss transfer agreement. In the event of a change of control and a rating reduction (the *Redemption Event*), however, the relevant contractual conditions grant every creditor the right pursuant to the financing conditions to request the redemption of their relevant Material Financing Agreement at its par value plus accrued interest: (i) for the bonds and the loan agreement, by the optional redemption date (exclusively) i.e. by 5 January 2018 and (ii) for the STADA Bond 2013 and STADA Bond 2015, within the redemption period i.e. by 8 January 2018.

The change of control occurred on 22 August 2017, since Nidda Holding's interest on this date had exceeded the limit of 50% of voting rights relevant for a change of control. This means that the creditors of the bonds and the loan agreement and those of STADA Bond 2013 and STADA Bond 2015 are entitled to a redemption right. This right can be exercised until 5 or 8 January 2018 respectively. At the time of concluding this Contract Report, it is not possible to predict how many creditors will ultimately make use of their right to premature redemption. Therefore, it is also unclear to what extent the above liabilities will become due for premature redemption.

In order to safeguard STADA'S liquidity, Nidda Holding and Nidda Topco S.à.r.l. have guaranteed to provide STADA with the requisite financial resources to satisfy departing financial creditors.

#### 4.6 Shareholders

On the signing date of this Contract Report, Nidda Healthcare holds 40,695,213 STADA Shares. This equates to an approximately 65.28% stake in the STADA share capital of 62,342,440 shares (please refer to section B.II.8 for further details).

After deducting the 84,311 treasury shares held by STADA (corresponding to 0.14% of the share capital), the remaining 34.58% of STADA Shares are in free float.

# 4.7 Stock exchange trading

The STADA Shares are listed with ISIN DE0007251803 on the Frankfurt Stock Exchange in the Regulated Market section with additional post-admission obligations (*Prime Standard*) as well as on the Regulated Market of the Düsseldorf Stock Exchange. Beyond this, the STADA Shares are traded via the electronic trading system *XETRA* as well as over the counter on the regional markets of Berlin, Hamburg, Hanover, Munich and Stuttgart, and via Tradegate Exchange. Currently, the STADA Shares are included in the MDAX, EuroSTOXX 600 and MSCI Small Cap Europe indexes.

# 5. Executive Board and Supervisory Board of STADA

#### 5.1 Executive Board

According to § 9(1) of the articles of association, STADA's Executive Board shall consist of two or more persons as determined by the Supervisory Board.

The members of STADA's Executive Board are:

- Dr Claudio Albrecht (Chairman of the Executive Board/CEO, since 27 September 2017)
- Mark Keatley (Chief Financial Officer, since 27 September 2017)
- Dr Barthold Piening (Chief Technical Officer, since 1 April 2017)

Pursuant to § 10(1) of the articles of association, STADA shall be legally represented by two members of the Executive Board or by one member of the Executive Board jointly with a holder of a general commercial power of representation (*Prokurist*). § 10(2) of the articles of association provides that the Supervisory Board may also determine that individual members of the Executive Board are entitled to solely represent STADA.

# 5.2 Supervisory Board

According to § 12(1) of the articles of association, the Supervisory Board shall be composed in compliance with the statutory provisions. In accordance with section 95 sentence 4 AktG in conjunction with section 4(1) DrittelbG (German One-Third Participation Act), the Supervisory Board of STADA shall consist of nine members, namely six shareholder representatives and three employee representatives.

The shareholder representatives are:

- Dr Günter von Au (Chairman of the Supervisory Board)
- Dr Eric Cornut.
- Dr Michael Siefke
- Benjamin Kunstler
- Bruno Schick
- Jan-Nicolas Garbe

The former members of the Supervisory Board Carl Ferdinand Oetker, Rolf Hoffmann, Dr Birgit Kudlek, Tina Müller and Dr Gunnar Riemann had resigned from their offices as Supervisory Board members with effect as of the end of 25 September 2017. With its court order of 26 September 2017, the Local Court (*Amtsgericht*) of Frankfurt am Main appointed Dr Michael Siefke, Benjamin Kunstler, Bruno Schick, Jan-Nicolas Garbe and Dr Günter von Au as new members of the Supervisory Board with immediate effect until the end of the next ordinary general meeting. On 27 September 2017, Dr Günter von Au was elected by the Supervisory Board members as Chairman of the Supervisory Board.

The employee representatives are:

- Jens Steegers (Deputy Chairman of the Supervisory Board)
- Halil Duru
- Dr Ute Pantke

# 5.3 Advisory Board

Furthermore, STADA has an Advisory Board, which is to support and advise the Executive Board and the Supervisory Board of STADA in the performance of their duties. The Advisory Board can make recommendations and proposals towards the Executive Board and the Supervisory Board of STADA and consists of eleven members. The current members of the Advisory Board are Dr Thomas Meyer (Chairman), Dr med Frank-R. Leu (Deputy Chairman), Rika Aschenbrenner, Wolfgang Berger, Gerd Berlin, Alfred Böhm, Jürgen Böhm, Axel Boos, Reimar Michael von Kolczynski, Dr Wolfgang Schlags and Jürgen Schneider.

# 6. Structure of the STADA Group

#### 6.1 Legal structure and significant participations

STADA is an international healthcare group with the legal form of a stock corporation (*Aktiengesellschaft*) with its registered office in Germany and a business address at Stadastraße 2 - 18, 61118 Bad Vilbel. Its business model is centred around on the healthcare market with a focus on the pharma sector. As at 30 September 2017, STADA holds, either directly or indirectly, global participations in 112 (as at 30 December 2016: 117) companies belonging to the STADA Group.

STADA provides all typical management and holding functions within the STADA Group and is in particular responsible for the strategic group development. Thus, the operating profit generated by the activities of the Group companies in the Generics and Branded Products segments is to be considered in assessing the result achieved by STADA. The services provided by STADA in its function as the parent or holding company of the STADA Group, including the supply of products to other Group companies have a significant influence on the result. STADA is remunerated for these strategic services by the Group companies receiving such services and the services are reported as part of STADA's sales. STADA's net income for the year is furthermore influenced by income from participations.

STADA holds regional companies in the individual countries in which the STADA Group is active. The significant<sup>1</sup> subsidiaries of STADA as of the end of financial year 2016 are shown in the following overview:

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Significant subsidiaries in this context are all subsidiaries which, in 2016, had a share of >=3% in the aggregate sales of the STADA Group.

**Company** Location

AO Nizhpharm (direct holding) Nizhny Novgorod, Russia

ALIUD PHARMA GmbH

(indirect holding) Laichingen, Germany

EG S.p.A.

(direct holding) Milan, Italy

Thornton & Ross Limited

(indirect holding) Huddersfield, Great Britain

Laboratorio STADA, S.L.

(direct holding) Barcelona, Spain

STADA GmbH

(direct holding) Bad Vilbel, Germany

S.A. Eurogenerics N.V.

(indirect holding) Brussels, Belgium

Hemofarm A.D.

(indirect holding) Vrsac, Serbia

STADApharm GmbH

(direct holding) Bad Vilbel, Germany

EG Labo - Laboratoires Eurogenerics SAS

(direct holding) Boulogne-Billancourt, France

Britannia Pharmaceuticals Ltd.

(indirect holding) Reading, Great Britain

The significant<sup>2</sup> subsidiaries of STADA as at 30 September 2017 are shown in the following overview:

<sup>&</sup>lt;sup>2</sup> Significant subsidiaries in this context are all subsidiaries which, in the first nine months of 2017, had a share of >=3% in the aggregate sales of the STADA Group.

Company	Location
AO Nizhpharm (direct holding)	Nizhny Novgorod, Russia
ALIUD PHARMA GmbH (indirect holding)	Laichingen, Germany
EG S.p.A. (direct holding)	Milan, Italy
STADA GmbH <sup>3</sup> (direct holding)	Bad Vilbel, Germany
S.A. Eurogenerics N.V. (indirect holding)	Brussels, Belgium
Thornton & Ross Limited (indirect holding)	Huddersfield, Great Britain
Laboratorio STADA, S.L. (direct holding)	Barcelona, Spain
STADApharm GmbH <sup>4</sup> (direct holding)	Bad Vilbel, Germany
EG Labo – Laboratoires Eurogenerics SAS (direct holding)	Boulogne-Billancourt, France

The companies Hemofarm A.D. and Britannia Pharmaceuticals Ltd., which were classified as significant companies in the reporting period 2016, had a share of less than 3% in the aggregate sales recorded by the STADA Group in the first nine months of 2017.

A list of shareholdings of STADA as at 31 December 2016 is attached to this Contract Report as Annex 1.

#### 6.2 Governance structures

The governance and organisation structure of the STADA Group can be subdivided into the following functional areas:

## (i) Chairmanship of the Executive Board

The Chairman of the Executive Board is mainly responsible for the definition, communication and implementation of the strategy for the STADA Group. This includes in particular, without being limited to, the management of the divisions of Marketing and Sales (including Biotechnology) as well as Business Development. Apart from the aforementioned strategic areas, the Chairman of the Executive Board is also responsible for the divisions of Corporate Communication, Human

As part of the Group's strate

As part of the Group's strategic development, STADA GmbH was merged with and into STADAvita GmbH by continuing the name of STADA GmbH with effect as of 30 June 2017.

As part of the Group's strategic development, STADApharm GmbH was merged with and into cell pharm Gesellschaft f\u00fcir pharmazeutische und diagnostische Pr\u00e4parate mbH by continuing the name of STADApharm GmbH with effect as of 30 June 2017.

Resources as well as Legal, including Compliance, Corporate Governance, Corporate Risk Management and Corporate Quality Assurance.

#### (ii) Finance

The finance area comprises central financial services for monitoring and controlling the STADA Group. Such services include in particular the functions of Corporate Accounting, Corporate Controlling, Corporate Treasury, Corporate Development and Mergers & Acquisitions, Corporate Tax, Internal Audit as well as Investor Relations.

#### (iii) Production and development

The Chief Technical Officer is responsible for the smooth supply of products to the STADA Group's sales organisation as well as for the development of the product range by adding new products and technologies. His functions include the management and development of internal production, coordination of external suppliers, Supply Chain Management, Procurement as well as Environmental Health & Safety, the management of marketing authorisations for medicinal products, medicine safety, clinical and pharmaceutical development and global project management.

The Executive Board members manage the aforementioned affairs in joint responsibility. According to the internal schedule of responsibilities, Dr Claudio Albrecht acts as chairman of the Executive Board, Mark Keatley is the head of the finance area and Dr Barthold Piening is in charge of the field of production and development. The functions in the individual areas shown in the following overview at a level below the Executive Board are generally managed in each case by one executive for the entire Group. There are exceptions for the areas of Marketing and Sales (currently under the interim leadership of the Chairman of the Executive Board), Global Supply Chain Management and Clinical and Pharmaceutical Development (current under the management of the Chief Technical Officer on an interim basis). The following overview reflects the current governance structure:

Chairman of the Executive Board/CEO	Chief Financial Officer (CFO)	Chief Technical Officer (CTO)
Dr Claudio Albrecht	Mark Keatley	Dr Barthold Piening
Marketing and Sales (incl. Biotechnology)	Corporate Accounting	Global Production (incl. Local Quality, Engineering & Facility Management)
Business Development (Portfolio Management, Market Research, Global Licensing, IP / Patents, Biosimilar Licensing, Global Project Management)	Corporate Controlling	Environmental Health & Safety
Corporate Communication	Corporate Treasury	Global Supply Chain Management
Corporate Human Resources	Corporate Tax	Global Procurement
Legal (incl. Corporate Governance, Corporate Compliance, Corporate Risk Management)	Corporate IT	Regulatory & Medical & Clinical Affairs
Corporate Quality Assurance	Corporate Development and Mergers & Acquisitions	Pharmaceutical Development
	Internal Audit	R&D Project Management
	Investors Relations	

#### 7. Business activities of the STADA Group

The STADA Group is an internationally active health care group focusing on the development, marketing, production and sales of pharmaceutical products for which there are no longer any industrial property rights, particularly patents. The STADA Group is oriented towards a growth market that is comparatively independent of the economic situation. Since the fundamental change to the reporting structures carried out in the third quarter of 2016, the STADA Group is managed by the two segments Generics and Branded Products.

# 7.1 Generics segment

In the Generics segment currently contributing a share of around 60% to the Group sales adjusted for currency and portfolio effects, STADA has a comprehensive portfolio, including selected biosimilars. Generics, i.e. pharmaceuticals with active ingredients identical to those contained in the originally patented pharmaceuticals from initial suppliers, are considered to involve further growth opportunities in the pharmaceutical market for offering a lower cost alternative to the original products. Thus, the focus in the Generics segment is on low pricing.

The requirements of the product portfolio are subject to the relevant regulatory structure in the individual markets in which generics are sold. The product portfolio in the Generics segment generally includes numerous dosage forms and dosages for most relevant active pharmaceutical ingredients. The top five generics active ingredients (in terms of sales) in financial year 2016 were Tilidin Naloxon, Atorvastatin, Pantoprazol, Epoetin Zeta and Diclofenac; during the first nine months of 2017, these were Tilidin Naloxon, Atorvastatin, Epoetin Zeta, Pantoprazol and Diclofenac. The eight largest markets in this segment in terms of sales were Germany, Italy, Spain, Russia, Belgium, France, Vietnam and Serbia in financial year 2016 and during the first nine months of 2017.

# 7.2 Branded Products segment

The Branded Products segment is in particular characterised by its highly attractive margins. It has currently a share of around 40% in the Group sales adjusted for currency and portfolio effects. In the Branded Products segment, the STADA Group pursues the concept of the so-called "strong brands", relying on high brand awareness.

Currently, Branded Products primarily comprise non-prescription products (OTC), prescription products (RX) known by a brand name and discretionary prescription products (OTX). The Group is expanding and increasing the internationalisation of the portfolio on an ongoing basis. The primary focus of these products is on the brand name. The top five branded products (in terms of sales) in financial year 2016 were APO-Go, Grippostad, Snup, Fultium and Vitaprost; during the first nine months of 2017, these were APO-Go, Grippostad, Snup, Aqualor and Vitaprost. The five largest markets in this segment in terms of sales in financial year 2016 were Germany, Great Britain, Russia, Italy and Vietnam; during the first nine months of 2017, these were Germany, Great Britain, Russia, Italy and the USA.

# 8. Business development and profit situation of the STADA Group

#### 8.1 Financial key figures for financial years 2014, 2015 and 2016

The profits of the segments were consolidated in the statement. The consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. In addition, the commercial law provisions set out in section 315a(1) HGB (German Commercial Code) were applied.

Figures in EUR million	2014	2015	2016
Earnings situation			
Group sales	2,062.2	2,115.1	2,139.2
- Generics	1,217.7	1,261.4	1,280.7
- Branded products	800.5	853.6	858.5
Operating profit	188.5	223.7	178.1
- Operating segment result Generics	108.3	288.8	195.2
- Operating segment result Branded Products	138.2	130.0	81.4
Operating profit (adjusted)	320.7	283.8	294.4
- Operating segment result Generics (adjusted)	176.9	182.7	214.2
- Operating segment result Branded Products (adjust-	192.9	173.2	152.8
ed)	192.9	173.2	132.6
EBITDA	418.8	377.1	361.5
- EBITDA Generics	223.1	233.2	255.8
- EBITDA Branded Products	231.5	211.8	186.2
EBITDA (adjusted)	431.9	389.4	398.0
- EBITDA Generics (adjusted)	228.7	232.0	264.9
- EBITDA Branded Products (adjusted)	240.0	220.1	200.7
EBIT	190.3	225.3	178.9
EBIT (adjusted)	322.4	285.3	295.1
EBT (adjusted)	124.7	157.8	127.4
EBT (adjusted)	253.3	220.9	244.2
Net income	64.6	110.4	85.9
Net income (adjusted)	186.2	165.8	177.3
Cash flow statement	100.2	103.0	177.5
Cash flow from operating activities	223.8	311.7	333.5
Cash flow from investing activities	-262.0	-178.2	-172.6
Free cash flow	-38.2	133.5	160.9
Free cash flow (adjusted)	157.4	212.4	243.0
Balance sheet	137.1	212.1	213.0
Total assets	3,335.5	3,287.4	3,440.4
Non-current assets	2,013.8	2,032.3	1,949.5
Current assets	1,321.7	1,255.1	1,490.9
Equity	903.4	1,018.5	1,047.1
Equity-to-assets ratio in %	27.1%	31.0%	30.4%
Non-current borrowed capital	1,246.7	1,282.6	1,493.7
Current borrowed capital	1,185.4	986.3	899.6
Net debt	1,327.5	1,215.7	1,118.2
Employees	1,541.5	1,213.7	1,110.2
Employees Employees as of the balance sheet date	10,363	10,532	10,923
Employees as of the balance sheet date  Employees (average number)	10,303	10,332	10,923
Share	10,209	10,771	10,039
Average number of shares (without treasury shares)	60,408,501	61,637,621	62,256,532
Market capitalisation (31 December)	1,530.8	2,327.9	3,066.3
Earnings per share	1.07	1.79	1.38
Earnings per share (adjusted)	3.08	2.69	2.85
Diluted earnings per share		1.79	
Diluted earnings per share (adjusted)	1.05		-
Diffuted earnings per snare (adjusted)	3.04	2.69	-

# 8.2 Business development and earnings situation in financial year 2016

The STADA Group was able to drive forward important changes in financial year 2016 in the context of its revised corporate strategy.

Overall, the earnings situation in 2016 was characterised by high special items, particularly through expenses in connection with restructuring decisions. As a result of the changes to the corporate structure in July 2016 the reporting structures were also changed. This led to the company moving away from regional responsibilities and to the establishment of central management of the Generics and Branded Products segments. This was followed by a series of structural measures, particularly in relation to personnel decisions, as well as the revaluation of portfolio activities. As a consequence, the development of the reported key earnings figures differed from the development of the adjusted key earnings figures. Furthermore, the development of the reported operating profit was significantly influenced by negative translation effects that were attributable to a weaker Russian ruble and the increasing weakness of the British pound sterling since the EU referendum.

In financial year 2016, the development of the Group sales, the EBITDA and the Group profit was as follows:

- Reported Group sales increased by 1% to EUR 2,139.2 million in the reporting year (previous year: EUR 2,115.1 million). When effects on sales resulting from changes in the Group portfolio and currency effects are deducted, adjusted Group sales increased by 3% to EUR 2,167.2 million (previous year: EUR 2,100.4 million).
- Reported EBITDA decreased by 4% to EUR 361.5 million (previous year: EUR 377.1 million). Reported net income decreased by 22% to EUR 85.9 million (previous year: EUR 110.4 million). After adjusting the key earnings figures for influences distorting the year-on-year comparison resulting from special items, adjusted EBITDA increased by 2% to EUR 398.0 million (previous year: EUR 389.4 million). Adjusted net income grew by 7% to EUR 177.3 million (previous year: EUR 165.8 million).
- 8.3 Business development and profit situation for the nine-month period ending 30 September 2017 and outlook for financial year 2017

The STADA Group's business developed well in the first nine months of 2017. Particular contributions to this were made by the very pleasing developments in the Belgian Generics segment and the Russian Branded Products segment. The good progress of the German Branded Products segment in the 3<sup>rd</sup> quarter of 2017 also had a positive effect. However, the development of the reported earnings indicators was influenced in the first nine months of 2017 by special effects due to advisory services.

The reported Group sales increased in the first nine months of 2017 by 10% to EUR 1,698.0m (1-9/2016: EUR 1,541.7m). After deducting sales factors attributed to changes in the Group portfolio and currency effects, adjusted Group earnings increased by 7% to EUR 1,641.1m (EUR 1-9/2016: 1,537.4m).

The reported EBITDA rose by 11% to EUR 320.3m (January to September 2016: EUR 289.1m). The adjusted EBITDA exhibited growth of 16% to EUR 347.5m (January to September 2016: EUR 300.6m). Reported Group profit grew by 9% to EUR 109.2m (January to September 2016: EUR 100.3m). Adjusted Group profit rose by 4% to EUR 145.4m (January to September 2016: EUR 139.9m).

The STADA Group's asset and financial position exhibited positive development in the first nine months of 2017. As at 30 September 2017, net debt was EUR 1,066.3m (January to September 2016: EUR 1,118.2m). The ratio of net debt to adjusted EBITDA improved in the first nine months of 2017 on linear extrapolation of the adjusted EBITDA of the first nine months of 2017 on a full year basis to 2.3 (January to September 2016: 3.0).

STADA is confident it will reach the goals set for the 2017 financial year. This is also proven by the good results for the first nine months of 2017, where the adjusted Group sales increased by 7% to EUR 1,641.1m (January to September 2016: EUR 1,537.4m), adjusted EBITDA rose by 16% to EUR 347.5m (January to September 2016: EUR 300.6m) and adjusted Group profit grew by 4% to EUR 145.4m (January to September 2016: EUR 139.9m).

For financial year 2017, the Executive Board of STADA is unchanged in expecting further growth in comparison to the previous year. As part of this Group sales adjusted for currency and portfolio effects of between EUR 2.280 billion and EUR 2.350 billion, adjusted EBITDA of between EUR 430 million and EUR 450 million and adjusted net income of between EUR 195 million and EUR 205 million should be achieved.

In general, the STADA Group's future sales and earnings development will be characterised by both growth-stimulating and challenging conditions. In light of the initiated adjustment processes and repositioned corporate culture, the implementation of the numerous initiatives as part of the revised corporate strategy and the strategic success factors, the positive prospects are, however, expected to prevail.

# 9. Employees and co-determination

#### 9.1 Employees

The number of employees employed by the STADA Group on a global scale as at 31 December 2016 was 10,923 and increased to 11,117 as at 30 September 2017. In financial year 2016, an average of 1,164 employees were under contract in Germany, including approximately 158 industrial employees whose work was typically marked by manual/physical work and often compensated by way of an hourly wage. Out of the 1,164 employees working in Germany, the average number of employees located at the Group's headquarters in Bad Vilbel amounted to 908. The average number of employees at international Group locations amounted to 9,675.

# 9.2 Co-determination

STADA's Supervisory Board consists of nine members three of which are elected by the employees in accordance with the provisions of the German One-Third Participation Act (*Drittelbeteiligungsgesetz*).

#### II. Nidda Healthcare

#### 1. Overview

Nidda Healthcare and Nidda Holding are indirect subsidiaries of Nidda Topco S.à r.l. with its registered office in Luxembourg. Shareholders of Nidda Topco S.à r.l. are Universe Luxembourg S.C.A. and Ciddan S.à r.l., each holding a share of 50% in the capital and voting rights, who coordinate their behaviour on the basis of the Syndicate Agreement and the Shareholders' Agreement (see sections A, B.II.5.1 and B.II.5.3). Universe Luxembourg S.C.A. is an indirect subsidiary of Bain Capital Investors, LLC. Ciddan S.à r.l. is an indirect subsidiary of Cinven (Luxco 1) S.A.

#### 2. Legal form, registered office, company objects, share capital, financial year

Nidda Healthcare is a limited liability company (*Gesellschaft mit beschränkter Haftung*) with its registered office in Frankfurt am Main, Germany, which was established under German law on 25 August 2017 and incorporated by entry in the commercial register on 7 September 2017. It is entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 109528. Its German business address is c/o Intertrust (Deutschland) GmbH, Grüneburgweg 58-62, 60322 Frankfurt am Main.

The company objects of Nidda Healthcare are the management of its own assets and the acquisition, disposal, holding and management of participations in other companies with activities in the healthcare market in Germany and abroad. Its company objects do not include banking business or financial services requiring a licence under the German Banking Act (*Kreditwesengesetz*).

The share capital of Nidda Healthcare is EUR 25,000.00 and is divided into 25,000 shares with serial numbers 1 to 25,000 and with a nominal amount of EUR 1.00 each. The share capital is fully paid up. Its sole shareholder is Nidda Holding.

Its financial year corresponds to the calendar year.

### 3. Corporate bodies and representation

Pursuant to § 6(1) of Nidda Healthcare's articles of association, its management consists of one or several persons appointed and dismissed by the shareholder meeting. Pursuant to § 7(1) of its articles of association, Nidda Healthcare – if only one managing director has been appointed – is represented by one managing director and otherwise is represented jointly by two managing directors or by one managing director together with a holder of general commercial power of attorney (Prokurist).

Since the establishment of Nidda Healthcare on 25 August 2017, Mr Andreas Grundhöfer has been appointed as sole managing director with the power of sole representation. Furthermore, he is released from the restrictions set out in section 181 of the German Civil Code (*Bürgerliches Gesetzbuch*).

Nidda Healthcare has no supervisory board or other body similar to a supervisory board.

#### 4. Business activities

The business activities of Nidda Healthcare consist of the management of its own assets and the acquisition, disposal, holding and management of participations in other companies with activities in the healthcare market in Germany and abroad.

When signing this Contract Report, Nidda Healthcare holds 40,695,213 STADA Shares, corresponding to approximately 65.28% of the share capital and voting rights of STADA.

Furthermore, Nidda Healthcare holds 100% of the shares in Nidda Healthcare Beteiligungserwerbs- und -verwaltungs GmbH (*Nidda Healthcare Beteiligung*). This is entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 110372. Its German business address is c/o Intertrust (Deutschland) GmbH, Grüneburgweg 58-62, 60322 Frankfurt am Main.

Nidda Healthcare Beteiligung's business involves the management of its own assets and the acquisition, disposal, holding and management of participations in other companies with activities in the healthcare market in Germany and abroad, with the exception of an interest in STADA.

Bain Capital and Cinven plan to expand their portfolio in the healthcare market in future, with possible acquisitions set to occur via Nidda Healthcare Beteiligung.

#### 5. Shareholder structure

A simplified overview of Nidda Healthcare's affiliated undertakings (the *Nidda Group*) is attached to this Contract Report as <u>Annex 2</u>.

- The sole shareholder of Nidda Healthcare is Nidda Holding, a limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law with its registered office in Frankfurt am Main, Germany, and entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 109897.
- The sole shareholder of Nidda Holding is Nidda BondCo GmbH, limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law with its registered office in Frankfurt am Main, Germany, and entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 110003.
- The sole shareholder of Nidda BondCo GmbH is Nidda German Midco GmbH, limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law with its registered office in Frankfurt am Main, Germany, and entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 110001.
- The sole shareholder of Nidda German Midco GmbH is Nidda German Topco GmbH, a limited liability company (*Gesellschaft mit beschränkter Haftung*) under German law with its registered office in Frankfurt am

- Main, Germany, and entered in the commercial register of the Frankfurt am Main Local Court (*Amtsgericht*) under HRB 110007.
- The sole shareholder of Nidda German Topco GmbH is Nidda Midco S.à r.l., a limited liability company (société à responsabilité limitée) under Luxembourg law with its registered office in Luxembourg and entered in the commercial and company register (Registre de Commerce et des Sociétés) of Luxembourg under registration number B213313.
- The sole shareholder of Nidda Midco S.à r.l. is Nidda Topco S.à r.l., a limited liability company (*société à responsabilité limitée*) under Luxembourg law with its registered office in Luxembourg and entered in the commercial and company register (*Registre de Commerce et des Sociétés*) of Luxembourg under registration number B213311.
- The shareholders of Nidda Topco S.à r.l. are Universe Luxembourg S.C.A., a partnership limited by shares (société en commandite par actions) under Luxembourg law with its registered office in Luxembourg and entered in the commercial and company register (Registre de Commerce et des Socié-Luxembourg under registration number B212953, Ciddan S.à r.l., a limited liability company (société à responsabilité limitée) under Luxembourg law with its registered office in Luxembourg and entered in the commercial and company register (Registre de Commerce et des Sociétés) of Luxembourg under registration number B213741. Universe Luxembourg S.C.A. and Ciddan S.à r.l. each hold 50% of the shares and voting rights in Nidda Topco S.à r.l. and coordinate their behaviour on the basis of the Syndicate Agreement (see sections A, B.II.5.1 and B.II.5.3 above) as a multi-parent unity.
- Direct and indirect shareholders of Universe Luxembourg S.C.A. are various fund and management companies of Bain Capital Funds and individual shareholders which hold minority interests and do not exercise controlling influence. The fund and management companies of Bain Capital Funds are controlled by Bain Capital Investors, LLC, a limited liability company under the law of the state of Delaware, United States of America, with its registered office in Wilmington, Delaware, United States of America.
- Direct and indirect shareholders of Ciddan S.à r.l. are various fund and management companies of the Sixth Cinven Fund and individual shareholders which hold minority interests and do not exercise controlling influence. The fund and management companies of the Sixth Cinven Fund are controlled by Cinven (Luxco 1) S.A., a stock corporation (société anonyme) under the law of Luxembourg and with its registered office in Luxemburg and entered in the commercial and company register (Registre de Commerce et des Sociétés) of Luxembourg under registration number B163382. The direct subsidiary of Cinven (Luxco 1) S.A., Cinven Capital Management (VI) General Partner Limited, a limited liability company under the law of Guernsey with its registered office in St. Peter Port, Guernsey, and entered in the Guernsey registry of companies, is the fund manager of

certain corporate entities of the Sixth Cinven Fund for the purposes of a capital management company.

# 5.1 Syndicate Agreement

In the Syndicate Agreement (see section A above), Bain Capital and Cinven agree, inter alia, to support one another in the acquisition of STADA. All decisions relating to the Takeover Offer will be made jointly by Bain Capital and Cinven. The Syndicate Agreement further provides for the undertaking to establish a company in which Bain Capital and Cinven each hold a participation of 50%. This undertaking was fulfilled with the establishment of Nidda Topco S.à r.l. In this regard, an additional Shareholders' Agreement was concluded to provide for details of the multi-parent structure established (see section B.II.5.3).

# 5.2 Information about the syndicate members

### (i) Bain Capital

Bain Capital has partnered closely with management teams to provide the strategic resources that build great companies and help them thrive since its founding in 1984. Bain Capital's global team of approximately 220 investment professionals creates value for its portfolio companies through its global platform and depth of expertise in key vertical industries including healthcare, consumer/retail (FMCG), financial and business services, industrials, and technology, media and telecommunications (TMT). Bain Capital's shared global platform and bundled expertise help companies to capture opportunities in strategic areas of focus.

Bain Capital has offices in Boston, Chicago, New York, Palo Alto, San Francisco, Dublin, London, Luxembourg, Munich, Melbourne, Mumbai, Hong Kong, Shanghai, Sydney and Tokyo and has made investments in more than 300 companies to date. In addition to private equity, Bain Capital invests across asset classes including credit, public equity and venture capital, managing approximately USD 75 billion in total.

More information is available on Bain Capital's website at http://www.baincapitalprivatequity.com.

#### (ii) Cinven

Cinven is a leading international private equity firm focused on building worldclass European and global companies. Its funds invest in six key sectors: Healthcare, Business Services, Consumer, Financial Services, Industrials, and Technology, Media and Telecommunications (TMT). Cinven takes a responsible approach towards its portfolio companies, their employees, suppliers, local communities, the environment and society. To this end, proven growth strategies are employed to specifically develop portfolio companies and generate value.

Cinven has offices in key locations including: Frankfurt, London, Paris, Milan, Madrid, Guernsey, Hong Kong, and New York. Since 1988, Cinven funds have invested in 120 companies worth around EUR 90 billion. Today Cinven has more than EUR 15 billion in assets under management.

More information is available on Cinven's website at http://www.cinven.com.

#### 5.3 Shareholders' Agreement

In view of the equal participations of Bain Capital and Cinven of 50% in Nidda Topco S.à r.l., their direct shareholders Universe Luxembourg S.C.A. (an indirectly controlled subsidiary of Bain Capital) and Ciddan S.à r.l. (an indirectly controlled subsidiary of Cinven), involving Nidda Topco S.à r.l., have entered into a shareholders' agreement (*Shareholders' Agreement*) on 21 August 2017.

The Shareholders' Agreement provides for details of the corporate governance structure of Nidda Topco S.à r.l., which is jointly controlled by Bain Capital and Cinven, and provides the legal framework for exercising voting rights attaching to shares in STADA. The Shareholders' Agreement particularly contains a catalogue of matters that require the mutual consent of both, Bain Capital and Cinven. These matters include, among others, any amendment to corporate documents of a group company to the detriment of Bain Capital or Cinven, any material amendment to the business activities of controlled companies, and any capital measures or profit distributions in a controlled company and consequently any matters affecting the determination of STADA's financial and business policies.

#### 6. Profit situation and financial situation of Nidda Healthcare

Due to Nidda Healthcare's incorporation on 7 September 2017, its first financial year is a short financial year (*Rumpfgeschäftsjahr*) that will end at the end of day on 31 December 2017 only. Therefore, when signing this Contract Report, no annual financial statements exist for the financial year ending 31 December 2017.

Nidda Healthcare's share capital was paid by way of a contribution in kind, by Nidda Holding contributing 40,207,789 STADA Shares. On 25 August 2017, these STADA Shares had a value of approximately EUR 2,649 million. In addition, Nidda Holding made an additional contribution in kind in Nidda Healthcare, contributing additional 487,424 STADA Shares, so that Nidda Holding contributed a total of 40,695,213 STADA Shares in Nidda Healthcare (for details, see sections A and B.II.8.1). As at the date of this Contract Report, Nidda Healthcare holds 40,695,213 STADA Shares, corresponding to a stake of approximately 65.28%.

Nidda Holding granted to Nidda Healthcare a shareholder loan of EUR 650 million on 1 September 2017, a portion of EUR 21,537,114.84 of which was redeemed by Nidda Healthcare on 5 September 2017. Accordingly, the outstanding amount under the shareholder loan is EUR 628,462,885.16 on the date this Contract Report is signed. As of 30 September 2017, Nidda Healthcare had equity capital of EUR 2,054,684,799.00.

# 7. Financial resources of Nidda Healthcare to fulfil its liabilities under the domination and profit and loss transfer agreement

Before signing this Contract Report, the Executive Board of STADA and the management of Nidda Healthcare examined whether Nidda Healthcare will be able to fulfil its payment obligations under the Agreement. On the basis of Nidda Healthcare's current economic, financial and contractual situation, the Executive Board of STADA and the management of Nidda Healthcare arrived at the conclusion that Nidda Healthcare will be able to fulfil its liabilities under the Agreement.

The Executive Board of STADA and the management of Nidda Healthcare based their conclusion substantially on the following aspects:

Nidda Healthcare's future payment obligations under the Agreement are the payment of the recurring compensation payment (*Ausgleich*) in accordance with § 4(2) of the Agreement, the compensation (*Abfindung*) in accordance with § 5(1) of the Agreement and, insofar as even relevant, the obligation to compensate for any annual loss in accordance with § 3 of the Agreement.

At the time of the conclusion of the Agreement, outside STADA Shareholders hold 21,562,916 STADA Shares (62,342,440 issued STADA Shares less 84,311 treasury shares held by STADA and 40,695,213 STADA Shares held by Nidda Healthcare). Under § 5(1) of the Agreement, Nidda Healthcare shall offer the outside STADA Shareholders compensation of EUR 74.40 per STADA share in return for the acquisition of their STADA Shares (see section D.I.5). Accordingly, Nidda Healthcare's maximum amount of financing with regards the cash compensation is EUR 1,604,280,950.40. Furthermore, according to § 4(2) of the Agreement Nidda Healthcare shall pay the outside STADA Shareholders an annual fixed recurring compensation payment of EUR 3.82 gross per STADA share for the term of the Agreement (see section D.I.4). Accordingly, Nidda Healthcare's maximum amount of financing with regards the recurring compensation payment is EUR 82,370,339.12 gross annually during the term of the Agreement (or EUR 76,117,093.48 net according to the currently applicable rate of corporation tax including solidarity surcharge). It is necessary to consider that no more recurring compensation payments will have to be made to those outside STADA Shareholders who use their right to leave STADA in return for appropriate cash compensation.

Nidda Healthcare's current equity base comprises equity of EUR 25,000.00 and capital reserves of EUR 2,054,659,799.00. The payment of the recurring compensation payment after effectiveness of the obligation to transfer all profit under the Agreement can be met out of STADA's profits (see section D.I.2). Transferred profit can also be used to pay the compensation. If the transferred profit is insufficient for paying the compensation, then use can be made to the lines of credit and commitments concerning the supply of equity. Following an in-depth examination, the Executive Board of STADA has concluded that the financing measures for satisfying liabilities under the Agreement can be used.

Firstly, Universe Luxembourg S.C.A (an indirectly controlled subsidiary of Bain Capital) and Ciddan S.à r.l. (an indirectly controlled subsidiary of Cinven) have undertaken in the Shareholders' Agreement to provide Nidda Topco S.à r.l., the indirect parent company of Nidda Healthcare, either directly or indirectly, with a total amount of up to EUR 3bn in the form of equity and/or shareholder loans or similar instruments (equity commitments) which serve amongst other things to finance the acquisition of STADA shares i.e. including the payment of the recurring compensation. An approximately amount of EUR 1.3bn remains available from these equity commitments. Moreover, Nidda Healthcare can use loan commitments in order to satisfy its obligations under the Agreement. Nidda Healthcare can use the following resources to acquire STADA shares i.e. also to pay the recurring compensation: (i) approximately EUR 831m of withdrawable resources under a senior

secured term facility originally taken out for EUR 1.165m running until 2024 and (ii) approximately GBP 260m (corresponding to approximately EUR 295m) of withdrawable funds under an additional, as yet unused senior secured term facility running until 2024. Furthermore, Nidda Healthcare can use the following resources to satisfy all its liabilities under the Agreement: (i) approximately EUR 232m in trust-managed proceeds from senior secured notes issued by Nidda Holding running until 2024 and (ii) approximately EUR 387m of withdrawable resources under a senior secured revolving facility with an original amount of EUR 400m.

Both profit deducted and this equity and borrowed capital must also be used if Nidda Healthcare is obliged to compensate for losses pursuant to § 3 of the Agreement. Currently, there is nothing to indicate that losses requiring compensation will arise in the coming years. The STADA Group's adjusted net income in the financial year ended 31 December 2016 was approximately EUR 177.3 million and its adjusted net income as of 30 September 2017 was EUR 145.4 million.

#### 8. Takeover Offer and other acquisitions by Nidda Healthcare

The offer conditions of the Initial Takeover Offer, which was published on 27 April 2017, were not fulfilled and the Initial Takeover Offer was therefore not consummated. After the German Federal Financial Supervisory Authority (BaFin) on 10 July 2017 had given its consent pursuant to section 26(2) of the Securities Acquisition and Takeover Act ( $Wp\ddot{U}G$ ) to a renewed voluntary takeover offer by Nidda Holding before the end of the one-year exclusion period, Nidda Holding on 10 July 2017 announced its intention to make the Takeover Offer to STADA Shareholders.

# 8.1 Takeover Offer and other share acquisitions

On 19 July 2017, Nidda Holding published the Takeover Offer to STADA Shareholders for the acquisition of all STADA Shares at an offer price of EUR 66.25 per STADA Share, including an increase by EUR 0.72 per STADA Share if the Takeover Offer is closed before the date on which STADA's general meeting resolves on the appropriation of profits for financial year 2016. In their reasoned statement published on 24 July 2017, the Executive Board and Supervisory Board of STADA stated that, in their overall assessment, they considered the consideration offered by Nidda Holding as fair and appropriate.

The closing of the Takeover Offer was subject to the condition, inter alia, that upon expiry of the acceptance period on 16 August 2017, a minimum acceptance threshold of 63%, corresponding to 39,222,621 STADA Shares tendered for sale, will be reached. Upon expiry of the acceptance period, a total of 39,749,517 or 63.77% of the STADA Shares in issue were tendered for sale, so that the minimum acceptance threshold was reached. The purchase agreements coming into existence were fulfilled on 22 August 2017 in accordance with the conditions of the Takeover Offer, whereby Nidda Holding obtained ownership in such STADA Shares.

The additional acceptance period for the Takeover Offer ended at the end of day on 1 September 2017. Upon expiry of the additional acceptance period, additional 66,813, or 0.11%, of the STADA Shares in issue were tendered for sale. The pur-

chase agreements coming into existence were fulfilled on 15 September 2017, whereby Nidda Holding obtained ownership in such additional STADA Shares.

Between 21 August 2017 and 23 August 2017, Nidda Holding acquired additional STADA Shares on the stock exchange: 443,208 STADA Shares on 21 August 2017, 15,064 STADA Shares on 22 August 2017 and 420,611 STADA Shares on 23 August 2017.

#### 8.2 Contribution of the STADA Shares to Nidda Healthcare

The articles of association of Nidda Healthcare provide that Nidda Holding contributes as a contribution in kind the 40,207,789 STADA Shares already owned by it upon establishment on 25 August 2017 – consisting of the 39,749,517 STADA Shares tendered for sale in connection with the Takeover Offer as well as the 443,208 STADA Shares acquired on the stock exchange on 21 August 2017 and the 15,064 STADA Shares acquired on the stock exchange on 22 August 2017. Accordingly, by contribution agreement of the same date, Nidda Holding transferred 40,207,789 STADA Shares to Nidda Healthcare.

The 420,611 STADA Shares acquired by Nidda Holding on the stock exchange on 23 August 2017 were transferred to Nidda Healthcare by contribution agreement dated 28 August 2017.

The 66,813 STADA Shares tendered for acquisition by Nidda Holding by the end of the additional offer period on 15 September 2017 were transferred to Nidda Healthcare by contribution agreement of the same date.

# 8.3 Potential acquisitions outside of the offer for compensation

Nidda Healthcare reserves the right, at any time and to the extent permitted by law, to acquire additional STADA Shares, including outside of the contractual offer for the compensation pursuant to § 5 of the Agreement (see section D.I.5), directly or indirectly on the stock exchange.

# C. Reasons for concluding a domination and profit and loss transfer agreement

# I. Economic and legal reasons

# 1. Strengthening STADA Group's growth

The Agreement will enable a closer and effective cooperation between STADA and its majority shareholder Nidda Healthcare as well as the companies controlled by Bain Capital and Cinven.

The contractual instruction right enables Nidda Healthcare's management to implement single managerial control in the group's interest and single group structures and strategies also vis-à-vis STADA. This is a vital requirement for the proposed cooperation between Nidda Healthcare and STADA.

Therefore, after conclusion of the Agreement, STADA's development is to be promoted in accordance with the business plan to be developed with the new management. On the basis of the Agreement, STADA and Nidda Healthcare have set

themselves the goal to strengthen and further improve STADA's position in global competition. Bain Capital and Cinven seek to achieve this goal by employing their comprehensive industry expertise, their worldwide network particularly in the healthcare industry and their long-standing experience and consequent track record in implementing growth strategies in companies with activities in key industries in general and in the healthcare sector in particular. This should enable STADA to efficiently strengthen and expand its core business on a global level.

The added value for STADA will consist in the support the Nidda Holding structure provides to STADA's management and hence in exploiting the potential offered by Bain Capital and Cinven. In particular, STADA's Executive Board is to be supported in successfully continuing STADA's extensive strategic development that has already been initiated and in implementing the transformation process, including the following:

- optimising the Group structure and its Branded Products and Generics segments;
- ridding the product portfolio of products that, according to cost-benefit analyses, do not make a sufficient contribution to profitability;
- developing attractive branded products and rolling them out internationally, with seven branded products already identified;
- tapping new growth markets, such as nutritional supplements or generics;
- developing a plan to generate growth through strategic acquisitions and a strategy for M&A transactions (implementation, financing and integration), and identifying potential target companies for M&A transactions to strengthen growth.

Particularly the great experience Bain Capital and Cinven have in the healthcare industry and in relation to M&A processes and the optimisation of group structures should help realising STADA's great potential in the mid and long-term.

# 2. Limits and restrictions for cooperation in the current de facto corporate group

Due to Nidda Healthcare's majority holding in STADA, a *de facto* corporate group is currently existing between STADA and Nidda Healthcare. The same applies indirectly to the relationship with the companies of the Nidda Group held by Bain Capital and Cinven, as set out in Annex 2. Strict limits apply to controlling and coordinating activities in a *de facto* corporate group. Furthermore, according to section 76(1) AktG, STADA's Executive Board is obliged to manage STADA on its own responsibility. If influence exerted interferes in the independent managerial control of STADA's Executive Board and results in adverse effects to STADA, then STADA's Executive Board must not comply with it unless the adverse effects caused by such influence are compensated by Nidda Healthcare or the entity of the Nidda Group exerting influence, section 311(1) AktG. Such compensation of an adverse effect must be effected by the end of the financial year of STADA in which such disadvantageous influence was exerted, i.e. within a narrow time frame, by providing a factual compensation or by granting a relevant entitlement,

section 311(2) AktG. STADA's Executive Board must not execute the relevant measure or transaction if the adverse effect cannot be quantified and hence not be compensated. Therefore, STADA's Executive Board must examine for each measure effected or omitted and each legal transaction of STADA that were effected or omitted upon request or in the interest of Nidda Healthcare whether such influence is legally permitted or whether it results in adverse effects for STADA. Such a case-by-case examination may require extensive analyses and involve significant resources of the Executive Board without resulting in absolute legal certainty in each case. In many cases, in particular measures with a long-term objective, it is very difficult to determine whether the relevant measure has adverse effects. Adverse effects in the short term may be offset by positive effects in the long term. However, it is often uncertain whether and to what extent such positive effects materialise. In addition, STADA's Executive Board must always take the interests of minority shareholders into consideration.

Furthermore, in a *de facto* corporate group, all measures and legal transactions effected with the controlling entity or any affiliated entity thereof or upon request or in the interest of these entities must be documented in detail. The Executive Board of STADA must report thereon in an annual control report (*Abhängigkeitsbericht*), quantifying any potential adverse effects (section 312 AktG). This control report must then be audited by an auditor and thereafter by STADA's Supervisory Board (sections 313, 314 AktG).

All these provisions require substantial amounts of time and financial and personnel resources on both sides, and in particular on the side of STADA as the controlled entity. This is because all measures and legal transactions by STADA which are effected upon request of Nidda Healthcare or an affiliated entity thereof or effected or omitted in their interest, either with Nidda Healthcare or with a third party, must be reviewed with the involvement of the Executive Board and other departments of STADA (e.g. Legal, Accounting and Tax or Financing) to ensure compliance with the applicable rules in the de facto corporate group. In addition to tying up resources and the impossibility to achieve absolute legal certainty, this necessary audit further causes delays to the planned cooperation between the STADA Group and the Nidda Group. This complicates the expeditious and efficient implementation not only of urgent business decisions to be taken, but also of those decisions that are in both parties' mutual interest.

Practical difficulties also exist, in general, in determining the compensation for adverse effects, in particular in quantifying and determining the nature and scope of the compensation capability of adverse effects. Such difficulties are often encountered in relation to measures and legal transactions that go beyond a mere exchange of performance and consideration (e.g. receipt of goods or provision of services) or for whose consideration a market price cannot be determined (with sufficient certainty). Such measures may exist, for example, in an exchange of know-how or business information. In these cases it is practically difficult, or often even impossible, to quantify and compensate adverse effects or corresponding advantages that may result for the controlled entity. As a result, such measures may not be taken in a *de facto* corporate group with sufficient legal certainty and may require substantial audit and documentation efforts or may have to be omitted in their entirety.

# 3. Establishment of a contractual corporate group by concluding the domination and profit and loss transfer agreement

These difficulties in a *de facto* corporate group are avoided where a domination and profit and loss transfer agreement exists, as this creates a contractual basis for the planned close cooperation. The provisions on a case-by-case compensation for adverse legal transactions or measures effected or omitted upon request, or in the interest, of the controlling entity or any affiliate do not apply in a contractual corporate group. The controlling contractual party, due to the part of the contract that relates to domination, has the right, in particular, to issue direct instructions to the management board of the controlled entity to effect measures or legal transactions in the interest of the controlling contractual party or any of its affiliates. This applies even where such measures or legal transactions, in an isolated consideration, should have adverse effects for the controlled entity (section 308 AktG), the adverse effects cannot be compensated within the same financial year and/or the adverse effects cannot be precisely quantified. This enables a more efficient employment of resources and allows implementing also such cooperation measures for which adverse effects and, where appropriate, corresponding benefits cannot be quantified with legal certainty. Management measures can thus be taken in line with the affiliated undertakings' mutual interests without requiring a burdensome examination of each measure as to its effects on the controlled entity. Furthermore, no expenditure is required for preparing and auditing a control report (Abhängigkeitsbericht), as no such report needs to be prepared in a contractual corporate group.

For Nidda Healthcare, on the other side, the Agreement allows better control of the planned cooperation with the STADA Group in the mutual interest of the group of undertakings as a whole. The Agreement will further facilitate the unrestricted exchange of information also with regard to best practice policies between STADA and the Nidda Group.

Accordingly, the conclusion of the Agreement proves to be a suitable legal means to implement the proposed comprehensive cooperation of the undertakings involved, which is also applied by other companies in similar cases and is provided for by law particularly for this purpose.

The interests of STADA are further protected after conclusion of the Agreement by the fact that the right to issue instructions is not unlimited (see section D.I.1). In particular, STADA must not be deprived of its capability to continue existing as a result of disadvantageous instructions, as the legal provisions assume the controlled entity's continued existence also after the Agreement may have been terminated. Disadvantageous instructions are further impermissible and do not trigger consequential obligations where they apparently do not serve the interests of the controlling company or any affiliate of the controlling company or of the controlled company.

Due to the combination of a domination agreement and a profit and loss transfer agreement, Nidda Healthcare will have a claim against STADA for the transfer of profits after the Agreement will have become effective on 1 January 2018 (section 301 AktG), provided that STADA's general meeting will approve conclusion of the Agreement on 2 February 2018 and it is entered in the commercial register

where STADA has its registered office in the course of financial year 2018. In return, however, Nidda Healthcare is obliged to compensate STADA for any annual net loss that may arise during the term of the Agreement starting already from the commencement of effectiveness of only the domination part of the Agreement, unless such loss is compensated by withdrawing from other profit reserves amounts that were allocated to profit reserves during the term of the Agreement (section 302 AktG). Thus, unlike in the case of a mere de facto corporate group, STADA does not require compensation of each individual adverse effect that may have been caused by an exertion of influence. STADA rather has a statutory claim for full compensation of losses by Nidda Healthcare, irrespective of influence being exerted or any other factors (see section 302 AktG). For outside STADA Shareholders, the Agreement signifies a safeguard of interests that does not exist in a de facto corporate group. Outside STADA Shareholders obtain a statutory claim against Nidda Healthcare either for receipt of an appropriate annual recurring compensation payment (Ausgleichszahlung) for the term of the Agreement pursuant to section 304 AktG (see section D.I.4) or for acquisition of the outside shareholder's shares against an appropriate compensation (Abfindung) pursuant to section 305 AktG as determined in the Agreement (see section D.I.5).

### 4. Summary result

The establishment of a contractual corporate group between STADA and Nidda Healthcare strengthens and expands opportunities for a closer and strong cooperation between STADA and its major shareholder, Nidda Healthcare. Compared to the de facto corporate group currently existing, the contractual corporate group will result in cost savings and an avoidance of expenditure as, for example, no audit and documentation obligations have to be fulfilled in respect of adverse effects of influence being exerted. The contractual corporate group further establishes legal certainty in the cooperation between STADA and Nidda Healthcare and the implementation of organisational and structural measures. It offers more flexibility to issue instructions and makes decision processes and their implementation faster and more efficient. After the Agreement has become effective, the close cooperation could further achieve additional synergies. Finally, the contractual corporate group grants STADA as the controlled entity a claim for compensation of any annual net loss, irrespective of influence exerted or of the amount of any adverse effects, and offers outside shareholders a safeguard in the form of an appropriate recurring compensation payment (Ausgleichszahlung) or an appropriate compensation (Abfindung).

### II. Tax reasons

Conclusion of the Agreement will result in the establishment of a consolidated tax group for purposes of corporate income tax and trade tax (consolidated tax group for income tax purposes) between Nidda Healthcare as the controlling entity and STADA as the controlled entity in this tax group.

The existence of a consolidated tax group for income tax purposes requires, inter alia, that Nidda Healthcare has continuously held a participation in STADA since the beginning of the latter's financial year which grants to it the majority of voting rights attaching to the shares in the controlled entity in the tax group (section 14(1)).

sentence 1 no. 1 sentence 1 of the German Corporation Tax Act (*KStG*), and that the participation is continuously attributable to a German permanent establishment of Nidda Healthcare during the entire existence of the tax group (section 14(1) sentence 1 no. 2 sentence 4 KStG). Furthermore, the Agreement must have been concluded for a minimum term of five years of time and must in fact be performed during its entire term (section 14(1) sentence 1 no. 3 sentence 1 KStG).

The consolidated tax group for income tax purposes will come into existence for the first time on 1 January 2018 provided that STADA's general meeting will approve conclusion of the Agreement on 2 February 2018 and it will be entered in the commercial register where STADA has its registered office in the course of financial year 2018.

The existence of the consolidated tax group for income tax purposes will not make general obligations under tax-law non-applicable to STADA. As before, STADA will have to determine its tax results separately from Nidda Healthcare in accordance with general provisions. For corporation tax purposes, STADA's income will be determined separately, and uniformly and with binding effect towards Nidda Healthcare and STADA. As a result of the existence of a consolidated tax group for income tax purposes, however, STADA's taxable income will be attributed to Nidda Healthcare starting from the financial year as from which the consolidated tax group first exists, taking into consideration certain statutory limitations, and then taxed on the level of Nidda Healthcare. However, 20/17 recurring compensation payments (*Ausgleichszahlungen*) made to outside STADA Shareholders are subject to corporation tax on the level of STADA (section 16 KStG).

Establishment of the consolidated tax group for income tax purposes results in positive liquidity effects for Nidda Healthcare, as profit transfers under commercial law from STADA to Nidda Healthcare in a consolidated tax group for income tax purposes, contrary to profit distributions, are not subject to the deduction of withholding tax plus solidarity surcharge. If the Agreement was not concluded and STADA's profit was distributed as a dividend, withholding tax plus solidarity surcharge would, in general, only be credited or, as the case may be, refunded in connection with the corporation tax assessment after filing the tax return for the assessment period in which the dividend was received, since the dividend should generally be excluded in relation to Nidda Healthcare when calculating income (section 8b(1) KStG). In addition, a transfer of profits under commercial law in a consolidated tax group for income tax purposes, contrary to a dividend distribution, is not subject to the fictitious five percent business expenses deduction prohibition as provided for in section 8b(5) KStG.

In addition, the establishment of the consolidated tax group for income tax purposes results in Nidda Healthcare being able to offset its tax result against the tax result of STADA, meaning that offsetting occurs between financing expenditure and operative earnings that, due to the lower tax payments on balance, results in a corresponding liquidity benefit. Due to the resulting 95% tax exemption, such offsetting would only be possible to a very limited extent in the case of dividend distributions by STADA to Nidda Healthcare.

Furthermore, Nidda Healthcare will examine whether the requirements for the establishment of a consolidated tax group for VAT purposes are met in connection

with concluding the Agreement. The existence of a consolidated tax group for VAT purposes would have the advantage that no VAT would accrue in the exchange of services between the two entities and only joint VAT declarations would have to be submitted.

#### III. Alternatives

The Executive Board of STADA and the management of Nidda Healthcare have duly examined alternatives to concluding the Agreement. They have come to the conclusion that no other structural measure they examined is suitable to achieve the described objectives in a similar or even more beneficial manner. Against this background, the following other structures were examined in particular:

# 1. Conclusion of an isolated domination agreement and an isolated profit and loss transfer agreement

The conclusion of an isolated domination agreement between STADA and Nidda Healthcare would be legally permitted. However, if no profit and loss transfer agreement is concluded, no consolidated tax group for purposes of corporate income tax and trade tax (consolidated tax group for income tax purposes) will be established. Furthermore, an isolated domination agreement allows no transfer of profits and no assumption of losses. In addition, the tax advantages sought and the liquidity benefit resulting from the transfer of profits could not be achieved with an isolated domination agreement.

The conclusion of an isolated profit and loss transfer agreement between STADA and Nidda Healthcare would also be legally permitted. However, a profit and loss transfer agreement provides no sufficient legal basis to allow the intended comprehensive cooperation and the unrestricted exchange of information between STADA and the Nidda Group. The intended close cooperation can only be achieved with legal certainty if a contractual basis is established for the current *de facto* corporate group by means of a domination agreement which gives Nidda Healthcare comprehensive rights to give instructions to STADA (see sections C.I.2 and C.I.3). Accordingly, the benefits of comprehensive cooperation that are also sought to be achieved could not be realised with a mere profit and loss transfer agreement.

Therefore, the Contractual Parties have decided to conclude a domination and profit and loss transfer agreement. This contractual form, by providing for the recurring compensation payment (*Ausgleich*) and the compensation (*Abfindung*), pays due consideration to the interests of STADA minority shareholders and has been tried and tested in practice in stock corporation law.

# 2. Exclusion of minority shareholders (squeeze-out)

An exclusion of STADA's minority shareholders pursuant to sections 327a et seqq. AktG (squeeze-out under stock corporation law) is not possible on the date the Agreement is signed, as this would require that Nidda Healthcare holds a minimum participation of 95% in STADA's share capital.

The same holds true for an exclusion of STADA's minority shareholders pursuant to section 62(5) of the German Transformation Act (*UmwG*) in conjunction with

section 327a et seqq. AktG after a previous merger (squeeze-out under transformation law), as this requires a minimum participation of 90%. In addition, Nidda Healthcare as a limited liability company (*Gesellschaft mit beschränkter Haftung*) does not have the required legal form for a squeeze-out under transformation law, i.e. that of a German stock corporation (*Aktiengesellschaft*). Accordingly, even if the required participation ratio was held, Nidda Healthcare would first have to be transformed into a stock corporation.

An exclusion of STADA's minority shareholders pursuant to sections 39a et seqq. WpÜG (squeeze-out under takeover law) is not possible either. For this purpose, Nidda Healthcare does not even have the right to file an application, as only the bidder in a takeover or mandatory offer has such right, which in the present case would be Nidda Holding (see section B.II.8). In addition, Nidda Healthcare does not hold the required minimum participation of 95% in STADA's share capital and, therefore, does not fulfil the requirements of a squeeze-out under takeover law.

Even if a squeeze-out was possible and implemented, the consequent position of Nidda Healthcare as the sole shareholder in STADA would not remove the restrictions and difficulties that result from the continued existence of a *de facto* corporate group (see section C.I.2), as long as STADA has the legal form of a stock corporation (*Aktiengesellschaft*) or a European stock corporation (*Societas Europeae*) with its registered office in Germany. Furthermore, the objectives pursued with the domination and profit and loss transfer agreement (see sections C.I.1 and C.I.3), in particular a consolidated tax group for income tax purposes (see section C.II), would not be achieved.

To the extent that STADA owns real property in Germany or holds a minimum participation, directly or indirectly, of 95% in the capital or assets of corporations or partnerships owning real property in Germany, a squeeze-out would further trigger real estate transfer tax (*Grunderwerbsteuer*).

### 3. Integration or merger

An integration into a group by way of an integration pursuant to sections 319 et seqq. AktG is not possible. On the one side, Nidda Healthcare as a limited liability company (*Gesellschaft mit beschränkter Haftung*) does not have the required legal form for an integration, i.e. that of a German stock corporation (*Aktiengesellschaft*) or a European stock corporation (*Societas Europaea*) with its registered office in Germany, so that Nidda Healthcare would first have to be transformed into either of these two legal forms. On the other side, Nidda Healthcare is neither the sole shareholder (section 319(1) sentence 1 AktG) nor holding a participation of at least 95% in STADA's share capital and, therefore, does not fulfil the requirements for an integration.

A merger of Nidda Healthcare with STADA (downstream merger) is no alternative as is, conversely, a merger of STADA with Nidda Healthcare (upstream merger). A downstream merger would not change anything about the requirement of a domination and profit and loss transfer agreement to implement the envisaged integration of STADA. STADA would then be required to conclude a domination and profit and loss transfer agreement with Nidda Holding as the sole shareholder of

Nidda Healthcare, which would then have ceased to exist. Nor is an upstream merger a suitable alternative. In this case, outside STADA Shareholders would obtain a participation in Nidda Healthcare with the same value as their previous participation in STADA. In addition, the STADA Shares would no longer be tradable, because the STADA Shares would be cancelled and the shares in Nidda Holding would only be tradable after its transformation into a stock corporation and an initial public offering, which is not intended, however.

Under the same conditions as a squeeze-out, an upstream merger would also trigger real estate transfer tax (*Grunderwerbsteuer*).

## 4. Change of legal form

A transformation of STADA changing its legal form into that of another corporation or a partnership is not suitable either to achieve the objectives pursued with the Agreement. Furthermore, STADA's corporate structure as a stock corporation is to be maintained for the time being.

First of all, the intended tax group would not be achieved by means of a change of legal form, and would still have to be established, in particularly, by means of a profit and loss transfer agreement. Further, a change of legal form to a partnership limited by shares (*Kommanditgesellschaft auf Aktien*) would leave the applicability of the rules for a *de facto* corporate group unaffected as well as the consequent disadvantages compared to the legal situation that would exist if a domination and profit and loss transfer agreement was concluded.

Also in case that its legal form was changed to that of a limited liability company (*Gesellschaft mit beschränkter Haftung*) or a partnership, instructions issued in the group's interest would have to be examined on a case-by-case basis as to whether they are disadvantageous to STADA. This is because also in relation to a limited liability company or a partnership, the fiduciary duty the controlling company has as a shareholder or partner would have to be observed, which would make the implementation of disadvantageous measures problematic.

Finally, a change of legal form would have caused additional expenditure and delays and, in case of a change of legal form to a limited liability company (*Gesell-schaft mit beschränkter Haftung*) or a partnership, the loss of the STADA Shares' admission to exchange trading. This would affect the tradability of STADA Shares. There is no legal obligation to effect a change of legal form in connection with the conclusion of a domination and profit and loss transfer agreement.

## 5. Summary results

The Executive Board of STADA and the management of Nidda Healthcare, after thorough and careful consideration, arrived at the conclusion that the intended close and efficient cooperation between STADA and Nidda Healthcare as well as the Nidda Group can only be achieved by concluding a domination and profit and loss transfer agreement. Only concluding a domination and profit and loss transfer agreement allows the limitations of a de facto corporate group (see section C.I) to be avoided and a consolidated tax group for corporate income tax and trade tax purposes (see section C.II) to be established.

## D. The domination and profit and loss transfer agreement

## I. Explanation of the Agreement's content

The individual provisions of the Agreement are explained below.

### 1. Managerial control (§ 1 of the Agreement)

§ 1 of the Agreement contains the constitutive provision for a domination agreement that STADA as the controlled company agrees that the management of its company shall be under the control of Nidda Healthcare as the controlling company. Nidda Healthcare is therefore entitled to issue general and case-specific instructions to STADA's Executive Board in relation to STADA's management and in relation to preparing STADA's annual financial statements (§ 1(1) of the Agreement). Nidda Healthcare is entitled to authorise its direct or indirect shareholders to exercise the right of instruction on behalf and as a proxy of Nidda Healthcare (§ 1(3) of the Agreement). Nidda Healthcare is a mere holding company. The group's management by the shareholder is exercised at a level above that of Nidda Healthcare (see Nidda Healthcare's shareholder structure in Annex 2). STADA's Executive Board is only obliged to comply with instructions issued by direct or indirect shareholders of Nidda Healthcare after it (i) has been presented with the first instruction by an authorized entity, and (ii) in case of foreign authorized entities also the power of representation of the person(s) issuing the instruction. Changes in relation to the power of attorney as well as in relation to the composition of the authorized company's management must be reported by Nidda Healthcare to STADA without undue delay (§ 1(3) of the Agreement).

Notwithstanding the domination and the consequent instruction right, STADA continues to be a legally independent entity with its own corporate bodies. Accordingly, STADA's Executive Board continues to be responsible for STADA's management and representation. To the extent that no instructions were given, STADA's Executive Board continues to be responsible for STADA's management in its own responsibility.

The scope of the instruction right is primarily determined pursuant to section 308 AktG. Section 308(1) sentence 2 AktG allows to issue also such instructions which have adverse effects for STADA, to the extent that they serve the interest of Nidda Healthcare or any of its affiliates. STADA's Executive Board is required to comply with legally permitted instructions (§ 1(2) of the Agreement) and is therefore, generally, not permitted to refuse compliance with instructions issued. However, STADA's Executive Board is not required to comply with an instruction which obviously does not serve the interest of Nidda Healthcare or any of its affiliates. The same applies to impermissible instructions (such as an instruction the compliance with which would violate statutory provision or provisions of STADA's articles of association) and instructions that would jeopardise STADA's existence. In the Contractual Parties' opinion, STADA's Executive Board is not required to comply with instructions issued for as long as Nidda Healthcare does not (fully) fulfil its obligations under the Agreement, in particular its obligations to assume losses and to make an appropriate recurring compensation payment (Ausgleich) to outside STADA Shareholders, or is not expected to be able to fulfil these obligations (for STADA's extraordinary termination right, see section D.I.7.4). Further, STADA's Executive Board may not be instructed to amend, maintain or terminate the Agreement (section 299 AktG, section 1(4) of the Agreement).

The instruction right exists only towards STADA's Executive Board (section 308 AktG), but not towards the Supervisory Board, the general meeting or employees of STADA, nor towards corporate bodies or employees of any subsidiary of STADA. If STADA's Executive Board is instructed to effect a transaction which may only be effected with the consent of STADA's Supervisory Board and if the Supervisory Board does not give its consent or does not give it within a reasonable period, the consent of STADA's Supervisory Board may be replaced by renewing the instruction (section 308(3) AktG). The participation rights of STADA's general meeting are in no case affected by the Agreement.

Instructions must be issued in text form within the meaning of section 126b BGB (e.g. by e-mail or by telefax or computer fax); or, if given orally, must be confirmed in text form without undue delay if requested by the STADA Executive Board (§ 1(5) of the Agreement).

Nidda Healthcare's instruction right and STADA's corresponding obligation to comply with such instructions exist from the time the Agreement becomes effective by virtue of registration in the commercial register where STADA has its registered office, but not before 1 January 2018 (section 294(2) AktG, § 1(1), § 7(2) of the Agreement and section D.I.7.2(i)).

## 2. Transfer of profits (§ 2 of the Agreement)

§ 2 of the Agreement contains the constitutive provision for a profit and loss transfer agreement that STADA undertakes to transfer its entire annual profit (*Gewinnabführung*) to Nidda Healthcare. Subject to the creation or release of reserves pursuant to § 2(2) of the Agreement, the amount of profits to be transferred is determined in accordance with section 301 AktG as amended from time to time (§ 2(1) of the Agreement).

The amount of profits to be transferred, in accordance with the current version of section 301 AktG, is the net income for the year arising without such transfer of profits, reduced by a loss carryforward from the previous year, by the amount to be allocated to the statutory reserve pursuant to section 300 AktG, and by the amount subject to a distribution ban pursuant to section 268(8) HGB.

The amount to be allocated to the statutory reserve is determined in accordance with section 300 no. 1 AktG and depends on the amount of share capital, the net income for the year and the amount already allocated to the statutory reserve. STADA's statutory reserve is currently established in full. Therefore, it is not necessary to allocate additional amounts to the statutory reserve pursuant to section 300 no. 1 AktG.

If internally generated intangible fixed assets (section 248(2) sentence 1 HGB) are capitalised in STADA's balance sheet, the distribution ban pursuant to section 268(8) sentence 1 HGB applies. In this case, profits may be distributed only insofar as the amount of freely available reserves after the distribution, plus a profit carried forward and less a loss carried forward, at least equals the total amount cap-

italised as internally generated intangible assets less deferred tax liabilities established in respect thereof. If deferred taxes (section 274(1) sentence 2 HGB) are capitalised in STADA's balance sheet, section 268(8) sentence 2 HGB provides that the amount of freely available reserves after the distribution, plus a profit carried forward and less a loss carried forward, must at least equal the amount of deferred tax assets less deferred tax liabilities. In the case of assets to which no creditors have access and whose sole purpose is to fulfil pension obligations or similar obligations that are due in the long term (section 246(2) sentence 2 HGB), section 268(8) sentence 3 HGB requires that the amount of freely available reserves after the distribution, plus a profit carried forward and less a loss carried forward, must at least equal the difference between the sum of the fair values stated in the balance sheet for these assets, reduced by deferred tax liabilities established in respect thereof, and the historical cost of these assets. The term "freely available reserves" (frei verfügbare Rücklagen) includes both profit reserves and certain capital reserves. Accordingly, profit reserves the distribution of which is not prevented by statutory provisions or the articles of association and freely available capital reserves pursuant to section 272(2) no. 4 HGB are to be taken into account in determining the maximum distribution amount.

The amount to be transferred as profit pursuant to § 2(1) of the Agreement is reduced pursuant to § 2(2) sentence 1 of the Agreement if and to the extent that STADA with the consent of Nidda Healthcare, given in writing or in text form within the meaning of section 126b BGB, allocates amounts from the net income for the year generated without the profit transfer to other profit reserves (section 272(3) sentence 2 HGB). The allocation of such amounts to other profit reserves is only recognised for the purposes of the consolidated tax group for income tax purposes (see section D.I.7.4) to the extent that this is economically justified in accordance with prudent business judgment (section 14(1) sentence 1 no. 4 KStG). § 2(2) sentence 1 of the Agreement pays consideration to this measure.

If, during the term of the Agreement, amounts were allocated to other profit reserves (section 272(3) sentence 2 HGB), such amounts may be withdrawn again from other profit reserves upon Nidda Healthcare's request pursuant to § 2(2) sentence 2 of the Agreement and be used to balance any annual net loss or be transferred as profit (section 301 sentence 2 AktG).

§ 2(2) sentence 3 of the Agreement provides that other reserves or a profit carried forward from the period before commencement of the Agreement must neither be transferred as profit nor be used to balance any annual net loss. The term "other reserves" includes any reserves pursuant to section 272 HGB except for other profit reserves established during the term of the Agreement. As a result thereof, neither the statutory reserve, the reserves established on the basis of STADA's articles of association or capital reserves, irrespective of the time of their establishment, nor other profit reserves established before the Agreement's commencement may be transferred as profit or be used to balance an annual net loss. This provision corresponds to the requirements of section 301 AktG and supreme court rulings on the use of reserves under a domination and profit and loss transfer agreement.

Pursuant to § 2(3) of the Agreement, the obligation to transfer profits exists for the first time for STADA's financial year beginning on 1 January 2018, provided that

the existence of the Agreement is registered in 2018 in the commercial register where STADA has its registered office and the Agreement thereby becomes effective, or otherwise such later financial year of STADA in which the Agreement becomes effective pursuant to § 7(2). In any case, the obligation becomes due upon approval of the annual financial statements for STADA's relevant financial year.

## 3. Assumption of losses (§ 3 of the Agreement)

§ 3(1) of the Agreement provides for the obligation of Nidda Healthcare pursuant to section 302(1) AktG as amended from time to time to balance any annual net loss of STADA. Pursuant to the current version of section 302(1) AktG, any annual net loss "otherwise" arising, i.e. without the existence of the obligation to assume losses, has to be balanced to the extent that such annual net loss is not balanced by withdrawing from other profit reserves (section 272(3) sentence 2 HGB) amounts that were allocated to the former during the term of the Agreement. The obligation to assume losses ensures that STADA's equity stated in the balance sheet on the date the Agreement becomes effective will not reduce during the term of the Agreement. Hence, it serves to safeguard the property interests of STADA, its shareholders and creditors during the term of the Agreement.

Pursuant to § 3(2) of the Agreement, the obligation to assume losses exists for the first time for STADA's financial year beginning on 1 January 2018, provided that the existence of the Agreement is registered in 2018 in the commercial register where STADA has its registered office and the Agreement thereby becomes effective, or otherwise such later financial year of STADA in which the Agreement becomes effective pursuant to § 7(2). In any case, the obligation becomes due at the end of a financial year of STADA.

If the Agreement is terminated by STADA during a financial year, i.e. in case of termination by Nidda Healthcare without cause or in case of termination by Nidda Healthcare or STADA for good cause (*aus wichtigem Grund*) (see section D.I.7.4), Nidda Healthcare is obliged to assume such deficit of STADA as results from a balance sheet to be prepared as of the date of termination of the Agreement (§ 3(3) of the Agreement).

Pursuant to the current version of section 302(4) AktG, STADA's claim for compensation for an annual deficit is statute-barred after ten years from the date on which the entry of the Agreement's termination in the commercial register where STADA has its registered office has been announced in accordance with section 10 HGB.

## 4. Recurring compensation payment (Ausgleich) (§ 4 of the Agreement)

### 4.1 Recurring compensation payment (*Ausgleichszahlung*)

Pursuant to section 304(1) AktG, the Agreement, to be effective, must contain an obligation to grant an appropriate recurring compensation payment (*Ausgleich*) to outside STADA Shareholders. Accordingly, Nidda Healthcare undertakes towards outside STADA Shareholders in § 4(1) of the Agreement to pay a fixed recurring cash compensation (*recurring compensation payment*) on an annual basis for as long as the Agreement is in effect.

After the profit transfer obligation pursuant to § 2 of the Agreement has become effective, i.e. for the first time for STADA's financial year in which the existence of the Agreement is entered in the commercial register where STADA has its registered office, and thereby becomes effective, STADA will generally no longer report a distributable profit for the relevant financial year and subsequent financial years (except for any income from the release of reserves that are not subject to the transfer of profits under the Agreement, or distributable profits due to a profit carried forward from the time before commencement of the Agreement). Accordingly, the STADA Shareholders' right to decide on the appropriation of distributable profits normally ceases to exist from that date. As compensation for the loss of their dividend entitlements, Nidda Healthcare grants outside STADA Shareholders the recurring compensation payment (*Ausgleichszahlung*) pursuant to § 4(1) of the Agreement.

The obligation to make such recurring compensation payments (Ausgleichszahlung) relates to the term in which the profit transfer obligation exists pursuant to § 2 of the Agreement and, consequently, for as long as the Agreement remains effective. The recurring compensation payment is granted for the first time for STADA's financial year in which the Agreement becomes effective pursuant to § 7(2) and will be paid for the first time after STADA's ordinary general meeting in the next following year (§ 4(4) of the Agreement). If the Agreement becomes effective during financial year 2018, the obligation to make the recurring compensation payment exists as from 1 January 2018. If the Agreement terminates during a financial year of STADA or if a recurring compensation payment is payable for a short financial year of STADA of less than twelve months, the recurring compensation payment is reduced for such financial year on a pro rata temporis basis (§ 4(5) of the Agreement). This takes account of the fact that the recurring compensation payment is determined for a period of twelve months, i.e. a full financial year.

Pursuant to § 4(3) of the Agreement, the recurring compensation payment (*Ausgleichzahlung*) is due on the third banking day (Frankfurt am Main) after STADA's ordinary general meeting for the respective preceding financial year, and in any even within eight months after the end of the relevant financial year.

### 4.2 Type of the recurring compensation payment (*Ausgleichszahlung*)

### (i) Legal bases

A domination and profit and loss transfer agreement must provide for an appropriate recurring compensation payment (*Ausgleich*) for the controlled entity's outside shareholders (section 304(1) sentence 1 and 2 AktG), and for outside STADA Shareholders in the present case. This recurring compensation payment must consist of a recurring cash payment in relation to each share (section 304(1) sentence 1 AktG). Two types of recurring compensation payments are possible, a fixed or a variable compensation payment.

# (ii) Fixed recurring compensation payment

In the case of a fixed recurring compensation payment, the annually recurring payment of a fixed cash amount is guaranteed. The amount of the fixed

recurring compensation payment must equal the amount which could be expected to be distributed on each individual share as average profit share, i.e. as distributable profit for commercial law purposes, in view of the controlled entity's past profitability and future earnings prospects, taking into account adequate depreciation, amortisation and value allowances, but excluding other profit reserves (section 304(2) sentence 1 AktG.

### (iii) Variable recurring compensation payment

The variable compensation guarantees a recurring payment based on the controlling company's profit. However, this is only possible if the controlling company is a German stock corporation, a partnership limited by shares or a European stock corporation (*Societas Europaea*) which has its registered office in Germany. The variable recurring compensation payment must then correspond to the amount which, using an appropriate conversion ratio, is attributable to each of the shares of the controlling company as dividend (section 304(2) sentences 2 and 3 AktG).

(iv) Reasons for determining a fixed recurring compensation payment

The Agreement between STADA and Nidda Healthcare determines a fixed annual recurring compensation payment. The main grounds for this are essentially as follows:

Nidda Healthcare as the controlling company is a limited liability company, meaning that the opportunity to choose the type of recurring compensation payment does not exist from the outset. Rather, only a fixed recurring compensation payment can be considered. Therefore, a variable recurring compensation payment based on the profit of Nidda Healthcare is legally impossible without transforming the company beforehand into a stock corporation or partnership limited by shares. Irrespective of this, a recurring compensation payment based on Nidda Healthcare's profit would not be suited to safeguarding the rights of the outside STADA Shareholders. Nidda Healthcare's interest in STADA is the only major asset of Nidda Healthcare, which is why from an economic perspective the outside STADA Shareholders only received a recurring compensation payment based on the profit of STADA. However, Nidda Healthcare could use control of STADA in a manner that results in the reduction of STADA profits. This in turn would lead to a lower recurring compensation payment for the outside STADA Shareholders.

4.3 Determination of the recurring compensation payment as a gross payment, amount of the recurring compensation payment

Under § 4(1) of the Agreement, Nidda Healthcare grants the outside STADA Shareholders the recurring compensation payment for the duration of the Agreement. The amount and the determination of the recurring compensation payment are explained and justified below and in section E.II.

(i) Amount of the recurring compensation payment

For every full STADA financial year, § 4(2) of the Agreement provides for a recurring compensation payment of EUR 3.53 for every STADA Share

(this corresponds to an amount of EUR 3.82 before any corporation tax and solidarity surcharge due). This amount is due in full on an annual basis, since from when the obligation to transfer profits becomes effective, STADA will generally no longer show any distributable profit (except for any income from the release of reserves that are not subject to the transfer of profits under the Agreement, or distributable profits due to a profit carried forward from the time before commencement of the Agreement), meaning that the STADA Shareholders' right to decide on the use of the distributable profit will no longer apply.

## (ii) Mechanism for adjusting the recurring compensation payment

In determining and adjusting the recurring compensation payment under § 4(2) of the Agreement, the Contractual Parties have adhered to the requirements of the German Federal Court of Justice (Bundesgerichtshof) (decision of 21 July 2003 - II ZB 17/01 - "Ytong"). According to this, the outside shareholders as a starting point are to be granted the expected gross distributable profit per share as a fixed size as a recurring compensation payment under section 304(1) sentence 1 and 2, and 304(2) sentence 1 AktG, with the corporate tax burden to be deducted from this at the relevant rate provided for by law. This is intended to ensure that a reduction in the corporation tax rate versus the relevant rate at the time of the effective date for the valuation does not result in an unjustified advantage for the controlling company to the detriment of the outside shareholders. Conversely, this is also intended to prevent an unjustified advantage for the outside shareholders to the detriment of the controlling company in the event of an increase in the rate of corporation tax. These principles apply accordingly to the solidarity surcharge levied in addition to the corporation tax.

On this basis, a gross profit share must be provided for as a fixed recurring compensation payment per STADA Share (*Gross Amount of Recurring Compensation*), set off against corporation tax along with the solidarity surcharge in accordance with the applicable rate for the relevant financial year (*Net Amount of Recurring Compensation*). In the event of a change to the rate of corporation tax or the solidarity surcharge, this creates a variable provision which immediately results in a corresponding adjustment to the Net Amount of Recurring Compensation. However, withholding tax and solidarity surcharge must only be deducted with regards the part of the Gross Amount of Recurring Compensation which relates to profits subject to German corporation tax.

According to the corporation tax rate of 15% and the solidarity surcharge of 5.5% applicable on the signing date of the Contract Report, a total of EUR 0.29 per STADA share is to be deducted from the Gross Amount of Recurring Compensation of EUR 3.82 per STADA share. This results in a Net Amount of Recurring Compensation of EUR 3.53 per STADA share.

As an example, the mechanism for adjusting the recurring compensation payment on the basis of changes to the tax rate can be illustrated as follows: if the rate of corporation tax of 15% is reduced by one percentage point to 14%, the variable provision in § 4(2) of the Agreement results in the current

deduction for corporation tax and solidarity surcharge of EUR 0.29 per STADA share being reduced by EUR 0.02 (1.0% plus 5.5% solidarity surcharge, together 1.055% on the part of the Gross Amount of Recurring Compensation which relates to the profits on which German corporation tax is charged). This increases the Net Amount of Recurring Compensation from EUR 3.53 per STADA share by EUR 0.02 to EUR 3.55. Conversely, increasing the rate of corporation tax by one percentage point results in a reduction in the Net Amount of Recurring Compensation from EUR 3.53 per STADA share by EUR 0.02 to EUR 3.51.

Under § 4(2) of the Agreement, moreover, the resulting source taxes (such as withholding tax plus solidarity surcharge) are withheld from the Net Amount of Recurring Compensation insofar as required by law. This also applies to the solidarity surcharge levied as a supplemental tax and any church tax (see section D.IV.2 for details).

### 4.4 Further explanation of § 4 of the Agreement

§ 4(3) of the Agreement governs the maturity of the recurring compensation payment. The recurring compensation to be paid by Nidda Healthcare is due in each case on the third banking day (Frankfurt am Main) after STADA's ordinary general meeting for the respective preceding financial year, but in any even within eight months after the end of the financial year.

§ 4(4) of the Agreement determines that the recurring compensation payment is granted for the first time for the full STADA financial year for which the obligation to transfer profits pursuant to § 2 of the Agreement becomes effective. Pursuant to § 2(3) of the Agreement, this is first the case for the entire profit of the STADA financial year beginning on 1 January 2018 or the subsequent STADA financial year in which the Agreement becomes effective by being entered in the commercial register where STADA has its registered office. If the Agreement becomes effective by 31 December 2018, the obligation to transfer profits exists from 1 January 2018 for the 2018 financial year. If the Agreement only becomes effective later, then the obligation to transfer profits only applies as of the subsequent financial year concerned.

As of when the transfer of profits pursuant to § 2 of the Agreement comes into effect, the outside STADA Shareholders have no claim to a dividend provided accumulated profit is not formed from reserves or profit brought forward from the period prior to the beginning of the Agreement and the general meeting resolves on a payout.

§ 4(5) of the Agreement determines that if the Agreement ends in the course of a STADA financial year, or a short financial year is created during the term of the Agreement, then the recurring compensation payment for this financial year will be reduced. This takes account of the fact that the amount of recurring compensation determined is fixed for a period of twelve months, i.e. a full financial year.

§ 4(6) sentence 1 of the Agreement governs the adjustment of the recurring compensation payment in the event of an increase in the STADA share capital from company funds. If new STADA Shares are issued in this manner, then the Gross Amount of Recurring Compensation per STADA Share decreases to the extent that

the total amount of the Gross Amount of Recurring Compensation remains unchanged. However, because an outside STADA Shareholder receives a corresponding number of new STADA Shares, there is no change to the total amount of the recurring compensation payment received by the outside STADA Shareholder. This provision is necessary because a capital increase from company funds, that is the transformation of profit or certain capital reserves into share capital, has no influence of the value and the profitability of STADA, and because the new STADA Shares from the capital increase from company funds are issued to the STADA Shareholders without consideration. Moreover, this also corresponds to section 216(3) AktG, according to which the economic content of contractual relationships between STADA and third parties are not affected by the capital increase from company funds. If no new STADA Shares are issued in relation to the capital increase from company funds, then an adjustment to the recurring compensation payment is not necessary.

If STADA's share capital is increased by issuing new STADA Shares against contribution in cash and/or in kind, then under § 4(6) sentence 2 of the Agreement, the claim to the recurring compensation payment also covers these newly issued STADA Shares. That ensures in the event of such increases to the STADA share capital that not only do compensation claims of the previous outside STADA Shareholders remain unaffected, but also that new outside STADA Shareholders are treated equally. The amount of the recurring compensation payment does not change either, although new shares have been issued. This is justified because the new shares have been issued in return for the rendering of capital contributions.

§ 4(7) of the Agreement concerns the protection of the outside STADA Shareholders. If a STADA Shareholder asserts that the recurring compensation payment on offer is too low, under sections 1 et seqq. of the Appraisal Proceedings Act (SpruchG) they can file appraisal proceedings for the court to determine the appropriate recurring compensation payment. The provision in § 4(7) sentence 1 of the Agreement grants all outside STADA Shareholders the right to supplement the recurring compensation payment in the event of any appraisal proceedings, if the court legally establishes a higher compensation; this corresponds to the legal regulation in section 13 sentence 2 SpruchG. These claims also apply to those STADA Shareholders who have in the meantime accepted the offer for the compensation pursuant to § 5 of the Agreement. These claims also exist regardless of whether the STADA Shareholder was involved in any appraisal proceedings (see § 13 sentence 2 SpruchG). If such an appraisal proceeding is terminated by a judicially recorded settlement, the rights of all outside STADA Shareholders are protected by the fact that such a termination pursuant to section 11(2) SpruchG is only possible with the consent of the joint representative of the outside STADA Shareholders. According to § 4(7) of the Agreement, in the case of a judicially recorded settlement, STADA Shareholders who have already been compensated in accordance with § 5 of the Agreement are entitled to demand a corresponding additional payment to the recurring compensation payment, to the extent required by the applicable statutory law (see also section D.III.2.3).

## 5. Compensation (*Abfindung*) (§ 5 of the Agreement)

# 5.1 Type of compensation

Other than the obligation to grant the recurring compensation payment, the Agreement must contain an obligation for Nidda Healthcare to acquire the shares of a STADA outside shareholder upon demand by such shareholder in return for appropriate compensation (*Abfindung*) specified in the agreement (section 305(1) AktG). In general, the Stock Corporation Act (*Aktiengesetz*) distinguishes between three types of compensation under section 305(2) sentence 2 AktG:

(i) Compensation in shares of the other party to the Agreement

If the other party to the Agreement (Nidda Healthcare) were a non-dependent and non-majority-owned stock corporation or partnership limited by shares with its registered office in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, then the Agreement would have to provide for granting treasury shares in this company as compensation (section 305(2) no. 1 AktG).

(ii) Choice between cash compensation and compensation in shares of the controlling company or the company with a majority interest in the other party to the Agreement

If the other party to the Agreement (Nidda Healthcare) were a non-dependent or non-majority-owned stock corporation or partnership limited by shares and the controlling company is a stock corporation or a partnership limited by shares with its registered office in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, then the Agreement would have to either provide for granting shares in the controlling company or the company with a majority interest or cash compensation (section 305(2) no. 2 AktG).

## (iii) Cash compensation

In all remaining cases, the Agreement must provide for cash compensation (section 305(2) no. 3 AktG).

# 5.2 Reasons for granting cash compensation

The following reasons are of primary relevance for granting cash compensation:

Nidda Healthcare is organised in the legal form of a limited liability company, and therefore is neither a stock corporation nor a partnership limited by shares with its registered office in a Member State of the European Union or another contracting state to the Agreement on the European Economic Area, meaning that section 305(2) no. 1 and no. 2 AktG do not apply.

Furthermore, the parties to the Agreement also have no option pursuant to section 305(2) no. 2 AktG to provide for compensation in shares of the controlling company or the company with a majority interest in the other party, in this case therefore Nidda Topco S.à r.l. as the indirect parent of the European subsidiaries of the Nidda Group. This option would only be conceivable if Nidda Topco S.à r.l. were to change its legal form to that of a stock corporation or a partnership limited by

shares. In Luxembourg, the legal form that would most closely resemble a stock corporation or a partnership limited by shares is an S.A. (*société anonyme*), as is apparent from Annex I to Art. 2(1) of Council Regulation (EC) No 2157/2001 of 8 October 2001 on the Statute for a European company, which contains a list of limited liability companies and stock corporations of Member States, including Luxembourg. However, reorganising Nidda Topco S.à r.l. would be associated with additional costs and delays. In addition, there is no legal obligation to reorganise a company in connection with the conclusion of a domination and profit and loss transfer agreement. In order to then offer compensation in shares, a valuation would ultimately have been necessary in relation to a new stock corporation (e.g. operating under Nidda Topco S.A.) so as to calculate the enterprise value. This would have resulted in significant additional costs and as a result to an additional delay in preparing and concluding a domination and profit and loss transfer agreement.

For the above reasons, provision was made in the Agreement for cash compensation in accordance with section 305(2) no. 3 AktG.

## 5.3 Amount of compensation

Nidda Healthcare is offering the outside STADA Shareholders who step down as shareholders of STADA due to the conclusion of the Agreement cash compensation of EUR 74.40 per STADA share (section 305(1) and (2) no. 3 AktG and § 5(1) of the Agreement). Details of how the appropriate compensation is determined and set are contained in section E.III.

# 5.4 Further explanation of § 5 of the Agreement

Nidda Healthcare's obligation to acquire the STADA Shares in return for compensation is time-limited under § 5(2) of the Agreement. The time limit ends two months after the date on which the entry of the Agreement's existence in the commercial register where STADA has its registered office in accordance with section 10 HGB has been announced. The time limit on the offer for the compensation is permitted by the Stock Corporation Act and is customary. The two-month limit is in accordance with section 305(4) sentence 2 AktG. This time limit shall be extended if, under section 4(1) sentence 1 no. 1 of the Appraisal Proceedings Act (SpruchG), outside STADA Shareholders file an application for the judicial determination of the compensation to be granted within three months following the date on which the entry of the Agreement's existence in the commercial register where STADA has its registered office in accordance with section 10 HGB has been announced. In this case, the period for accepting the offer for the transfer of the shares to Nidda Healthcare in return for payment of the compensation shall end under section 305(4) sentence 3 AktG no earlier than two months after the date on which the decision on the last-decided application of a shareholder has been announced in the Federal Gazette (Bundesanzeiger). § 5(2) sentence 3 of the Agreement clarifies that this statutory provision applies without reservation.

Following the registration of the existence of the Agreement in the commercial register where STADA has its registered office, the outside STADA Shareholders may decide to either stand down as STADA Shareholders and, in return, to receive the appropriate compensation (*Abfindung*) as offered, or to remain as STADA

Shareholders and to receive the appropriate recurring compensation payment (*Ausgleich*) as offered in § 4 of the Agreement. However, the declaration by the outside STADA Shareholders that they wish to accept the offer for the compensation from Nidda Healthcare must be received by the central processing agency commissioned by Nidda Healthcare within the aforementioned time limit (see D.II on acceptance). Once the limit has expired, it will no longer be possible to accept the offer for the compensation.

§ 5(3) of the Agreement governs execution of the capital measures at STADA prior to the expiry of the time limit under § 5(2) of the Agreement. If such capital measures occur within this limit, then an adjustment to the compensation occurs insofar as this is legally required. In this regard, please refer to section D.I.4.4.

Under § 5(4) of the Agreement, acceptance of the offer for the compensation is free of charge for the outside STADA Shareholders provided they possess a domestic securities account. This ensures that the outside STADA Shareholders are not burdened with fees, commission or other handling charges by the banks and the level of cash compensation is maintained. This does not affect taxes incurred by an outside STADA Shareholder for the profit on a sale. These are to be borne by the outside STADA Shareholder concerned (see section D.IV.3 on the tax implications).

§ 5(5) of the Agreement concerns the protection of the outside STADA Shareholders. In the event of appraisal proceedings, sections 1 et seqq. SpruchG grant all outside STADA Shareholders a claim to a supplement to the compensation if the court bindingly sets higher compensation; this corresponds to the legal provision in section 13(2) SpruchG. These claims also exist if the external STADA Shareholder has already been compensated, regardless of whether the outside STADA Shareholder participated in any appraisal proceedings. If such an appraisal procedure is terminated by a judicially recorded settlement, the rights of all outside STADA Shareholders are protected by the fact that such a termination of procedure is only possible with the consent of the joint representative of the outside STADA Shareholders in accordance with section 11(2) SpruchG. Under § 5(5) of the Agreement, Nidda Healthcare will also acquire the STADA Shares offered by outside STADA Shareholders in return for payment of the increased compensation in the event of a judicially recorded settlement to terminate an appraisal procedure, to the extent required by the applicable statutory law (see also section D.III.2.3).

The Agreement can be terminated in accordance with § 7(3) to (5). If termination occurs at a time at which the time limit for the acceptance of the cash compensation offer under § 5(2) of the Agreement has expired, any outside STADA Shareholder then present shall be granted the right under § 6(1) of the Agreement to offer the STADA Shares he holds at the time the termination becomes effective to Nidda Healthcare in return for payment of the cash compensation of EUR 74.40 and, in turn, Nidda Healthcare is obliged to acquire the shares offered by the outside STADA Shareholders. This amount corresponds to the appropriate compensation determined by the Contractual Parties in § 5(1) of the Agreement. If the amount of compensation increased by a legally binding decision in appraisal proceedings, Nidda Healthcare shall acquire the shares offered by the outside STADA

Shareholders in return for payment of the compensation determined in the appraisal proceedings.

This right of sale grants additional protection to outside STADA Shareholders who initially decide not to accept the offer for the compensation (*Abfindungsangebot*) from Nidda Healthcare and instead to remain STADA Shareholders and receive the recurring compensation payment (*Ausgleich*). In the event of termination of a domination and profit and loss transfer agreement, there is no statutory obligation regarding such a renewed offer for the compensation.

This renewed right of sale is also time limited. It can be exercised up to two months after the date on which the entry of the Agreement's termination in STADA's local commercial register in accordance with section 10 HGB has been announced. The sale of STADA Shares pursuant to § 5(6) of the Agreement is also free of charge for the outside STADA Shareholders, as is evident from the corresponding application of § 5(4) of the Agreement. The corresponding application of § 5(3) of the Agreement accounts for possible increases of STADA's share capital from company funds or against contributions in kind (see section D.I.4.4 above). The aforementioned right of sale applies both in the event of a termination by Nidda Healthcare and in the event of a termination by STADA. In this context, it is important to consider that termination of the Agreement without cause during the fixed term of the Agreement under § 7(3) of the Agreement is excluded (see section D.I.7.3).

No provision is made for interest payments on the amount payable under § 5(6) of the Agreement in corresponding application of section 305(3) sentence 3 AktG.

## 6. Information right (§ 6 of the Agreement)

§ 6 of the Agreement governs an information right for Nidda Healthcare and information duties for STADA.

Under § 6(1) of the Agreement, Nidda Healthcare is entitled to inspect the books and records of STADA at any time. Under § 6(2) of the Agreement, moreover, the Executive Board of STADA is obliged at any time to provide Nidda Healthcare with all requested information about all STADA's affairs. Under § 6(3) of the Agreement, moreover, the Executive Board of STADA is obliged to keep Nidda Healthcare continually informed about the development of the business, particularly about important transactions.

The information right is intended to enable Nidda Healthcare to exercise its managerial control and its instruction right vis-à-vis STADA on the basis of appropriate information. Accordingly, Nidda Healthcare is granted a comprehensive inspection right which is supplemented by an information duty of STADA that exists independently of this right. This enables any information gap which exists to be resolved quickly and efficiently and Nidda Healthcare to be put in the position to exercise its right of managerial control and right to issue instructions in the interests of the Group in knowledge of all information.

§ 6(4) of the Agreement clarifies that, as long as STADA is a listed stock corporation, the Contractual Parties are obliged to comply with the capital market provisions, in particular Market Abuse Regulation (EU) 596/2014.

## 7. Effectiveness and duration (§ 7 of the Agreement)

### 7.1 Effectiveness

In accordance with section 293 AktG, furthermore, the effectiveness of this Agreement is dependent upon the consent of the STADA general meeting and the shareholders' meeting of Nidda Healthcare (§ 7(1) of the Agreement). The STADA general meeting is set to consent to the Agreement on 2 February 2018 and the Nidda Healthcare shareholders' meeting on 19 December 2017.

The Executive Board and Supervisory Board DPLTA committee of STADA consented to the Agreement on 19 December 2017 and the management of Nidda Healthcare on 19 December 2017 and signed the Agreement on the same date.

The Agreement only becomes effective when its existence has been entered in the commercial register where STADA has its registered office (sections 294(2) AktG and § 7(2) of the Agreement).

### 7.2 Commencement of the contractual term

(i) Effectiveness of the right of managerial control and the right to issue instructions under § 1 of the Agreement

Nidda Healthcare's right of managerial control and right to issue instructions, and STADA's corresponding duty to follow, exist from the moment that the Agreement becomes effective by virtue of entry in the commercial register where STADA has its registered office.

(ii) Effectiveness of the obligation to transfer profits under § 2 of the Agreement

STADA's obligation to transfer profits first exists for the financial year beginning on 1 January 2018, provided that the existence of the Agreement is entered in 2018 in the commercial register where STADA has its registered office and the Agreement thereby becomes effective. If the Agreement only becomes effective in a subsequent financial year (for instance because registration is delayed due to an action for annulment or nullity), the obligation to transfer profits only exists as at this subsequent financial year.

(iii) Effectiveness of the obligation to compensate losses under § 3 of the Agreement

Nidda Healthcare's obligation to compensate any annual net loss that arises shall exist for the first time for the STADA financial year beginning on 1 January 2018, provided that the existence of the Agreement is entered in 2018 in the commercial register where STADA has its registered office and the Agreement thereby becomes effective. If the entry of the Agreement in the commercial register, as is generally the case, does not occur at the same time as the beginning of the financial year, but instead later, then the obligation to assume losses also has retroactive effect for the part of the financial year that has already occurred at the time of entry in the commercial register.

## 7.3 Term of the Agreement/Minimum term

The Agreement is concluded for an indefinite period (§ 7(3) sentence 1 of the Agreement). STADA's right to terminate without cause is excluded (§ 7(3) sentence 3 of the Agreement). In return, the outside shareholders receive an additional compensation right pursuant to § 5(6) (see section D.I.5.4 above). Nidda Healthcare's right to terminate the Agreement without cause is excluded for the first five years of time (60 months) after the beginning of the financial year in which the Agreement becomes effective (§ 7(3) sentence 2 of the Agreement). Consequently, there is a minimum term of five successive years of time from the beginning of the STADA financial year in which the Agreement becomes effective. If the Agreement becomes effective on 1 January 2018, then the minimum term will run until the end of 31 December 2022. Under section 14(1) sentence 1 no. 3 KStG, the contractual minimum term of five successive years of time is a requirement for establishing a valid consolidated corporation and trade tax group between Nidda Healthcare and STADA.

## 7.4 Termination of the Agreement

STADA's right to terminate without cause is excluded. Nidda Healthcare's right to terminate the Agreement without cause is excluded for the first five successive years of time from the beginning of the financial year in which the Agreement becomes effective. Therefore, the Agreement can only be terminated by observing a notice period of three months following the end of five years of time since the Agreement became effective. Thereafter, it can be terminated without cause as at the end of a subsequent financial year with the same notice period (§ 7(3) sentence 2 of the Agreement). Termination must be given in writing (§ 7(8) of the Agreement).

This does not affect the Contractual Parties' right under § 7(4) and (5) of the Agreement to terminate the Agreement, without observing a notice period, where there is good cause to do so. From the perspective of civil law, there is good cause for termination if, considering all circumstances, it is no longer reasonable to expect the terminating party to the Agreement to continue the contractual relationship to the end of the notice period for termination without cause. Such a termination right is prescribed by law and cannot be contractually excluded. As an example, section 297(1) sentence 2 AktG presents the good cause for termination of a domination agreement whereby the controlling company is unlikely to be able to satisfy its obligations under the agreement. For instance, the controlling company Nidda Healthcare would be entitled to terminate should the asset or financial situation of the controlled company STADA worsen if the risks for the controlling undertaking are no longer acceptable and the situation is not its responsibility. As the controlled company, STADA can terminate if, for example, Nidda Healthcare as the controlling company is unable to satisfy its contractual obligations (assumption of losses, recurring compensation payments (Ausgleich) and compensation (Abfindung)). In the event that Nidda Healthcare fails to satisfy its payment obligations under the Agreement, § 7(4) sentence 2 of the Agreement provides that STADA shall inform Nidda Healthcare about this and shall give it a month's time to provide satisfaction before STADA terminates the Agreement for good cause; section 297(1) sentence 2 AktG is unaffected.

§ 7(5) of the Agreement lists other cases in which Nidda Healthcare may terminate for good cause. In particular, Nidda Healthcare is entitled to terminate the Agreement for good cause in the event of the sale or contribution of the interest in STADA to another company, in the event of the loss of the majority of voting rights in the general meeting of STADA for another reason or in the event of a change of legal form, merger, demerger or liquidation of STADA or Nidda Healthcare.

These provisions must be assessed in light of tax law: A profit and loss transfer agreement is being concluded to establish a consolidated tax group for purposes of corporate income tax and trade tax between Nidda Healthcare and STADA. Amongst other things, one requirement for a consolidated tax group for income tax purposes is that STADA, as the controlled company, is financially integrated into Nidda Healthcare, as the controlling company, from the beginning of its financial year such that the controlling company is entitled to the majority of the voting rights. Furthermore, a profit transfer agreement must have been concluded for a minimum term of five years (60 months) and must in fact be performed during its entire term (section 14(1) sentence 1 no. 3 sentence 2 KStG).

Termination of the profit transfer agreement prior to the end of the minimum term only results in disallowance of the consolidated tax group from the outset if termination occurs for good cause that is recognised for tax purposes. It is recognised for tax purposes that the loss of the interest and thus the voting rights may constitute good cause for the purposes of section 14(1) sentence 1 no. 3 sentence 2 of the Corporation Tax Act (*KStG*) for the controlling company to prematurely terminate the Agreement for good cause which does not affect the recognition of the consolidated tax group for the financial years that have already been concluded. The same applies to merger, demerger or liquidation of the controlling or the controlled company in the fiscal unit. § 7(5) of the Agreement reflects these tax principles and guarantees that Nidda Healthcare is able to effectively terminate the Agreement for good cause under civil law in the event of the option for termination for good cause without detriment under tax law.

If the Agreement is terminated for good cause without notice, then the Agreement ends at the end of the date specified in the termination, but no earlier than the end of the date on when the termination is received (§ 7(6) of the Agreement).

Upon termination of the Agreement, Nidda Healthcare must provide a security to the creditors of STADA in accordance with section 303 AktG if they contact Nidda Healthcare within six months following entry of the termination of the Agreement (§ 7(7) of the Agreement). Under section 303(1) and (2) AktG, however, this obligation only exists towards creditors whose claims were established before entry of the termination of the Agreement in the commercial register where STADA has its registered office has been announced under section 10 HGB and who, in the event of insolvency proceedings, have no right to preferential satisfaction from cover funds that have been put in place for their protection and are state monitored. Nidda Healthcare can guarantee the claim instead of providing a security, with section 349 HGB on the exclusion of the defence of the failure to pursue remedies inapplicable in this case (section 303(3) AktG).

### 8. Final provisions (§ 8 of the Agreement)

§ 8(1) of the Agreement (severability clause) ensures that the material content of the Agreement is maintained if, contrary to expectations, contractual provisions prove to be entirely or partially invalid, unenforceable or incomplete. This is a common provision in domination and profit and loss transfer agreements.

Under § 8(2) of the Agreement, the income tax provisions and requirements for the recognition of a consolidated tax group must be considered when interpreting the Agreement, in particular those of sections 14 to 19 KStG.

§ 8(3) of the Agreement clarifies that the Agreement is legally independent and shall not form a legal entity within the meaning of section 139 BGB with other legal transactions and arrangements concluded in the past or in the future between STADA and Nidda Healthcare.

Under § 8(4) of the Agreement, any amendments and additions to the Agreement require the written form in order to be effective. This also applies to the writtenform clause itself. Section 295 AktG applies in all other respects. This states that inter-company agreements may only be amended with the consent of the STADA general meeting and the shareholders' meeting of Nidda Healthcare.

§ 8(5) of the Agreement establishes Frankfurt am Main as the place of performance for the obligations of both sides under the Agreement and as the exclusive place of jurisdiction, insofar as this is legally permissible. These provisions ensure that the courts where Nidda Healthcare and STADA have their registered offices have jurisdiction to decide on disputes under and in conjunction with the Agreement.

§ 8(6) of the Agreement clarifies that only the German text of the Agreement is legally binding and that the English text only represents a non-binding translation.

# II. Payment of the compensation (Abfindung) and the recurring compensation (Ausgleich) (bank-related processing)

Nidda Healthcare will task BNP Paribas, Frankfurt am Main (Central Processing Agency), with processing the acquisition of the STADA Shares offered by the outside STADA Shareholders in return for appropriate compensation under § 5 of the Agreement. STADA Shareholders wishing to accept the offer for the compensation must send their custodian bank with a completed acceptance declaration including the number of STADA Shares for which they want to accept the offer for the compensation. Forms for such an acceptance declaration will be provided to the custodian banks by the Central Processing Agency in advance. The relevant custodian bank sends the acceptance declaration to the Central Processing Agency without undue delay. The Central Processing Agency then informs the relevant custodian bank about the closing date and the exact size of the shareholder's total amount of compensation as at the closing date, which for every tendered STADA share is the product of the compensation pursuant to § 5(1) of the Agreement plus interest pursuant to section 305(3) sentence 3 AktG as at the closing date. In this context, the closing date is at the latest the 18th banking day (Frankfurt am Main) after receipt of the acceptance declaration by the Central Processing Agency. On the closing date, payment of the total amount of compensation to which the relevant shareholder is entitled occurs concurrently (*Zug um Zug*) with the proper transfer of the tendered STADA Shares to the Central Processing Agency. Processing of the compensation is free of commission and charges for the outside STADA Shareholders (see section D.I.5.4). Further processing details will be announced without undue delay following registration of the Agreement in the commercial register.

Under § 4 of the Agreement, payment of the fixed recurring compensation (*Ausgleich*) will be processed in the same manner as a dividend payment.

## III. Legal implications for the outside STADA Shareholders

## 1. Corporate law implications

Performance of the Agreement impairs the outside STADA Shareholders in the position given to them under control and property law by virtue of ownership of the shares.

Following conclusion of the Agreement, Nidda Healthcare is entitled to issue binding instructions to the Executive Board of STADA with regards the management of STADA, whereby the management of STADA may solely be aligned with the interests of Nidda Healthcare. Pursuant to the Agreement, Nidda Healthcare may issue STADA with disadvantageous instructions, provided they serve the needs of Nidda Healthcare and are not impermissible e.g. due to violating mandatory legal provisions. Permissible disadvantageous instructions may, irrespective of the obligation of Nidda Healthcare to assume any annual net loss which arises in relation to STADA, have considerable negative implications for STADA's net assets and earnings which may also persist after the potential termination of the Agreement.

The outside STADA Shareholders are impaired by Nidda Healthcare's contractually agreed right of managerial control and right to issue instructions vis-à-vis STADA in terms of their governing rights and potentially their property rights. The outside STADA Shareholders will be economically compensated for these impairments by virtue of appropriate recurring compensation payment (*Ausgleich*) paid annually or appropriate compensation (*Abfindung*). The compensation (*Abfindung*) compensates for the loss of membership and the resulting control and property rights that existed unimpaired prior to conclusion of the Agreement; the recurring compensation payment (*Ausgleich*) compensates for the loss of the claim to dividend under property law. The outside shareholders have the option of whether to request recurring compensation payment (*Ausgleich*) or compensation (*Abfindung*) (see also section E re the size).

Once the Agreement becomes effective, STADA will not show any annual net income and – aside from potential earnings from the release of reserves not subject to the contractual transfer of profits, or a distributable profit as a result of any precontractual profit brought forward – no more distributable profit either. This means that, once the Agreement becomes effective, the outside STADA Shareholders will in principle receive no dividend for the term of the Agreement. Under regular circumstances, their right to decide on the use of distributable profit that arises during the term of the Agreement no longer applies.

In order to safeguard the interests of the outside shareholders, there is a claim against Nidda Healthcare pursuant to section 304 AktG for an annual recurring compensation payment (*Ausgleichszahlung*). The annual recurring compensation payable in accordance with § 4 of the Agreement will be paid to the outside STADA Shareholders without undue delay after the maturity date determined in § 4(3) of the Agreement. The technical processing of the payment takes place via the relevant custodian banks, as in the case of a dividend payment (see section D.II).

As an alternative to receiving the recurring compensation payment (*Ausgleich*), the outside STADA Shareholders can make use of the offer for the compensation under section 305 AktG and sell their shares to Nidda Healthcare in return for being granted the compensation (*Abfindung*) determined in § 5(1) of the Agreement. With regards the details of the recurring compensation payment (*Ausgleich*) and the compensation (*Abfindung*), reference is made to the above explanations in section D.I.4 and section D.I.5 on § 4 and § 5 of the Agreement.

The outside STADA Shareholders do not lose the right to compensation (Abfindung) by having already received the recurring compensation payment (Ausgleich). If the offer for the compensation (Abfindung) is only accepted after the recurring compensation (Ausgleich) has been paid, which can especially be the case when the offer for the compensation (Abfindung) is accepted during or following the conclusion of appraisal proceedings (see section 305(4) sentence 3 AktG and § 5(2) of the Agreement), recurring compensation payments (Ausgleich) which have already been paid will be offset against the claim to the payment of interest on the compensation (Abfindung) under section 305(3) sentence 3 AktG. The offsetting occurs according to reference periods, generally according to financial years, with STADA Shareholders entitled to compensation (Abfindung) entitled to the difference between the recurring compensation payment (Ausgleich) and interest on compensation (Abfindung) for the relevant reference period if the recurring compensation payment (Ausgleich) received is lower than the interest on the compensation (Abfindung) and also if the interest on the compensation (Abfindung) falls short of the higher recurring compensation payment (Ausgleich) in every period. In this context, the offsetting of the recurring compensation payment (Ausgleich) against the interests payable on the compensation (Abfindung) only occurs for the recurring compensation payment (Ausgleich) related to the period starting from the registration of the Agreement. There will be no offsetting of recurring compensation payments (Ausgleich) already received against the compensation payment (Abfindung) itself. This conforms with the statutory provisions taking into consideration the German Federal Court of Justice (Bundesgerichtshof) rulings (judgment of 16 September 2002 - II ZR 284/01 - "Rütgers"; judgment of 2 June 2003 - II ZR 85/02; judgment of 10 December 2007 – II ZR 199/06).

Once the Agreement becomes effective, Nidda Healthcare has the obligation to acquire the STADA Shares from the outside STADA Shareholders at their request and in return for payment of the compensation determined in § 5(1) of the Agreement. From this point onwards, the outside STADA Shareholders can use their right to transfer their STADA Shares to Nidda Healthcare in return for payment of the compensation determined in the Agreement by declaring as such to their relevant custodian bank (see section D.II on acceptance). From the end of the day on which the Agreement becomes effect by virtue of its entry in the commercial regis-

ter, interest is payable on the compensation pursuant to § 5(1) of the Agreement at five percentage points annually above the relevant base rate in accordance with section 247 BGB (section 305(3) sentence 3 AktG). Those STADA Shareholders who do not use their right to transfer their STADA Shares to Nidda Healthcare remain STADA Shareholders and receive the recurring compensation payment annually.

Directly after the registration of the Agreement, the finer details of the compensation process will be announced in the Federal Gazette (*Bundesanzeiger*) as well as being communicated to the outside STADA Shareholders via the respective custodian banks. Processing the transfer of the STADA Shares to Nidda Healthcare due to acceptance of the offer for the compensation does not result in any costs for the STADA Shareholders (§ 5(4) of the Agreement).

Nidda Healthcare's obligation to assume the shares of the outside STADA Shareholders in return for payment of the compensation is time-limited pursuant to § 5(2) of the Agreement. The declaration by the outside STADA Shareholders to accept the offer for the compensation from Nidda Healthcare must be received by the Central Processing Agency commissioned by Nidda Healthcare within this limit (see explanations in section D.I.5.4 of the details of the time limit on the obligation of Nidda Healthcare). Once the limit has expired, it shall no longer be possible to accept the offer for the compensation.

If the time-limit for accepting the offer for the compensation is extended due to appraisal proceedings in accordance with section 305(4) sentence 3 AktG and outside STADA Shareholders accept the offer for the compensation within the time limit following the conclusion of the appraisal proceedings although they have already received the recurring compensation payment (*Ausgleich*) under § 4 of the Agreement, the payments received will be offset against the claim for interest to be paid on the compensation (*Abfindung*) under § 305(3) sentence 3 AktG.

Beyond this, the conclusion of the Agreement has no legal implications for the interests of the outside STADA Shareholders. In particular, the conclusion and registration of the Agreement in the commercial register respectively are not associated with any change to the voting and other participation rights linked to their shares.

The stock exchange listing of the STADA Shares is not affected by the registration of the Agreement in the commercial register. However, it cannot be excluded that a large part of the outside STADA Shareholders will accept the offer for the compensation and that the number of STADA Shares in free float will continue to reduce. The resulting reduction in the liquidity of STADA Shares may lead as a consequence to larger fluctuations in the price of the STADA Shares than in the past.

The number of STADA Shares in free float will be reduced to the extent that the offer for the compensation under the Agreement is accepted. As a consequence, STADA may possibly no longer satisfy the relevant criteria for remaining in the stock market indices containing the STADA Shares. In particular, this applies to the STADA Shares remaining in the MDAX, an index calculated by Deutsche Börse AG that consists of 50 undertakings traded on the Frankfurt Stock Exchange. Amongst other things, exclusion from a stock market index can result in institutional investors that mirror the relevant index in their portfolio divesting their

STADA Shares and refraining from making future acquisitions of STADA Shares. An increased supply of STADA Shares, combined with reduced demand for STADA Shares, may negatively influence the price of the STADA Shares.

### 2. Protection of the outside STADA Shareholders

As described in detail below, the outside STADA Shareholders are ensured of protection in connection with the conclusion of the Agreement by the granting of a recurring compensation payment (*Ausgleich*) and compensation (*Abfindung*). The appropriateness thereof shall be audited by a court-appointed Contract Auditor (see section D.III.2.2). If outside STADA Shareholders should be of the opinion that the recurring compensation payment (*Ausgleich*) and/or compensation (*Abfindung*) fixed in the Agreement is not appropriate, they can have the appropriateness reviewed in appraisal proceedings.

### 2.1 Compensation (*Abfindung*) and the recurring compensation payment (*Ausgleich*)

The interests of the outside STADA Shareholders are accounted for by the duty to grant compensation (*Abfindung*) and a recurring compensation payment (*Ausgleich*).

In return for losing their dividend by virtue of the duty to transfer profits pursuant to § 2 of the Agreement, the outside STADA Shareholders receive a claim to payment of annual recurring compensation payment in accordance with § 4(2) of the Agreement in conjunction with section 304 AktG.

On the basis of the Expert Opinion by ValueTrust (<u>Annex 5</u>), the Contractual Parties have determined a recurring compensation payment in the gross amount of EUR 3.82 (net EUR 3.53).

In its Expert Opinion, ValueTrust comes to the conclusion that the relevant range of the objectified business value within the meaning of the IDW S 1 of STADA as of 2 February 2018 referred to in court rulings for determining the compensation (*Abfindung*) and the recurring compensation payment (*Ausgleich*) is EUR 4,371.5m to EUR 4,660.2m. In doing so, ValueTrust does not consider the value of the 84,311 treasury shares held by STADA and, instead, refers to the quantity of outstanding shares when calculating the value per STADA share (62,342,440 issued STADA shares less 84,311 treasury shares held by STADA) (the *Outstanding STADA Shares*). For 62,258,129 Outstanding STADA Shares, the range of the objectified business value corresponds to a range of EUR 70.22 to EUR 74.85 per Outstanding STADA Share. According to the Valuation Expert's findings, the appropriate recurring compensation payment (*Ausgleich*) within the meaning of section 304 AktG derived from the range of the objectified business value according to the IDW S 1 amounts to EUR 3.61 gross (EUR 3.34 net) to EUR 3.84 gross (EUR 3.55 net) per STADA share.

As an alternative, the outside STADA Shareholders can make use of the offer for the compensation under section 305 AktG and, following the registration of the Agreement, transfer their STADA Shares to Nidda Healthcare in return for being granted appropriate compensation. When calculating the compensation of EUR 74.40 per STADA Share determined in § 5(1) of the Agreement, the bases used were STADA's circumstances at the time of the resolution of the planned

general meeting of STADA on 2 February 2018 (see the extensive explanation and justification of the compensation in section E.III).

Pursuant to § 5(6) of the Agreement, if the Agreement is terminated by one of the Contractual Parties, then the outside STADA Shareholders present at the time of termination are entitled to sell their STADA Shares to Nidda Healthcare within a period of two months after the date on which the registration of the termination of the Agreement in the commercial register where STADA has its registered office is announced pursuant to section 10 HGB (see section D.I.5.4).

## 2.2 Contract audit by a contract auditor

Upon a joint application by the Executive Board of STADA and the management of Nidda Healthcare, the Regional Court (Landgericht) Frankfurt am Main, by way of a decision dated 21 September 2017, selected and appointed ADKL AG, Wirtschaftsprüfungsgesellschaft, Breite Straße 29-31, 40213 Düsseldorf as the Contract Auditor within the meaning of section 293b(1) AktG. This decision is attached to the Contract Report as Annex 4. ADKL will audit the Agreement and, in particular, the appropriateness of the compensation (Abfindung) and the annual recurring compensation payment (Ausgleich) and produce a separate Audit Report on this pursuant to section 293e AktG. This Audit Report, along with the documents mentioned in section 293f(1) AktG, will be available on STADA's website at http://www.stada.com/egm2018 as of when the general meeting, due to take place on 2 February 2018, is convened. Moreover, the documents will also be laid out for inspection by the shareholders in the offices of STADA from the convocation of the general meeting until its conclusion and also at the general meeting of STADA scheduled for 2 February 2018. On request, every STADA Shareholder will be given a copy of said documents without delay or charge. Please refer to the invitation to the general meeting on 2 February 2018 for details.

### 2.3 Appraisal proceedings

If STADA Shareholders should be of the opinion that the amount of the annual recurring compensation payment (Ausgleichszahlung) fixed in the Agreement under § 4(2) is not appropriate in accordance with section 304 AktG, they can have the appropriateness of the recurring compensation payment reviewed by a court in appraisal proceedings pursuant to section 304(3) sentence 3 AktG in conjunction with section 2 no. 1 SpruchG after the Agreement has taken effect. The right to make a request for the initiation of appraisal proceedings does not depend on any objection having been declared in the general meeting, to the minutes recorded by the officiating notary, against the resolution on the approval of the Agreement. The judicial review of the recurring compensation payment in appraisal proceedings pursuant to section 304(3) sentence 3 AktG in conjunction with section 1 no. 1 SpruchG can be requested within three months since the date on which the entry of the existence of the Agreement in the commercial register of STADA has been published in accordance with section 10 HGB. The request must be justified by stating reasons in accordance with section 4(2) SpruchG within the aforementioned period of three months. If a higher annual recurring compensation payment is fixed by the court having jurisdiction in such appraisal proceedings by way of a non-appealable decision, such decision shall take effect for and against all outside STADA Shareholders so that the STADA Shareholders not involved in the appraisal proceedings can also assert a claim against Nidda Healthcare for an increase of the recurring compensation payment (section 13 sentence 2 SpruchG). Nidda Healthcare can terminate the Agreement in this event within two months after the court decision has become non-appealable (section 304(4) AktG). If such appraisal proceedings are terminated by a judicially recorded settlement, the rights of all outside STADA Shareholders are safeguarded by the fact that such a termination of the proceedings under section 11(2) SpruchG is subject to the consent of the joint representative of the outside STADA Shareholders. According to § 4(7) of the Agreement, in the case of a judicially recorded settlement, shareholders who have already been compensated in accordance with § 5 of the Agreement may also request a corresponding supplement to the recurring compensation payment they have already received to the extent required by the applicable statutory law.

If outside STADA Shareholders should be of the opinion that the compensation (*Abfindung*) fixed in § 5(1) of the Agreement is not appropriate, they can also have the appropriateness of the offered compensation reviewed by a court in appraisal proceedings pursuant to section 305(5) sentence 2 AktG in conjunction with section 1 no. 1 SpruchG. The above statements concerning the recurring compensation payment apply accordingly with regard to the period for submitting the request, the statement of reasons for the request, the effect of the court decision in appraisal proceedings, a right of termination for Nidda Healthcare after a judicial determination of the compensation as well as the termination of such proceedings by a judicially protocolled settlement.

# IV. Tax implications for the outside STADA Shareholders

## 1. Preliminary remark

The following statements include a brief summary of some important German taxation principles, which may be relevant in connection with the conclusion of the Agreement for the outside STADA Shareholders who are subject to unlimited tax liability in Germany.

Tax implications for outside STADA Shareholders with limited tax liability in Germany are not explained below. They depend, among other aspects, on special provisions of German tax law, the tax law in the country in which the respective shareholder is domiciled as well as on the provisions of any existing treaty for the avoidance of double taxation (double taxation treaty).

The description relates in general only to corporate income tax, income tax, withholding tax and trade tax as well as the solidarity surcharge which accrue in Germany, but not to church tax, and deals only with some of the aspects of these types of taxes. For example, the description does not address the special features of so-called lock-up shares acquired as a consideration for a tax-privileged contribution under the German Transformation Tax Act (*Umwandlungsteuergesetz*), nor the special provisions for certain companies in the financial and insurance industry. Only the currently applicable law as applied by tax authorities and finance courts in their rulings as of the date of this Contract Report is used as a basis. This law can change, potentially also with retroactive effect.

No liability is assumed for the completeness and accuracy of this description. This summary is not intended to be, nor should it be construed as, legal or tax advice. Shareholders are recommended to consult with their tax advisors. Only tax advisors are able to reasonably take into account the specific tax circumstances of the individual shareholder.

## 2. Taxation of recurring compensation payments at the level of shareholders

The recurring compensation payment (*Ausgleichszahlung*) made by Nidda Healthcare to the STADA Shareholders on an annual basis as provided for in § 4(1) of the Agreement is likely to be subject to the general rules on the taxation of dividends at the level of the shareholders concerned.

## 2.1 Withholding tax

Withholding tax of 25% and the solidarity surcharge of 5.5% levied on the withholding tax (resulting in a tax deduction including the solidarity surcharge of 26.375%) will generally be withheld from the recurring compensation payment upon its being paid out. The withholding tax is generally withheld and passed on without regard to which amount the payment is actually subject to taxation at the level of the STADA Shareholders.

With regard to STADA Shareholders holding their shares as private assets, the collection of withholding tax generally discharges the shareholder's tax liability for the recurring compensation payments (so-called flat-rate withholding tax (*Abgeltungsteuer*)). Subject to certain requirements, shareholders holding their shares as private assets can apply for an exemption from the flat-rate withholding tax. By contrast, the withholding tax paid by STADA Shareholders holding their shares as part of the business assets is generally credited against the income tax or corporate income tax of the shareholder concerned. Any withholding tax collected in excess of these shareholders' personal tax liability will be refunded. The same applies accordingly to the solidarity surcharge.

## 2.2 Shares held as private assets

The recurring compensation payments (*Ausgleichszahlungen*) for shares held as private assets are subject to income tax as income from capital assets; in this case, however, the income tax on the recurring compensation payments is generally settled by the deduction of the withholding tax (so-called flat-rate withholding tax) and the recurring compensation payment must, therefore, no longer be declared in the annual tax return of the STADA Shareholder. In certain cases (for example, if a non-assessment certificate from the tax authority is submitted or up to the amount of any issued exemption order), STADA Shareholders can be paid the recurring compensation payment without deduction of withholding tax and solidarity surcharge.

Upon the request of a STADA Shareholder, his recurring compensation payment can also be subject to the income tax according to the basic scale instead of collecting the flat-rate withholding tax if this leads to a lower tax burden for the shareholder (most favourable tax treatment test - *Günstigerprüfung*). In this event, the capital gains less the saver's tax-free allowance of EUR 801 (EUR 1,602 in the case of jointly assessed spouses) are determinative for the taxation and a deduction

of the actual income-related expenses is excluded. The income from capital investments thus calculated is subject to the individual income tax rate of the STADA Shareholder concerned within the scope of the income tax assessment. A withholding tax initially deducted will be credited against the income tax levied in this way.

If a STADA Shareholder meets the relevant requirements and applies for an exemption from the flat-rate withholding tax, taxation will be comparable to that applicable to a sole proprietor (see section D.IV.2.3(ii)).

### 2.3 Shares held as business assets

If the shares are held as business assets, taxation will depend on whether the STADA Shareholder is a corporation, a sole proprietor or a partnership (joint proprietors):

## (i) Corporations

Recurring compensation payments to a corporation are generally subject to corporate income tax unless the STADA Shareholder held a share of at least 10% of the STADA share capital at the beginning of the respective calendar year. In this event, the recurring compensation payments are generally exempt from corporate income tax. However, 5% of this tax-exempt income is deemed to be expenses which cannot be deducted as business expenses for tax purposes so that they are finally subject to corporate income tax (plus solidarity surcharge). In exchange, business expenses which have actually been incurred in relation to the recurring compensation payments can generally be fully deducted (subject to other restrictions on deduction). The recurring compensation payments are fully subject to trade tax unless the STADA Shareholder held a share of at least 15% of the STADA share capital (intercompany participation) at the beginning of the relevant tax period. In the latter case, the exemption of 95% of the recurring compensation payments from corporate income tax applies accordingly for purposes of trade tax.

## (ii) Sole proprietors

In the case of sole proprietors (individuals), 60% of the recurring compensation payment is subject to the applicable income tax rate (so-called partial income method (*Teileinkünfteverfahren*)). Accordingly, any expenses economically related to the recurring compensation payment are only deductible for tax purposes at a rate of 60% (subject to other restrictions on deduction). If the shares belong to the assets of a permanent establishment located in Germany, the recurring compensation payment is fully subject to trade tax if and to the extent the STADA Shareholder is subject to trade tax and does not hold a share of at least 15% of the STADA share capital at the beginning of the relevant tax period. However, the trade tax is completely or partially credited against the STADA Shareholder's income tax by way of a flat rate procedure.

### (iii) Partnerships

If the shares are held by a partnership (joint proprietors), the income tax or corporate income tax is only assessed at the level of its partners. In the case of partners subject to corporate income tax which hold a share of at least 10% of the share capital at the beginning of the respective calendar year, 95% of the recurring compensation payment is finally exempt from taxation and the remainder is subject to taxation (see (i) above). However, if the partner is liable to income tax, 60% of the recurring compensation payment is subject to taxation (see (ii) above). Concerning the deductibility of business expenses, the statements made under (i) above apply to partners liable to corporate income tax and the statements made under (ii) above apply to partners liable to income tax. The recurring compensation payment is fully subject to trade tax at the level of the partnership if the partnership is subject to trade tax and does not hold a share of at least 15% in the company's share capital at the beginning of the relevant tax period. If the shares of the partnership are held by individuals, the trade tax levied at the level of the partnership is completely or partially credited against their income tax by way of a flat rate procedure. If the partnership holds a share of at least 15% in the company's share capital at the beginning of the relevant tax period, 5% of the recurring compensation payment is subject to trade tax in case of corporations being concerned.

### 3. Taxation of compensations at the level of STADA Shareholders

Pursuant to § 5(1) of the Agreement, Nidda Healthcare undertakes towards the STADA Shareholders who want to leave STADA due to the conclusion of the Agreement to purchase their shares in exchange for an appropriate compensation (*Abfindung*) in the amount of EUR 74.40 for each STADA share. A capital gain generated by a resulting transfer of STADA Shares in exchange for the aforementioned compensation is likely to be subject to the rules on the taxation of gains from the sale of shares in a corporation at the level of the STADA Shareholders concerned. A capital gain is realised if the compensation less any related costs of sale exceeds the acquisition costs for tax purposes or the book value for tax purposes for the relevant shares at the level of the respective STADA Shareholder. If the compensation less any costs of sale is less than the acquisition costs or the book value of the shares at the level of the STADA Shareholder, a capital loss is incurred.

## 3.1 Withholding tax

Capital gains are generally subject to withholding tax of 25% plus the solidarity surcharge of 5.5% levied on the withholding tax (in total thus 26.375%). Collection of the tax requires the existence of a domestic paying office (domestic branch office of a foreign credit institution, financial services institution, securities trading company or securities trading bank) which holds the STADA Shares in custody or administers them or carries out their sale and pays out or issues a credit for the capital gains.

Compensations paid for shares held as private assets which were acquired prior to 1 January 2009 are not subject to a withholding tax. Furthermore, the withholding

tax is not payable in relation to capital gains for shares which are part of the business assets held by corporations with unlimited tax liability. The same applies to shares, subject to certain requirements, which are held by individuals or partnerships as part of the business assets.

If withholding tax and solidarity surcharge are deducted, they generally discharge the shareholder's tax liability with regard to shares which are held as part of his private assets. However, the collection of the withholding tax will not discharge the shareholder's tax liability in relation to shares held as private assets if the shareholder held a participation of at least 1% in the share capital of STADA at a time during the last five years prior to the sale, as well as in relation to shares held as part of the business assets. Rather, in such cases, the taxes withheld will be credited against the seller's tax liability for income or corporate income tax and solidarity surcharge or will be refunded in the amount of a potential excess.

# 3.2 Shares held as private assets

The taxation of compensations depends on whether the STADA Shareholders acquired the shares prior to 1 January 2009 or after 31 December 2008:

## (i) Shares acquired prior to 1 January 2009

In the case of shares acquired prior to 1 January 2009 and held as part of private assets, capital gains from potential compensations generally also remain exempt from taxation, as they did before.

However, gains from compensations paid to a STADA Shareholder who or - in case of an acquisition without consideration - whose predecessor in title held a direct or indirect participation of at least 1% in STADA's share capital at any time during the five-year period preceding the acquisition by Nidda Healthcare according to § 5(1) of the Agreement are subject to the so-called partial income method (*Teileinkünfteverfahren*), i.e. 60% of the gains are subject to taxation. In this case, any expenses economically related to the compensations paid and any capital losses are accordingly only deductible for tax purposes at a rate of 60%.

## (ii) Shares acquired after 31 December 2008

Capital gains from the sale of STADA Shares which were acquired after 31 December 2008 are generally always subject to taxation without regard to the holding period. Corresponding capital losses may only be set off against capital gains from the sale of shares in the current year or in a later year.

Capital gains resulting from a compensation for shares which were acquired after 31 December 2008 are subject to withholding tax if there is a domestic paying office. The deduction of withholding tax will generally discharge the tax liability, i.e. the investor's income tax liability is settled by the tax deduction and the capital gain no longer has to be declared in the shareholder's annual tax return. In certain cases (for example, if a non-assessment certificate from the tax authority is submitted or up to the amount of any issued exemption order), STADA Shareholders can be paid the recurring compensation payment without deduction of withholding tax and solidarity surcharge. If the deduction of withholding tax does not occur

other than in these cases (e.g. for lack of a domestic paying office), the STADA Shareholder must state the capital gain in his income tax return. However, the capital gain in these cases will not be subject to the individual income tax rate of the shareholder; instead, the assessment of the capital gain will be made at the flat rate of the withholding tax.

Upon the request of the STADA Shareholder, the gain resulting from the compensation can also be subject to the income tax according to the basic scale instead of collecting the flat-rate withholding tax if this leads to a lower tax burden for the shareholder. In this case, a withholding tax initially deducted will be credited against the income tax levied by way of assessment. When determining the income from capital investments, only a saver's tax-free allowance of EUR 801 (or EUR 1,602 in the case of jointly assessed spouses) can be deducted as income-related expenses. A deduction of the actual income-related expenses is excluded.

60% of a capital gain is taxable if the STADA Shareholder held a participation of at least 1% in the STADA share capital at a time during the last five years prior to the sale. The deducted withholding tax and solidarity surcharge will be credited against the STADA Shareholder's tax liability in his tax assessment or any excess will be refunded. In these cases, 60% of any capital losses and expenses economically related to the sale are deductible for tax purposes.

#### 3.3 Shares held as business assets

If the STADA Shares are held as business assets, taxation of the capital gains will depend on whether the STADA Shareholder is a corporation, a sole proprietor or a partnership (joint proprietors):

### (i) Corporations

Capital gains from the sale of STADA Shares are generally exempt from corporate income tax and trade tax for corporations. However, 5% of the capital gains are deemed to be expenses which cannot be deducted as business expenses for tax purposes so that they are finally subject to corporate income tax (plus solidarity surcharge) and trade tax. Capital losses and other profit reductions economically related to the sold shares cannot be taken into account for tax purposes.

### (ii) Sole proprietors

To the extent that STADA Shares are held by sole proprietors, 60% of the capital gains are taxable. Accordingly, only 60% of the business expenses related to such capital gains as well as only 60% of any capital losses can be taken into account for tax purposes. If the STADA Shares are part of the assets of a permanent establishment located in Germany, 60% of the capital gains are subject to trade tax if the sole proprietor is liable to trade tax. However, the trade tax is completely or partially credited against the investor's income tax by way of a flat rate procedure.

### (iii) Partnerships

If the STADA Shares are held by a partnership (joint proprietors), taxation will depend on whether the partners are liable to income tax or corporate income tax. 95% of the capital gains from the sale of shares held by partners liable to corporate income tax are generally exempt from taxation (see (i) above). 60% of the capital gains from the sale of shares held by partners liable to income tax are generally taxable (see (ii) above). In addition, 60% (if individuals are concerned) and 5% (if corporations are concerned) of the capital gains from the sale of shares are subject to trade tax at the level of the partnership liable to trade tax if they are attributed to a domestic permanent establishment. However, if the shares of the partnership are held by individuals, the trade tax is completely or partially credited against their income tax by way of a flat rate procedure. Concerning the deductibility of business expenses associated with capital gains and capital losses, the statements under (i) above apply to partners subject to corporate income tax and the statements under (ii) above apply to partners subject to income tax.

# V. Tax implications for STADA

If the other statutory requirements for a consolidated tax group for purposes of corporate income tax and trade tax are met as well, the Agreement will have the effect that STADA's income for purposes of corporate income tax and trade tax will be attributed to Nidda Healthcare and taxed there. However, STADA will have to pay taxes on 20/17 of the recurring compensation payments (*Ausgleichszahlungen*) actually made as its own income (section 16 KStG). The consolidated tax group shall not start before STADA's financial year in which the obligation to transfer profit exists from the very beginning under § 2 of the Agreement, that means probably as of 1 January 2018 provided that the Agreement has been registered in the commercial register before the end of this financial year at the latest in accordance with § 7(2) of the Agreement. Any loss carry forwards for tax purposes from the time prior to the consolidated tax group remain in place, but cannot be deducted for the duration of the consolidated tax group.

As a result of the consolidation for tax purposes, STADA shall be liable pursuant to section 73 AO (German Tax Code) for such taxes of the parent company of the consolidated tax group for which the consolidated tax group between them is relevant for tax purposes. Claims for reimbursement of tax credits are treated equally with the taxes in this respect.

### VI. Costs of the domination and profit and loss transfer agreement

The conclusion of the Agreement was associated with one-time costs incurred in this context. STADA incurred such costs in particular for the Valuation Expert to be commissioned (see section E.I), for the Audit Report to be prepared (see section D.III.2.2) as well as for legal advice to be obtained. The costs for the Expert Opinion and the Audit Report to be prepared shall be borne by STADA and Nidda Healthcare in equal parts. In addition, either party shall bear its own costs, including the costs of any external advisors. STADA's external costs are likely to total

approximately EUR 1.3m. The external costs payable by Nidda Healthcare are likely to amount to approximately EUR 1m.

# E. Type and amount of the recurring compensation payment (Ausgleich) and the compensation (Abfindung) under sections 304, 305 AktG

#### I. Overview

According to section 304 AktG, a domination and profit and loss transfer agreement shall provide for an appropriate recurring compensation payment (*Ausgleich*) for the outside shareholders by means of a recurring payment of money in proportion to the shares in the share capital. The type of the recurring compensation payment and the reasons for determining a fixed recurring compensation payment were explained under section D.I.4.2.

Pursuant to section 304(1) sentence 1 and (2) sentence 1 AktG, at least the annual payment of that amount must be guaranteed as a recurring compensation payment which could most likely be distributed to the individual share as an average profit share according to the earnings position of the company to date and its future prospects for earnings, taking into account reasonable depreciation and adjustments in value, but without establishing other profit reserves.

According to section 305(1) AktG, a domination and profit and loss transfer agreement shall furthermore provide for the obligation of the controlling company to purchase the shares of an outside shareholder upon request in exchange for an appropriate compensation (*Abfindung*) specified in the Agreement. The appropriate compensation (*Abfindung*) must, in accordance with section 305(3) sentence 2 AktG, take into account the situation of the company at the time of its general meeting adopting a resolution on the Agreement. This applies accordingly to the recurring compensation payment (*Ausgleichszahlung*) within the meaning of section 304 AktG. According to the decision of the German Federal Constitutional Court (*Bundesverfassungsgericht*) dated 27 April 1999 (BvR 1613/94), an existing stock exchange price shall also be taken into account when calculating the amount of the compensation (*Abfindung*) under section 305 AktG. The stock exchange price, in general, represents the lowest amount of the compensation (*Abfindung*) payable to the shareholder.

The relevant valuation date for the recurring compensation payment (*Ausgleich*) and the compensation (*Abfindung*) is the date of the proposed extraordinary general meeting of STADA which is intended to adopt a resolution on the Agreement, that is 2 February 2018.

The Executive Board of STADA and the management of Nidda Healthcare commissioned ValueTrust as Valuation Expert to prepare an Expert Opinion on the enterprise value of STADA as of the day of the proposed extraordinary general meeting, 2 February 2018, as well as on the amounts of the appropriate recurring compensation payment (*Ausgleichszahlung*) within the meaning of section 304 AktG and the appropriate compensation (*Abfindung*) within the meaning of section 305 AktG.

The Valuation Expert carried out the work required for the Expert Opinion from 19 October 2017 to 18 December 2017. On 18 December 2017, the Valuation Expert submitted his Expert Opinion on the determination of STADA's enterprise value as of 2 February 2018, that is the date of the extraordinary general meeting of STADA that is to adopt a resolution on the Agreement. For assessing the enterprise value of STADA, ValueTrust, acting in compliance with its briefing, determined ranges of the enterprise value on the basis of the valuation methods that are common practice in the field of company valuation and recognised in court rulings. Accordingly, ValueTrust, in its function as neutral expert, determines a range of the objectified business value based on the IDW standard 1 "Principles for the performance of business valuations" (IDW S 1, Version 2008, status at 2 April 2008, hereinafter IDW S 1). Furthermore, ValueTrust also considered the "Best Practice Recommendations Corporate Valuation" of the Society of Investment Professionals in Germany (Deutsche Vereinigung für Finanzanalyse und Asset Management e.V.) (rev. December 2012, hereinafter also "DVFA recommendations"). ValueTrust provides the Expert Opinion in its function as an independent expert in the sense of the DVFA recommendations.

In its Expert Opinion, ValueTrust comes to the conclusion that the relevant range of STADA's objectified business value within the meaning of the IDW S 1 as of 2 February 2018, which is referred to in court rulings for determining the appropriate compensation (*Abfindung*) and the appropriate recurring compensation payment (*Ausgleich*), is EUR 4,371.5m to EUR 4,660.2. For 62,258,129 Outstanding STADA Shares (62,342,440 issued STADA shares less 84,311 treasury shares held by STADA), this corresponds to a range per Outstanding STADA Share in the amount of EUR 70.22 to EUR 74.85.

The Valuation Expert also comes to the conclusion that the relevant average stock exchange price amounts to EUR 65.41 per STADA share. The relevant price in this context is the volume-weighted average stock exchange price determined for the STADA Shares by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht – BaFin) for the three-month period prior to the announcement on 24 August 2017 of Nidda Holding's intention to enter into a domination and profit and loss transfer agreement between STADA and Nidda Healthcare (see section E.III). The range of the enterprise value per STADA share calculated by using the discounted cash flow method is above the relevant stock exchange price so that the stock exchange price being an absolute minimum value for the appropriate compensation (Abfindung) is not decisive. Accordingly, it can be inferred from the Expert Opinion that the appropriate compensation (Abfindung) within the meaning of section 305 AktG ranges between EUR 70.22 and EUR 74.85 per STADA share. According to the Valuation Expert's findings, the appropriate recurring compensation payment (Ausgleich) within the meaning of section 304 AktG derived from the range of the objectified business values according to the IDW S 1 amounts to EUR 3.61 gross (EUR 3.34 net) to EUR 3.84 gross (EUR 3.55 net) for each STADA share.

The complete version of ValueTrust's Expert Opinion on the enterprise value of STADA dated 18 December 2017 is attached hereto as <u>Annex 5</u> and thus forms an integral part of this Contract Report.

Following their own review, the Executive Board of STADA and the management of Nidda Healthcare adopt the complete content of the statements made by Value-Trust in the aforementioned Expert Opinion regarding STADA's enterprise value, the appropriate recurring compensation payment (*Ausgleich*) and the appropriate compensation (*Abfindung*) and include such statements in this Contract Report. According to their own assessment, the Executive Board of STADA and the management of Nidda Healthcare fix a compensation (*Abfindung*) within the meaning of section 305 AktG in the amount of EUR 74.40 for each STADA share as well as a recurring compensation payment (*Ausgleich*) within the meaning of section 304 AktG in the amount of EUR 3.82 gross (EUR 3.53 net) for each STADA share. These determined values of recurring compensation payment and compensation are therefore within the ranges established by ValueTrust.

The Expert Opinion submitted by ValueTrust - just like this Contract Report - will be available, along with the other documents required under section 293f(1) AktG, at STADA's website at http://www.stada.com/egm2018 from the convocation of STADA's general meeting that is to adopt a resolution on the approval of the Agreement. Moreover, the documents will also be laid out for inspection by the shareholders in the offices of STADA from the convocation of the general meeting until its conclusion and also at the general meeting of STADA scheduled for 2 February 2018. Upon request, every shareholder will be given copies of said documents without delay or charge. With regard to the details of laying out and asking for copies of said and further documents, reference is made to the invitation to the general meeting that is to resolve on STADA's approval of the Agreement.

For avoiding any liability risks, the Executive Board of STADA and the management of Nidda Healthcare explicitly point out that whilst STADA's plans that form the basis of the company valuation were prepared to the best of their knowledge, they are based on future-focused circumstances or changes to market and competitive conditions whose occurrence may be outside STADA's sphere of influence and that neither STADA nor Nidda Healthcare will or can assume any liability for the actual occurrence of the facts and forecasts which the plans are based on. This Contract Report serves solely to satisfy the statutory information duty pursuant to section 293a AktG.

### II. Determination and setting of the amount of the appropriate recurring compensation payment according to section 304 AktG

According to § 4(2) of the Agreement, Nidda Healthcare will grant the outside STADA Shareholders a fixed annual recurring compensation payment (*Ausgleichszahlung*) from the financial year as of which the obligation to transfer profit under § 2 of the Agreement takes effect, i.e. probably from the financial year starting on 1 January 2018, for the duration of the Agreement.

The annual recurring compensation payment amounts to EUR 3.82 gross and EUR 3.53 net per STADA share.

The reasons why the Contractual Parties agreed upon a fixed recurring compensation payment were set out in section D.I.4.2. The Contractual Parties agreed upon a gross amount in accordance with the rulings of the German Federal Court of Jus-

tice (*Bundesgerichtshof*) (decision of 21 July 2003 - II ZB 17/01 - "Ytong"). In this respect, reference is made to the explanatory notes in section D.I.4.3.

The Executive Board of STADA and the management of Nidda Healthcare fixed the amount of the recurring compensation payment by mutual agreement based on the results of ValueTrust's Expert Opinion dated 18 December 2017, in which the Valuation Expert comes to the conclusion that the appropriate recurring compensation payment ranges between EUR 3.61 gross (EUR 3.34 net) and EUR 3.84 gross (EUR 3.55 net) for each STADA share.

### III. Determination and setting of the amount of the appropriate compensation according to section 305 AktG

According to § 5 of the Agreement, Nidda Healthcare shall acquire, if so demanded by any outside STADA Shareholder, such shareholder's STADA Shares against payment of a compensation (*Abfindung*) (section 305(2) no. 3 AktG). Every outside STADA Shareholder accepting the offer for the compensation shall receive a compensation in the amount of EUR 74.40 for each STADA Share. The relevant reasons for the agreed type of compensation, namely a cash compensation, are set out in section D.I.5.2.

The Executive Board of STADA and the management of Nidda Healthcare fixed the amount of the compensation payment by mutual agreement based on the results of the Expert Opinion dated 18 December 2017. In that Expert Opinion, the Valuation Expert determined the appropriate compensation within the meaning of section 305 AktG to range between EUR 70.22 and EUR 74.85 on the basis of the range of the objectified business values according to the IDW S 1.

The Valuation Expert and the Contractual Parties also considered the stock exchange price of the STADA share in determining the amount of the compensation. According to the ruling of the German Federal Constitutional Court (*Bundesverfassungsgericht*) of 27 April 1999 - BvR 1613/94, the stock exchange price generally represents the lowest limit for determining the amount of the compensation to be offered to the outside shareholders. The German Federal Court of Justice (*Bundesgerichtshof*) (judgment of 12 March 2001 - II ZB 15/00) specified the requirements laid down by the German Federal Constitutional Court (*Bundesverfassungsgericht*) with regard to the relevance of the stock exchange price for determining the appropriate compensation. In its judgment of 19 July 2010 (ZB II 18/09 "Stollwerk"), it established additional requirements in this respect by specifying that the relevant stock exchange price must be determined on the basis of a salesweighted average stock exchange price during a three-month reference period prior to the announcement of a structural measure.

Nidda Holding announced that it intended to initiate the conclusion of a domination and profit and loss transfer agreement between STADA as the controlled company and Nidda Holding or one of its affiliates as the controlling company by way of an ad-hoc announcement on 24 August 2017. The volume-weighted stock exchange price of the STADA share determined by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht - BaFin*) for the three-month period preceding the publication of the ad-hoc announcement

on 24 August 2017 is EUR 65.41. As this value is above the above-stated range of the objectified business value according to the IDW S 1, the volume-weighted stock exchange price of EUR 65.41 was not decisive for the determination of the compensation in the present case.

The volume-weighted stock exchange price does not have to be adjusted and extrapolated to the date of the general meeting. According to the Stollwerck decision of the German Federal Court of Justice (*Bundesgerichtshof*), such adjustment only has to occur if a longer period of time has passed between the public announcement of the structural measure and the date of the general meeting and if the development of the stock exchange prices shows that an adjustment is appropriate. An adjustment of the volume-weighted three-month stock exchange price in the present case, however, is not necessary because a period of less than six months lies between the announcement of the intent to enter into a domination and profit and loss transfer agreement (24 August 2017) and the date on which the Agreement will be submitted to the extraordinary general meeting for its approval (2 February 2018). This does not constitute a longer period of time within the meaning of the Stollwerck decision.

#### F. Contract audit

The Contract Auditor prepared an Audit Report which, along with the documents mentioned in section 293f(1) AktG, will be available on STADA's website at http://www.stada.com/egm2018 from the convocation of the extraordinary general meeting. Moreover, the Audit Report along with the specified documents will also be laid out for inspection by the shareholders in the offices of STADA from the convocation of the general meeting until its conclusion. The Audit Report will also be laid out along with the specified documents during the general meeting. On request, every STADA Shareholder will be given copies of said documents without delay or charge (section D.III.2.2).

#### $STADA\ Arzneimittel\ Aktiengesellschaft$

The Executive Board				
Bad Vilbel, 19 December 2017				
Dr Claudio Albrecht	Mark Keatley	Dr Barthold Piening		
Chairman of the Executive Board/CEO	Chief Financial Officer	Chief Technical Officer		

#### Nidda Healthcare GmbH

The Management

Frankfurt am Main, 19 December 2017

Andreas Grundhöfer Managing Director

Annexes

Annex 1: List of shareholdings of STADA Arzneimittel Aktiengesellschaft pursuant to section 285 no. 11 HGB as at 31 December 2016

#### List of equity interests of STADA Arzneimittel AG in accordance with Section 285 No. 11 of the German Commercial Code

The following list shows the earnings of the companies independent from the share in capital.

#### 1) Direct investments of STADA Arzneimittel AG

	Earnings 2016	Equity	Equity interest in %
Germany <sup>1)</sup>	_		
BEPHA Beteiligungsgesellschaft für Pharmawerte mbH, Bad Vilbel	EUR 0	kEUR 253	100%
BIOCEUTICALSArzneimittel AG, Bad Vilbel	kEUR 6,193	kEUR 42,107	15.86%
Mobilat Produktions GmbH, Pfaffenhofen	EUR 0	kEUR 256	100%
STADA Aesthetics Deutschland GmbH, Bad Homburg	kEUR 147	kEUR 172	100%
STADA GmbH, Bad Vilbel	EUR 0	kEUR 359	100%
STADA Pharma International GmbH, Bad Vilbel	EUR 0	kEUR 31	100%
STADApharm GmbH, Bad Vilbel	EUR 0	kEUR 154	100%
International <sup>2)</sup>			
AO Nizhpharm, Nizhny Novgorod, Russia <sup>3)</sup>	kRUB2,139,595	kRUB 17,217,309	100%
Ciclum Farma, Unipessoal, LDA, Paco de Arcos, Portugal	kEUR 356	kEUR 4,711	100%
Crinos S.p.A., Milan, Italy	kEUR -1,151	kEUR 25,417	96.77%
EG Labo - Laboratoires Eurogenerics SAS, Boulogne-Billancourt, France	kEUR -1,511	kEUR 46,737	100%
EG S.p.A., Milan, Italy	kEUR 5,204	kEUR 68,413	98.87%
Grunenthal Ukraine LLC, Kiev, Ukraine <sup>4)</sup>	-	_	100%
Laboratorio STADA, S.L., Barcelona, Spain	kEUR 3,568	kEUR 61,555	100%
Laboratorio Vannier S.A., Buenos Aires, Argentina	kARS 8,324	kARS 44,542	85%
OOO Hemofarm, Obninsk, Russia	kRUB 363,928	kRUB 2,760,145	10%
OOO STADA Marketing, Nizhny Novgorod, Russia <sup>3)</sup>	kRUB -17,788	kRUB 4,493	10%
SCIOTEC Diagnostic Technologies GmbH, Tulln an der Donau, Austria <sup>3)</sup>	kEUR 7,977	kEUR 9,444	100%
STADA Aesthetics Belgique (BVBA), Brussels, Belgium <sup>4)</sup>	-	-	100%
STADAArzneimittelGesellschaftm.b.H., Vienna, Austria <sup>3)</sup>	kEUR 729	kEUR 5,858	100%
STADA d.o.o., Ljubljana, Slovenia	kEUR 42	kEUR 467	100%
STADA d.o.o., Zagreb, Croatia	kHRK 553	kHRK 4,281	100%
STADA Egypt Ltd., Cairo, Egypt <sup>4)</sup>	-	_	83.33%
STADA LUX S.à R.L., Luxembourg, Luxembourg	kEUR 1	kEUR 7	100%
STADA PHARMA Bulgaria EOOD, Sofia, Bulgaria <sup>4)</sup>	-	_	100%
STADA PHARMA CZ s.r.o., Prague, Czech Republic	kCZK 4,432	kCZK 240,688	100%
STADA Pharma Services India Private Limited, Mumbai, India <sup>4)</sup>	-	-	85%
STADAPHARMA Slovakia s.r.o., Bratislava, Slovakia	kEUR 337	kEUR 2,884	100%
STADA Pharmaceuticals (Asia) Ltd., Hong Kong, People's Republic of China	kHKD 45,271	kHKD 191,778	100%
STADA Pharmaceuticals Australia Pty Ltd, Sydney, Australia <sup>4)</sup>	-	_	100%
STADA Poland Sp. z o.o. Piaseczno, Poland	kPLN 1,274	kPLN7,702	100%
STADA Service Holding B.V., Etten-Leur, Netherlands	kEUR 21,444	kEUR 662,020	100%
STADA (Shanghai) Company Management Consulting Co. Ltd., Shanghai, People's Republic of China	kCNY 128	kCNY 927	100%
STADA UK Holdings Ltd., Reading, United Kingdom	kEUR 27,764	kEUR 438,930	100%

There is a profit and loss transfer contract for German companies with a result of 0. For foreign companies, equity is shown both in local currency and in accordance with local law. Figures from financial year 2015. 1) 2) 3) 4)

Waiver of disclosures pursuant to Section 286 (3) Sentence 1 No. 1 of the German Commercial Code.

#### 2) Indirect investments of STADA Arzneimittel AG

	Earnings 2016	Equity	Equity interes in %
Germany <sup>1)</sup>			
ALIUD PHARMA GmbH, Laichingen	EUR 0	kEUR 52	100%
Blitz F15-487 GmbH, Bad Vilbel	EUR 0	kEUR 414	100%
cell pharm Gesellschaft für pharmazeutische und diagnostische Präparate mbH, Bad Vilbel	EUR 0	kEUR 229	100%
Grippostad GmbH, Bad Vilbel	EUR 0	kEUR 25	100%
Hemopharm GmbH Pharmazeutisches Unternehmen, Bad Homburg	kEUR 748	kEUR 717	100%
PharmaSwyzz Deutschland GmbH, Bad Homburg	kEUR-1	kEUR 13	100%
STADAvita GmbH, Bad Homburg	EUR 0	kEUR 25	100%
STADA CEE GmbH, Bad Vilbel	EUR 0	kEUR 223	100%
STADA Medical GmbH, Bad Vilbel	EUR 0	kEUR 103	100%
International <sup>2)</sup>	_		
AELIA SAS, Saint Brieuc, France <sup>3)</sup>	kEUR 540	kEUR 1,497	20%
Britannia Pharmaceuticals Ltd., Reading, United Kingdom	kGBP 14,603	kGBP 74,094	100%
Brituswip Limited (J.V.), Newbury, United Kingdom	kGBP8	kGBP 129	50%
BSMW Limited, Stockport, United Kingdom	kGBP312	kGBP 1,938	100%
Centrafarm B.V., Etten-Leur, Netherlands	kEUR 5,501	kEUR 11,903	100%
Centrafarm Nederland B.V., Etten-Leur, Netherlands	kEUR -223	kEUR 25,236	100%
Centrafarm Services B.V., Etten-Leur, Netherlands	kEUR 1,736	kEUR 10,124	100%
Clonmel Healthcare Limited, Clonmel, Ireland	kEUR 21,986	kEUR 41,333	100%
CNRD 2009 Ireland Ltd., Dublin, Ireland	kEUR -20	kEUR 89	50%
Crinos S.p.A., Milan, Italy	kEUR -1,151	kEUR 25,417	3.23%
Croma Medic, Inc., Manila, Philippines	kPHP 23,693	kPHP 305,211	100%
Crosspharma Ltd., Belfast, United Kingdom	kEUR 143	kEUR 1,965	100%
Dak Nong Pharmaceutical JSC, Dak Nong, Vietnam <sup>3)</sup>	kVND 264,642	kVND 2,359,521	43%
DIALOGFARMA LLC, Moscow, Russia <sup>3)</sup>	kRUB -3,597	kRUB 14,965	50%
EG S.p.A., Milan, Italy	kEUR 5,204	kEUR 68,413	1.13%
Fresh Vape Electronic Cigarettes Limited, Chesterfield, United Kingdom	kGBP7	kGBP 5	100%
Genus Pharmaceuticals Holdings Ltd., Huddersfield, United Kingdom	kGBP 0	kGBP 12,472	100%
Genus Pharmaceuticals Ltd., Huddersfield, United Kingdom	kGBP 0	kGBP 34,399	100%
Healthypharm B.V., Etten-Leur, Netherlands	kEUR 639	kEUR 3,381	100%
Hemofarm A.D., Vrsac, Serbia <sup>3)</sup>	kRSD 2,950,193	kRSD 25,600,534	100%
Hemofarm Banja Luka d.o.o., Banja Luka, Bosnia-Herzegovina <sup>3)</sup>	kBAM 3,167	kBAM 58,144	91.5%
Hemofarm Komercd.o.o., Skopje, Macedonia <sup>4)</sup>	-	_	99.18%
Hemofarm S.à.r.l., Constantine, Algeria <sup>4)</sup>	-	_	40%
Hemomont d.o.o., Podgorica, Montenegro <sup>3)</sup>	kRSD -425	kRSD 16,542	71.02%
HTP Huisapotheek B.V., Etten-Leur, Netherlands	kEUR 0	kEUR 11	100%
Internis Pharmaceuticals Limited, Huddersfield, United Kingdom	kGBP 8,356	kGBP 11,151	100%
Jinan Hemofarm Pharmaceuticals, Jinan, People's Republic of China <sup>4)</sup>	_		35.5%
Laboratorio Vannier S.A., Buenos Aires, Argentina	kARS 8,324	kARS 44,542	15%
LAS Trading Limited, Chesterfield, United Kingdom	kGBP 0	kGBP 1	100%
LCM Limited, Huddersfield, United Kingdom	kGBP0	kGBP 0	100%
Lowry Solutions Limited, Huddersfield, United Kingdom	kEUR 1,399	kGBP 47	100%
Natures Aid Ltd., Preston, United Kingdom	kGBP 5,673	kGBP 173	100%
Nizhpharm-KazakhstanTOODO,Almaty,Kazakhstan	kKZT -1,219,034	kKZT 518	100%

There is a profit and loss transfer contract for German companies with a result of 0, with the exception of Blitz F15-487 GmbH and Grippostad GmbH. For foreign companies, equity is shown both in local currency and in accordance with local law. Figures from financial year 2015.

Waiver of disclosures pursuant to Section 286 (3) Sentence 1 No. 1 of the German Commercial Code.

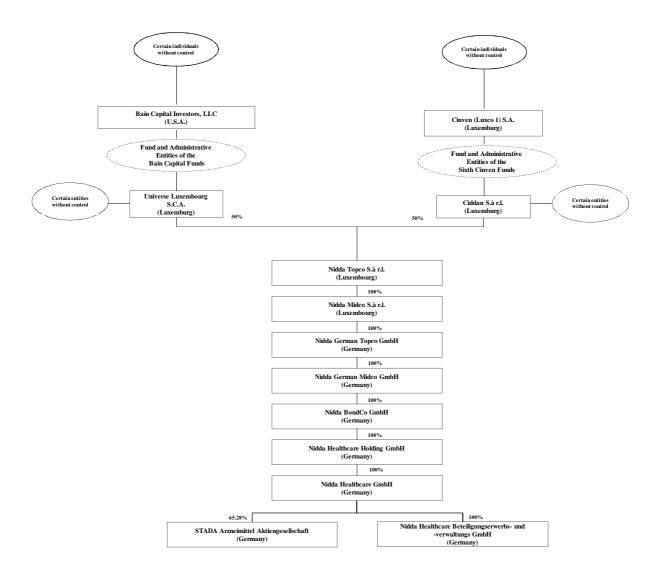
<sup>1.</sup> 2. 3. 4.

	Earnings 2016	Equity	Equity interest in %
International <sup>1)</sup>			
Nizhpharm-Ukraine DO, Kiev, Ukraine	kUAH -270,402	kUAH -19,150	100%
OOO Aqualor, Moscow, Russia <sup>2)</sup>	kRUB 58	kRUB 162	100%
OOO Hemofarm, Obninsk, Russia	kRUB 363,928	kRUB 2,760,145	90%
OOO STADA CIS, Nizhny Novgorod, Russia <sup>2)</sup>	kRUB -16,162	kRUB -120,452	100%
OOO STADA Marketing, Nizhny Novgorod, Russia <sup>2)</sup>	kRUB -17,788	kRUB 4,493	90%
OOO STADA PharmDevelopment, Nizhny Novgorod, Russia	kRUB 13,002	kRUB 45,522	100%
Pegach AG, Egerkingen, Switzerland	kCHF-3	kCHF 355	100%
Pharm Ortho Pedic SAS, Trélazé, France <sup>2)</sup>	kEUR 379	kEUR 3,040	25%
Phu Yen Export Import Pharmaceuticals JSC, Phu Yen, Vietnam <sup>2)</sup>	kVND 550,013	kVND 25,074,594	20%
PYMEPHARCO JOINT STOCK COMPANY, Tuy Hoa, Vietnam	kVND 239,258,579	kVND 1,326,176,644	59%
Quang Tri Pharmaceutical Joint Stock, Quang Tri Province, Vietnam <sup>2)</sup>	kVND 508,738	kVND 4,347,090	22%
Quatropharma Holding B.V., Etten-Leur, Netherlands	kEUR 0	kEUR 329	100%
S.A. Eurogenerics N.V., Brussels, Belgium	kEUR 1,384	kEUR 80,879	100%
Slam Trading Limited, Chesterfield, United Kingdom	kGBP 1,071	kGBP 43	100%
Socialites E-Commerce Limited, Huddersfield, United Kingdom	kGBP127	kGBP 125	100%
Socialites Nederlands BV, Beuningen, Netherlands	kEUR 0	kEUR 0	100%
Socialites Retail Limited, Chesterfield, United Kingdom	kGBP -614	kGBP -498	100%
Spirig HealthCare AG, Egerkingen, Switzerland	kCHF 424	kCHF 5,797	100%
STADA (Thailand) Co. Ltd., Bangkok, Thailand	kTHB 16,962	kTHB 63,919	60%
STADA Aesthetics AG, Bottighofen, Switzerland <sup>3)</sup>			100%
STADA Aesthetics Italia S.R.L., Verona, Italy <sup>3)</sup>	_	_	100%
STADA Aesthetics UK Limited, Kent, United Kingdom <sup>3)</sup>	_	_	100%
STADA Egypt Ltd., Cairo, Egypt <sup>3)</sup>	_	_	16.67%
STADA Financial Investments Limited, Clonmel, Ireland	kEUR -5	kEUR 91,412	100%
STADA Genericos, S.L., Barcelona, Spain	kEUR 0	kEUR 2	100%
STADA HEMOFARM S.R.L., Temeswar, Romania <sup>2)</sup>	kRON 738	kRON 14,846	100%
STADA Import/Export International Ltd., Hong Kong, People's Republic of China	kUSD 1,314	kUSD 2,259	51%
STADA IT Solutions d.o.o., Belgrade, Serbia <sup>2)</sup>	kRSD 17,351	kRSD 54,676	100%
STADA M&D S.R.L., Bucharest, Romania	kRON 173	kRON 6,841	100%
STADA MENA DWC-LLC, Dubai, United Arab Emirates	kAED -1,278	kAED 39,799	100%
STADA Nordic ApS, Herlev, Denmark <sup>2)</sup>	kDKK 4,896	kDKK 112,058	100%
STADA Pharma Services India Private Limited, Mumbai, India <sup>3)</sup>	_	_	15%
STADA Pharmaceuticals (Beijing) Ltd., Beijing, People's Republic of China	kCNY 7,275	kCNY 61,935	83.351%
STADA Vietnam J.V. Co., Ltd., Ho Chi Minh City, Vietnam	kVND 300,760,835	kVND 959,963,868	50%
STADA, LDA, Paco de Arcos, Portugal	kEUR -6	kEUR -24	100%
STAdata LLC, Kiev, Ukraine <sup>3)</sup>	_		100%
Sundrops Limited, Huddersfield, United Kingdom	kGBP 2,957	kGBP 3,427	100%
Thornton & Ross Ireland Limited, Clonmel, Ireland	kEUR 0	kEUR 0	100%
Thornton & Ross Limited, Huddersfield, United Kingdom	kGBP 37,644	kGBP 29,371	100%
UABSTADA-Nizhpharm-Baltiya, Vilnius, Lithuania	kEUR 64	kEUR 1,227	100%
Velefarm A.D., Belgrade, Serbia <sup>3)</sup>	-		19.65%
Vetfarm A.D., Belgrade, Serbia <sup>3)</sup>	_	_	15%
Well Light Investment Services JSC, Ho Chi Minh City, Vietnam	kVND -31,937	kVND 134,387,846	49%
ZAO Makiz-Pharma, Moscow, Russia	kRUB -7,567	kRUB 1,065,980	100%
ZAO Makiz-Priarina, Moscow, Russia ZAO Skopinpharm, Ryazanskaya obl., Russia		kRUB 332,202	100%
Zeroderma Limited, Huddersfield, United Kingdom <sup>3)</sup>	kRUB -5,224	VVOD 225'505	100%

<sup>1)</sup> 2) 3) For foreign companies, equity is shown both in local currency and in accordance with local law. Figures from financial year 2015.

Waiver of disclosures pursuant to Section 286 (3) Sentence 1 No. 1 of the German Commercial Code

Annex 2:	Simplified shareholder structure of Nidda Healthcare GmbH



Annex 3: Domination and profit and loss transfer agreement between STADA Arzneimittel Aktiengesellschaft and Nidda Healthcare GmbH

#### Beherrschungs- und Gewinnabführungsvertrag

#### Domination and Profit and Loss Transfer Agreement

zwischen

by and between

STADA Arzneimittel Aktiengesellschaft,

Stadastraße 2-18, 61118 Bad Vilbel,

eingetragen im Handelsregister des Amtsgerichts Frankfurt am Main (HRB 71290)

registered at the commercial register of the local court Frankfurt am Main (HRB 71290)

-STADA -

und

and

Nidda Healthcare GmbH,

c/o Intertrust (Deutschland) GmbH, Grüneburgweg 58-62, 60322 Frankfurt am Main,

eingetragen im Handelsregister des Amtsgerichts Frankfurt am Main (HRB 109528)

registered at the commercial register of the local court Frankfurt am Main (HRB 109528)

#### - Nidda Healthcare-

#### § 1 Leitung

#### § 1 Managerial Control

- (1) STADA unterstellt Nidda Healthcare die Leitung ihrer Gesellschaft ab dem Zeitpunkt der Wirksamkeit dieses Vertrags. Dementsprechend ist Nidda Healthcare berechtigt, dem Vorstand der STADA in Bezug auf die Leitung der STADA sowohl allgemeine als auch auf den Einzelfall bezogene Weisungen zu erteilen. Nidda Healthcare ist ebenfalls berechtigt, Weisungen in Bezug auf die Aufstellung des Jahresabschlusses der STADA zu erteilen.
- (2) Der Vorstand der STADA ist verpflichtet,Weisungen der Nidda Healthcare nach§ 1 Abs. 1 und in Übereinstimmung mit
- (1) STADA agrees that the management of its company shall be under the control of Nidda Healthcare as from the date of the effectiveness of this Agreement. Accordingly, Nidda Healthcare shall be entitled to give instructions to the management board of STADA with respect to the management of STADA in general or on a case by case basis. Nidda Healthcare is also entitled to give instructions with respect to the preparation of the annual accounts of STADA.
- (2) The management board of STADA is required to comply with the instructions of Nidda Healthcare as specified

§ 308 AktG zu befolgen.

- (3) Nidda Healthcare kann ihre direkten oder indirekten Gesellschafter bevollmächtigen, das ihr zustehende Weisungsrecht in rechtsgeschäftlicher Vertretung auszuüben. STADA ist nur verpflichtet, solche Weisungen direkter oder indirekter Gesellschafter der Nidda Healthcare zu befolgen, nachdem ihr (i) die entsprechende Vollmacht bei erstmaliger Weisung durch eine bevollmächtigte Gesellschaft und (ii) bei ausländischen bevollmächtigten Gesellschaften auch die Vertretungsberechtigung der die Weisung erteilenden Person(en) vorgelegt wurde. Änderungen in Bezug auf erteilte Vollmachten sowie in Bezug auf die Zusammensetzung der Geschäftsführung der bevollmächtigten Gesellschaft(en) hat Nidda Healthcare unverzüglich gegenüber STADA anzuzeigen. Auch im Falle rechtsgeschäftlicher Vertretung besteht die Haftung der Nidda Healthcare nach § 309 AktG i.V.m. § 278 BGB unverändert fort.
- (4) Nidda Healthcare kann dem Vorstand der STADA keine Weisungen in Bezug auf die Änderung, Aufrechterhaltung oder Beendigung dieses Vertrags erteilen.
- (5) Weisungen bedürfen der Textform nach § 126b BGB oder sind, sofern sie mündlich erteilt werden, unverzüglich in Textform zu bestätigen, sofern der Vorstand dies verlangt.

- in § 1 para. 1 and in accordance with § 308 AktG.
- (3) Nidda Healthcare may authorize its direct or indirect controlling shareholder to exercise the right of instruction on its behalf as a proxy. STADA is only required to comply with such instructions given by direct or indirect shareholders of Nidda Healthcare after having received (i) the relevant powers of attorney with the first instruction by an authorized entity, and (ii) in case of foreign authorized entities also the power of representation of the person(s) issuing the instruction. Changes in relation to the power of attorney as well as in relation to the composition of the authorized company's management must be reported by Nidda Healthcare to STADA without undue delay. The liability of Nidda Healthcare under § 309 AktG in conjunction with § 278 BGB continues unchanged also in the case of legal representation.
- (4) Nidda Healthcare shall not be entitled to give instructions to the management board of STADA pertaining to amending, maintaining, or terminating this agreement.
- (5) Any instructions require text form according to § 126b BGB or, if the instructions are given orally, they shall be confirmed in text form without undue delay, if requested by the management board.

#### § 2 Gewinnabführung

- (1) STADA verpflichtet sich, ihren ganzen Gewinn an Nidda Healthcare abzuführen. Vorbehaltlich der Bildung oder Auflösung von Rücklagen nach § 2 Abs. 2 ist der nach § 301 AktG in dessen jeweils geltender Fassung zulässige Höchstbetrag abzuführen.
- (2) STADA kann mit schriftlicher oder in Textform nach § 126b BGB erfolgender Zustimmung der Nidda Healthcare Beträge aus dem Jahresüberschuss in andere Gewinnrücklagen einstellen, soweit dies handelsrechtlich zulässig und bei vernünftiger kaufmännischer Beurteilung wirtschaftlich begründet ist. Während der Vertragslaufzeit gebildete andere Gewinnrücklagen sind auf schriftliches oder in Textform nach § 126b BGB erfolgendes Verlangen der Nidda Healthcare aufzulösen und zum Ausgleich eines Jahresfehlbetrags zu verwenden oder als Gewinn abzuführen. Sonstige Rücklagen oder ein Gewinnvortrag, der aus der Zeit vor der Wirksamkeit dieses Vertrags stammt, dürfen weder als Gewinn abgeführt noch zum Ausgleich eines Jahresfehlbetrages verwendet werden.
- (3) Die Verpflichtung zur Abführung des gesamten Gewinns besteht erstmals für das am 1. Januar 2018 beginnende oder dasjenige spätere Geschäftsjahr der STADA, in dem dieser Vertrag nach § 7 Abs. 2 wirksam wird. Die Verpflichtung ist in jedem Fall mit Feststellung des Jahresabschlusses für das betreffende Geschäftsjahr der STADA fällig.

#### § 2 Transfer of Profit

- (1) STADA undertakes to transfer its entire annual profit (*Gewinnabführung*) to Nidda Healthcare. Subject to establishing or dissolving reserves in accordance with § 2 para. 2, the maximum amount permissible under § 301 AktG, as amended from time to time, shall be transferred.
- (2) If and to the extent permissible under commercial law and economically jusby reasonable commercial judgement, STADA may, with the consent of Nidda Healthcare in writing or text form according to § 126b BGB, allocate parts of its annual profit to other profit reserves. Other profit reserves which have been created during the term of this agreement shall be liquidated upon request of Nidda Healthcare in writing or text form according to § 126b BGB and used to compensate any annual deficit for the financial year or be transferred as profit. Other reserves or profits carried forward from the period prior to the term of this agreement may neither be transferred as profit nor be used to compensate for any annual deficit.
- (3) The obligation to transfer the annual profit applies for the first time to the entire profits generated in the fiscal year of STADA beginning on January 1, 2018 or to the entire profits of any later fiscal year in which this agreement becomes effective according to § 7 para. 2. In each case, the obligation becomes due with the approval of the respective annual financial state-

#### § 3 Verlustübernahme

- (1) Nidda Healthcare ist nach § 302 Abs. 1 AktG in dessen jeweils geltender Fassung zum Ausgleich eines Jahresfehlbetrags der STADA verpflichtet. Die Vorschrift des § 302 AktG ist in ihrer Gesamtheit in der jeweils geltenden Fassung anzuwenden.
- (2) Die Verpflichtung zum Ausgleich des gesamten Jahresfehlbetrags besteht erstmals für das am 1. Januar 2018 beginnende oder dasjenige spätere Geschäftsjahr der STADA, in dem dieser Vertrag nach § 7 Abs. 2 wirksam wird. Die Verpflichtung wird in jedem Fall zum Ende eines Geschäftsjahrs der STADA fällig.
- (3) Bei einer Beendigung dieses Vertrags während eines Geschäftsjahrs, insbesondere durch eine Kündigung aus wichtigem Grund, ist Nidda Healthcare zur Übernahme desjenigen Fehlbetrags der STADA, wie er sich aus einer auf den Tag des Wirksamwerdens der Beendigung zu erstellenden Stichtagsbilanz ergibt, verpflichtet.

#### § 4 Ausgleichszahlung

(1) Nidda Healthcare verpflichtet sich, den außenstehenden Aktionären der STADA für die Dauer dieses Vertrags als angemessenen Ausgleich nach § 304 Abs. 1 AktG die Zahlung einer wiederkehrenden

# § 3 Balancing of Losses

- (1) Nidda Healthcare is obliged pursuant to § 302 para. 1 AktG, as amended from time to time, to balance each year any annual net loss of STADA that would otherwise arise during the term of this agreement. The provision of § 302 AktG applies in its entirety, as amended from time to time.
- (2) The obligation to balance any losses applies for the first time to the entire losses generated in the fiscal year of STADA beginning on January 1, 2018 or to the entire losses of any later fiscal year in which this agreement becomes effective according to § 7 para. 2. In each case, the obligation becomes due at the end of the respective fiscal year of STADA.
- (3) In the event this agreement is terminated during a fiscal year, and specifically in the event of termination for cause (wichtiger Grund), Nidda Healthcare is required to balance the losses of STADA as shown in the balance sheet to be drawn up as of the date of the effectiveness of the termination in accordance with applicable accounting rules.

# § 4 Recurring Compensation Payment

(1) Nidda Healthcare undertakes to pay to outside shareholders of STADA as adequate compensation pursuant to § 304 para. 1 AktG a recurring cash compensation (*Recurring Compensation*)

- Geldleistung (*Ausgleichszahlung*) zu zahlen.
- (2) Die Ausgleichszahlung beträgt für jedes volle Geschäftsjahr der STADA für jede nennwertlose auf den Namen lautende Stückaktie der STADA mit einem rechnerischen Anteil am Grundkapital von EUR 2,60 (jede einzelne eine STADA Aktie, insgesamt die STADA Aktien) brutto (Bruttoausgleichs-EUR 3,82 betrag), abzüglich eines etwaigen Betrags für Körperschaftsteuer und Solidaritätszuschlag in Höhe des für diese Steuern für das jeweilige Geschäftsjahr jeweils geltenden Steuersatzes (Nettoausgleichsbetrag), wobei dieser Abzug nur auf den Teil des Bruttoausgleichsbetrags, der sich auf die der deutscher Körperschaftsteuer unterliegenden Gewinne bezieht, vorzunehmen ist. Am Tag des Abschlusses dieses Vertrags beträgt die Körperschaftsteuer 15 % und der Solidaritätszuschlag 5,5 %. Dementsprechend ergibt sich am Tag des Abschlusses dieses Vertrags nach kaufmännischer Rundung auf einen vollen Cent-Betrag eine Ausgleichszahlung in Höhe von EUR 3,53 je STADA Aktie für ein volles Geschäftsjahr der STADA. Klarstellend wird vereinbart, dass, soweit gesetzlich vorgeschrieben, anfallende Ouellensteuern (etwa Kapitalertragsteuer zuzüglich Solidaritätszuschlag) von dem Nettoausgleichsbetrag einbehalten werden.
- **Payment**) (Ausgleich) as long as this agreement is in effect.
- (2) The Recurring Compensation Payment payable for each full fiscal year of STADA with respect to each no-par value registered share of STADA (Namensaktie ohne Nennbetrag), each with a notional value of EUR 2.60 (each a STADA Share, together the STADA Shares), shall be equal to EUR 3.82 gross (Gross Compensation Amount), less any amount of corporate income tax (Körperschaftsteuer) and solidarity surcharge (Solidaritätszuschlag) at the prevailing rate of these taxes for the relevant fiscal year (Net Compensation Amount), provided that this deduction is to be effected only on such portion of the Gross Compensation Amount that relates to profits subject to German corporate income tax. As of the date of the execution of this agreement, the corporate income tax amounted to 15% and the solidary surcharge amounted to 5.5%. When applied to the Gross Compensation Amount which is subject to German corporate income tax and rounded to a full cent amount in accordance with commercial practices and then deducted, the resulting amount as of the date of the execution of this agreement is a Recurring Compensation Payment of EUR 3.53 for each STADA Share for an entire fiscal year of STADA. For the avoidance of doubt, it is agreed that any withholding tax (such as capital gains tax plus solidarity surcharge thereon) shall be withheld from the Net Compensation Amount to the extent required by statutory law.

- (3) Die Ausgleichszahlung ist am dritten Bankarbeitstag (Frankfurt am Main) nach der ordentlichen Hauptversammlung der STADA für das jeweils abgelaufene Geschäftsjahr, jedoch spätestens acht Monate nach Ablauf des jeweiligen Geschäftsjahrs fällig.
- (4) Die Ausgleichszahlung wird erstmals für dasjenige Geschäftsjahr der STADA, in dem dieser Vertrag nach § 7 Abs. 2 wirksam wird, gewährt und wird gemäß § 4 Abs. 3 erstmals nach der ordentlichen Hauptversammlung der STADA im darauffolgenden Jahr gezahlt.
- (5) Falls dieser Vertrag während eines Geschäftsjahrs der STADA endet oder STADA während der Laufzeit dieses Vertrags ein Rumpfgeschäftsjahr bildet, vermindert sich der Bruttoausgleichsbetrag für das betroffene Geschäftsjahr zeitanteilig.
- (6) Falls das Grundkapital der STADA aus Gesellschaftsmitteln gegen Ausgabe neuer Aktien erhöht wird, vermindert sich der Bruttoausgleichsbetrag je STADA Aktie in dem Maße, dass der Gesamtbetrag des Bruttoausgleichsbetrags unverändert bleibt. Falls das Grundkapital der STADA durch Ausgabe neuer Aktien gegen Bar- und/oder Sacheinlagen erhöht wird, gelten die Rechte aus diesem § 4 auch für die von außenstehenden Aktionären bezogenen Aktien aus einer solchen Kapitalerhöhung. Der Beginn der Berechtigung aus den neu ausgegebenen Aktien nach diesem § 4 korrespondiert mit dem von STADA bei Ausgabe der neuen Aktien festgesetzten Zeitpunkt zur Gewinn-

- (3) The Recurring Compensation Payment is due on the third banking day (Frankfurt am Main) following the ordinary general shareholders' meeting of STADA for the respective preceding fiscal year, but in any event within eight months following expiration of this fiscal year.
- (4) The Recurring Compensation Payment is first granted for the fiscal year of STADA in which this agreement becomes effective according to § 7 para. 2, and will be paid for the first time in accordance with § 4 para. 3 after the ordinary general shareholders' meeting of STADA in the following year.
- (5) If this agreement ends during a fiscal year of STADA or if STADA establishes a short fiscal year (*Rumpfgeschäftsjahr*) during the term of this agreement, the Gross Compensation Amount is reduced to *pro rata temporis* for the relevant fiscal year.
- (6) If the share capital of STADA is increased from own funds of STADA in exchange for the issuance of new shares, the Gross Compensation Amount per STADA Share is reduced to such extent that the aggregate amount of the Gross Compensation Amount remains unchanged. If the share capital is increased by the issuance of new shares against cash contributions and/or contributions in kind, the rights under this § 4 also apply for the shares subscribed to by outside shareholders in such capital increase. The beginning of the entitlement to rights under this § 4 in respect of the newly issued shares follows the begin-

anteilsberechtigung.

- (7) Falls der Ausgleichszahlung nach § 4 Abs. 1 für jede STADA Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder in einem gerichtlich protokollierten Vergleich zur Beendigung eines Spruchverfahrens erhöht wird, können auch die bereits nach Maßgabe des § 5 abgefundenen Aktionäre eine entsprechende Ergänzung der von ihnen bereits erhaltenen Ausgleichszahlung verlangen, soweit gesetzlich vorgesehen.
  - § 5
    Abfindung
- (1) Nidda Healthcare verpflichtet sich, auf Verlangen eines jeden außenstehenden Aktionärs der STADA dessen STADA Aktien gegen eine Barabfindung (*Abfindung*) in Höhe von EUR 74,40 je STADA Aktie zu erwerben.
- (2) Die Verpflichtung der Nidda Healthcare zum Erwerb der STADA Aktien ist befristet. Die Frist endet zwei Monate nach dem Tag, an dem die Eintragung des Bestehens dieses Vertrags im Handelsregister des Sitzes der STADA nach § 10 HGB bekannt gemacht worden ist. Eine Verlängerung der Frist nach § 305 Abs. 4 Satz 3 AktG wegen eines Antrags auf Bestimmung der angemessenen Ausgleichszahlung oder der angemessenen Abfin-

- ning of entitlement to dividends as set out by STADA at the time of issuance of the new shares.
- (7) If the Recurring Compensation Payment pursuant to § 4 para. 1 is increased for each STADA Share by a legally binding court decision in appraisal proceedings (*Spruchverfahren*) or a judicially recorded settlement to end the appraisal proceedings (*gerichtlich protokollierter Vergleich*), the outside Shareholders, even if they have already been compensated according to clause § 5, are entitled to demand a corresponding additional payment to the Recurring Compensation Payment to the extent required by the applicable statutory law.

#### § 5 Compensation

- (1) Nidda Healthcare undertakes upon demand of any outside shareholder of STADA to purchase the STADA Shares tendered by such shareholder in exchange for a cash compensation (*Compensation*) (*Abfindung*) in the amount of EUR 74.40 for each STADA Share.
- (2) The obligation of Nidda Healthcare to acquire STADA Shares is limited in time. The time limitation period ends two months after the date on which the entry of the existence of this agreement has been published in the commercial register at the registered seat of STADA pursuant to § 10 HGB. An extension of the time limitation period pursuant to § 305 para. 4 sent. 3 AktG as a result of a filing for determination

dung durch das in § 2 SpruchG bestimmte Gericht bleibt unberührt; in diesem Fall endet die Frist zwei Monate nach dem Tag, an dem die Entscheidung über den zuletzt beschiedenen Antrag im Bundesanzeiger bekannt gemacht worden ist.

- (3) Falls bis zum Ablauf der in § 5 Abs. 2 genannten Frist das Grundkapital der STADA aus Gesellschaftsmitteln gegen Ausgabe neuer Aktien erhöht wird, vermindert sich die Abfindung je STADA Aktie in dem Maße, dass der Gesamtbetrag der Abfindung unverändert bleibt. Falls das Grundkapital der STADA bis zum Ablauf der in § 5 Abs. 2 genannten Frist durch Ausgabe neuer Aktien gegen Bar- und/oder Sacheinlagen erhöht wird, gelten die Rechte aus diesem § 5 auch für die von außenstehenden Aktionären bezogenen Aktien aus der Kapitalerhöhung.
- (4) Die Übertragung der STADA Aktien gegen Abfindung ist für die außenstehenden Aktionäre der STADA kostenfrei, sofern sie über ein inländisches Wertpapierdepot verfügen.
- (5) Falls die Abfindung nach § 5 Abs. 1 für jede STADA Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder in einem gerichtlich protokollierten Vergleich zur Beendigung eines Spruchverfahrens erhöht wird, wird Nidda Healthcare die von außenstehenden Aktionären angebotenen STADA Aktien

- of the adequate Recurring Compensation Payment or the adequate Compensation by a court pursuant to § 2 SpruchG remains unaffected; in this event, the time limitation period shall expire two months after the date on which the decision on the last motion disposed has been published in the Federal Gazette (*Bundesanzeiger*).
- (3) If the share capital of STADA is increased from own funds of STADA in exchange for the issuance of new shares prior to the expiration of the time limitation period set forth in § 5 para. 2, the Compensation for each STADA Share is reduced to such extent that the aggregate amount of the Compensation remains unchanged. If the share capital of STADA is increased by the issuance of new shares against cash contributions and/or contributions in kind prior to the expiration of the time limitation period set forth in § 5 para. 2, the rights under this § 5 also apply for the shares subscribed to by outside shareholders in such capital increase.
- (4) The transfer of STADA Shares in exchange for Compensation is without charge to outside shareholders of STADA, provided that they have a domestic securities deposit account.
- (5) If the Compensation pursuant to § 5 para. 2 is increased for each STADA Share by a legally binding court decision in an appraisal proceeding (*Spruchverfahren*) or a judicially recorded settlement to end the appraisal proceedings (*gerichtlich protokollierter Vergleich*), Nidda Healthcare will ac-

gegen Zahlung der erhöhten Abfindung erwerben, soweit gesetzlich vorgesehen.

- (6) Falls dieser Vertrag durch Kündigung der STADA oder Nidda Healthcare zu einem Zeitpunkt endet, zu dem die Frist nach § 5 Abs. 2 für den Erwerb der STADA Aktien durch Nidda Healthcare gegen Abfindung nach § 5 Abs. 1 abgelaufen ist, hat jeder außenstehende Aktionär der STADA das Recht, seine STADA Aktien, die er im Zeitpunkt der Beendigung dieses Vertrags hält, Nidda Healthcare gegen Abfindung nach § 5 Abs. 1 anzubieten und Nidda Healthcare ist verpflichtet, die von dem außenstehenden Aktionär angebotenen STADA Aktien zu erwerben. Falls die Abfindung nach § 5 Abs. 1 für jede STADA Aktie durch eine rechtskräftige Entscheidung in einem Spruchverfahren oder durch einen gerichtlich protokollierten Vergleich zur Abwendung oder Beendigung eines Spruchverfahrens erhöht wird, wird Nidda Healthcare die von dem außenstehenden Aktionär angebotenen STADA Aktien gegen Zahlung der im Spruchverfahren oder im gerichtlich protokollierten Vergleich festgesetzten Abfindung erwerben. Das Recht unter diesem § 5 Abs. 6 ist befristet. Die Frist endet zwei Monate nach dem Tag, an dem die Eintragung der Beendigung dieses Vertrags im Handelsregister des Sitzes der STADA nach § 10 HGB bekannt gemacht worden ist. § 5 Abs. 3 und § 5 Abs. 4 gelten entsprechend.
- quire the STADA Shares tendered by the outside shareholders against payment of the increased Compensation to the extent required by applicable statutory law.
- (6) If this agreement ends upon termination by STADA or Nidda Healthcare at a time when the period pursuant to § 5 para. 2 to tender the STADA Shares to Nidda Healthcare against the Compensation pursuant to § 5 para. 1 has expired, every outside shareholder of STADA is entitled to tender the STADA Shares held at the time of termination of this agreement to Nidda Healthcare against the Compensation pursuant to § 5 para. 1 and Nidda Healthcare shall be obliged to acquire the STADA Shares tendered by the outside shareholder. If the Compensation pursuant to § 5 para. 1 for each STADA Share is increased as a result of non-appealable appraisal proceedings (Spruchverfahren) or as a result of judicially recorded settlement (gerichtlich protokollierter Vergleich) in order to avert or terminate appraisal proceedings (Spruchverfahren), Nidda Healthcare will acquire the STADA Shares tendered by the outside shareholders against payment of the Compensation for each STADA Share as determined in the appraisal proceedings or judicially recorded settlement (gerichtlich protokollierter Vergleich). The right of disposal as set forth in this § 5 para. 6 is limited in time. The time limitation periods ends two months after the date on which the registration of the termination of this agreement has been published in the commercial register at the registered seat of STADA

pursuant to § 10 HGB. § 5 para. 3 and § 5 para. 4 apply accordingly.

#### § 6 Auskunftsrecht

# (1) Nidda Healthcare ist berechtigt, Bücher und Schriften der STADA jederzeit einzusehen.

- (2) Der Vorstand der STADA ist verpflichtet, Nidda Healthcare jederzeit alle verlangten Auskünfte über sämtliche Angelegenheiten der STADA zu geben.
- (3) Unbeschadet der vorstehenden Rechte ist STADA verpflichtet, Nidda Healthcare über die geschäftliche Entwicklung, insbesondere über wesentliche Geschäftsvorfälle, laufend zu informieren.
- (4) Solange es sich bei STADA um eine börsennotierte Aktiengesellschaft handelt, sind die Parteien verpflichtet, die kapitalmarktrechtlichen Vorschriften, insbesondere die Marktmissbrauchsverordnung (EU) Nr. 596/2014, einzuhalten.

#### § 7 Wirksamwerden und Dauer des Vertrags

- (1) Dieser Vertrag bedarf zu seiner Wirksamkeit der Zustimmung der Hauptversammlung der STADA und der Gesellschafterversammlung der Nidda Healthcare.
- (2) Dieser Vertrag wird wirksam, sobald sein Bestehen in das Handelsregister des Sitzes der STADA eingetragen worden ist.
- (3) Dieser Vertrag wird auf unbestimmte Zeit geschlossen. Nidda Healthcare kann die-

## § 6 Right to Information

- (1) Nidda Healthcare is entitled to inspect the books and records of STADA at any time.
- (2) The management board of STADA is obliged to supply Nidda Healthcare at any time with all requested information on all matters relating to STADA.
- (3) Notwithstanding the rights above, STADA is required to keep Nidda Healthcare continuously informed on the business development and, specifically, on material transactions.
- (4) As long as STADA is a publicly listed stock corporation the Parties are obliged to comply with the capital market law requirements, in particular with Market Abuse Regulation (EU) No 596/2014.

# § 7 Effectiveness and Term of this Agreement

- (1) This agreement requires for its effectiveness the consent of the general shareholders' meeting of STADA and the shareholders' meeting of Nidda Healthcare.
- (2) This agreement becomes effective upon registration of its existence in the commercial register at the registered seat of STADA.
- (3) This agreement is concluded for an indefinite period. Nidda Healthcare

sen Vertrag mit einer Frist von drei Monaten zum Ablauf eines Geschäftsjahres der STADA ordentlich kündigen, jedoch erstmals zum Ende des Geschäftsjahrs der STADA, das mindestens fünf Zeitjahre (60 Monate) nach Beginn des Geschäftsjahrs, in dem dieser Vertrag wirksam geworden ist, endet. Das ordentliche Kündigungsrecht für STADA ist ausgeschlossen.

- (4) Jede Partei kann diesen Vertrag aus wichtigem Grund ohne Einhaltung einer Kündigungsfrist kündigen. Falls Nidda Healthcare nach diesem Vertrag bestehende Zahlungsverpflichtungen nicht erfüllt, soll STADA die Nidda Healthcare hiervon unterrichten und ihr einen Monat Zeit zur Erfüllung geben, bevor STADA diesen Vertrag aus wichtigem Grund kündigt. § 297 Abs. 1 Satz 2 AktG bleibt unberührt.
- (5) Insbesondere sind die Vertragsparteien zur Kündigung aus wichtigem Grund berechtigt, sofern:
  - (a) Nidda Healthcare wegen einer Veräußerung der STADA Aktien, einer Einbringung der STADA Aktien in eine andere Gesellschaft oder eines anderen Grunds in der Hauptversammlung der STADA nicht mehr die Mehrheit der Stimmrechte zusteht;
  - (b) ein Rechtsformwechsel, eine Verschmelzung, Spaltung oder Liquidation einer der Vertragsparteien stattfindet;
  - (c) ein Umstand vorliegt, der die Beendigung der steuerlichen Organschaft

- may terminate this agreement for convenience with a notice period of three months prior to the end of the fiscal year of STADA, but not earlier than as of the end of the fiscal year of STADA that ends at least five years (*Zeitjahre*) (60 months) after the beginning of the fiscal year in which this agreement has become effective. The termination for convenience for STADA is excluded.
- (4) Each party may terminate this agreement for cause (*aus wichtigem Grund*) without compliance with any notice period. If Nidda Healthcare fails to perform any of its payment obligations under this agreement, STADA shall give notice to Nidda Healthcare and grant a period of one month to cure the default before terminating this agreement for cause. § 297 para. 1 sent. 2 AktG remains unaffected.
- (5) The parties to this agreement are entitled to terminate this agreement in particular, but without limitation to, if one of the following events occurs:
  - (a) Nidda Healthcare ceases to hold the majority of the voting rights in the general shareholders' meeting of STADA as a result of a disposal of STADA Shares, or a contribution of STADA Shares to another entity, or for another reason;
  - (b) a change in legal form, merger, demerger or liquidation of one of the parties to this agreement;
  - (c) any other event which results in the termination of the fiscal unity be-

- zwischen Nidda Healthcare und STADA zur Folge hat;
- (d) ein anderer wichtiger Grund in steuerrechtlichem Sinne für die Beendigung dieses Vertrags gegeben ist.
- (6) Im Fall einer fristlosen Kündigung aus wichtigem Grund endet dieser Vertrag mit dem Ablauf des in der Kündigung genannten Tags, frühestens jedoch mit Ablauf desjenigen Tags, an dem die Kündigung zugeht.
- (7) Endet dieser Vertrag, hat Nidda Healthcare den Gläubigern der STADA nach Maßgabe des § 303 AktG Sicherheit zu leisten.
- (8) Die Kündigung muss schriftlich erfolgen.

#### § 8 Schlussbestimmungen

(1) Sollte eine Bestimmung dieses Vertrags ganz oder teilweise unwirksam, undurchführbar oder nicht durchsetzbar sein oder werden, ist davon die Gültigkeit, Wirksamkeit und Durchsetzbarkeit der übrigen Bestimmungen nicht berührt. Anstelle der undurchführbaren oder unwirksamen. nicht durchsetzbaren Bestimmung gilt eine wirksam, durchführbare und durchsetzbare Bestimmung, die dem wirtschaftlich Gewollten und dem mit der undurchführbaren unwirksamen. nicht durchsetzbaren Bestimmung Bezweckten am nächsten kommt. Entsprechendes gilt für den Fall einer unbeabsichtigten Lücke dieses Vertrags. Die Parteien vereinbaren, dass durch das Vorstehende nicht nur eine Beweislastumkehr eintritt, sondern auch die Anwend-

- tween Nidda Healthcare and STADA; or
- (d) any other event which qualifies as a cause for the termination of this agreement for tax purposes.
- (6) In the event of termination for cause without notice, this agreement lapses at the end of the date stated in the notice of termination, provided that this date is no earlier than the day on which notice of termination is served.
- (7) If the agreement is terminated, Nidda Healthcare must furnish security to the creditors of STADA under the conditions set forth in § 303 AktG.
- (8) Any notice of termination must be in writing.

#### § 8 Miscellaneous

(1) Should any provision of this agreement be or become invalid, ineffective or unenforceable as a whole or in part, the validity, effectiveness and enforceability of the remaining provisions shall not be affected thereby. Any such invalid, ineffective or unenforceable provision shall be deemed replaced by such valid, effective and enforceable provision as comes closest to the economic intent and the purpose of such invalid, ineffective or unenforceable provision. The aforesaid shall apply analogously to any unintended gap in this agreement. The parties agree that the aforesaid shall not only reverse the burden of proof but that the application of § 139 BGB shall be excluded in its entirety as well.

barkeit des § 139 BGB ausgeschlossen ist.

- (2) Zur Auslegung dieses Vertrags sind die ertragsteuerlichen Bestimmungen für die Anerkennung einer Organschaft, insbesondere §§ 14-19 KStG in deren jeweils geltender Fassung, zu berücksichtigen.
- (3) Die Parteien erklären ausdrücklich, dass dieser Vertrag keine rechtliche Einheit (§ 139 BGB) mit anderen Rechtsgeschäften oder Vereinbarungen, die zwischen den Parteien getätigt oder abgeschlossen wurden oder werden, bildet oder bilden soll.
- (4) Änderungen und Ergänzungen dieses Vertrags bedürfen zu ihrer Wirksamkeit der Schriftform. Dies gilt insbesondere auch für diese Schriftformklausel. Im Übrigen gilt § 295 AktG.
- (5) Soweit rechtlich zulässig, ist Frankfurt am Main Erfüllungsort für die beiderseitigen Verpflichtungen aus diesem Vertrag sowie ausschließlicher Gerichtsstand.
- (6) Nur der deutsche Text dieses Vertrags ist rechtsverbindlich. Der englische Text ist nicht Teil des Vertrags und nur eine unverbindliche Übersetzung.

- (2) When construing this agreement, the income tax provisions for recognition of a fiscal unity, especially §§ 14-19 KStG, as amended from time to time, shall be taken into account.
- (3) The parties explicitly declare that this agreement is not intended to form a legal unity (§ 139 BGB) with other legal transactions or agreements which are or will be concluded and/or effected between the parties.
- (4) Amendments and supplements to this agreement must be in writing to be effective. This specifically applies to this clause requiring written form as well. § 295 AktG applies.
- (5) As far as legally permissible, Frankfurt am Main is the place of performance for reciprocal obligations and the exclusive legal venue.
- (6) Only the German text of this agreement is legally binding. The English text is not part of this agreement and a non-binding convenience translation only.

### STADA Arzneimittel Aktiengesellschaft

Der Vorstand / The Executive Board

Bad Vilbel, den 19. Dezember 2017 / the 19 December 2017

Dr. Claudio Albrecht

Vorstandsvorsitzender Chairman of the Executive Board/CEO Mark Keatley

Vorstand Finanzen Chief Financial Officer Dr. Barthold Piening

Vorstand Produktion & Entwicklung Chief Technical Officer

#### Nidda Healthcare GmbH

Die Geschäftsführung / The Management

Frankfurt am Main, den 19. Dezember 2017 / the 19 December 2017

Andreas Grundhöfer Geschäftsführer

Managing Director

Annex 4:

Decision of Regional Court (*Landgericht*) Frankfurt am Main of 21 September 2017 on the appointment of ADKL AG Wirtschaftsprüfungsgesellschaft, Breite Straße 29-31, 40213 Düsseldorf as the Contract Auditor (*Vertragsprüfer*) within the meaning of section 293b(1) AktG

# NON-BINDING ENGLISH TRANSLATION OF THE GERMAN ORIGINAL VERSION FOR CONVENIENCE PURPOSES ONLY

3-05 O 77/17

# LANDGERICHT (REGIONAL COURT) FRANKFURT AM MAIN DECISION

In the proceedings

regarding the appointment of a contract auditor in accordance with section 293c(1) AktG

for

- STADA Arzneimittel AG, represented by its 12-18,
   61118 Bad Vilbel, applicant
- 2) Nidda Healthcare GmbH, represented by its 2)Nidda Healthcare GmbH, represented by its managing director, c/o Intertrust (Deutschland) GmbH, Grüneburgweg 58-62, 60322 Frankfurt am Main, applicant

concerning a domination and profit and loss transfer agreement planned between the two undertakings

the Fifth Chamber for Commercial Matters of the Regional Court of Frankfurt am Main, acting through Dr. M. Müller, the Presiding Judge at the Regional Court, ordered on 21 September 2017:

The company appointed to conduct the joint audit of the planned domination and profit and loss transfer agreement shall be

**AKDL AG** 

Financial Auditors

Attn.: Mr. Wolfram Wagner

Breite Str. 29-31,

40213 Düsseldorf

.

The applicants shall bear the costs of the appointment proceedings as joint and several debtors.

The value of the subject matter is set at EUR 60,000.

#### Grounds

There is nothing to indicate that the applicants' proposal for the appointed auditor should not be followed, meaning that the court can use the applicants' joint proposal when choosing between potential auditors. The court has no concerns regarding the appointed auditor. According to the appointed auditor's declaration of 13 September 2017, there are no legal obstacles.

In the interests of increasing the transparency and acceptance of the audit, the contract auditor is to address and comment on the following points in the audit report.

1.

Where, how and when the audit occurred.

2.

In accordance with section 1(1) of the Appraisal Proceedings Act (SpruchG), the auditor is expressly advised of the court's view with regards possible appraisal proceedings that the legislator's intention in relation to the advance appointment of suitability auditors can only be implemented in appraisal proceedings if the auditor's report constitutes an independent opinion (see also Federal Constitutional Court dated 30 May 2007 —1 Bv1Z. 390/04 — AG 2007, 544 = NZG 2007, 587) when compared to the transfer report, avoiding closeness to the company and, in this case, to the major shareholder and demonstrating distance from the latter's report. As part of this, it is important to consider that whilst the auditor is appointed by the court, it reports to the company and the shareholders rather than to the court.

Even if, in principle, there are no objections to a parallel audit, it is appropriate however for the contract auditor to comment in its opinion on the nature of collaboration with any valuation experts appointed by the major shareholder and on discussions concerning critical points etc, in particular the points where the views of

the contract auditor and those of the valuation expert diverged, and it is important to state why the view of the auditor or that of the valuation expert is ultimately preferable.

3.

It is important to state the sources of the parameters used by the auditor for measuring the net income value (base rate of interest, growth allowance, excess returns, risk premium (when using CAPM or TAX CAPM: BETA factor and potentially composition of a peer group) and why these indices and/or in particular time spans used are preferable to others that also come into consideration.

4.

If past results are adjusted for certain extraordinary income or expenses, it is important to state and justify why this has happened.

5.

The same initially applies as in section 4 above for projected company earnings. Moreover, it is important to set out the sources of any corporate planning.

6.

The auditor is required to submit a copy of its report to the court's files. Insofar as it made use of a computer programme when calculating the value of the undertaking and the interest parameters, it is requested to enclose copies of the file produced in the process (e.g. Excel sheet) and the audit report as a file for the court on a usable data carrier (e.g. CD-ROM; USB stick, as an email attachment where appropriate to M.Mueller@LG-Frankfurt.Justiz.Hessen.de).

7.

When requested by the court, the auditor is to disclose to the court the remuneration agreement with the applicant and the invoice following the end of its work.

8.

As a matter of precaution, the auditor is advised that when requested by the court, it must provide a written statement on the appropriateness of any recurring compensation payment or compensation and that it may be ordered to appear in any oral proceedings.

The decision on costs follows from section 22 GNotKG.

The value of the subject matter is determined by section 67 GNotKG.

Information on legal remedies:

This decision can be appealed by submitting a statement of appeal to the Landgericht (Regional Court) Frankfurt am Main or by recording the appeal to the records of the court registry within one month of receiving the decision. The appeal must contain the designation of the decision being contested and a declaration that this decision is being appealed. The statement of appeal must be signed by the appellant or their authorised representative.

Dr. M. Müller

Annex 5: Expert opinion of ValueTrust Financial Advisors SE dated 18 December 2017 on the calculation of the value of STADA Arzneimittel Aktiengesellschaft as at 2 February 2018

# ValueTrust

### **Expert Report**

on the business value of STADA Arzneimittel AG

in connection with the planned conclusion of a domination and profit and loss transfer agreement between Nidda Healthcare GmbH and STADA Arzneimittel AG

Please note that this translation of the German language Expert Report is for convenience purposes only. Only the German original of the Expert Report is legally valid and binding. No responsibility is assumed for misunderstandings or misinterpretations that may arise from this translation or any mistakes or inaccuracies contained herein. In doubt, only the German original shall form the basis for interpretation.

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#### List of Abbreviations:

AB = Aktiebolag

A.D. = Akcionarsko društvo

AG = German stock corporation (Aktiengesellschaft)

AIFA = L'Agenzia Italiana del Farmaco (Italian health authority)

AktG = German Stock Corporations Act (Aktiengesetz)

API = Active pharmaceutical ingredient

AS = Aksjeselskap

ASA = Allmennaksjeselskap

BaFin = German Financial Supervisory Authority (Bundesanstalt für

Finanzdienstleistungsaufsicht)

bn = billions

BGH = German Supreme Court of Justice (*Bundesgerichtshof*)

BREXIT = Exit of Great Britain from the European Union

BVerfG = German Constitutional Court (*Bundesverfassungsgericht*)

BvR = Case number of the German Constitutional Court

CAGR = Compound annual growth rate

CAPEX = Capital expenditures

CAPM = Capital Asset Pricing Model

CDAX = Composite DAX

CIS = Commonwealth of Independent States

Corp. = Corporation

C.p. = Ceteris paribus (all else remaining the same)

DACH = Germany, Austria and Switzerland (Deutschland, Österreich und

Schweiz)

DAX = German Stock Index (*Deutscher Aktienindex*)

DCF = Discounted cash flow
DIH = Days inventory on hand

D.o.o. = Druzba z omejeno odgovornostjo

DPLTA = Domination and Profit and Loss Transfer Agreement

DPO = Days payable outstanding
DSO = Days sales outstanding

DVFA = German Association for Financial Analysis and Asset Management

(Deutsche Vereinigung für Finanzanalyse und Asset Management

e.V.)

EAEU = Eurasian Economic Union

EBIT = Earnings before interest and taxes

EBITDA = Earnings before interest, taxes, depreciation and amortization

ECB = European Central Bank
EEA = European Economic Area

EFPIA = European Federation of Pharmaceutical Industries and

Associations

EMA = European Medicines Agency

Etc. = Et cetera

EU = European Union

EU5 = Germany, Great Britain, France, Spain and Italy

EU-GMP Leitfaden = EU-Good-Manufacturing-Practice

EUR = Euro (currency unit)

e.V. = Registered Association (Eingetragener Verein)

FAUB = Technical Committee for Business Valuation and Economics

(Fachausschuss für Unternehmensbewertung und

Betriebswirtschaft)

FTSE 100 Index = Financial Times Stock Exchange 100 Index

FTSE MIB Index = Financial Times Stock Exchange Milano Italia Borsa Index

GDP = Gross domestic product

GmbH = German company with limited liability (Gesellschaft mit

beschränkter Haftung)

IC = Invested Capital

IDW S 1 = IDW Standard: "Standards for Conducting Enterprise Valuations"

(IDW S 1 in the version 2008, status: 2 April 2008)

IDW = Institute of Accountants in Germany (Institut der

Wirtschaftsprüfer in Deutschland e.V.)

i.e. = id est

IFRS = International Financial Reporting Standards

Inc. = Incorporated incl. = including

INN = International Non-Proprietary Name

ISIN = International Securities Identification Number

J.V. = Joint venture

KSt = German Corporate Income Tax (Körperschaftsteuer)

LG = District Court (Landgericht)

Ltd. = Limited

LTM = Last twelve months

m = millions

Madrid Ibex 35 Index = Madrid Iberia Index 35

MDAX = Mid-Cap-DAX

MENA = Middle East & North Africa

MSCI World = Morgan Stanley Capital International World

NHS = National Health Service

no. = Number

N.V. = Naamloze Vennootschap

OECD = Organisation for Economic Co-operation and Development

OLG = Court of Appeals (Oberlandesgericht)

OPEC = Organization of the Petroleum Exporting Countries

OTC = Over-the-counter

OTX = (branded) products eligible for prescriptions

p.a. = annually (per annum)
PLC = Public limited company

p./pp. = page/pages

PPRS = Pharmaceutical Price Regulation Scheme

R&D-Quote = Research & Development-Quote

ROE = Return on equity

ROCE = Return on capital employed
ROIC = Return on invested capital

Rx = (branded) products requiring prescriptions

S&P = Standard & Poor's

S&P BSE 500 Index = Standard & Poor's Bombay Stock Exchange 500 Index

S.A. = Société Anonym

SAS = Société par actions simplifiée

SE = Societas Europaea

SG&A = Selling, General and Administrative Expenses

SKU = Stock Keeping Unit

S.L. = Sociedad de responsabilidad limitada

S.p.A. = Società per Azioni

S.r.l. = Società a responsibilità limita

St.d.A = Professional Association of German Pharmacists

(Standesgemeinschaft deutscher Apotheker)

SWOT = Model for analyzing Strengths Weaknesses Opportunities Threats

in a business model and the competitive environment

Tax-CAPM = Capital Asset Pricing Model including Taxes

Top 7 = Germany, Great Britain, Italy, France, Spain, Belgium and Russia

Tsd. = Thousand
TV = Terminal value

USA/U.S. = United States of America

USD = US American Dollar (currency unit)

VEP = Vital and Essential Pharmaceutical List

VWAP = Volume weighted average price
WACC = Weighted average cost of capital
WP = Accountant (Wirtschaftsprüfer)

WPg = *Die Wirtschaftsprüfung* published by the IDW

WpÜGAngebV = German Regulation on the Content of the Offering Document

(Wertpapiererwerbs- und Übernahmegesetz Angebotsverordnung)

XETRA = Electronic trading system of Deutsche Börse AG

#### 1. MANDATE AND EXECUTION OF THE MANDATE

#### 1.1. Mandate

- 1. In a letter dated 19 October 2017, STADA Arzneimittel Aktiengesellschaft, Bad Vilbel ("STADA AG" as the single company and "STADA" as STADA Arzneimittel Aktiengesellschaft including all group companies) and Nidda Healthcare Holding GmbH, formerly Nidda Healthcare Holding AG, München ("Nidda Holding", and together with STADA AG, the "Clients") have retained ValueTrust Financial Advisors SE, Munich ("ValueTrust") to prepare an Expert Report on the business value of STADA in connection with the planned conclusion of a domination and profit and loss transfer agreement ("DPLTA") between Nidda Healthcare GmbH, Frankfurt a. M. ("Nidda Healthcare") and STADA.
- 2. Nidda Healthcare intends to undertake in the DPLTA pursuant to § 305 AktG to be signed by Nidda Healthcare and STADA AG on 19 December 2017 to acquire the STADA shares of the outside shareholders of STADA upon their request in exchange for granting cash compensation (the "compensation").
- 3. Nidda Healthcare also intends to guarantee to the outside shareholders of STADA AG an annual fixed payment pursuant to § 304 AktG in the form of recurring compensation payment (the "recurring compensation payment") for the first time for the financial year in which the DPLTA becomes valid by being entered into the commercial register.
- In order to evaluate the business value of STADA, ValueTrust has determined in accordance with the mandate business value ranges on the basis of the valuation methods recognized in business valuation practice and case law. ValueTrust has accordingly determined a range for the objectified business value under the IDW Standard 1 "Principles for the Performance of Business Valuations" (Grundsätze zur Durchführung von Unternehmensbewertungen) (IDW S 1 in the version 2008, status: 2 April 2008, "IDW S 1"). In accordance with that standard, ValueTrust is issuing an Expert Report in the function of a neutral expert. In addition to the principles for an objectified business value under IDW S 1, ValueTrust has also taken into account the principles on business valuation established in the case law for determining the reasonable compensation and recurring compensation payments in structural measures under stock corporation's law. The objectified business value determined pursuant to IDW S 1 constitutes an intersubjective, verifiable value for financial success in the future, which results on a going concern basis and on the basis of the existing business concept with all realistic expectations for the future in the context of the chances and risks in the market and the financial possibilities for the business as well as other influencing factors. In light of this background, we have carried out, in accordance with the mandate and in accordance with IDW S 1 and the case law, a check of the reasonableness of the business plan.
- 5. We have also taken into account the "Best Practice Recommendations Corporate Valuation" (Best-Practice-Empfehlungen Unternehmensbewertung) of the German Association for Financial Analysis and Asset Management e.V. (status: December 2012, "DVFA-

Recommendations"). In accordance with the DVFA-Recommendations, we issue our Expert Report in the function of an independent expert. Contrary to the IDW S 1, the DVFA-Recommendations are directed towards determining the fair market value and are based on a valuation concept of the "market participant" as a standard for determining the derived fundamental value. This concept is based more strongly on empirically observable approaches of actual buyers of enterprises.

- 6. The reason for valuation is the conclusion of the DPLTA. ValueTrust supports in this context the management board of Nidda Healthcare and the executive board (*Vorstand*) of STADA AG in determining the reasonable compensation under § 305 AktG and the reasonable recurring compensation payment under § 304 AktG.
- 7. The DPLTA requires the approval of the shareholders' meeting of STADA AG. The valuation date was set to be 2 February 2018. On this day, the extraordinary general shareholders' meeting that votes on the DPLTA will probably take place.
- 8. This Expert Report is supposed to serve as the basis for the "joint report of the executive board of STADA Arzneimittel Aktiengesellschaft, Bad Vilbel and the management board of Nidda Healthcare GmbH, Frankfurt am Main, pursuant to § 293 a AktG on the DPLTA between STADA Arzneimittel Aktiengesellschaft and Nidda Healthcare GmbH" as of 19. December 2017 ("contract report"). The contract report will be published in connection with the invitations to the extraordinary shareholders' meetings of STADA AG that are intended to resolve about the conclusion of the DPLTA.
- The execution of the mandate and our responsibility, also in the relationship to third parties, is governed by the terms and conditions of engagement documented in the mandate letter dated 19 October 2017. This Expert Report has been prepared exclusively for the internal use by the Clients as well as for the purpose of concluding the DPLTA. The internal use includes, in addition to providing information for the management board of Nidda and the executive board and the supervisory board of STADA AG, also publication in connection with the preparation and conduct of the extraordinary shareholders' meeting of STADA AG as well as use in connection with potential, subsequent appraisal proceedings (*Spruchverfahren*), provided that our Expert Report is completely disclosed together with all annexes. Furthermore, our Expert Report serves as a basis for the contract report of the executive board of STADA and the management board of Nidda which refers to our Expert Report and partially or completely includes this Expert Report.
- 10. Aside from this, the Expert Report cannot be made available or disclosed to third parties without our prior written consent. Under no circumstances, regardless whether an approval or prior consent has been issued or not, do we assume any liability towards third parties for the Expert Report.

#### 1.2. Execution of the mandate

- 11. We conducted our work from 19 October 2017 until 18 December 2017 in our offices as well as in the offices of STADA. Primarily the information listed in Annex 1 "List of main documents and information used" was available for us to conduct the mandate. This Expert Report is based on the status of information related to the assets, financial situation and earnings position of STADA as well as its future development as of 18 December 2017 and capital markets data as of 8 December 2017.
- 12. During the course of our actions to check the reasonableness, we also conducted discussions about the general business activities, the current and forecast financial situation as well as the future strategic direction of STADA. In this regard, we received oral information and explanations from the members of the executive and management board and employees of the respective company as well as from their advisors listed in Annex 2.
- 13. In general, our value determination is based on the records and information provided to us for the valuation. We critically analyzed the information, but we did not conduct any audit in the sense of an audit of annual financial statements.
- 14. A representation letter, dated 18 December 2017, has been submitted to us by STADA stating that all information, which is relevant to the preparation of this Export Report, has been provided completely and accurately.
- 15. We emphasize that there are normally differences between the expected and the actually generated results because events can occur differently than originally planned. These differences can be material. Therefore, we assume no liability and responsibility for the occurrence of the assumptions and results assumed in the business plan and/or the measures to be carried out as well as the result of the business activities. We also do not make any statement about the ability to achieve the planned results as well as the accuracy and completeness of the assumptions, results and information forming the basis of the business plan.
- 16. We refer to the fact that the following calculations to derive the business values are generally shown in millions of Euro. Since the calculations were actually made with the exact numbers, the addition and subtraction of values in tables can lead to deviations in the shown subtotals and totals.

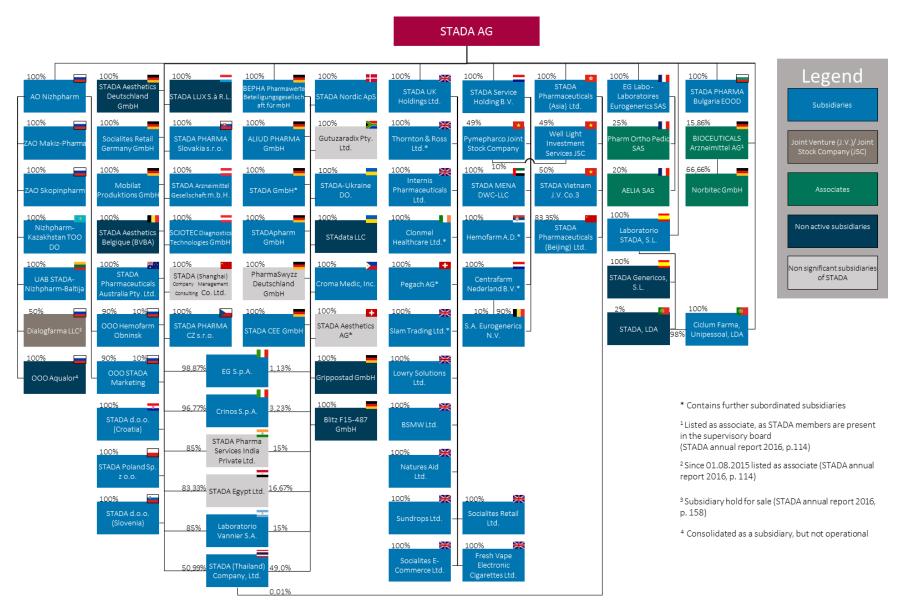
#### 2. VALUATION SUBJECT STADA

- 17. The definition of the valuation subject is the basis for every business valuation. In order to be able to evaluate the opportunities for growth, the business plan and the risk potential for the business being valued, it is necessary to understand the historic background, the business model and the company's market position.
- 18. First, the history as well as the legal and tax situation of the company will be described below. The economic situation, the business model, the business strategy and the market and competitive environment will then be explained. The strengths and weaknesses of the business model as well as the opportunities and threats in the market environment (SWOT analysis) will then be addressed with reference to the historic earnings situation, assets and financial situation in the last four financial years before the valuation date, in order to be able to specify the opportunities-risk profile of the valuation subject on this basis. In connection with the discussion of comparable companies (peer group), this is an appropriate starting point for assessing the business plan with regard to the amount, the risk profile and the timing of cash flows which are marked by forecasting uncertainty and the capital market based premises for the valuation.

#### 2.1. Legal and tax situation

19. The valuation subject is STADA AG, Stadastraße 2-18, 61118 Bad Vilbel, including its affiliated enterprises and participations as shown in the following organigram:<sup>1</sup>

See company information, illustration based on the organigram of STADA Arzneimittel AG, 30 September 2017.



- 20. As of 30 September 2017, STADA includes 81 fully consolidated subsidiaries, including STADA Vietnam J.V. Co. Ltd., whereby minorities exist in the companies Pymepharco Joint Stock Company, STADA Pharmaceuticals Ltd., Well Light Investment Services Joint Stock Company, Hemomont d.o.o. and Hemofarm Banja Luka A.D.<sup>2</sup> In addition, STADA has participations in four associated companies and 27 non-consolidated and other companies. There are currently DPLTA with the main German subsidiaries.
- 21. The parent company in the corporate group STADA AG is a stock corporation registered in the commercial register at the Local Court Frankfurt am Main under the register number HRB 71290 with its registered office in Bad Vilbel, Germany. The headquarters of STADA are located in Bad Vilbel, Germany.
- 22. According to the articles of association, the business purpose of STADA AG is
  - 1. the development, production and distribution as well as trading with products of all kinds for the worldwide healthcare market, especially in the field of the pharmaceutical, biotechnical, chemical and cosmetic industry, medical and laboratory technology, hospital supplies as well as the dietary food and sweets industry;
  - 2. the establishment, operation, acquisition and sale of and participating in businesses with activities in the worldwide healthcare market, especially in the field of the pharmaceutical, biotechnical, chemical and cosmetic industry, medical and laboratory technology as well as the dietary food and sweets industry;
  - 3. the development and rendering of services of all kinds for the worldwide healthcare market in exchange for compensation; the company can also develop and provide services free of charge, especially for patients and end consumers as well as medicalpharmaceutical professional groups, if such services are suitable for supplementing, promoting or supporting other businesses of the company;
  - 4. obtaining, acquiring, taking out and issuing licenses for as well as trading with intangible assets with regard to the worldwide healthcare market, especially software and internet applications as well as licensing of pharmaceuticals, trademarks, intellectual property rights and co-distribution rights for products, especially in the field of the pharmaceutical, biotechnical, chemical and cosmetic industry, medical and laboratory technology, hospital supplies as well as the dietary food and sweets industry; the company can also directly or indirectly through subsidiaries grant licenses to pharmacies under which they can themselves assume individual steps in the production of select products;
  - 5. engaging in all transaction which appear necessary or useful to achieve the corporate purpose.

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<sup>&</sup>lt;sup>2</sup> See STADA, Annual report 2016, p. 159, p. 160; STADA, Interim Report for the first nine months, November 2017, S. 32.

- 23. The financial year corresponds to the calendar year.
- 24. The share capital of STADA AG as of 18 Dezember 2018 is EUR 162,090,344 and is divided into 62,342,440 no-par registered shares<sup>3</sup> each representing a proportionate amount of EUR 2.60 in the share capital. There are no different share classes. As of 30 September 2017, STADA AG held 84,311 treasury shares. The number of outstanding shares of 62,258,129 correspondingly results from the total number of outstanding shares of 62,324,440 minus 84,311 treasury shares.
- 25. Under the employee participation program, STADA AG sold a total of 2,216 treasury shares in the financial year 2016 for an average price of EUR 36.31. The total number of shares with full voting and dividend rights as of 18 September 2017 was 62,258,129 ("outstanding shares"). In addition to Nidda Healthcare, institutional investors held approximately 33% and private investors held approximately 2% of the share capital as of 30 September 2017.<sup>4</sup>
- 26. The shares of STADA AG are admitted to trading in the regulated market with additional admission duties at the Frankfurt Securities Exchange (Prime Standard) under the International Securities Identification Number (ISIN) DE0007251803, where they are traded, among other places, in the electronic trading system XETRA. STADA AG shares are also traded on the exchanges in Berlin, Düsseldorf, Hamburg, Hannover, Munich and Stuttgart as well as through the Tradegate Exchange. Shares in STADA AG have been listed on the stock exchange since 1997.<sup>5</sup>
- 27. The executive board of STADA AG is authorized under §6 para. 1 of the Articles of Association of STADA AG to increase the share capital of STADA AG, with the approval of the supervisory board, by 4 June 2018 once or multiple times by up to EUR 77,134,304 by issuing up to 29,667,040 registered shares in exchange for cash contributions and/or contributions in kind (authorized capital). The shareholders generally have a subscription right to the new shares, to the extent the executive board of STADA AG, with the approval of the supervisory board, cannot exclude the subscription right in the situations listed in § 6 para. 1 of the Articles of Association of STADA AG.
- 28. The share capital of STADA AG has also been conditionally increased by up to EUR 69,188,340 by the issuance of up to 26,610,900 registered shares (conditional capital 2013). The conditional capital increase serves to grant shares to the holders and creditors of options and/or convertible bonds, profit sharing bonds and/or profit sharing rights with options and/or conversion rights or obligations which are issued by STADA AG in exchange for cash up to 4 June 2018 on the basis of the authorization dated 5 June 2013. The new shares participate in

Prior to 9 December 2016, the shares in the company were all registered shares with restrictions on transferability (*vinkulierte Namensaktien*) which under the articles of association could only be transferred with the consent of the company's executive board, and they were registered in the company's stock register. On 26 August 2016, the general shareholders meeting of STADA adopted a resolution to cancel the restrictions on transfer. The shares are now, without exception, registered shares which each grant one vote in the general shareholders' meeting since registration of the resolution in the commercial register on 9 December 2016.

<sup>4</sup> See https://www.stada.de/investor-relations/aktie/aktionaersstruktur.html. status 21 November 2017.

<sup>5</sup> See https://www.stada.de/investor-relations/kontakt-and-support/fragen-and-antworten.html, status 21 November 2017.

the profit from the beginning of the financial year for which no resolution about the use of the balance sheet profit has been adopted at the time these securities are issued.

- 29. Under the resolution of the general shareholders' meeting on 5 June 2013, STADA AG was authorized under § 71 para. 1 no. 8 AktG to acquire treasury shares in an amount up to a total of ten percent of the existing share capital at the time the resolution is adopted or the time when the authorization is exercised. At no time can the acquired shares, together with other shares held by STADA AG or attributable to STADA AG under § 71d and § 71e AktG constitute more than ten percent of the respective share capital. The authorization cannot be used by STADA for the purpose of trading in own shares. The authorization applies until 5 June 2018. The authorization to redeem shares has not been used up to the time when this Expert Report is signed.
- 30. The executive board of STADA AG consists of three members. The present members of the executive board are Dr. Claudio Albrecht (chief executive officer), Mark Keatley (chief financial officer) and Dr. Barthold Piening (executive board member responsible for production and development). The appointment of the present members of the executive board by the supervisory board took place with effect as of 27 September 2017 (chief executive officer and chief financial officer) and effective as of 1 April 2017 (member responsible for production and development).<sup>6</sup>
- 31. The supervisory board of STADA AG consists of nine members. The present members of the supervisory board are Dr. Günter von Au (chairman), Jens Steegers (vice-chairman), Dr. Eric Cornut, Halil Duru, Jan-Nicolas Garbe, Benjamin Kunstler, Dr. Ute Pantke, Bruno Schick and Dr. Michael Siefke. The Local Court Frankfurt am Main appointed the new members of the supervisory board Jan-Nicolas Garbe, Benjamin Kunstler, Bruno Schick, Dr. Michael Siefke and Dr. Günter von Au as of 26 September 2017 immediately after the former chairman of the supervisory board as well as four other members of the supervisory board had resigned their offices effective as of the end of the day on 25 September 2017.
- During the course of implementing the adopted and further developed business strategy in 2016, a change was made in 2016 with regard to the business and reporting structure:<sup>8</sup>
  - 1. Pursuant to the amended operational organization, the divisions' product development, procurement, purchasing, production, quality management, finance, risk management, compliance and corporate governance were subject to central management in the financial year 2016. Furthermore, the responsibility for sales and

See https://www.stada.de/presse-public-relations/pressemitteilungen/detailansicht/news/detail/News/dr-claudio-albrecht-zum-ceo-and-mark-keatley-zum-cfo-der-stada-arzneimittel-ag-bestellt.html, status 28 September 2017; https://www.stada.de/presse-public-relations/pressemitteilungen/detailansicht/news/detail/News/stada-finale-zahlen-2016-bestaetigen-gutes-jahresergebnis-mittelfristige-wachstumsziele-fuer-2019-a.html, status 29 March 2017.

See https://www.stada.de/presse-public-relations/pressemitteilungen/detailansicht/news/detail/News/aufsichtsrat-der-stada-arzneimittel-ag-waehlt-dr-guenter-von-au-zum-neuen-vorsitzenden.html, status 27 September 2017.

<sup>8</sup> See STADA, Annual report 2016, p. 9.

- results was no longer subject to regional responsibility to the previous degree and instead was also centrally managed in the context of the new business structure.
- 2. The executive board also adopted a fundamental change in the reporting structures in the financial year 2016. STADA had previously reported on the basis of operational segments and market regions. Under the modified reporting structure, the Group is now managed on the basis of the two segments generics and branded products. As a result of the change, the ancillary activities involving trading in the segment generics was also modified. This is why the figures reported starting in the financial year 2016 in the segment generics as well as in the previous year include the previously separately shown ancillary activity of trading.

#### 2.2. Corporate history

- 33. STADA's roots go back more than 120 years back to 1895 when a few pharmacists got together for the purpose of producing joint medications based due to economic aspects. Joint medications were then produced in the involved pharmacies in Berlin, Dresden, Würzburg and Darmstadt. When the German Apothecary Association was established, the own production of pharmaceutical specialties was regulated from the manufacture through the packaging and labeling to the pricing.
- 34. During the course of the political unification of regional special companies, the German Apothecary Association was transitioned in the year 1933 to the Professional Association of German Apothecaries (Standesgemeinschaft Deutscher Apotheker, "St.d.A."). After numerous restructurings under corporate law, the mid-size corporate holding company was established in 1995 with its registered office in Bad Vilbel. The initial public offering with non-voting preferred stock began in the year 1997 and was completed with the placement of registered common stock in the year 1998. The new funding made it possible for STADA to increasingly internationalize starting in 1999.
- 35. STADA began in the year 2001, with the involvement of private venture capital, to develop biogenerics (today: biosimilars). STADA also made progress with international expansion, so that the sales threshold of EUR 500 million was surpassed for the first time in r 2001. In the same year, the preferred shares were converted into common stock, and STADA was included in the MDAX. STADA acquired in the following year the second largest Spanish generics provider Bayvit S.A. In 2004, STADA succeeded in acquiring approximately 97.5 % of the shares in the Russian pharmaceutical company Nizhpharm OJSC, which was a strategically important step towards expanding the business in Russia. Up to and including 2007, there were additional important steps in the international expansion, such as e.g. the acquisition of the Serbian Hemofarm Group. STADA placed its first corporate bond in 2010, which enabled, among other aspects, the financing of other national and international acquisitions. During the course of a group-wide cost efficiency program initiated in 2010, STADA started to implement the first corresponding measures. During 2011, STADA entered into a cooperation with Gedeon Richter AG, a Hungarian multinational pharmaceutical and biotechnology company, for the development of biosimilar products. STADA implemented additional measures in 2012 under the cost efficiency program, such as e.g. the sale of an Irish and two Russian production sites. STADA succeeded in the year 2013 with "STADA diagnostics" in entering into the area of personalized pharmaceutical therapy. STADA also acquired Thornton & Ross Ltd., the fifth largest supplier in the British OTC market ("Over the Counter"; "OTC").
- 36. In order to bundle the IT services in the STADA Group, STADA established in 2013 in Serbia an IT shared service center. STADA also expanded its offering of biosimilars and successfully placed a second corporate bond. In 2014, STADA established the logistics and distribution center in Dubai and achieved for the first time sales of more than EUR 2 bn. In 2015, STADA placed a further corporate bond to refinance the corporate bond from 2010 that was maturing in the same year. STADA also licensed the biosimilar Pegfilgrastim to Gedeon Richter AG in order to expand the biosimilar activities. Furthermore, STADA strengthened the branded products

portfolio by acquiring the Austrian company SCIOTEC Diagnostics Technologies GmbH. STADA received in 2016 the "positive opinion" for a biosimilar Teriparatid. STADA also acquired the British branded products company Natures Aid Ltd.

37. STADA bundled the German activities in the middle of 2017 in order to increase efficiency and strengthen the national business. During the course of this measure, STADA GmbH was merged with STADAvita GmbH by keeping STADA GmbH as the going concern company. STADApharm GmbH was merged with cell pharm Gesellschaft für pharmazeutische und diagnostische Präparate mbH, by keeping STADApharm as the going concern company.

#### 2.3. Economic foundations

#### 2.3.1. Business model

- 38. STADA is the parent company of an internationally active group in the field of healthcare with a focus on the development, marketing, production and distribution of patent-free pharmaceutical products. Due to reasons related to costs and risk, STADA does not focus on research and development of innovative active substances but instead focuses on developing and marketing pharmaceutical products for which no intellectual property rights, especially patents, exist anymore ("generics").9
- 39. The two core segments of STADA are generics and branded products. In the area of generics, STADA is the fourth largest company in Europe behind the companies Teva Ltd., Novartis AG and Mylan Inc.<sup>10</sup> STADA develops and distributes in the generics segment mostly pharmaceuticals that require prescriptions and which are a copy with the same effective substance of other products that are already in the market under a brand name. In the segment branded products, on the other hand, primarily prescription-free products) are distributed. While the market for generics requiring prescriptions is characterized by regulated customer prices, intense competition, high pressure on costs and high requirements on production safety and product quality, the market for branded products is characterized by price level, marketing strategies and low regulatory requirements as well as customer loyalty.
- 40. STADA generated group sales of EUR 2,139.2 m in the financial year 2016. The portion of sales in the segment generics is 59.9%, and the portion for branded products was 40.1%. The eight largest countries in terms of sales of generics in 2016 were Germany, Italy, Spain, Russia, Belgium, France, Vietnam and Serbia. The five largest countries in terms of sales of branded products were Germany, Great Britain, Russia, Italy and Vietnam.

<sup>9</sup> We refer to chapter 2.3.2 Corporate Strategy in this Report with regard to the new strategic focus for the biosimilars.

See STADA, Public-Side Lender Presentation, September 2017, p. 15.

<sup>11</sup> See STADA, Annual report 2016, p. 44.

- 41. The products are offered through a broad network of distribution companies, wholesalers and pharmacies in numerous forms of application and dosages in all significant generics and branded products markets in Europe.
- 42. In light of the price erosion resulting from the regulatory environment and competition, STADA is dependent on having a product pipeline that is always well filled, in order to generate stable and sustained sales. Overall, STADA has a broadly diversified product pipeline. The expansion of the product portfolio constitutes a main prerequisite for organic growth. In 2016, 665 new products were introduced in the market throughout the group. The expansion of the product pipeline is tied, among other aspects, to having access to external development partners.
- 43. STADA in general has a high degree of flexibility in the supply chain and pharmaceutical production. Due to the comprehensive product portfolio of more than 800 pharmaceutical substances with approximately 17,000 so-called stock keeping units (hereinafter, "SKU") distributed by the group, STADA uses an international network of internal and external sources in both the supply chain as well as the production of pharmaceuticals. STADA normally does not manufacture the required effective substances and ancillary substances itself but instead obtains them mostly from price-efficient suppliers in low-cost countries. Pharmaceuticals are produced in the group's own locations, whereby around 75% of the group-wide production volume is produced in low-cost countries due to the successive transition of production volumes within the own production sites.
- 44. The distribution strategy of STADA is directed towards the specific market situation in the individual countries. The main aspect is whether the market constitutes a regulated market with price requirements or a so-called self-payer market such as Russia. STADA is also represented to different degrees in the segments generics and branded products in the individual countries.
- 45. The most important customer groups for STADA include patients and end consumers, doctors, pharmacies and pharmacy chains, hospitals, mail-order companies, wholesale purchasing groups and other service providers in the healthcare market as well as health insurance companies.

#### 2.3.1.1. Segment description and distribution approach – generics

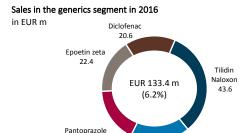
- 46. According to the STADA definition of segments, generics involves products for the healthcare market normally pharmaceuticals which contain one or more effective substances for which the intellectual property rights have expired and where the sales positioning satisfies one of the following three criteria:
  - 1. The product is offered with emphasis on the fact that it is normally cheaper compared to a product of another provider that has the same effective substance, or

- 2. the product is an integral part of a marketing concept covering multiple products and indications mostly for products that require prescriptions with substances for which the intellectual property rights have expired, or
- 3. the product is distributed under its international nonproprietary name ("INN").
- 47. Generics accordingly as a general rule also refer to effective substances (pharmaceuticals) which require prescriptions and are mostly eligible for reimbursement, which is why the products are accordingly primarily distributed to pharmacists, wholesalers and hospitals. The emphasis in sales for generics is based on a favorable price and/or marketing covering multiple products and indications by providing as many medications as possible for the common therapy ("full range approach").
- 48. The generics market is characterized by high sensitivity to pricing, continuous pressure on margins, intense competition and continuously changing regulatory parameters. Against this background, the respective composition of the product portfolio in the generics segment is affected to a great degree by the regulatory structure of the markets and discount agreements. Since the pharmaceuticals in the generics segment involve almost exclusively effective substances which require prescriptions, the price for a generics medication is usually determined by the mandatory reference to a local community or national price list for reimbursements. Due to the cost pressure from the public social insurance organizations, the generics markets is characterized by continuous adjustments in pricing which are implemented by setting maximum reimbursement prices (fixed amounts), reductions in reimbursed prices, the application of international reference price models or as in Germany by the introduction of public tender models. On the other hand, the continuous expiration of patents and other protective rights results in a relatively secure potential for growth which simultaneously, however, endures for only a relatively short time and must be continuously supplemented with new pharmaceuticals.
- 49. Due to the prohibition on advertising directed towards patients, marketing of generics is not oriented on a "product-related" marketing strategy but addressed to the continuously adjusted price lists for reimbursements which result from price negotiations with the organizations that bear the costs and the public tenders, normally on the basis of high sales volumes for individual effective substances. Financial incentives for the pharmacists or the doctors play only a subordinate role when distributing generics. Instead, doctors issue their prescriptions dependent on regulatory parameters either for specific pharmaceuticals or the corresponding effective substance, whereby in the latter case, the pharmacies usually select the medication. Against the background of general budget restrictions in public healthcare systems, both doctors as well as apothecaries are required to prescribe and sell cost-efficient medications.
- 50. The requirements in the generics segment for the product portfolio are directed towards the regulatory structure in the individual markets where the generics are distributed. The product portfolio normally includes the most relevant effective substances in numerous forms of

<sup>12</sup> See no. 157 for further information.

application and dosages. The Top 5 generics effective substances in 2016 were Tilidin Naloxon, Atorvastatin, Pantoprazol, Erythropoetin (Epo) and Diclofenac.

- The generics segment also includes biosimilars. These are compared to generics much more complex imitations of biopharmaceuticals. Since biosimilars can provide substantial cost reductions for the healthcare systems in comparison to the cost intensity of biopharmaceutical products, they are considered to have a large growth potential. In light of these opportunities for growth, STADA is increasingly expanding its biosimilar portfolio. STADA pursues a single licensing strategy in which licenses for selected biosimilars are obtained from highly specialized providers because this constitutes a low risk and cost-efficient method compared to developing these products internally. At the present time, STADA is positioned with two biosimilars in the market (SILAPO\*, an epo-biosimilar and Grastofil\*, a filgrastim medication). In addition, STADA is in the in-licensing process for other biosimilars. In the future, STADA intends to increasingly develop biosimilars in cooperation with partner companies, because the high costs and risks of development are offset by higher earnings opportunities.<sup>13</sup>
- 52. Sales with generics are primarily generated in Germany, Italy, Belgium, Spain, Russia, France and Serbia. The ongoing diversification in countries in the MENA region, Asia as well as first steps in Latin America are intended to reduce the geographic risk and the dependency on the strongly regulated markets in Europe. The higher portion of own payers in these markets is also supposed to help counter the structural pressure on margins. When measured against total sales in the generics segment, the largest sales markets in 2016, except for Russia, were in the EU.



Source: STADA Arzneimittel AG, Annual report 2016, p. 16-18.



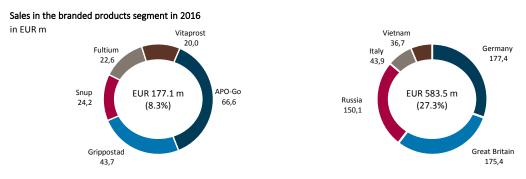
Atorvastatin

<sup>13</sup> We refer to chapter 2.3.2 Business Strategy in this Report with regard to the new strategic focus for the biosimilars.

#### 2.3.1.2. Description of segment and approach to sales - branded products

- 53. Branded products are products for the healthcare market which contain one or more effective substances which patent rights are expired and their sales positioning is characterized by one of the two following criteria:
  - 1. The product is offered under a product-specific brand name and emphasis on specific product qualities which are directed towards individualization of the product compared to competitive products and other products sold by the Group.
  - 2. The product is part of a marketing concept primarily for non-prescription products, most of which are offered under a product-specific brand name with emphasis on various specific product qualities which are directed towards individualization of the product compared to competitive products and other products sold by the group.
- 54. STADA defines branded products into non-prescription products (OTC), products requiring prescriptions (RX) and products eligible for prescriptions (OTX). The group is pushing not just for expansion of the portfolio, but also for increasing internationalization of successful brands.
- The main focus of distribution in the case of branded products is based on the respective product features and especially the respective brand name which is strengthened with active marketing. The market for branded products does not follow so much the regulatory parameters, and active marketing is possible because these branded products mostly do not require prescriptions, contrary to generics. Competitors differentiate with regards to product policy, communications strategy and targeted distribution measures. In general, the communications strategy in the STADA group involves television and print advertising and corresponding measures in social media. Distribution measures in the field of OTC products are concentrated mostly on pharmacies.
- The continuous product policy decisions for OTC-products in the STADA group are controlled centrally through a group-wide procurement, logistics and distributions process. In the course of this process, marketing decisions with regard to portfolio decisions and product packaging are coordinated and set in a binding manner throughout the group.
- 57. The group applies a concept of so-called "strong brands" in the branded products segment which relies on a high degree of product awareness. STADA covers all material indications in this area. The top 5 branded products in 2016 were APO-Go®, Grippostad®, Snup®, Fultium® and Vitaprost®.

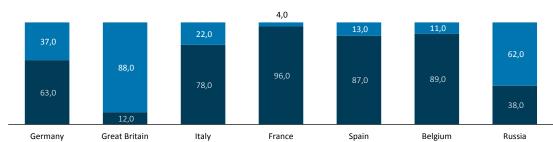
The five largest markets in terms of sales in the branded products segment were Germany, Great Britain, Russia, Italy and Vietnam.



Source: STADA Arzneimittel AG, Annual report 2016, p. 17-18.

#### 2.3.1.3. International focus

- 59. STADA distributes generics and branded products in about 125 countries, whereby all European markets as well as the main growth markets in the MENA region, Asia, South America and Australia are covered. Part of the sales are accordingly charged in currencies other than Euro. The markets in Germany, Russia, Italy and Great Britain were among the strongest regions in terms of sales in 2016.<sup>14</sup> Large sales were also realized in France, Spain and Belgium.
- 60. While sales of branded products at the level of the individual countries are generated primarily in Russia and Great Britain, STADA generates a large portion of sales with generics especially in central Europe.



■ Generics ■ Branded products

Sales distribution by country and segment in % in 2016

Source: STADA Arzneitmittel AG, Annual report 2016, p. 43-45.

- The European market is strongly fragmented, which is why STADA is confronted with different regulations and approaches for distribution.
- 62. In Germany, STADA generated in 2016 approx. 60% of the sales with generics, most of which were generated through the distribution company ALIUD PHARMA GmbH. Especially in the

As a result of a change in the reporting in the Annual report for 2016, sales figures for specific segments for certain countries (countries marked in the illustration "Distribution of sales according to regions, 2014-2016" with \* or \*\*) are missing.

indication area pain, ALIUD PHARMA is successful in tenders placed by health insurance organizations. The generics strategy focuses on continuously optimizing the product portfolio, in order to continue to be able to successfully participate in tenders placed by health insurance organizations in all areas of indications which are important for STADA. In addition to the distribution model involving tenders by health insurance organizations, STADA generates additional sales through its subsidiary STADAPHARM with hospitals and cooperation customers. This field involves especially the distribution of oncology medications. While non-prescription branded products only play a subordinate role in the business model of ALIUD PHARMA and STADAPHARM, the sale of branded products is primarily controlled by the subsidiary STADA GmbH. STADA GmbH has its own sales force and generates sales with pharmacies and wholesale counterparties. The most important branded products include in this regard, among others, Grippostad C (colds), Hoggar Night (sleep medication), Ladival (protection against sunlight) and Multilind (curative salve).

- 63. STADA's activities in Great Britain are marked to a decisive degree by the distribution of branded products. The main subsidiaries include in this context the companies Britannia Pharmaceuticals Ltd., Thornton & Ross Ltd., Internis Pharmaceuticals Ltd. and Natures Aid Ltd. Britannia Pharmaceuticals Ltd. 15 focuses exclusively on the distribution of branded products, the main product emphasis is placed on medications against illnesses of the nervous system such as Parkinson's. 16 Natures Aid Ltd. focuses on various non-prescription branded products such as food supplements, vitamins and herbal products.<sup>17</sup> STADA also acquired in the subsidiary Thornton & Ross Ltd., a producer of non-prescription branded products in Great Britain, in 2013. The product portfolio includes, among others, the medications Covonia (colds) and Hedrin (delousing medication) as well as Zoflora, a disinfectant intended for the household.<sup>18</sup> There was a further acquisition of a British company in 2014, Internis Pharmaceuticals Ltd., which has an emphasis on the development and marketing of licensed Vitamin D3 Rx medications (the Fultium portfolio). Furthermore acquisitions were made in the niche area of vaping (for giving up smoking). This product class is sold mostly under the brand name "Socialites"<sup>19</sup>. The trading partners for the brand inventory are wholesale counterparties for pharmacies as well as pharmacies and supermarkets and drugstore chains.
- 64. STADA distributes the product portfolio in Italy especially through the subsidiary EG S.p.A., which generates its sales primarily by marketing generics. The two strongest generics in terms of sales are Pantoprazol and Lansoprazol (both proton pump inhibitors). The distribution of generics mainly involves wholesalers and pharmacies. In addition to generics, EG S.p.A. also distributes branded products. Furthermore, branded products are also marketed by the distribution company Crinos S.p.A., whereby the products Hirudoid (dermatology) and Valpinax (psychopharmaceutical) were among the most important medications in the recent past. In

<sup>15 100%</sup> sub-subsidiary of Clonmel Healthcare Ltd.

See https://www.britannia-pharm.co.uk/about-us.html, status 10 November 2017.

See https://www.naturesaid.co.uk/about-natures-aid/, status 10 November 2017.

See http://www.thorntonross.com/aboutus.aspx, status 10 November 2017.

<sup>19 100%</sup> subsidiary of UK Holdings Ltd.

order to secure and further expand market shares in Italy, STADA is considering a further expansion of the specialized external sales force for doctors.

- 65. The subsidiary EG Labo-Laboratoires Eurogenerics SAS generates the main portion of sales in France. The local distribution company operates in a challenging competitive environment which is characterized to a decisive degree by high discounts for pharmacies, pharmacy chains and purchasing groups. EG Labo Laboratoires Eurogenerics SAS generates the largest portion of sales with generics. <sup>20</sup> In 2015 and 2016, STADA discontinued the largest portion of the branded products portfolio and has accordingly become virtually a sole generics provider.
- on the distribution of a successful generics portfolio to pharmacies. STADA is currently not distributing any products in Spain directly to hospitals and instead focuses exclusively on wholesalers and pharmacies. A strengthened focus on the distribution of branded products is planned for the future. However, the expectation for generics is that there will be only minor growth due to the continuing competition with regard to discounts.
- 67. STADA is represented in Belgium through the distribution company S.A. Eurogenerics N.V.<sup>22</sup> Since the end of the distribution agreement with Omega Pharma N.V. ("OMEGA") in December 2016, the distribution company has now been independently handling logistics and distribution. As a market leader, the Belgium company benefits from the introduced full range product portfolio as well as the presence of a country-wide external sales force which is used primarily for generics and ongoing communication with doctors.<sup>23</sup>
- 68. The sub-group STADA CIS is the basis for distribution in the CIS countries<sup>24</sup> and the Baltic countries. In the Russian market, the company distributes branded products and genercis, whereby the branded products segment was driven by acquisitions. The focus in the branded products segment lies on cold remedies (e.g. the acquisition of the brand "Aqualor"). Approximately 20% of the total sales of the Russian sub-group are generated in Kazakhstan and Ukraine as well as other export markets. The majority of products are produced locally, and the remaining portion is imported. Due to the procurement of raw materials and sometimes finished products in foreign currencies (Euro, USD), the gross margin depends partly on the currency exchange rate between the Ruble as the local currency and foreign currencies. In the long term, the sub-group in Russia plans a further increase in sales (measured in Euro) in the branded products segment, while the portion of sales of generics is supposed to decrease slightly. When adjusted for currency exchange rates, an increase in sales in both segments is expected, but the growth will be much stronger in the segment branded products than in

<sup>&</sup>lt;sup>20</sup> See STADA, Interim Report for the first nine months, October 2017, p. 13.

See STADA, Interim Report for the first nine months, October 2017, p. 13.

See STADA, Interim Report for the first nine months, October 2017, p. 13.

See http://www.omega-pharma.de/de/unternehmen/geschichte.php, status 7 November 2017.

The CIS Region (Commonwealth of Independent States) defines a group of independent countries of the former Soviet Union. Relevant for STADA are mainly Russia. Ukraine and Kazakhstan.

generics. The focus in the Russian distribution territory will also in the future be placed on branded products.

#### 2.3.1.4. Development and licensing process for products

- 69. STADA's business model includes, in addition to distribution, the development and purchasing/production of effective substances requiring prescriptions and non-prescription substances as well as pharmaceutical substances which are not protected by patents.
- 70. The actual development process is preceded by portfolio management functions, <sup>25</sup> which prepare long-term decisions for new introduction of products and makes decisions in consultation with the distribution department. Strategic portfolio decisions at STADA are made to a decisive degree by taking into account the sales planning at the local distribution companies as well as evaluating technical feasibility studies. Following this, it is decided if the development will be performed internally or by an external partner.
- 71. Due to the time required for development of up to four years and the submission and licensing period of up to two years, making a decision about a new introduction of a generic must be made in a binding manner at least six years prior to the expiration of a patent. Generics can only be marketed after a patent is expired. Upon considering the necessary patent research, a portfolio decision is normally made up to ten years in advance in the STADA Group.
- 72. In case of an internal development, the initial phase of the development process involves a basic evaluation of the pharmaceutical active substance<sup>26</sup> on the basis of the original medication. The subsequent formula strategy must determine a stable formula which does not violate the formula patents of the originator, while still staying with the important parameters for the referenced product. The same therapeutic effect must among others be proven in stability tests and clinical studies (bioequivalence studies). The formula identified in the development phase is subsequently transitioned to production standard. The results of the development and the transition to production standard (validation) are documented in order to prove whether the formula can also be reproduced in large scale production.
- 73. The results of the development are documented in licensing documents in the subsequent licensing process. As a general rule, a pharmaceutical substance can be registered both with national as well as in a general European licensing process. In general, the pharmaceuticals licensed in the STADA group for the Central Europe market are marketed in all Member States of the European Union (EU) as well as the European Economic Area (EEA). In most situations, STADA favors especially Europe-wide licensing procedures, so that the corresponding licensing documents are normally submitted to the European Medicines Agency (EMA). The costs for the licensing process are assumed fully by STADA. In addition, STADA also bears the related

<sup>25</sup> This applies only for the global developments in generics. In the case of branded products projects, marketing is the customer and portfolio management is not actively involved.

<sup>&</sup>lt;sup>26</sup> Active pharmaceutical ingredient or "API".

- obligations (e.g. costs of non-introduction of a pharmaceutical or if the sales are lower than expected).
- 74. In order to manage the group-wide development projects, STADA has a central project management with interface management that assures a transparent controlling of product developments. The group's own development centers for international projects are located in Germany and Serbia. In order to be able to optimize the management and technical synergies in the development process, STADA also cooperates with external partners, primarily in Europe and Asia. In addition to the own developments, STADA also uses a worldwide network of external development partners through which dossiers and licenses are acquired.<sup>27</sup>

#### 2.3.1.5. Purchasing and manufacturing processes

- 75. STADA produces its products at 19 production sites. The main production capacities of STADA are located in low-cost countries, such as in Eastern Europe and Asia. There are also production facilities in Germany and Great Britain.
- 76. The active substances and ancillary substances required for the pharmaceutical production are not produced by STADA itself and instead are procured usually from more price-efficient suppliers in low-cost countries, especially in the Asian region. For this purpose, STADA has procurement offices in Shanghai (China) and Mumbai (India). To the extent STADA has products produced by contract manufacturers, the company depends on the prices for supplies which must be negotiated with the contract manufacturers. In order to lower the risk of losses of margins resulting from a downturn in sales prices, the suppliers participate in the price risk to extent possible by using dynamic pricing clauses in which the procurement prices are coupled to the sales prices. STADA uses in this context, in addition to dynamic pricing clauses, also other mechanisms such as follow-up negotiations or special procurement pricing in the case of special sales volumes, for example, in the case of tender contracts.
- 77. A central office is mostly responsible and carries out the activities in the areas of the supply chain and purchasing. The main goal of the supply chain and purchasing sections are to continuously lower the procurement prices paid to third parties for materials (finished products, bulk goods, API, ancillary materials and packaging of all kinds), in order to remain competitive in light of strong pressures on prices. In addition, a goal is to optimize both the delivery times as well as the minimum order volumes. Both aspects result in an improved responsiveness, a more efficient working capital management and lower depreciation of inventory.
- 78. The global procurement organization is structured in two departments with different responsibilities: "Third Party Manufacturing" and "Purchasing of Production Materials". The area "Third Party Manufacturing" bundles the procurement of finished goods from contract manufacturers. The area "Purchasing of Production Materials" bundles the procurement of active substances, ancillary substances as well as packaging. In addition to central negotiations,

See STADA, Annual report 2016, p. 19.

this department is also responsible for identifying and qualifying new suppliers. The supplier market for active substances undergoes continuous change and the market is generally dynamic. Thus, this organizational structuring assures that the own plants of STADA can make purchases from the most price-efficient suppliers which comply with the quality requirements (with a strong focus on China and India), without having to continuously monitor and analyze the market in a decentralized manner.

# 2.3.1.6. Pharmaceutical approval/Pharmaceutical co-vigilance and quality assurance/quality control

- 79. A further main function in the group-wide licensing process is handled in the area of pharmaceutical approval which continuously updates the licensing records and, thus, contributes to maintaining the pharmaceutical licenses. In addition to this function, the department Quality Assurance/Quality Control (QA/QC) assumes the ongoing control functions which assure permanent, consistent quality of the products throughout the entire life cycle of the products.
- 80. A final assessment of the safety of pharmaceuticals cannot be made at the time they are first licensed, the date when a corresponding pharmaceutical license is issued. Manufacturers of medication are accordingly required to continuously and systematically document and evaluate experiences in using pharmaceuticals in the context of pharmaceutical co-vigilance. The main task of pharmaceutical co-vigilance is assuring continuous information about side-effects and interactions associated with using the pharmaceutical. This function assures that patients, doctors and other addressee are informed in a continuous process about these risks and, if appropriate, possibilities to mitigate the risks. Against this background, pharmaceutical covigilance is understood to be the systematic collection and evaluation of unwanted effects of pharmaceuticals.
- 81. Just as is the case with the area of pharmaceutical co-vigilance, the functions of QA/QC relate to the safety of pharmaceuticals, i.e. quality assurance and compliance with the regulatory requirements, and serve to assure consistent product quality. As a general rule, all QA/QC relevant activities in Europe are based on an EU GMP guide (EU-Good-Manufacturing-Practise), 28 which is regularly revised and published. 29 Part 1 of this guide consists of the GMP requirements related to pharmaceuticals, and Part 2 represents the corresponding requirements with regard to active substances. Against the background that QA/QC facts can have effects on the pharmaceutical approval, there is an important interface between the two areas. In order to comply with regulatory requirements, STADA must perform the QA/QC duties both internally as well as having external quality control. Internal QA/QC functions are performed by qualified personnel within the group who assure that every batch is produced and controlled in accordance with the provisions in the pharmaceutical license and other relevant provisions. In addition, the respectively responsible national supervisory authorities conduct inspections in regular intervals as an external party. Outside the EU, STADA requests,

<sup>28</sup> Defines the EU directive on quality assurance of production processes and environment in the production of pharmaceuticals and active substances.

<sup>29</sup> See Homepage of the European Commission at the following link: http://ec.europa.eu/health/documents/eudralex/vol-4/index\_en.htm.

in addition to national inspections for selected premises, additional EU Good Manufacturing Practice Compliance Inspections (EU-GMP compliance inspections), in order to receive the extension of the necessary EU import license applicable for three years.<sup>30</sup> In addition, STADA orients itself at the different production sites not only on the GMP-standards, but also the applicable ISO norms.

#### 2.3.2. Corporate strategy

82. The business model of STADA aims at delivering sustainable and profitable growth and increasing the value of the business in the long run. To achieve these goals, the management board adopted an enhanced business strategy in 2016. While not changing the underlying general strategic direction, several initiatives to improve STADA's performance were introduced. These measures are meant to increase the competitiveness, innovative power and long-term value creation. Over the course of the execution of the strategy, STADA intends to exploit new revenue sources, optimize marketing expenses, improve sales efficiency and reduce cost of sales. The main strategic pillars can be summarized by the following topics:

#### Preservation and expansion of the market position and streamlining of the product portfolio

- B3. Due to the existing potentials for growth in the health care and, more specifically, in the pharmaceutical market, STADA aims at creating further growth. Previously untapped sales potential in the branded products segment shall be leveraged through an increased internationalization strategy. In the generics segment, STADA will benefit from further products going off-patent and adding selected biosimilars to its portfolio. Furthermore, the number of companies within STADA group will be reduced, brands will be centralized and STADA will focus its marketing efforts on products offering the best prospects for growth and margin, while pruning many products whose individual sales are very low.
- 84. The portfolio strategy within the branded products segment follows a strict selection process, which aims at focusing on selected products (pharmaceuticals, cosmetic products, nutritional supplements). In comparison to the branded products segment, the generics segment is positioned more broadly and covers several different areas of applications. Against the background of planned savings for production and marketing costs, management intends to streamline and harmonize the generics portfolio of STADA. With regards to its long-term oriented group-wide development activities, STADA is already working on the development of generics products with potential launch dates beyond the year 2026. STADA generally pursues a "time and cheap to market" strategy with the objective of launching new products not only at the earliest point in time, but also at the best possible cost of sales.
- 85. The generics segment is expected to remain a core segment within the scope of the growth strategy to realize sustainable revenue growth and relatively constant cash flows, which enable the company to further grow its branded products segment. Within the generics segment, management assumes further sales growth from the expansion to markets with low

<sup>30</sup> See STADA, Annual report 2016, p. 21-22.

penetration rates and the extension of the product portfolio by areas of high growth, e.g. inlicensing or co-development of biosimilars or entering niche segments. STADA will focus on markets with a high fraction of direct payers when exploiting new markets, e.g. CIS, Asia and MENA.

- With respect to growth potential in biosimilars, STADA continuously expands its portfolio. The future product strategy for biosimilars will focus on certain therapeutic areas, especially oncology, central nervous system (CNS), diabetes and ophthalmology and corresponding lead substances. With regard to the planned focus on certain therapeutic areas, STADA will complement its existing in-licensing strategy (where selected biosimilars are licensed from highly specialized suppliers) with a co-development strategy (in which STADA enters the project at the pre-approval stage and contributes to the development spending in return for a greater share of the profits and the right to handle most or all of the distribution and marketing for the products which are successfully approved). This shift in strategy will increase STADA's risk profile in the future but will give STADA the opportunity to accelerate its entry into certain fast-growing therapeutic areas. Even though biosimilars like generics are also subject to price erosion in the long-term, the positive prospects are expected to prevail.
- 87. In the branded products segment, STADA intends on further internationalizing successful brands on the basis of an established platform, e.g. a premium-price strategy in Russia. By internationalizing already successful products, STADA expects to benefit from cross-selling potential. Additionally, product developments in the profitable market for specialized pharmaceuticals are planned. The placement of OTC products will still be carried out by advertisement and a strong positioning in pharmacies in the future. STADA showed already some successful internationalizations in the past. While in 2016 the company successfully introduced products from the areas dermatology, colds, headlice and food supplements in international markets, this strategy has been further expanded in the first nine months of 2017 and will continue.<sup>31</sup>

#### Profitability increase and optimization of the group structure

- 88. Against the background of the growth strategy adopted in 2016, STADA plans to realize cost savings in the production. In the area of supply management and production, especially in the generics segment, standardized production and packaging processes will be implemented and the supply chain will be improved. Furthermore, the number of suppliers is expected to decrease, and a renegotiation of supply contracts and an in-sourcing of products is planned. By consolidating activities across countries, a further reduction of the fixed costs component, especially in the production and development, is planned. Further savings potential was identified by the executive board in the administration area, e.g. by further unifying its IT landscape and optimizing of distribution structures.
- 89. In general, STADA pursues the goal to define responsibilities more clearly and increase the transparency within the company. To support the achievement of these goals, a new business

<sup>31</sup> See STADA, Interim Report for the first nine months, October 2017, p. 15.

culture will be introduced with a stronger focus on entrepreneurship, an extensive knowledge transfer and open dialogue.

- 90. The setup of technology centers which focus on trends and consumer needs as well as active management of portfolio transactions and partner programs will serve as the base for a profitable and sustainable product portfolio.
- 91. Besides organic growth, STADA generally also considers acquisitions in the Generics and Branded Products segment. Potential targets are mostly active in emerging markets with low regulatory barriers and offer an existing platform for STADA to expand into new markets or new products through existing distribution channels.

#### 2.3.3. Macro-economic situation and outlook

- 92. In order to assess the economic situation as of the valuation date and the future development of STADA, a fundamental analysis of the (macro-)economic environment as well as an estimate of the overall economic development is required.
- 93. The analysis of the overall economic environment is made in this context on the basis of the growth of the real gross domestic product (GDP) as well as the consumer price index in the most relevant regions. In the last years, STADA generated its sales to the greatest extent in the Eurozone, Great Britain and Russia. Against this background, these regions are analyzed in more detail below, whereby the focus in the Eurozone is on the countries Germany, Italy, Spain, France and Belgium. Primarily the collection of data and assessment of the International Monetary Fund ("IMF") serves as the source for information:<sup>32</sup>

Percentage change in real gross domestic product

	2009			2012	2013	2014	2015					
		2010	2011					2016	2017	2018	[]	2022
World	-0,1	5,4	4,3	3,5	3,5	3,6	3,4	3,2	3,6	3,7	[]	3,8
Europe	-4,5	2,1	1,6	-0,9	-0,2	1,3	2,0	1,8	2,1	1,9	[]	1,5
Germany	-5,6	3,9	3,7	0,7	0,6	1,9	1,5	1,9	2,0	1,8	[]	1,2
Great Britain	-4,3	1,9	1,5	1,3	1,9	3,1	2,2	1,8	1,7	1,5	[]	1,7
Italy	-5,5	1,7	0,6	-2,8	-1,7	0,1	0,8	0,9	1,5	1,1	[]	0,8
France	-2,9	2,0	2,1	0,2	0,6	0,9	1,1	1,2	1,6	1,8	[]	1,8
Spain	-3,6	0,0	-1,0	-2,9	-1,7	1,4	3,2	3,2	3,1	2,5	[]	1,7
Belgium	-2,3	2,7	1,8	0,1	-0,1	1,6	1,5	1,2	1,6	1,6	[]	1,5
Russia	-7,8	4,5	5,1	3,7	1,8	0,7	-2,8	-0,2	1,8	1,6	[]	1,5

Source: International Monetary Fund, World Economic Outlook, October 2017.

#### 2.3.3.1. Development of the gross domestic product

94. The global economy was able to achieve real growth of 3.2% in 2016, making it the weakest growth rate after the financial crisis in 2009. The expectation is that the global real economy will grow by 3.6% in 2017 and 3.7% in 2018 and that the growth will be slightly stronger than in the previous years. The main drivers for this development can generally be considered to be

<sup>32</sup> See https://www.imf.org/en/Publications/WEO/Issues/2017/09/19/world-economic-outlook-october-2017#Introduction, status 22 November 2017.

the positive growth rates in the Eurozone, Japan, the Asian countries and Russia, which offset the weaker growth forecast in the USA and Great Britain compared to the previous forecasts. In detail, the industrial countries achieved real growth in the amount of 1.7% in 2016. The emerging countries achieved real growth in the amount of 4.6% in 2016. However, especially the growth in the emerging countries in the past was characterized by a weaker development in China and a generally low oil price. The expectation for the future is that real worldwide economic growth will maintain its current level and can also grow by 3.8% in 2022.

- 95. The economy in the Eurozone had a substantial recovery in 2016 after the effects of the European government debt crisis. After the GDP was able to increase by 2.0% in 2015, real growth had a similar level in 2016 at 1.8%, compared to the previous year. A further real growth in the amount of 2.1% is expected for 2017 and 1.9% is expected for 2018, whereby the aftereffects of the European government debt crisis and the unfavorable demographic developments in the European countries continue to put the brakes on the recovery. Impulses for growth, however, are expected in the export business, which also profits from a continuing weak Euro, and from the expected easing of the restrictive monetary policy in some European countries.
- 96. Like the Eurozone, the German economy grew substantially in 2016 and achieved a real growth rate in the amount of 1.9%. In light of the forecast by the IMF, real growth in the amount of 2.0% is expected for 2017, whereby the main drivers for growth are a robust domestic demand, a stable employment market, increasing household income as well as a strong export business.<sup>33</sup> In the future, the German economy expects consistent positive parameters, so that the IMF assumes a real growth rate in the amount of 1.2% in 2022 in its long-term forecast. Compared to the expected long-term growth in other countries, the German forecast, however, is relatively weak for 2022. The main responsibility for this development lies in the expected demographic changes which are likely to be stronger in Germany than in other industrial countries.<sup>34</sup>
- 97. While the real GDP growth in Great Britain was regularly higher than in the Eurozone in recent years, short-term losses are expected from the decision to exit the European Union ("BREXIT") that was made in the summer of 2016. This is reflected in lower forecasts which provide 1,7% and 1.5% for real growth rates respectively in 2017 and 2018 and are, thus, below the real economic growth in the previous year (1.8%) as well as the growth in the Eurozone. Over the long-term, the IMF expects real economic growth in the amount of 1.7% in 2022, which would again exceed the real growth in the Eurozone in the amount of 1.5%.
- 98. Italy's economy recovered successively in recent years from the European government debt crisis that had reached its peak in 2013 and led to a collapse of the Italian economy in the amount of -1.7%. Since 2014, the Italian economy is again growing, whereby the growth of 0.9% in 2016 is still well below the real growth rates in the Eurozone. The economic

<sup>33</sup> See

https://www.bundesbank.de/Redaktion/DE/Downloads/Veroeffentlichungen/Monatsberichte/2017/2017\_06\_monatsbericht.pdf?\_\_blob=publicationFile. status 10 November 2017.

<sup>34</sup> See https://www.bundesbank.de/Redaktion/EN/Reden/2017/2017\_11\_17\_dombret.html, status 22 November 2017.

development is also supposed to be below the average real growth in the Eurozone in 2017 at only 1.5%. In light of the long-term development, the IMF expects a new downturn in economic growth, so that the Italian economy is supposed to only achieve real growth of 0.8% in 2022. As the third-largest economy within the Eurozone, Italy has a high level of government debt which was 133.0% of its GDP in 2016. The Italian government is additionally under pressure from the European partners to reduce debt, generate sustained growth and eliminate inefficiencies in the labor market.<sup>35</sup>

- 99. France has been confronted with increasing unemployment rates for young people and increasing government debt since 2008. In 2012 to 2014, the French economy had a relatively weak development and only achieved growth rates of less than one percent. Despite this historic trend, the IMF expects a positive development for the country in the long-term. While the French economy already achieved real growth of 1.2% in 2016, real growth in the amount of 1.8% is forecasted for 2022 which is higher than the level in the Eurozone.
- 100. Spain was able to show positive economic growth for the third year in a row in 2016, whereby the real growth rate of 3.2% was significantly above the real growth in the Eurozone in the amount of 1.8%. The decisive cause for this positive development was the strong private consumption as well as the successful implementation of savings measures by the Spanish government.<sup>36</sup> There is uncertainty due to the political turbulence following the recently conducted referendum about independence for Catalonia, which might result in negative effects on the development of the companies in Spain.<sup>37</sup> Further real growth rates of 3.1% for 2017 and 2.5% for 2018 are expected, so that the high level from the previous year only slowly comes close to the European average in the mid- and long-term. In its long-term forecast, the IMF expects that the real economic growth in Spain will be 1.7% in 2022.
- 101. Belgium had positive real economic growth in 2014 to 2016, whereby this growth was less than the growth rates in the Eurozone in 2015 and 2016. The real growth in 2016 was only 1.2%. The main aspects inhibiting growth consist of the restrictive monetary policy and the low increase in real income as well as the related weak domestic consumption.<sup>38</sup> The IMF expects real growth in the amount of 1.6% in the following year. Over the long-term, the real growth is supposed to decrease slightly to 1.5% in 2022.
- 102. The economic growth in Russia had significant downturns in recent years as a result of the Ukraine crisis and the related sanctions as well as the weak oil price. However, the downturn in the real GDP in 2016 in the amount of -0.2% must already considered to be progress after the Russian economy shrank by -2.8% in 2015. Independent of the past, a significant increase in the amount of 1.8% is apparent for 2017, which is primarily the result of the fixing of the oil price by OPEC. For Russia, the IMF expects that the development of the GDP will stabilize at the

<sup>35</sup> See https://www.cia.gov/library/publications/the-world-factbook/geos/it.html, status 10 November 2017.

<sup>&</sup>lt;sup>36</sup> See https://www.cia.gov/library/publications/the-world-factbook/geos/it.html, status 10 November 2017.

See STADA, press release, 9 November 2017, p. 3.

<sup>38</sup> See https://www.cia.gov/library/publications/the-world-factbook/geos/it.html, status 10 November 2017.

level of 2017 in the long term, so that real economic growth in the amount of 1.5% will be achieved in 2022.

#### 2.3.3.2. Development of the consumer price indices

103. The analysis of the overall economic environment is also made on the basis of the consumer price indices:

Percentage change in consumer price index

	2009								Forecast			
		2010	2011	2012	2013	2014	2015	2016	2017	2018	[]	2022
Europe	0,3	1,6	2,7	2,5	1,3	0,4	0,0	0,2	1,5	1,4	[]	2,0
Germany	0,2	1,1	2,5	2,1	1,6	0,8	0,1	0,4	1,6	1,5	[]	2,5
Great Britain	2,2	3,3	4,5	2,8	2,6	1,5	0,0	0,7	2,6	2,6	[]	2,0
Italy	0,8	1,6	2,9	3,3	1,2	0,2	0,1	-0,1	1,4	1,2	[]	1,4
France	0,1	1,7	2,3	2,2	1,0	0,6	0,1	0,3	1,2	1,3	[]	1,8
Spain	-0,3	1,8	3,2	2,4	1,4	-0,1	-0,5	-0,2	2,0	1,5	[]	1,9
Belgium	0,0	2,3	3,4	2,6	1,2	0,5	0,6	1,8	2,2	1,5	[]	2,0
Russia	11,7	6,9	8,4	5,1	6,8	7,8	15,5	7,0	4,2	3,9	[]	4,0

Source: International Monetary Fund, World Economic Outlook, October 2017.

- 104. Due to the background of low prices for raw materials, the price increase in the Eurozone in 2016 was only 0.2%. However, an inflation rate of 1.5% is expected for 2017, whereby the continuing low interest rate policy of the European Central Bank ("EZB") indicates an inflation rate of just under 2.0%. In accordance with the inflation goal of the EZB, the IMF expects an inflation rate of 2.0% for 2022.
- 105. Germany had a substantial decrease in the inflation rate from 2011 to 2016 by analogy to the Eurozone from 2.5% in 2011 to 0.4% in 2016. However, the expectation for 2017 is that the inflation rate will again increase and will be 1.6% at the end of the year. The short-term and mid-term future development of the inflation rate will most likely depend decisively on when and to which extent the prices for raw materials recover and increase. Over the long term, the IMF expects a further increase in the inflation rate for Germany, so that the rate is supposed to be 2.5% in 2022. In light of the fact that this inflation goal is above the forecast for the Eurozone, it must be noted that the low interest rate policy of the EZB is more strongly noticed in economically competitive countries such as Germany than, for example, in the peripheral areas of the currency zone.
- 106. The exit of Great Britain from the European Union already had a noticeable influence on the expectations for inflation after the referendum. Based on the devaluation of the British Pound and the resulting increases of prices for imports, the expectation is that the inflation rate will increase in the short term to 2.6% in 2017 and 2018. However, over the long term, the assumption is that the British Pound will recover, so that the IMF again expects a lower inflation rate of 2.0% for 2022.
- 107. In a similar manner as in the Eurozone, Italy was characterized by a substantial decrease in the inflation rate in the recent years since 2012. After a stagnation in the price level from 2014 to

2016, an increase in the inflation rate in the amount of 1.4% is expected for the first time for 2017. Although a slight decrease in the inflation rate to 1.2% is expected for 2018, the IMF forecasts a long-term level in the amount of 1.4% for 2022.

- 108. France also had relatively low inflation rates in the past which have first had a moderate increase since 2016, but at a level of 0.3% the rate is still well below the targets of the EZB. For 2017, the IMF expects an increase of consumer prices to 1.2%. Over the long term, the growth rate in consumer prices is supposed to increase slightly to 1.8% in 2022.
- 109. As a member of the Eurozone, Spain has also had decreasing inflation rates for some years, which fell from 3.2% in 2011 to -0.5% in 2015 and were still defined in a deflationary condition at -0.2% in 2016. The IMF forecasts a positive inflation rate in the amount of 2.0% for 2017, which virtually corresponds to the long-term forecast of the IMF for 2022 in the amount of 1.9%.
- 110. Contrary to most other countries in the Eurozone, Belgium already had a slight increase in the national consumer prices in 2015. The inflation rate again increased in 2016 to 1.8%. In the future, the IMF expects, after a further increase of the growth of consumer prices to 2.2% in 2017, a decrease in the inflation rate to 1.5% in 2018. Over the long term, the IMF forecasts a inflation rate in the amount of 2.0% in 2022 which corresponds to EZB's inflation target.
- 111. The very high inflation rates in Russia of 15.5% in 2015 and 7.0% in 2016 resulting from the collapse of the Ruble appeared to have been overcome, so that only a relatively low increase in prices in the amount of 4.2% is expected for 2017. The Russian currency devalued in 2015 and 2016 due to the weak oil price and the sanctions by the West against Russia in connection with the Ukraine crisis. Above all, imported goods became significantly more expensive. In the meantime, the oil price has recovered, foreign investments have increased and the value of the Ruble has again increased in a manner analogous to the oil price. In the long term, the expectation is that the target inflation rate of the central bank in 2022 will be 4.0%. <sup>39</sup>

#### 2.3.3.3. Conclusion

112. Based on the analysis of the real growth of the GDP in the past and the forecasts by the IMF, the real growth rates in the relevant sales markets for STADA are in a range of approximately 0.5% to 1.7% annually. The historic and expected real growth of the GDP in Great Britain and Russia is also at a similar level. With regard to the historic and expected inflation rates in the Eurozone, the finding is that they are below the EZB's target for inflation of 2.0% and are in a range of approximately 0.7% to 1.6%. In individual years in the past, such as in 2009, 2012 and 2013, there sometimes were large deviations from the target. The issue of average, nominal expectations for growth is again addressed in Chapter 4.5 when deriving the sustained growth rate for the financial surpluses. It is especially necessary to analyze the extent to which there is a possibility of passing on increases in costs resulting from inflation to the customers on the sales side by means of increasing prices. The specific aspects in the respective market and

<sup>39</sup> See https://www.cbr.ru/eng/DKP/dkp\_e/, status 7 November 2017.

- competitive environment in the various countries in which STADA is active must also be considered.
- 113. In addition to the development of the macro-economic environment, the economic situation in the relevant industries of STADA is analyzed below. The situation and the development of these industries is a further indicator for estimating the future nominal growth potential of STADA.

# 2.3.4. Market and competitive environment

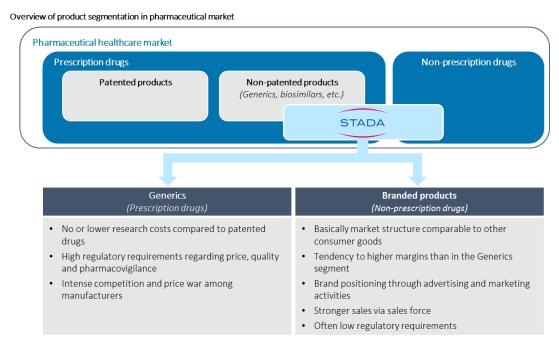
114. The following chapter describes the market and competitive environment for STADA. While the first section describes the positioning of STADA in the competitive environment and explains the general parameter in the global pharmaceutical market, the subsequent section focuses on the individual participants in the market. After summarizing in the most important regulatory components in the health care system, the individual market situation of STADA in the core sales countries is subsequently addressed.

## 2.3.4.1. Positioning of STADA in the market and competitive environment

of complexity which results from a large number of product categories, market participants established under private law and public law and different regulatory requirements. Pharmaceutical companies accordingly take into account, in addition to direct competitors and consumers, also the regulatory requirements.

## **Product segments**

116. The pharmaceutical market is overall divided into many product groups, such as branded pharmaceuticals protected by patents, generics, biosimilars and OTC branded products. STADA positions itself in this environment primarily in the area of the non-patent protected generics, biosimilars and OTC branded products.



Source: Own representation.

### Patent protected pharmaceuticals that require prescriptions

- 117. Prescription pharmaceuticals protected by patents involve products where the introduction into the market involves substantial research and development costs. In order for companies to amortize the incurred costs for research and development and for simultaneously continue to develop other products in their development pipeline, the producers protect their products with patents. As soon as the protection of a patent is lost, the previous producer loses its exclusivity for the product. As a consequence, other pharmaceutical companies can offer medications with the same active substance (generics) at lower prices, because they can produce preparations on the basis of the already licensed product which have the same combinations of active substances with relatively low costs and risks in development.
- 118. As a general rule, prescription pharmaceuticals can be subdivided into the two classes biologicals and synthetic medications. Biologicals constitute medications which are produced biologically or genetically and consist of highly complex molecular structures. These structures are obtained from biological processes and are used especially in manufacturing vaccines as well as in gene and cell therapy. Synthetically manufactured medications are defined as low molecular chemical pharmaceutical medications having a relatively low level of complexity. Substitutes produced synthetically are referred to as generics. Imitations of biological medications, however, are generally referred to as biosimilar or bioidenticals.

### Generics

119. Against the background that the original medications form the basis for generics, and original medications normally require prescription, generics are normally also in the class of pharmaceuticals which require prescriptions. Generics are usually distributed under their generic chemical designation or their international non-proprietary name (INN), supplemented

with the designation of the company carrying out the marketing. Such medications accordingly do not have any brand names. There are two material deviations from this general rule: in the first place, there are so-called brand generics which are marketed under an own brand name. In the second place, there are special generics which are different in terms of chemical composition, dosage or the production process compared to the original medication. Corresponding medications are subject to a development and license period which is up to four years longer.

# Biosimilars/bioidenticals

120. Biosimilars are understood to be a pharmaceutical with an active substance produced with biotechnology that was developed as a comparison to an originally supplied product that is already in the market. The biosimilar is similar due to the fact that it has a proven therapeutic equivalents and is comparable in terms of safety and quality. Thus, a biosimilar is a successor product to a biopharmaceutical that previously had patent protection. Biosimilars are generally biological pharmaceuticals that require prescriptions and, contrary to generics, are not defined by a synthetic imitation of a simple chain of molecules and instead reflect a biologically produced reconstruction of highly complex molecular chains. The definition "similar" is based on the fact that the composition of the medication is not identical to the biological medication due to the biological production process and instead is only recognized as a "similar" pharmaceutical. Biological imitation medications which are identical to the original medication in terms of production are defined as bioidenticals. Against the background of the strict regulatory licensing provisions, biosimilars only receive an approval if there are no significant deviations compared to the composition of the original medication.

## Branded products / OTC

121. Contrary to prescription pharmaceuticals, medications which do not require prescriptions or "over the counter" (OTC) products can be purchased without a prescription. They are typically no longer subject to protection under patents. Branded products are typically subject to lower regulatory requirements than prescription pharmaceuticals and can be taken as a preventive measure or for self-medication. The differences in the specific demand in individual countries is quite significant with regard to the acceptance of OTC branded products by consumers. While, for example, approximately 55.0% of the population visit a pharmacy or comparable distribution platform in Great Britain in the case of mild illnesses before visiting a doctor, only approximately 24.0% of the population in the Netherlands prefer self-medication to personal treatment. In addition, cosmetic products, for example, substances that protect against sunlight, are included among these products.

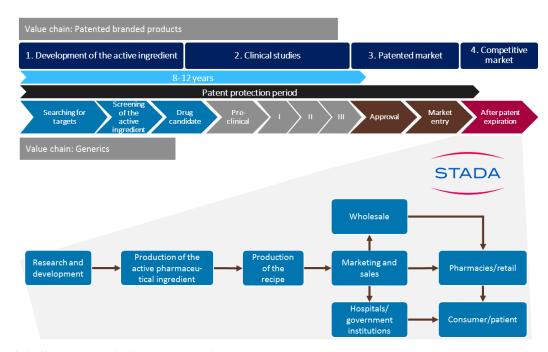
## Food supplements

122. As a general rule, food supplements are foods or extracts from foods used for medical purposes. Food supplements are normally produced using naturally obtained substances and sometimes have the same effects as standardized, pharmaceutical products. However, since this product segment is generally subject to even lower regulatory requirements and is

normally also purchased outside of pharmacies, food supplements can be considered to be a separate product segment.

## Classification of competitors in the pharmaceutical industry

123. Companies are subdivided into different categories depending on the field of activity of the pharmaceutical company within the pharmaceutical value creation chain. The pharmaceutical value creation chain defines in this regard the life cycle of a medication. It can be organized in four phases, development of the active substance, clinical studies, patent protected market and competitive market. Based on STADA's product focus, the company operates in the competitive market and, thus, generally competes with companies which also focus on pharmaceuticals after patent protection has expired.



Globally integrated pharmaceutical companies

124. This category of companies includes primarily producers of original medications which typically reflect the complete pharmaceutical value creation chain within the patent protected market phase. As a result of the high quotas of failures in research and development and the related costs, globally active pharmaceutical companies bundle their resources, in order to specialize on the commercialization of a limited number of potentially successful medications (so-called "blockbuster medications"). In addition to the focus on patent protected pharmaceuticals, globally integrated pharmaceutical companies are increasingly also active in the competitive market.

## Specialized pharmaceutical companies

125. This category in principle defines small to mid-size companies which place their focus on certain regions or fields of therapy. Companies in this regard having a regional focus normally pay

attention to having a broad product portfolio which is established in the corresponding core region on the basis of a strong national or regional distribution network. While the risk involved in individual products at companies with regional focus is accordingly limited, pharmaceutical companies with a product focus are substantially more dependent on the success of their emphasized therapy. In order to still mitigate the operational risk, the companies try to compensate for product risks with a presence in multinational niche markets.

## Biotechnological companies

126. This group of companies includes typically companies which focus more strongly on research and development in the field of biotechnology and are at the beginning of the pharmaceutical value creation chain. Especially smaller companies depend on their technological expertise and do not specialize on sales. As a consequence, the market entry for biologicals often takes place in partnership with other pharmaceutical companies which have corresponding distribution infrastructures. As a general rule, the importance of biotechnological companies is increasing because they are increasingly responsible for discovering new active substances and medications.

### Generics producers

127. This category of companies typically includes companies with a focus on the development, production and sale of pharmaceutical products where there is no patent protection. Contrary to pharmaceutical or biotechnological companies involved in research, generics producers do not engage in their own research and instead try to generate profits above all by reducing costs and economies of scale. The profitability of generics producers is often determined by the country specific regulatory environment, because price setting mechanisms of the national healthcare systems usually do not differentiate between individual generics and instead only have one price class per group of active substances. Emerging countries are interesting for generics companies in particular because a lower level of regulation provides prospects for higher margins and there is also normally no competitive local supplier. 40

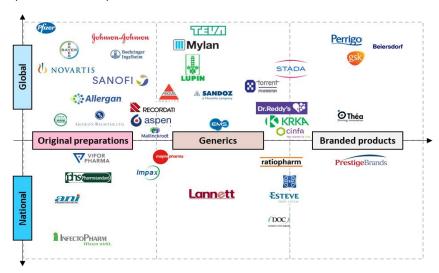
## Healthcare and brand companies (other companies)

128. In addition to the already mentioned types of companies, there are other companies active in healthcare in general. They specialize in the production of products which, although covering healthcare needs, at the same time do not require prescriptions. Typical products of these manufacturers include, among other items, branded medications, body care products, products for dental care, foods and food supplements as well as healthcare products for women and babies. The markets for these products are characterized by much lower regulatory requirements, as a result of which the producers focus strongly on the positioning of their brands. Customers of these companies are mostly end consumers or patients which receive the products in pharmacies or through other distribution channels. Important parameters for the

See Analyst report Bankhaus Lampe, STADA Arzneimittel AG, 20. December 2016, p. 8.

- purchasing behavior in this regard are recommendations by pharmacists as well as marketing strategies of the respective manufacturers.
- 129. The intensity of competition between the described categories of pharmaceutical companies in general depends on the product segment as well as the regulatory environment. When considering the largest national and international companies in the global pharmaceutical market, the following matrix results:





Source: Own representation.

- intensity of competition during the term of the patent, because the pharmaceuticals they offer normally compete only with a few substitute products. The competitive situation changes after the expiration of patent protection when generics manufacturers enter competition and, as a result, substantially lower the price level. In order to be able to act in this "second phase" of the market, manufacturers of original mediations often pursue a "second brand strategy", in order to increase the market entry barriers for generics manufacturers. A prominent example in this regard is the pharmaceutical company Novartis AG, which has operated the generics brand Sandoz AG since the year 2003 and has accordingly compensated for price reductions after the expiration of the patent using the own imitation medications. As a consequence, this branding and pricing strategy leads to a market situation where large corporate groups in the pharmaceutical industry engaged in research (Pfizer Inc., Novartis AG, Merck & Co. and Sanofi, S.A.) influence the competitive environment for generics manufacturers.
- 131. As suppliers of substitute products, generics manufacturers normally have only very limited possibilities for differentiation of products. Competitive benefits accordingly can be gained only from an already strong market position, distribution channels and knowledge of the local market. This difficult marketing situation for generics manufacturers is not significantly

<sup>41</sup> It must be noted that the price level normally first decreases when research and development costs of the manufacturers of original medications are already amortized.

improved, despite the increasing focus on biosimilars, because manufacturers of the original medications do not automatically leave the market, as might be expected, after expiration of the patents. They instead can also prepare the sale of biosimilars in addition to the original medication.

132. A similarly competitive market environment as is the case for generics manufacturers also exists for producers for branded products, but they have more possibilities for differentiation, such as with regard to product quality, packaging design and brand identity.

## International market environment and currency exchange rate risks

- 133. As a result of the fact that pharmaceutical companies increasingly act at the global level, the expectation is that the market for generics will be further globalized in the coming years. While German manufacturers will most likely continue to grow worldwide in connection with this advancing degree of globalization, the assumption is that international generics manufacturers will also further expand their presence in the German market.
- 134. In light of the international focus of companies in the pharmaceutical market, currency exchange rate fluctuations represent a material risk. A differentiation must be made between transaction risks and translation risks. The transaction risks, from the point of view of the corporate group, have an effect on cash flows. Translation risks result from the conversion of the profit and loss statement and the balance sheet values in the reporting of the group and can have a decisive effect on the results of the group in the group's currency. The transaction risks can be hedged using derivatives, such as futures and swaps.

# Customers

135. The demand power of customers in the pharmaceutical industry depends on the respective local healthcare system and the type of distributions channel and varies greatly in light of the different unique features of pharmaceuticals, such as product features and areas for treatment. This permits the conclusion that especially in the case of patent protected pharmaceuticals, the customers generally have low demand power because there is frequently no available substitute. Contrary to the situation with original medications, the demand power of the customers is normally high in the case of generics, depending on the respective local health care system. In this context, there is autonomy in the structuring of prices in systems with established tender contracts of the health insurance organizations, especially in the case of a high competitive density for substitutes. Above all in Europe, where the healthcare systems are financed approximately 60.0% to 70.0% by public health insurance organizations, the

negotiating position of pharmaceutical companies is very limited due to the increasingly intensive need for savings.

136. In the area of branded products, the demand power of customers is also relatively high due to having competing products for individual areas of application. So, companies must make high expenditures for marketing, in order to successfully distribute their products.

## Suppliers

- 137. While companies in the pharmaceutical industry are subject to relatively intense competition, the negotiating power of manufacturers towards suppliers is currently low, because the required active substances, especially for synthetic products, belong to the special products in the chemical industry and cannot be obtained at a large number of suppliers.
- 138. STADA is no different in this regard from the general structure of the industry and thus has a fragmented supplier network. In general, STADA enters supply contracts with price adjustment mechanisms under which the purchasing price is linked to the selling price of the products.
- 139. With regard to the expansion and renewal of the generics portfolio as well as the expansion of the business with biosimilars, there is a high degree of dependency on biological companies. This is because of their expertise in developing, which STADA uses in the context of its inlicensing strategy. STADA intends to reduce this dependency in the area of biologicals and increasingly engage in co-development with development partners in the future.

## 2.3.4.2. General expectations for growth and market drivers

## General expectations for growth

140. Publicly accessible data from IMS is considered in the following summary of the general market growth. Even if the referenced expectations for growth offer a good indication of future expectations, it must be considered that the underlying market revenues correspond to gross amounts and, thus, by definition are higher than the net total sales of STADA which are shown after discounts and similar price reductions. Furthermore, there are also potential discrepancies in the case of branded products to be considered which result from the fact that the composition of the portfolio by IMS takes exclusively into account branded products which are medication similar, while STADA's branded products portfolio also includes the company's branded products such as hygienic substances and sun cream. In addition to the composition of the portfolio, it must also be considered that in the case of branded products, discounts or similar price reductions play a role at company level, but at the same time are not taken into account in the IMS expectations for the market. The global pharmaceutical market has been characterized by continuous growth in recent years and was at a level of approximately EUR 1,000.0 bn in 2016. 42 Based on a higher worldwide standard of living, the expectation is that the market volume will increase annually by approx. 4.9% from 2016 to 2021 and will be

See QuintilesIMS, Market Prognosis 2017 - 2021, May 2017, p. 7.

approximately EUR 1,300.0 bn in 2021.<sup>43</sup> Geographically, the US American pharmaceutical market is the largest pharmaceutical market with a portion of global sales in the amount of approx. 46.0%, followed by Germany, Great Britain, France, Spain and Italy ("EU5") which in the aggregate have a market share in the amount of approx. 15.0%. In addition to the western industrial countries, Japan is a further core market where approx. 8.0% of worldwide sales are generated. The remaining sales in the amount of approx. 31.0% are fragmented in their regional distribution and are spread through China and the rest of the world.

- 141. Within the worldwide pharmaceutical market, the market segment for generics has had constant growth which was on average 9.2% annually from 2011 to 2016 and, thus, corresponded to a global market volume in the amount of EUR 185.5 bn. In light of the continuing consolidation of governmental budgets and healthcare expenditures, the expectation for the future is that the worldwide generics market will grow stronger than in the past. Average annual growth of up to 8.0% is expected for 2017 to 2021, so that the market volume at the end of the analyzed period will be more than EUR 272,0 bn. While biosimilar products in the generics segment currently only have a portion of sales in the amount of 1.0% in the global biologics market, the expectation is that this low value will substantially increase in the coming years. The reason for this assessment is an annual growth in the amount of approx. 41.0% during the last five years and the future expiration of patent protection for various biologicals blockbuster pharmaceuticals.<sup>44</sup> Since biologicals normally involve high priced medications, biosimilars will have an increasingly important role in the future, above all with the healthcare organizations that bear the costs.
- 142. Significant average annual growth in the amount of approx. 4.8% in 2017 to 2021 is also expected for the global market for branded products, so that the global market volume at the end of the analyzed period will be more than EUR 107.0 bn. The average annual growth in this segment in the period 2011 to 2016 was 7.1% and a market volume in the amount of approx. EUR 79.4 bn was generated in 2016. The expected stronger growth in the future is primarily based on the increasing trend towards self-medication. It is expected that patients will increasingly purchase medications that do not require prescriptions instead of having themselves treated by doctors.

## Market drivers

143. The reasons for the growth in the global pharma market in general and in the individual product segments have their basis in many different factors. The main drivers are presented below. They will determine the trends in the mid-term and the long-term:

### Economic cycles

144. The pharmaceutical market is generally considered to be non-cyclical, for the most part. The analysis of historic expenses for medications that require prescriptions as well as over the counter medications shows continuing growth. The primary drivers for growth are the globally

See QuintilesIMS, Market Prognosis 2017 - 2021, May 2017, p. 7.

<sup>44</sup> See QuintilesIMS, Flashlight Report Version 62, September 2017, p. 11.

improved healthcare standards, increased perception of risks for illnesses, medical progress and the resulting new products and possibilities for treatment.

145. Contrary to economic cycles, pharmaceutical manufacturers in certain product groups are affected by seasonal influences. While patent protected medications and generics are generally not affected by such market drivers, the sales of branded products, for example, cold remedies, correlate much more significantly to the seasonal circumstances.

## Global growth in population

146. As is the case in other consumer markets, the sales by the pharmaceutical industry will continue to increase in light of the continuously growing worldwide population. While there are currently approx. 7.6 bn people on the planet, there could be as many as 8.6 bn in 2030. Approx. 57.9% of all people live in Asia and approx. 19.9% live in Africa as far as the regional distribution is concerned. 45

## Demographic change

147. One of the most relevant trends for the pharmaceutical industry is the demographic change in industrial countries and the related increasing age of society. The resulting need for pharmaceutical products is expressed, among other aspects, by higher expenditures for treating chronic illnesses which often first occur when people are older. Based on data from the United Nations, approx. 962 m people lived in the world in 2017 (corresponding to approx. 12.7%), who were older than 60, whereby approx. 25.0% of those people lived in Europe. In 2050, the expectation is that except for Africa, at least 25.0% of the population worldwide will already be older than 60.47

## New medications / product pipeline / expiring patents

- 148. The demographic change and the related need for pharmaceuticals will unavoidably lead to an increase in available medications and treatment methods. While certain trends in development cannot be foreseen as a result of future illnesses, it can already be found today that increasing research and development costs will lead to an improvement in the treatment of respiratory and cardio-circulatory illnesses, but also in the area of oncology, immunology and problems in the central nervous system. According to information from the European Association of the Pharmaceutical Industry (EFPIA), pharmaceutical companies quadrupled their annual investments in research and development from EUR 7.8 bn to EUR 30.5 bn in 1990 to 2014.
- 149. On the one hand, this results in new original medications continuously entering the market, on the other hand the expiring patents continuously increase the volume of generics. The overall

See United Nations, World Population Prospects, 2017, p. 1.

See United Nations, World Population Prospects, 2017, p. 11.

See United Nations, World Population Prospects, 2017, p. 11.

believe is that generics manufacturers will have an annual volume of sales from expiring patents in the two digit billions amount in 2018 to 2020.48

Cost benefits from efficient pharmaceuticals

150. A further argument for a growing pharmaceutical market is apparent from the greater economic efficiency of pharmaceuticals compared to alternative methods for treatment such as stationary treatment in clinics. Especially in light of increasing expenditures in the health care system with simultaneously more restrictive budgets in the public health insurance organizations, the most cost efficient method of treatment is supposed to be considered more often in the future. As a consequence, increasing demand for generics and an increase in branded products with preventive characteristics are expected.

# Lifestyle

151. A continuing and progressing change in lifestyle in the sense of less physical burden and simultaneously increasing unhealthy nutrition will also maintain the demand for pharmaceuticals against diabetes, heart disease, high cholesterol values and high blood pressure as well as obesity in the future. While these illnesses have their source in modern lifestyle and used to occur above all in western industrial countries, a similar trend can be found in emerging countries, in the meantime.

Health insurance and increasing disposable income

152. An additional driver for demand for pharmaceuticals that require prescriptions and branded products is increasing disposable income and a continuous expansion of health insurance policies which are expected both in emerging countries as well as western industrial countries. It could already be observed in the past that higher disposable income increased the demand for cold remedies and allergy products, so that a comparable development is also anticipated in the future.

## Emerging countries

153. The general belief is that the growth of the pharmaceutical industry in the coming years will be supported above all by the emerging countries. While, for example, the market for generics in the Eastern European countries such as Serbia is expected to grow on average by 5.8% p.a. and by 14.0% p.a. in Russia and by 13.0% p.a. in the Ukraine, annual growth of only 4.3% is expected for the countries in Western Europe. In addition to the necessary optimization of local distribution systems resulting from this, the shift in demand coincides with the expansion of production in research sites in these regions. The main drivers for this development in the emerging countries are, among others, a general growth in population, continuously increasing disposable income, higher life expectancy and a continuously improved supply with pharmaceuticals. It is also believed that a higher portion of generics can be sold in emerging countries due to the previous inventory of low quality products and that these generics can be

See EvaluatePharma, World Preview 2017 – Outlook to 2022, 2017, p. 9.

sold at relatively high prices based on the fact of a general high portion of people who pay for themselves.

## 2.3.4.3. Regulatory environment

154. Pharmaceutical companies are subject to a large number of national as well as international regulatory provisions. These affect the complete value creation chain (production, market licensing and marketing of medications) as well as extensive provisions in the healthcare systems (including pricing, granting of discounts and distribution channels for the sale of medications). The most important provisions in the licensing procedures and the pricing mechanisms in STADA's core sales markets are emphasized below.

# Licensing process and marketing

European Union

- 155. As a general rule, all pharmaceuticals require a license from public authorities prior to entering the market.<sup>49</sup> Pharmaceutical companies must generally submit both clinical studies as well as non-clinical research results which correspond to common EU standards for licensing pharmaceuticals. In general, the same provisions apply for generics as for original medications, whereby the applicant can use the original preparation as a reference pharmaceutical under certain timing requirements and can refer to the records for that original preparation. In addition to generics, branded products, as pharmaceuticals, must normally also receive a license, in order to be sold to pharmacists or similar customers. Other products, including food supplements, however, are subject to lower regulatory requirements. However, in certain countries, such as Germany, the authorities plan to also submit this product group to a licensing duty in the future. 50 The license in the EU can be obtained centrally using EU law as well as decentrally under national law. In other words, companies active in the EU have in principle the choice whether they apply for a pharmaceutical license with the European Medicines Agency or whether they apply for the license from the respective national public authorities within the European Economic Area. In both situations, the companies are permitted to distribute the pharmaceutical also in other European markets after successfully receiving the license.
- 156. In addition to the licensing provisions, companies in the healthcare market are also subject to requirements concerning production and advertising activities. In principle, the rule within the EU is that a product approval from one Member State in which the production takes place must be issued. Furthermore, companies engaged in wholesale or distribution of pharmaceuticals must process a license for each country in which distribution takes place. In addition to provisions on licensing and production, there is an obligation for pharmaceutical co-vigilance for products introduced successfully in the market. The manufacturers must document

<sup>49</sup> See http://www.bundesgesundheitsministerium.de/themen/krankenversicherung/online-ratgeber-krankenversicherung/arznei-heil-and-hilfsmittel/zugang-zu-arzneimitteln.html. status 25 November 2017.

<sup>50</sup> See https://www.zentrum-der-gesundheit.de/zulassungspflicht-nahrungsergaenzung-ia.html, status 25 November 2017.

potential side-effects in this context and inform public authorities or the prescribing doctors about this on a continuous basis.<sup>51</sup>

157. The marketing of pharmaceuticals is also strictly regulated and limits the companies in their communications with customers. As a general rule, pharmaceuticals requiring a prescription fall under the EU Directive 2001/83/EC, so that pharmaceuticals requiring prescriptions can be advertised only to Doctors, pharmacists and other persons entitled to trade in pharmaceuticals. The background for this Directive is the intention to not diminish the competency of doctors for prescriptions by way of advertising statements and to accordingly not endanger the protection of the public. However, the provisions in the law on marketing branded products are much less restrictive. Branded products can be advertised effectively to the public, so long as no studies or similar documents are attached as information materials. As a result of the granted possibilities for communication, pharmaceutical companies are able to differentiate themselves from other competitors by way of product policy, communication strategy and targeted distribution measures. Classical marketing strategies in this regard include an attractive design for the packaging as well as attractive forms of administering medication.

#### Russia

- 158. Contrary to the harmonization of national regulation within the EU, all production steps, such as development, registration, production, delivery and storage of medications are monitored in Russia by the "Eurasian Economic Union" (EAEU). A successful license for pharmaceuticals depends, similarly to the situation in the EU, on positive test results which are compiled in the context of pre-clinical and clinical studies. It is generally easier to successfully obtain a license in the Russian market for generics due to less extensive conditions since the Russian healthcare system has the goal of having a cost-efficient structure. In addition to licensing individual medication, companies which wish to be active in the Russian healthcare market must also obtain approval from the Russian health ministry. In addition to permission to act as a company in the Russian market, individual activities, such as production, research and distribution of medications, require additional permits from public authorities. Furthermore, healthcare companies, in a manner similar to Europe, are required to engage in pharmaceutical covigilance efforts, in order to timely recognize potential side-effects and take appropriate measures.
- 159. In the event that companies resist existing provisions or violate the rules, the public authorities have the possibility to cancel licenses and assess financial penalties.

# Pricing and reimbursement systems in the EU

160. A difference must generally be made between the governmental healthcare system, the commercial healthcare system and the insurance model. A governmental or insurance-based healthcare system exists when the setting of pharmaceutical prices is made primarily by government regulated healthcare authorities or the statutory healthcare organizations. National healthcare systems where there is mostly no governmental pricing regulations are

<sup>51</sup> See Generic Medicines, European Generic Medicines Markets, 2016, p. 6.

defined as commercial healthcare systems and are normally characterized by the fact that patients do not receive any financial support required by law in the case of treatment with pharmaceuticals. Instead, the pricing is exclusively determined by supply and demand.<sup>52</sup>

- 161. As a result of regulatory restrictions, STADA's competitive environment or peer group is also limited. Companies with a clear regional focus on the USA are not taken into account in this regard because that sales market can generally be defined as a commercial healthcare system, and pharmaceutical manufacturers are free in determining the prices.<sup>53</sup>
- 162. The general rule is that governmental healthcare authorities have a continuing interest in limiting the expenditures for the supply of pharmaceuticals due to the importance of a functioning healthcare system in the society. Also, the authorities try to avoid increasing premiums for the people with health insurance in the mid-term and the long term. In order to achieve this goal, there are various pricing mechanisms applied in the EU for medications which require prescriptions. These mechanisms are described briefly below. Branded products and other medications that do not require prescriptions, however, are generally subject to the free structuring of prices.

# Introduction of fixed amounts

163. Fixed amounts in the national health insurance systems refer to binding upper limits on prices for reimbursement for pharmaceuticals by health insurance organizations which apply independent of the actual price for the pharmaceutical. The implementation of fixed prices is in general made in two successive procedures. In a first step, a central or federal committee determines a group of pharmaceuticals covering pharmaceuticals in which the active substance is therapeutically and pharmacologically comparable. In a second step, the respective fixed amounts are set, up to the amount of which the national health insurance companies bear the costs. This mechanism results in a permanent price competition because pharmaceutical companies normally must offer their medications below the fixed amount, in order to win prescribing doctors or pharmacists to select the companies' pharmaceuticals. Especially in light of the fact that doctors are normally subject to control mechanisms when prescribing pharmaceuticals, such as e.g. budget restrictions in Germany, doctors often only have the choice between a few, comparable medications which are comparable in price.

### International reference price systems

amounts to international reference pricing systems which, in turn, reflect the upper price limits agreed for comparable groups of pharmaceuticals in foreign countries. The resulting ongoing regulation of prices between different national systems of price regulation has the effect of evening out the amounts fixed at the national level, but also result in a continuous erosion of the reimbursement prices. At the same time, however, it must be considered that international

<sup>52</sup> See http://www.deutschlandfunk.de/russisches-gesundheitssystem-korrupte-zweiklassenmedizin.724.de.html?dram:article\_id=329377, status 10 November 2017

<sup>53</sup> See http://www.handelsblatt.com/unternehmen/industrie/medikamentenpreise-die-wucher-methoden-der-us-pharmaindustrie/14687894.html, status 26 November 2017.

reference price systems are used in many countries only as orientation in price negotiations between health insurance organizations, government healthcare authorities and the manufacturers.

Pharmaceuticals – discounting agreements (tender contracts)

165. Discounting agreements for pharmaceuticals also have the intention of lowering expenditures for pharmaceuticals and stabilizing premiums for health insurance. Health insurance organizations tender their needs for generics to a great extent throughout Europe. If generics companies want to supply the insureds of these health insurance organizations with pharmaceuticals, the generics companies must participate in such efforts. Exclusively the manufacturer offering the highest discount receives the award of a contract and, thus the supply contract in cases of tender offers. The pharmacists are then required to hand over the pharmaceutical to the patient under the discount agreement. A discount agreement is normally valid for two years. The tender is subsequently again issued, and again only the manufacturer with the highest discount offred receives the contract.<sup>54</sup>

## Fixed price differences

166. In addition to the reference price system and the introduction of fixed amounts, there are fixed price differences between generics and original medications in many national healthcare systems which require suppliers of generics to already have a maximum price in advance depending on the price of the original medication. In light of the continuing competition in pricing between the suppliers, granted discounts on prices, however, are in the majority greater than the values required by law.

## Structuring prices and reimbursement system in Russia

- 167. In a manner similar to Europe, the Russian healthcare system is in principle not a pure self-payer market and instead aims to relieve citizens financially when they need pharmaceuticals. A main difference compared to the European reimbursement systems, however, is that the current Russian system makes the type of reimbursement dependent on pre-defined categories of patients. This differentiation specifically has the consequence that benefits of the statutory health insurance system are exclusively available to patients who are treated in hospitals. A reimbursement of pharmaceutical costs incurred outside a stay in a hospital also exists, but is normally accessible only for a small fraction of the Russian population and involves, for example, special situations such as patients with cost-intensive illnesses or orphans and small children requiring medical care.
- 168. The pharmaceutical available to patients in the statutory health insurance system must in each case be included in the "Vital and Essential Pharmaceutical List" ("VEP"). The VEP defines a list with all pharmaceuticals which are necessary and essential for life and is published once annually by the Russian authorities. The goal of the VEP list is to counter the most relevant illnesses with a targeted selection of medications and to regulate the pricing of these medications or to assign a specific fixed amount to these medications. International

Regular publication of the Association of Generics and Biosimilar Companies in Germany Pro Generika e. V.

# VALUETRUST

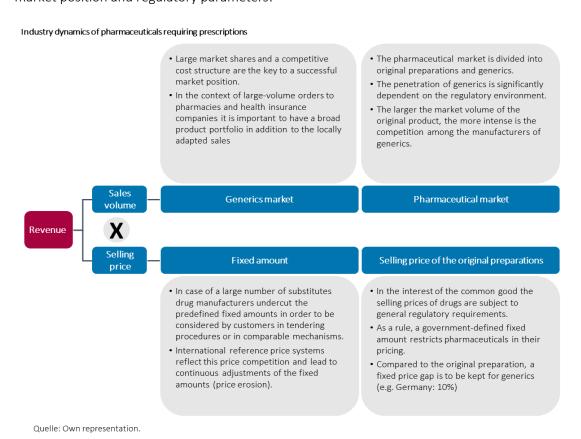
manufacturers are also taken into account in the annual selection but can be excluded in cases of doubt as soon as at least two substitutes exist from the Eurasian Union.

- 169. In the light of the background that a reimbursement of pharmaceuticals is not the rule, except for the supply of medication in hospitals, a large portion of the pharmaceuticals requiring prescriptions in other countries are also purchased without a prescription in pharmacies in Russia. A private health insurance policy for covering these expenses for pharmaceuticals is mostly only available for wealthy Russians, whereby the private insurers normally do not cover all services. Since as a consequence approximately 70% of the expenditures for pharmaceuticals are borne by private persons, the Russian healthcare market can be classified to the greatest extent as a self-payer market. Medications which do not require prescriptions are also not subject to any price regulations.
- 170. The Russian health ministry plans to reform the healthcare system by 2025. Various pilot projects have already been implemented in this regard. For example, the approach of generally reimbursing up to 90.0% for certain categories of pharmaceuticals and minimizing the own payment for patients to 10.0%. In addition, established systems, such as the reference price system, are being examined where patient, upon purchasing original medications, only pay the difference to the corresponding generics.

Seel. http://www.deutschlandfunk.de/russisches-gesundheitssystem-korrupte-zweiklassenmedizin.724.de.html?dram:article\_id=329377, status 10 November 2017.

# Price/volume structure for pharmaceuticals requiring prescriptions

171. In light of the regulatory influence in pricing of pharmaceuticals that require prescriptions, the sales of pharmaceutical companies are determined with the focus on pharmaceuticals which require prescriptions resulting from the following interaction between generics penetration, market position and regulatory parameters:



- 172. In order to exist in the market environment with intense competition, it is important for generics manufacturers to have high market shares. The decisive aspect in this regard is a competitive product portfolio which can generate increasingly higher economies of scale as volumes increase and, thus, first obtain a competitive price level. In addition to an attractive price level, it is essential for the market position and the generated sales to have a distribution system which is optimized for the specific circumstances in the country and to be able to be an attractive comprehensive provider to the customer by having the correct pharmaceuticals in the product portfolio (so-called "one stop shop" strategy).
- 2.3.4.4. Development of the market for generics and branded products in STADA's core markets
- 173. As an international company in the healthcare industry, STADA operates on a global level and accordingly is subject to country specific factors. In this context, STADAs most important sales markets and their corresponding competitive as well as regulatory parameters are discussed below. Furthermore, for all markets we consider STADAs positioning in the generics and

branded products segment, as well as in individual niche markets in the area of biosimilars and vaping products (for quitting smoking). Additionally, the sales potential of pipeline products as well as of cross-selling activities (internationalization) is also being addressed.

174. Based on the regulatory framework summarized in chapter 2.3.4.1.4, the main provisions and parameters in STADA's core sales markets are described below. In 2017, these core sales markets generated 66.9% of the sales in the generics segment and 69.3% of the sales in the branded products segment. As will be pointed out in the summary for the specific countries as well, one important factor for STADA is an optimized distribution structure which assures access to the relevant decisions-makers when selling pharmaceuticals. As it has already been described in chapter 2.3.4.1.2, the global pharmaceutical market is a growing market which profits from different megatrends, including demographic changes, an increasing world population and a generally improved living standard. A comparable development can also be seen in STADA's core sales countries, where, on an aggregated basis, on average the pharmaceutical market is expected to grow by approximately 3.6% annually in the years 2017 to 2021. Furthermore, a similar development can be observed by solely aggregating the generics and branded products markets, where STADAs core sales markets are also expected to increase by 3.6% per year.

Size, characteristics and growth of the pharmaceutical, generics and branded products markets in STADA's core markets

in EUR bn	DE	GB	IT	FR	ES	BE	RU	Top 7
STADA's total sales share in generics (in %, in 2017)	21.8%	1.7%	12.6%	6.1%	7.8%	9.0%	7.9%	66.9%
STADA's total sales share in branded products (in %, in 2017)	18.5%	17.8%	4.6%	0.5%	2.0%	1.3%	24.6%	69.3%
STADA's generics market position in top 5	$\checkmark$	×	<b>✓</b>	×	<b>✓</b>	$\checkmark$	<b>~</b>	
STADA's branded market position in top 5	$\checkmark$	<b>~</b>	×	×	×	×	$\checkmark$	
Total sales of pharmaceutical market (in 2016)*	39.9	22.5	26.1	29.9	19.1	4.9	11.9	154.3
Annual growth (2011-2016)	4.5%	6.2%	4.9%	0.8%	3.2%	0.9%	11.2%	4.5%
Annual growth (2017-2021)	3.4%	4.7%	2.4%	2.2%	2.6%	1.4%	8.2%	3.6%
Market segment generics (within the pharmaceutical market)								
Penetration of generics (total sales, in 2016)**	16.8%	24.3%	13.7%	19.8%	16.0%	12.0%	20.8%	18.0%
Annual growth (2011-2016)	4.9%	10.1%	8.0%	5.6%	5.6%	3.7%	12.3%	
Annual growth (2017-2021)	4.7%	2.2%	4.4%	4.7%	5.2%	2.9%	6.0%	4.3%
Market segment branded products (within the pharmaceutical n	narket)							
Penetration of branded products (total sales, in 2016)	13.3%	7.5%	6.0%	11.1%	3.4%	11.8%	32.1%	11.0%
Annual growth (2011-2016)	2.5%	3.5%	0.8%	-1.8%	-1.3%	1.6%	10.8%	
Annual growth (2017-2021)	2.5%	1.3%	1.3%	-1.4%	0.1%	2.0%	5.6%	2.2%
∑ penetration of both segments (total sales, in 2016)***	30.1%	31.8%	19.7%	30.9%	19.4%	23.9%	52.9%	29.0%
CAGR (2017-2021)	3.7%	2.0%	3.5%	2.8%	4.4%	2.4%	5.8%	3.6%

### Sources

QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 42, p. 50.

 ${\tt Data\ table, Qunitles IMS, Market\ Prognosis\ 2017-2021-Generics\ market\ and\ OTC\ market.}$ 

<sup>\*</sup> Total market volume of the pharmaceuticals market was converted from USD into EUR, with an assumed exchange rate of EUR/USD 1.08.

<sup>\*\*</sup> Defines the relationship between the total sales of the generics market and the total pharmaceuticals market.

<sup>\*\*\*</sup> Defines the market volume of the generics and branded products markets.

### 2.3.4.4.1. Germany

#### Overview

- 175. In the year 2016, the market volume generated in the German pharmaceutical market was EUR 39.9 bn, which corresponds to a market share of 21.3% compared to the market volume within the EU and, thus, represents the largest portion for all Member States. <sup>56</sup> While for the year 2017 the market volume is expected to reach EUR 41.4 bn, the average annual growth rate for the period 2017 to 2021 is 3.4%. <sup>57</sup>
- 176. The German generics market is one of the most developed generics markets in the EU with a share of 16.8% of the German pharmaceutical market. 58 The total market volume of generics in the year 2016 was EUR 6.7 bn, which corresponds to an average annual growth rate of 4.9% since the year 2011. The main years of growth in this regard were the years 2013 and 2015, where the underlying growth drivers were primarily based on the general decreases in the budgets of the health insurance organizations.<sup>59</sup> While the market volume in the year 2017 will probably be EUR 7.0 bn, an average annual growth of 4.7% is expected in the years 2017 to 2021, so that the total market volume in the year 2021 will probably increase to EUR 8.5 bn. 60 In the beginning of the year 2017, the five largest market participants included the companies Novartis AG, Teva Ltd., STADA, Sanofi S.A. and Torrent Ltd., which together achieved a market share of approximately 50.0%.<sup>61</sup> In the past, based on sales, STADA itself was able to establish itself as the third largest supplier in the German generics market and maintain this position for many years. In addition to synthetic imitation products, in recent years the importance of biosimilars has also significantly increased in Germany. A main regulatory measure in this regard is a legally binding quota for selected products, which requires doctors to increasingly prescribe biosimilars when prescribing certain active substances.
- 177. Branded products generated a portion of sales of 13.3% of the German pharmaceutical market in the year 2016.<sup>62</sup> The total market volume in the year 2016 was EUR 5.4 bn, which corresponds to an average annual growth of 2.5% since the year 2011. While the market volume in the year 2017 will likely be EUR 5.5 bn, an average annual growth of 2.5% annually is expected in the years 2017 to 2021, so that the total market volume will likely increase to EUR 6.0 bn in the year 2021.<sup>63</sup> In the beginning of the year 2017, the largest market participants included the companies Bayer AG, GlaxoSmithKline Plc., Teva Ltd., Klosterfrau Zürich AG,

See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

Defines the share of generics in the pharmaceuticals market in terms of sales.

<sup>59</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>60</sup> See data table, QuintilesIMS Market Prognosis 2017 - 2021 - Generics Market.

See STADA, Interim Report for the first nine months, October 2017, p. 55.

 $<sup>^{62}</sup>$  See STADA Arzneimittel AG, interim report for the first half year, August 2017 p. 69.

<sup>63</sup> See data table, QuintilesIMS Market Prognosis 2017 - 2021 - OTC Market.

Novartis AG and STADA, which together had a market share in the amount of approximately 70.0%.<sup>64</sup>

Regulatory environment for determining prices

- 178. As a general rule, health insurance is mandated by law for citizens in Germany. In this regard, the German healthcare system includes private and statutory health insurance organizations which in principle are supposed to assume all costs incurred for pharmaceuticals that require prescriptions. Approximately 89.2% of the population in Germany is covered by statutory health insurance and approximately 10.8% have private health insurance.<sup>65</sup> The basic system for regulating pharmaceutical prices is based on a reference price model which defines fixed amounts eligible for reimbursement and, as a consequence, refers to the reimbursement prices in other EU Member States when setting its own prices.
- 179. In general, the determination of fixed prices is made by way of product classification which reflects pharmaceuticals with comparable active substances and defines corresponding reimbursement prices on the basis of reference prices. In order to be actually free in determining prices, manufacturers must accordingly develop product features which are not yet covered in the existing classifications and, thus, are not part of a reference price group.
- 180. In addition to regulating prices with an international reference price system, there are other provisions and approaches in Germany, such as tender contracts or legally binding fixed price discounts. In this regard, the latter provision normally provides that generics must generally be offered at a 10.0% price discount compared to the original medications, in case the costs are borne by statutory health insurance organizations. In the event that a health insurance organization has not signed any tender agreement for certain active substances, but there is a product classification for the substances, the pharmacy will independently select a pharmaceutical among the three cheapest alternatives when the prescription is presented. The influence of doctors in selecting pharmaceuticals first takes effect when no product classification exists for an active substance, whereby the choice of pharmaceutical also is controlled in the context of pre-defined budgets. The amount of these budgets is determined

 $<sup>^{64}\,</sup>$  See STADA, Interim Report for the first nine months, October 2017, p. 68.

<sup>65</sup> Seehttps://de.statista.com/statistik/daten/studie/155823/umfrage/gkv-pkv-mitglieder-and-versichertenzahl-im-vergleich/; status 10 November 2017.

Defines the so-called aut-idem rule: The pharmacy selects one of the three cheapest pharmaceuticals which must be compared to each other in terms of strength, composition and active substance (See https://www.verbraucherzentrale.de/wissen/gesundheit-pflege/medikamente/rabattvertraege-bei-arzneimitteln-10602, status 25 November 2017).

by the health insurance organizations and results from different factors such as, among other, local demographic criteria.

181. Branded products are normally marketed in Germany through the normal distribution channels to customers and pharmacies, whereby no binding prices exist and the distribution is supposed to support the sale of generics.

### General market drivers

- 182. In light of the fact that the distribution of generics is regulated in Germany in an amount of approximately 70.0% through tender contracts, the market dynamics in this product segment are primarily characterized by dependency of the manufacturers on the health insurance organizations, where this group of customers includes both statutory as well as private health insurance organizations. The level of negotiating power of the statutory health insurance organizations is especially apparent from the fact that in the year 2016, relatively high discounts compared to the own list prices were granted under tender contracts.
- 183. In addition to price controls by means of tender contracts, pharmaceutical companies are above all affected by the regulatory annual adjustment of fixed amounts to international reference prices. In this regard, the fixed price discount compared to the price for original medication increases, for both high-priced generics as well as cheap generics, from approximately 20.0% at the time of introduction into the market to approximately 60.0% after fifteen quarters of the product being present in the market. Furthermore, the replacement quota increases in the same reviewed period, so that in the first fifteen quarters after the entry into the market of the first generic, both high-priced generics as well as cheap generics have an increase to approximately 60.0%, emphasizing again the high penetration rate of generics in the German pharmaceutical market.<sup>67</sup>
- 184. The future demand for branded products in Germany will primarily be driven by a higher self-medication rate as well as an increased price sensitivity. For the healthcare market, this development implies a shift in the distribution channels to online trading. Additionally, for branded products which are not required to be solely dispensed by pharmacies, the distribution channel in this segment will also shift to drugstores and grocery stores, resulting in a potential reduction of visits to doctors.

## STADAs current position in the market

- 185. STADA is one of the leading suppliers of generics and branded products in the German healthcare market. However, in recent years the company lost market shares in the field of generics due to a stronger focus on increasing its profitability.
- 186. As in the past, the generics business will remain a major component of STADAs business activities in Germany in the future. While in the year 2016, the three most important products in this segment included the pharmaceuticals Tilidin Naloxon (pain remedy), Epoetin zeta

<sup>&</sup>lt;sup>67</sup> The sales volume of the original medication was not further adjusted after generics were introduced into the market; See Annex 10. Sales volume replacement rate for generics.

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(biosimilar for the treatment of anemia) and Hydromorphone (pain remedy), the expectation is that in the future these products will continue to represent a significant market share in their reference market. Furthermore, other planned changes in the product portfolio relate to a stronger focus on biosimilars, whereby STADA anticipates significant, additional sales starting in the financial year 2020 (Epoetin Zeta already in 2016 a Top 4 product in generics in the Group). In this regard, future biosimilar products which are supposed to generate the sales include the medications pegFilgrastim (leukemia), Rituximab (cancer immune therapy) and Teriparatide (osteoporosis)). In this context, important development partners will continue to be the companies MabXience and Gedeon Richter. In light of the fact that STADAs current planning already indicates delays in the development of biosimilars, future deviations due to the lengthy development process must be considered.

- 187. While in the past, STADAs growth in the branded products segment tended to be relatively weak, the segment is supposed to play again an important role in the future. In the financial year 2016, the most important products in this segment included the pharmaceuticals Grippostad (colds), Ladival (protection against sunlight) and Hoggar (sleep disorders), whereby the expectation is that in upcoming years these products they will also be adequately represented in the portfolios of pharmacies. In the course of STADAs internationalization strategy, in the future selected products are also supposed to be marketed in Germany which are already distributed successfully by other STADA companies. In this context, the internationalization strategy for branded products includes, among others, the pharmaceuticals Fultium (vitamins) and Hedrin (lice remedy).
- 188. On the distribution side, STADA is a well-established player in the field of tender contracts involving health insurance organizations. At the same time, however, the business is greatly influenced by regulations and is subject to strong price competition. The branded products segment, however, was further developed as an independent area in recent years. Furthermore, the company plans, as is common practice in this segment, to increase the sales volume with targeted distribution measures directed towards customers and pharmacies.
- 189. In general, STADA expects to maintain its established market position in the generics and branded products segment in the future. While the company is able to build on a good market position with pharmaceuticals requiring prescriptions, the branded products segment is supported by a strong portfolio with high brand identity.

## 2.3.4.4.2. Great Britain

### Overview

- 190. In the year 2016, the market volume generated in the British pharmaceutical market was EUR 22.5 bn, which corresponds to a market share of 12.2% compared to the total market volume within the EU.<sup>68</sup> While for the year 2017 the market volume is expected to reach EUR 23.7 bn, the average annual growth rate for the period 2017 to 2021 is 4.7%.<sup>69</sup>
- 191. With a generic market share of 24.3% of the British pharmaceutical market, next to Germany, Great Britain is one of the countries with the largest relative portion of generics products. In the year 2016, the market volume of generics was EUR 5.5bn, which corresponds to an average annual growth of 10.1% since the year 2011. While in general the growth over this time period is evenly distributed, the most important growth drivers included regulatory measures, such as a directive to concentrate prescriptions on cost-efficient pharmaceuticals. While the market volume in the year 2017 will probably be EUR 5.9 bn, an average annual growth of 2.2% is expected in the years 2017 to 2021, so that the total market volume in the year 2021 will probably increase to EUR 6.4 bn. Among other factors, the decrease in the forecasted growth up to the year 2021 is based on the strong growth generated in 2014 to 2016, which, however, cannot be continued in the future due to the already high generics penetration and an related increase in saturation. In the beginning of the year 2017, the five largest market participants included the companies Teva Ltd., Chiesi S.p.A., Mylan Inc., Mundipharma GmbH and Sanofi S.A., which together achieved a market share of approximately 42,0%.
- 192. Branded products generated a portion of sales of 7.5% of the British pharmaceutical markets in the year 2016. The total market volume in the year 2016 was EUR 1.7 bn, which corresponds to an annual average growth rate of 3.8% since the year 2011. While the market volume in the year 2017 will likely be EUR 1.7 bn, an average annual growth of 1.3% is expected in the years 2017 to 2021, so that the market volume will probably increase to EUR 1.8 bn in the year 2021. In the beginning of the year 2017, the five largest market participants were the companies Johnson & Johnson Corp., Reckitt Benckiser PLC, GlaxoSmithKline Plc., STADA and Perrigo Plc, which together achieved a market share of approximately 75.0%. 74

## Regulatory and environment for determining prices

193. As a general rule, the National Health Service ("NHS") is the public authority which has jurisdiction for health insurance for the citizens and regulatory power for setting pharmaceutical prices in Great Britain. In addition, approximately 11.0% of the population has

<sup>68</sup> See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

<sup>69</sup> See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 49; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

<sup>70</sup> See Deloitte, 2015 Life Sciences Outlook, December 2014, p. 3; data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>&</sup>lt;sup>72</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>&</sup>lt;sup>73</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - OTC Market.

<sup>&</sup>lt;sup>74</sup> See STADA, Interim Report for the first nine months, November 2017, p. 70.

a private health insurance. In principle, the provisions on regulating prices are based on predefined groups of products which in general are subdivided into brand protective pharmaceuticals, that require prescriptions, such as patented medications or brand generics, as well as generics and branded products, which do not require prescriptions.

- 194. In case manufacturers of brand protected pharmaceuticals which require an prescription, such as patented medications and brand generics, distribute these products to governmental organizations such as the NHS, they are normally subject to the "Pharmaceutical Price Regulation Scheme" (PPRS), which represents a price control instrument and controls approximately 90.0% of all pharmaceuticals sold to the NHS, despite its generally voluntary nature. Contrary to the reference price system, the PPRS focuses on the actual pricing of medications and accordingly is used as an instrument to control the profitability of pharmaceutical companies. While the manufacturers are in principle free in setting their prices when introducing products into the market, they are limited, anyway, if the proposed prices do not correspond to the opinions of the healthcare authorities. Since the British healthcare system does not provide for an international reference price system, the official opinion about value does not refer to applicable fixed amounts in foreign countries. In addition, the manufacturers of branded protected pharmaceuticals, such as patented medications or brand generics, are subject to a general cap on profit which requires them to reimburse excess earnings to the NHS at a later point in time, if expenditures of NHS were above the agreed budget targets. Against the background that the PPRS rules are voluntary for companies when applied, manufacturers in the past who did not want to agree to the rules had to grant to the NHS as a general rule a price reduction in the amount of 15.0% below the government list prices However, the plan for the future is to eliminate these fixed price differences and instead to require manufacturers to reimburse generated excess profits to the NHS.
- 195. In Great Britain, generics which require a prescription are in general not subject to any provisions on prices but instead are efficiently priced by way of competition. Aside from this principle, however, manufacturers must pay attention to the fact that the fixed amounts eligible for reimbursement for generics are determined by the health ministry, so that an indirect price control is exercised. In this context, the fixed amount is determined on the basis of product classifications which, in turn, define a price level for each class and are derived on the basis of list prices demanded in the market. Since the NHS does not reimburse any costs above this fixed amount, patients must themselves pay the difference when purchasing a more expensive pharmaceutical.
- 196. In principle, branded products in Great Britain are not subject to any statutory provisions on pricing. Individual exceptions only exist with regard to products which are distributed to the government healthcare authorities.
- 197. Furthermore, the British healthcare system has additional provisions and rules to improve public health. These provisions include the requirement that prescription pharmaceuticals must be 100.0% reimbursed if the benefitted patient is younger than 18 years, or older than 60 years, or if the patient has certain illnesses. Furthermore, the approximately 35,000 doctors are monitored by 220 clinical commissions which control the prescribed formulas for

pharmaceuticals and require the prescribing doctors to save costs for the NHS. As a result of this indirect regulation of prescriptions, up to 80.0% of the sales volume of all prescribed pharmaceuticals are covered with generics. Additionally, as is the case in Germany, there is also price control through tender contracts, whereby this mechanism is used exclusively for selling pharmaceuticals to publicly operated hospitals.

#### General market drivers

- 198. Against the background that the healthcare system in Great Britain is primarily controlled by the NHS, the generic penetration of approximately 24.3% of the market volume is among the highest in Europe. While the government strongly regulates the prices for medications that require prescriptions, the success in sales depends on the trading margin of the products for the pharmacies. This negotiating power of the pharmacies results from the fact that doctors in Great Britain do not prescribe specific pharmaceuticals but instead only designate the required active substance. Another important factor emphasizing the relevance of pharmacies is that contrary to Germany, in Great Brtain pharmacy chains are also permitted. Consequently, pharmaceutical manufacturers must try to motivate pharmacies to sell their own products by offering attractive purchasing conditions.
- 199. Since in Great Britain generics are priced efficiently in competition, the main market drivers focus on supply and demand. Consequently, while in areas with high competition prices for generics are relatively low, a relatively high profitability is achieved in nichemarkets. This contrast between expensive and cheap generics is also apparent in the price erosion during the first fifteen quarters after the first generic enters the market. While a fixed price discount compared to the original medication actually does not exist in niche segments, the deduction in price increases to approximately 80.0%.<sup>75</sup> At the same time it can be found, that in the first fifteen quarters after the first generic enters the market, the replacement quota increases to approximately 75.0% for cheap generics and to approximately 50.0% for high price generics.<sup>76</sup>
- 200. In addition to the regulatory influences, one of the main other market drivers in Great Britain is the traditionally high demand for self-medication products. As a consequence, for manufacturers, the British branded market is characterized by high advertisement expenses which are used to promote products on the various sales platforms, including supermarkets, pharmacies and online platforms. Compared to other European healthcare systems, the British market is considered to be already very advanced in terms of replacing prescription pharmaceuticals with branded products.
- 201. In light of the BREXIT and the related uncertainties, however, it must also be taken into account that in the future the government healthcare system can be subject to potential budget

<sup>75</sup> The selling price of the original medication was not further adjusted after generics were introduced into the market; See Annex 9. Price level of generics compared to original medications.

<sup>76</sup> The sales volume of the original medication was not further adjusted after generics were introduced into the market See Annex 10. Sales volume replacement rate for generics.

restrictions, so that sales volumes of pharmaceutical companies could accordingly be negatively influenced.

## STADAs current market position

- 202. STADA is among the leading suppliers of branded products in the British health care market. While in the past, STADA was not able to establish itself in the generics segment, the company plans to substantially expand its business activities in this field in the future.
- 203. In recent years, the market position was solidified by means of various acquisitions. In this context, important transactions included the acquisition of the subsidiary Internis Pharmaceuticals Ltd. in 2014, a leading supplier of vitamin D3 medications requiring prescriptions, as well as the acquisition of the dermatological series Flexitol in the same year.
- 204. In the coming years, STADAs most important branded products will be the pharmaceuticals Fultium (vitamins) and Hedrin (lice remedy). In addition to the sales volume generated by pharmaceuticals that were intended for the British market right from market launch, further sales growth is supposed to be generated from cross-selling activities.
- 205. In addition to traditional branded products, STADA entered the field of vaping (quitting smoking) by acquiring the company Socialites in December 2015. While the company has succeeded in establishing vaping products in Great Britain, the management plans to increase sales by also expanding the business in other European countries. The success of this strategy, however, will especially depend on the regulatory environment and the issue of whether vaping products will actually be recognized as pharmaceuticals, so that in the future doctors will be permitted to recommend this type of product.
- 206. Contrary to the branded products business, in recent years, sales in the generics segment only played a subordinate role for STADA in the British market. However, in the near future the company plans to substantially expand the segment and establish a new market presence under the name STADA UK Generics. In this regard, strategic considerations include, for example, a greater focus on tender contracts for public hospitals, where the company believes it has a good position due to the acquired expertise from other sales markets. At the product level, STADA plans to substantially expand the portfolio, whereby inside the generics pipeline the emphasis, related to molecules, will be put on new active substances, so that a higher profitability of generics can be expected in the coming years.
- 207. Overall, STADA expects to continue to grow in the British market. While in the past the branded products business became one of the most important growth drivers, in the upcoming years STADA plans to also expand in the generics segment.

## 2.3.4.4.3. Italy

Overview

208. In the year 2016, the market volume generated in the Italian pharmaceutical market was EUR 26.1 bn. and accordingly constituted the third largest market in the EU. While for the year

2017 the market volume is expected to reach EUR 27.7 bn., the average annual growth rate for the period 2017 to 2021 is 2.4%.

- 209. With a generic market share of 13,7% the Italian pharmaceutical market, Italy is one of the countries with the lowest relative portion of generic products in Europe. The main reason for the low portion of generics in Italy is the traditionally high demand for original medications and branded generics. In the year 2016, the total market volume of generics was EUR 3.6 bn., which corresponds to an average annual growth of 0.8% since the year 2011. The annual growth in the first years was approximately 11.4% and hence stronger compared to the end of the reviewed time period. The most important growth drivers were the low relative share of generic products which continuously increased, however, in recent years due to general budget restrictions. While the market volume in the year 2017 will probably be EUR 3.8 bn., an average annual growth of 4.4% is expected in the years 2017 to 2021, so that the total market volume in the year 2021 will probably increase to EUR 4.6 bn. In the beginning of the year 2017, the five largest market participants included the companies Mylan Inc., Teva Ltd., Novartis AG, STADA and Doc Generics Ltd., which had an aggregate market share of approximately 32.0%. Based on sales, in the last years STADA was able to establish itself as the fourth largest supplier in the Italian generics market and maintain this position for many years.
- 210. Branded products generated a portion of sales of 6.0% of the Italian pharmaceutical market in the year 2016. The total market volume in the year 2016 was EUR 1.6 bn., which corresponds to an average annual growth of 0.8% since the year 2011. While the market volume will likely be EUR 1.6 bn. in the year 2017, an average annual growth of 1.3% is expected in the years 2017 to 2021, so that the market volume will probably increase to EUR 1.7 bn in the year 2021. Contrary to other European markets, there is a concentration of the market participants on just a few companies.

Regulatory environment for determining prices

211. In general, the Italian state guarantees its citizens a basic health insurance to satisfy the general medical needs. The price level for original medications and generics which pharmaceutical companies can apply in Italy is controlled by the Italian medicines authority (AIFA) which reimburses approximately 65.0% of all medications licensed in Italy. In this regard, the pricing is based on a reference price system which is comparable to other European standards. In principle, the costs for pharmaceuticals are only reimbursed if the respective products are essential prescription medications, such as products to treat chronic illnesses, or if the products can only be administered under the supervision of experts. Contrary to this, pharmaceuticals

<sup>577</sup> See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

<sup>78</sup> See http://www.pharmavoice.com/article/2015-09-italy/, Stand vom 27. November 2017; datatable, QuintilesIMS, Market Prognosis 2017-2021 -Generics Market

<sup>&</sup>lt;sup>79</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>80</sup> See data table. QuintilesIMS Market Prognosis 2017-2021 - OTC Market.

<sup>81</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 – OTC Market.

which are not reimbursed by governmental authorities include non prescription drugs or pharmaceuticals which are nots classified as essential medication.

- 212. The determination of the fixed amount is made predominately on the basis of criteria such as the therapeutic value, European reference prices, potential groups of patients and the degree of therapeutic innovation. As soon as an agreement between the government authorities and the manufacturer is reached, the agreement is valid for 24 months, whereby publication of current fixed amounts takes place monthly. The general guide for determining prices is that the gross price covers the price of the manufacturer and additional premiums for trading and pharmacies. The determination of the fixed amount for generics is not different to the process of other medications. The general rule is, however, that patients must be granted a fixed price reduction of at least 20,0% compared to the original medication. However, in the Italian market it can be observed, that the actual price deduction for newly introduced generics is approximately 60.0%. Aside from the fixed amount defined by the government, however, in Italy it is also common that the selling price of individual generics is above the fixed amount. In that case, however, patients who receive a prescription for such products must pay the difference to the reimbursable price by themselves. For patients a situation like this this only occurs, if doctors explicitly prescribe to high priced geenric, so that pharmacies cannot substitute the prescriped drug with a cheaper alternative.
- 213. Pharmaceuticals which are not reimbursed are also subject to a general control in order to avoid abuse. Consequently, manufacturers of such product must pay attention that potential conducted price increases for medications, which are not eligible for reimbursement, are exclusively applied in uneven years and that the increase does not exceed the target inflation rate.

## General market drivers

- 214. Against the background that doctors in Italy can prescribe the product as well as the active substance, suppliers especially use efforts to give doctors a positive impression of the product features using brand identities. Additionally, manufacturers must also involve pharmacies in their distribution activities.
- 215. Although in Italy the demand power of pharmacies is supposedly limited due to a strongly fragmented structure, pharmacies normally expect price discounts or similar incentives from manufacturers, which are usually reflected in the delivery of branded products. Since in the year 2017 the Italian government has also permitted the business activity of pharmacy chains, the negotiation position of pharmacies could improve even more.<sup>82</sup>
- 216. Although in principle the Italian healthcare system prefers generics, branded protective pharmaceuticals are well established among the consumers. This trend is driven, among other factors, also by the way doctors issue prescriptions. Overall, however, a continuing increase in the generics volumes can be identified, which also involves participation by the patients in payment for original products. Compared to other European countries, the price erosion in Italy

<sup>82</sup> See Quintiles IMS, Consumer Health OTC Review, 2017, p. 188.

is relatively moderate, so that in the first fifteen quarters after a generic has been introduced into the market, the price discount increases form approximately 35.0% to approximately 45.0% in the case of expensive generics, and from approximately 55.0% to approximately 70.0% in case of cheap generics. <sup>83</sup> In light of the low generics penetration rate, a low replacement quota is to be expected. When observing the relative portion of generics in the first fifteen quarters after the market entry of a generic, however, it is apparent that the replacement quota in terms of sales volumes is only low in the case of cheap generics at approximately 20.0%. High priced generics, however, have a quota of replacement in terms of sales volumes of approximately 100,0%, so that after fifteen quarters, the sales volume of generics corresponds to the original medications. <sup>84</sup>

## STADAs current market position

- 217. STADA is one of the leading supplier of generics in the Italian healthcare market. STADA is also present with branded products, whereby the company was able to increase the field of cold remedies in the past, especially by procuring licenses.
- 218. In the generics market, STADA is generally able to compete in a relatively stable market and act as the fourth largest supplier. In light of the relatively strong market position of pharmacies STADA is in a good position with its own distribution structure to also profit in the future from further growth in the market. The three most important generics in the year 2016 were the medications Pantoprazole (proton pump inhibitor), Lansoprazole (proton pump inhibitor) and Repaglinide (stomach therapy), which in each case had significant market shares in their respective reference market. In the future, it is expected that particularly the medication Pantoprazole (stomach problems) will continue to grow. In addition to established generics, STADA also plans to introduce new pharmaceuticals into the market. Regarding the product pipeline, above all STADA focuses on new groups of active substances so that as a consequence a higher profitability can be expected.
- 219. STADAs business activity in the branded products segment was marked in the recent past by the termination of a distribution contract. Against this background, the company plans to internally manage the distribution in the future and relay on the existing structures of the subsidiary Crinos S.p.A. The expectation in the product portfolio is that the products Soldesam (anti-inflammatory), Hiudoid (dermatology), Valpinax (psycho pharmaceutical) and Keraflox (antibiotic) will be among the most important medications. In this context, the sales volume and is also expected to be driven by targeted advertising measures.
- 220. The overall expectation is that STADA will retain its established market position in the Italian generics market and will profit from future market growth. The success of the branded

The selling price of the original medication was not further adjusted after generics were introduced into the market; See Annex 9. Price level of generics compared to original medications.

The sales volume of the original medication was not further adjusted after generics were introduced into the market; See Annex 10. Sales volume replacement rate for generics.

products segment will primarily depend on the extent to which STADA is able to compensate the loss of the external distribution partner in the future.

### 2.3.4.4.4. France

### Overview

- <sup>221</sup>. The French pharmaceutical market volume was EUR 29.9 bn in 2016 and represented the second largest market within the EU. While in 2017 a market volume of EUR 30.9 bn is expected, the average annual growth rate for the period 2017 to 2021 is approximately 2.2%.<sup>85</sup>
- 222. With a generics share of approximately 19.8% in the French pharmaceutical market, France is one of the countries in Europe with a relatively high generics market share. The generics market share was EUR 5.9 bn in 2016, which corresponds to an average annual growth of 5.6% since 2011. During this observed period, the growth weakened from 12.8% to 5.1%, whereby this development was primarily based on the increase in intensity in competition and the related price wars. While a market volume of EUR 6.3 bn is expected in 2017, an average annual growth of 4.7% is expected in the years 2017 to 2021, so that the French generics market is supposed to generate a market volume in an amount of EUR 7.5 bn at the end of the period. The companies Mylan Inc. and Servier S.A.S were the two largest participants in the market at the beginning of 2017 and had an aggregate market share of approximately ca. 40,0%. STADA itself only has the eighth place in the French generics market based on total sales, whereby the company was able to maintain this position throughout the past.
- 223. Branded products had a market volume of approximately 11.1% of the French pharmaceutical market in 2016. The market volume was EUR 3.3 bn in 2016, which corresponds to an average annual decline in the amount of 1.8% since 2011. As is also a characteristic in the generics market, the French branded products market is characterized by a high intensity of competition, where the price level is determined above all from large volume orders of established market participants. While the market volume will likely be EUR 3.3 bn in 2017, a further annual decrease in the amount of 1.4% is expected on average in the years 2017 to 2021, so that at the end of the period the French branded products market is supposed to generate a market volume in the amount of EUR 3.1 bn. 88 The five largest market participants included the companies Sanofi S.A., Pierre Fabre S.A., Bristol-Myers Corp., Mylan Inc. and Bayer AG in 2016 which together achieved a market share in the amount of approximately 42.7%.

## Regulatory environment for determining prices

224. The French healthcare system is mainly based on the statutory health insurance for approximately 90.0% of the French population and offers almost a complete supply of pharmaceuticals. Similar to the situation in Germany, health insurance is a requirement for citizens in France. In addition to the statutory health insurance, approximately 95.0% of the

<sup>85</sup> See date table QuintilesIMS - Market Prognosis 2017-2021, May 2017, p. 50; The market volume of total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

<sup>86</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>87</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

<sup>88</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - OTC Market.

population have private supplemental insurance which covers further potential burdens with deductibles. In light of the fact that the French government acts as a regulatory institution and at the same time as the largest customer in the national pharmaceuticals market, the French healthcare system is generally a very high-end and cost efficient system.

- 225. As a general rule, the price control for pharmaceuticals market in France is carried out by the French health ministry. Similar to other EU countries, the determination of fixed prices is based on different product classifications for which the price level is oriented on international reference prices. Since the actual fixed amount, however, is determined by the French ministry of health, there can be price adjustments at any time as a result of governmental budget goals. The determination of a fixed amount for generics is not different from the process for other medications which require prescriptions. The general rule, however, is that patients are granted at least a fixed price discount in the amount of 60.0% compared to the original medication and that this discount increases by a further 7.0% after an eighteen months term.
- 226. The decision about whether patients finally have an original medication or a generic is normally made by the pharmacies who are generally granted the right to also distribute substitutes without regard to the prescription. Due to the target ratios and attractive price discounts on the fixed amount determined by the government, pharmacies have incentives to sell the more cost efficient generics. Especially the price discount from the fixed price was further intensified by the regulator in the past by expanding it from originally 17.0% to 40.0%. Furthermore, the indicated penetration with generics is also controlled through doctors who must take into account above all active substances covered by corresponding generics when issuing prescriptions.

### General market drivers

- 227. As a result of the central role of the French government in the healthcare system, politics plays an important role in the development of the market. National cost saving programs were established in 2017 so that expenditures for generics had to be reduced by EUR 340.0 m, which led to an increased pressure on the manufacturers' margins in light of the government healthcare system and the resulting market power of the French government as the customer and the health insurance organization. The French health ministry expects further general savings in the amount of EUR 260.0 m in 2018 which are supposed to be achieved by lower fixed amounts for pharmaceuticals in general.
- 228. In addition to the influence of the government, pharmacies also have a strong market position. Although, similar to Germany or Spain, no pharmacy chains are permitted in France, the pharmacies have a substantial influence on the granted price discounts and special conditions due to joint purchasing groups. Especially manufacturers with large product portfolios, economies of scale and established distribution channels are active in this environment.
- 229. The French market for branded products is generally marked by a very intensive competition in all product segments. A successful competition in the market is linked above all to a strong

<sup>89</sup> See Generic Medicines, European Generic Medicines Markets, 2016, p. 7.

product portfolio with strong brand identification and a correspondingly high advertising expense. In order for the advertised products to also be actually available for customers, pharmacies have a major role in this regard and must continuously store branded products.

## STADA's current market position

- all large suppliers dominate the pharmaceutical market due to economies of scale. Against the background that STADA is one of the smaller suppliers in the French pharmaceutical market, the company is often not able to win in a competitive price war. While the company is currently trying to reduce its inventories, STADA has the long-term risk of losing market shares despite stabilizing margins, due to having a product portfolio which is too small.
- 231. Since the generics business is currently suffering above all from intense price competition, the company plans in the future to develop new partnerships, in order to secure better access to pharmacies. Furthermore, the branded products segment virtually no longer has any significant role since the sale of the subsidiary Laboratoire Lero SAS as well as the product portfolio Keal and Sulfarlem.
- 232. Overall, the business activity in France is above all characterized by STADA's weak market positioning which prevents the company from acting successfully in competitive price wars.

## 2.3.4.4.5. Spain

## Overview

- 233. The market volume generated in the Spanish pharmaceutical market was EUR 19.1 bn in 2016. While the market volume is expected to be EUR 19.5 bn in 2017, the average annual growth rate for the period 2017 to 2021 is 2.6%.
- 234. With a generics market share of approx. 16.0% in the Spanish pharmaceutical market, Spain is one of the countries in Europe with a relatively low generics market share. The generics market volume was EUR 3.0 bn in 2016, which corresponds to an annual growth of 5.6% since 2011. The growth was distributed in this period above all in the recent years, whereby the main driver for growth was the result of regulation and related to the EU guideline requiring that patients be enabled to have access to highly developed pharmaceuticals by means of high generics penetration. While the market volume will likely be EUR 3.3 bn in 2017, an average annual growth in the amount of 5.2% is expected in the years 2017 to 2021, so that at the end of the period, the Spanish generics market is supposed to generate market volume in the amount of EUR 4.0 bn. The five largest market participants included the companies Cinfa S.A., STADA, Normon S.A., Kern Pharma SL and Novartis AG at the beginning of 2017, which together had a market share in the amount of approx. 38.0%. STADA itself acts in the Spanish generics market

See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

<sup>91</sup> See data table, QuintilesIMS, Market Prognosis 2017-2021 - Generics Market.

<sup>92</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

currently as the second largest manufacturer based on total sales, whereby the company consistently had the third ranking in the previous years.

235. Branded products had a market share of 3.4% in the Spanish pharmaceutical market in 2016. The market volume was EUR 0.6 bn in 2016, which corresponds to an annual decline of 1.3% since 2011. While the market volume will likely also be EUR 0.6 bn in 2017, an average annual growth of 0.1% is expected in the years 2017 to 2021, so that also at the end of the analyzed time period, the Spanish market for branded products is supposed to continue to generate market volume in the amount of EUR 0.6 bn.<sup>93</sup> The market for branded products is relatively weak in Spain because doctors were not permitted to recommend branded products or similar pharmaceuticals in the past. In light of the potential cost savings resulting from branded products based on omitted refund claims, however, the expectation is that medications which do not require prescriptions can be marketed more strongly in the future.<sup>94</sup> The largest market participants included the companies Johnson & Johnson Corp., GlaxoSmithKline Plc., Almirall S.A., Bayer AG and Sanofi S.A. at the beginning of 2017 which together had a market share of approx. 40.0%.

## Regulatory environment for determining prices

- 236. The Spanish healthcare system is in principle characterized by the local communities, so that individual administrative districts can independently regulate the healthcare market in their jurisdictions. Aside from this fragmented structure, the situation for manufacturers of pharmaceuticals is that they are only considered in the selection of products by the public Spanish health insurance organization if the respective medications have been licensed in advance by the national healthcare authorities.
- 237. Statutory price regulation involves in general only pharmaceuticals that require prescriptions that are sold to the public health insurance organization. The relevant fixed amount in this regard is based on the price level for a pre-defined product group which consists of different active substances and methods of administration. Instead of simply assuming flat price levels of the product groups, the fixed amounts are determined individually for individual pharmaceuticals and are based within their class again on the product which has the best relationship with regard to costs, treatment and length of use. While the reimbursement price determined on the basis of the reference price system defines the price level, which benefits the manufacturers, the final fixed amount takes into account additional surcharges in the form of profit margins. The surcharge taken into account here benefits the pharmacies and the dealers. The determined fixed amount is controlled and adjusted as needed once annually by the Spanish health ministry. Furthermore, the rule is that the maximum fixed amount cannot exceed the list prices which patients pay who are not insured under the public healthcare system.
- 238. The selection of pharmaceuticals sold to patients can be made both by the treating doctors as well as by the pharmacies. This divided decision-making is based on the fact that prescribing

<sup>93</sup> See data table, QuintilesIMS Market Prognosis 2017-2021 - OTC Market.

<sup>94</sup> See Quintiles IMS, Consumer Health OTC Review, 2017, p. 212.

doctors besides the active substance to be administered may also write down specific products when issuing the prescription. Since the Spanish healthcare system does not differentiate between generics and original medications and reimburses the costs for both classes of pharmaceuticals, both doctors as well as pharmacies normally have no incentive to sell generics, despite the fixed price difference in the amount of 40.0%. This is also explained by the fact that the producers of original medications must adapt their price level to the price level for generics. The patients were previously also not permitted to themselves cover the differences between the fixed amount and the selling price.<sup>95</sup>

239. As is similar in the generics market in Germany, price is also controlled through tender contracts, whereby this mechanism is used exclusively in the case of selling pharmaceuticals to public operated hospitals. Tender contracts in the private sector, however, are permitted at the present time only in the administrative district of Andalusia. Against the background of promoting public health, however, the assumption is that this instrument for lowering pharmaceutical prices will also be applied in other regions in the long term.

## General market drivers

- 240. The same treatment in the regulations for generics and original medications has meant that the generics penetration has only been very slow in Spain in the past because there was no price benefit compared to the original medication. As a consequence, based on the relatively low penetration rate for generics, there is no surprise that the price discount on the fixed amount for high priced generics increases in the first fifteen quarters after the market entry of the first generic from approx. 20.0% to approx. 55.0% and, thus, is more moderate than, for example, in Germany or Great Britain. <sup>96</sup> A similar development can be observed also in the case of cheap generics, where the price deduction from the fixed amounts increases from approx. 40.0% to approx. 55.0%. The low penetration with generics is also apparent in the replacement rate for generics. While this increases to only approx. 35.0% in the first fifteen quarters after the market entry of a generic in the case of high priced generics, <sup>97</sup> the portion of cheap generics in the same observed period grows to approx. 40.0%. <sup>98</sup> A new regulatory impulse which could counter this trend is the idea of binding the fixed amount in general to generics instead of individual prices, so that patients may themselves pay the potential difference in price when an original medication is prescribed.
- 241. Growth drivers in the branded products market segment in the past were especially the original pharmaceuticals requiring prescriptions which were later converted to branded products. Furthermore, the growth in the amount of 5.6% within the last five years was driven by other factors, such as increased advertising activities, new entries into the market by companies and a strengthened distribution activity by pharmacies. In light of the forecast lower growth rates, however, it must be found that the very high pressure on competition, in the meantime, and

<sup>95</sup> See Market Review, European Generic Medicines Markets, 2016, p. 16.

The selling price of the original medication was not further adjusted after generics were introduced into the market; Annex 9. Price level of generics compared to original medications.

<sup>97</sup> The sales volume of the original medication was not further adjusted after generics were introduced into the market; Annex 9. Price level of generics compared to original medications.

<sup>98</sup> See Annex 10. Sales volume replacement rate for generics.

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the regulatory restrictions combined with recommendations of doctors have led to a substantial price war and this normally cannot be compensated with higher sales volumes.

## STADA's current market position

- 242. STADA concentrates in the Spanish healthcare market primarily on the generics segment, whereby the business with branded products is also supposed to be expanded intensively in the future. Since the pharmaceutical prices in the Spanish healthcare system are today already among the lowest in Europe and the general pressure on prices is also supposed to continue in the future, the expectation is that STADA's total sales in Spain will remain stable as far as possible in the following years.
- 243. In the past, STADA successfully established itself in the Spanish generics market and was able to expand its own market share. Independent from this market position, however, the expectation is that the total sales will at first remain relatively stable in the coming years due to increased intensity of competition and will increase slightly afterwards. A decisive driver in this regard will be the successful market introduction of biosimilars, which is planned for 2019 and is supposed to occur above all with hospitals. The future growth with regard to the regulatory aspects will especially depend on whether the Spanish healthcare system increasingly uses tender contracts in the long term and that STADA can accordingly profit from its already established network. The three most important generics in 2016 in the Spanish market were the pharmaceuticals Atorvastatin (treatment of hypocholesteremia), Valsartan (ACE inhibitor) and Omeprazole (proton pump inhibitor), which each had significant market shares in their reference markets. In addition to already established products, STADA also plans to introduce new generics into the market. As can be seen in the sales markets in Great Britain or Italy, STADA is focusing in Spain on the development of imitation medications which include new molecules and, as a consequence, are characterized by higher profitability and growth in total sales.
- <sup>244</sup>. In light of the competitive generics business, STADA plans in the future to increasingly focus on the business with branded products. The main drivers of this planned development are the future investments in new brands, for example Neositrin (head lice remedy), Benenox (sleep disorders) or ArterioK2 (dietary supplement).
- 245. Overall, STADA's business activities in Spain are driven to a great extent by regulatory influences which had a negative influence in the past both on the generics as well as the business with branded products. The future development of STADA will accordingly above all depend on the extent to which the regulatory environment changes and, for example, price differences between generics and original medications are permitted.

## 2.3.4.4.6. Belgium

Overview

- $^{246}$ . The market volume generated in the Belgium pharmaceutical market in 2016 was EUR 4.9 bn. While a market volume in the amount of EUR 5.0 bn is expected for 2017, the average annual growth rate for the period 2017 to 2021 is 1.4%.  $^{99}$
- 247. Belgium is among the countries in Europe with relatively low market share in generics of 12.0% in the Belgian pharmaceutical market. The market volume of generics was EUR 0.6 bn in 2016, which corresponds to an annual growth of 3.7% since 2011. During this observed time period, the actual rate of growth fluctuated between 7.0% and 2.0%, whereby the main drivers for growth throughout the years were the continuous budget reductions in the public healthcare system. While the market volume in 2017 will most likely be EUR 0.6 m, average annual growth in the amount of 2.9% is expected in 2017 to 2021, so that at the end of the period the Belgian generics market is supposed to generate a market volume in the amount of EUR 0.7 bn. At the beginning of 2017, the two largest market participants include the companies STADA and Novartis AG, which together have a market share of approx. 50.0%. STADA itself is the consistent leading manufacturers in the Belgian generics market based on total sales.
- 248. In 2016, branded products had a market share in the amount of approx. 11.8% of the Belgian pharmaceutical market. In 2016, the market volume was EUR 0.6 bn, which corresponds to an average growth of 1.6% since 2011. While the market volume will also likely be EUR 0.6 bn in 2017, average annual growth in the amount of 2.0% is expected in 2017 to 2021, so that at the end of the analyzed period the Belgian market for branded products is supposed to continue to have a market volume in the amount of EUR 0.6 bn. <sup>102</sup> At the beginning of 2017, the five largest market participants included the companies Johnson & Johnson Corp., GlaxoSmithKline PLC, Bristol-Meyers Corp., Reckitt Benckiser PLC and SMB Pharma NV, which together have a market share in the amount of approx. 40.0%.

Regulatory environment for determining prices

- 249. The Belgian healthcare system is based on private and a statutory health insurances which cover the costs incurred for prescription pharmaceuticals. In addition to the statutory health insurance, a large share of the population also has private supplemental insurance which covers potential burdens resulting from deductibles and additional health services.
- 250. As a general rule, the price control of pharmaceuticals marketed in Belgium is carried out by the Belgian Ministry of Economics. Similar to other EU countries, the determination of fixed prices is based on different product classifications, for which the price level can correspond in

<sup>99</sup> See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 50; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

See data table - QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

See data table - QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

See data table - QuintilesIMS Market Prognosis 2017-2021 - OTC Market.

the maximum to the international reference prices.<sup>103</sup> Against the background of an annual fixed budget for healthcare expenditures, the actual fixed amounts are negotiated annually between industry representatives and the Ministry of Economics, so that there can be deviations compared to the international reference prices. The determination of the fixed amount for generics does not differ from the process for other prescription pharmaceuticals.

251. In addition to the provision with regard to price regulation, the expenditures for the healthcare system are controlled through a pre-defined prescription policy. In this context, doctors in Belgium must write at least 50.0% of their prescriptions for cost-efficient pharmaceuticals. The classification as a cheap pharmaceutical does not matter whether a generic or an original pharmaceutical is involved.

#### Market drivers

- 252. In light of the moderate budget development for healthcare expenditures, a further growth of generics is anticipated. However, since the pharmacies are not permitted to independently sell generics instead of original pharmaceuticals, especially the doctors have a decisive role in the future generics penetration. While the generics penetration with regard to pharmaceutical sales in the form of prescriptions increased in recent years , the manufacturers of original pharmaceuticals continued to dominate in the sale of pharmaceuticals to hospitals.
- 253. As is the situation in other countries with low generics penetration rates, the price erosion in the first fifteen quarters after the market entry of a generic are less dramatic in Belgium than, for example, in Germany or Great Britain. It can be found in this regard that the price deduction from the fixed amount increases for both high priced as well as cheap products from approx. 40.0% at market entry to approx. 65.0%. A similar situation arises with regard to the displacement quota, where in the first fifteen quarters after the market entry of a generic, the share of high priced generics increases to approx. 15.0% and the share of cheap generics increases to approx. 20.0%. 105
- 254. Branded products are mainly distributed through pharmacies. Less regulated products, for example, food supplements, are slowly also being distributed at other sales locations. In the future, new distribution channels, such as online platforms, and an increasing demand resulting from a modern lifestyle of the target groups will be important drivers of growth.

#### STADA's current market position

- 255. In the Belgian healthcare market, STADA primarily concentrates on the generics segment, whereby the business with branded products is also supposed to be expanded in the future.
- 256. STADA has a market share of approx. 40.0% and plays a dominant role in the Belgian generics market. The assumption is that STADA will profit from generally increasing generics

See Market Review, European Generic Medicines Markets, 2016, p. 7.

The selling price of the original medication was not further adjusted after generics were introduced into the market; Annex 9. Price level of generics compared to original medications

<sup>105</sup> The sales volume of the original medication was not further adjusted after generics were introduced into the market; Annex 10. Sales volume replacement rate for generics.

penetration. At the same time, in the financial year 2016, STADA separated from the long-standing sales partner OMEGA in order to be able to process the market with sole responsibility for sales. The company already achieved initial success in the financial year 2017, where the own distribution activities were able to achieve positive volume effects compared to the previous year at a decreasing discount quota at the same time. <sup>106</sup> The three most important generics in 2016 in the Belgian market were the pharmaceuticals Alprazolam (anxiety and panic disorders), Bisoprolol (high blood pressure) and Zolpidem (sleep disorders), which in each case have significant market shares in their reference markets. In addition to the growth of already established generics, the growth will also be driven by generics in the product pipeline. As is the case in Great Britain or Italy, STADA is focusing on the development of imitation pharmaceuticals which contain complex active substances and, as a consequence, are characterized by higher profitability as well as growth in total sales.

- 257. STADA's growth in the segment of branded products is primarily based on the generally expected market growth. Under the distribution strategy, STADA plans to achieve increasing total sales on the basis of increased brand differentiation.
- 258. The expectation overall is that STADA will also profit in the future from the general growth in the generics market as a result of STADA's established market position.

#### 2.3.4.4.7. Russia

Overview

- 259. The market volume generated in the Russian pharmaceutical market in 2016 was EUR 11.9 bn. While a market volume in the amount of EUR 13,0 bn is expected for 2017, the average annual growth rate for the period 2017 to 2021 is approximately 8.2%.  $^{107}$
- 260. Generics represent a major class of pharmaceuticals in the Russian healthcare market with a generics market share of approximately 20.8% of the Russian pharmaceutical market. The market volume of generics in 2016 were EUR 2.5 bn, which corresponds to an average annual growth in the amount of 12.3% since 2011. During this reviewed time period, the annual growth in part fluctuated considerably, whereby the actual growth rate was up to 18.5% especially in 2014 and 2015. The main reason for this development involved above all hospitals which cover approximately 80% of their needs for pharmaceuticals with generics. <sup>108</sup>
- 261. While the market volume will probably be EUR 2.7 bn in 2017, an average annual growth in the amount of 6,8% is expected in 2017 to 2021, so that at the end of the period, the Russian generics market is supposed to generate a market volume in the amount of EUR 3.4 bn.<sup>109</sup> The assumption, similar to the situation in Great Britain is, that the growth will slow down in light of the increasing generics market share of the entire pharmaceutical market and the related

 $<sup>^{106}\,\,</sup>$  See STADA, Interim Report for the first nine months, November 2017, p. 14.

See QuintilesIMS, Market Prognosis 2017-2021, May 2017, p. 42; The market volume of the total pharmaceuticals market was converted from USD to EUR at a currency exchange rate of EUR/USD 1.08.

See https://www.rbth.com/economics/2013/09/06/indian\_companies\_leave\_footprints\_on\_russian\_generic\_drug\_market\_29159, status 27 November 2017, data table - QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

See data table - QuintilesIMS Market Prognosis 2017-2021 - Generics Market.

saturation. At the beginning of 2017, the five largest market participants include the companies KRKA d.d., Sanofi S.A., Gedeon Richter AG, STADA and Teva Ltd. which together have a market share in the amount of approximately 20%. STADA itself was able to constantly improve its market position in the last years in the Russian generics market and currently is at fourth place in terms of total sales

262. Branded products had a market share in the amount of approximately 32.1% of the Russian pharmaceutical market in 2016. The market volume in 2016 was EUR 3.9 bn which corresponds to annual growth in the amount of 10.8% since 2011. While the market volume in 2017 will most likely be EUR 4.0 bn, average annual growth in the amount of 5.6% is expected in 2017 to 2021, so that at the end of the period, the Russian market for branded products is supposed to generate a market volume in the amount of EUR 5.0 bn. 110 At the beginning of 2017, the largest participants in the market are currently the companies OTCPharm OJSC, Bayer AG, STADA, Sanofi S.A. and GlaxoSmithKline PLC.

#### Regulatory environment for determining prices

263. The general situation in Russia is, like in most EU countries, that there are statutory restrictions on the pricing of primarily prescription pharmaceuticals. However, the type of reimbursement in Russia compared with the EU depends on pre-defined patient groups, whereby a differentiation is made between hospital treatment and treatment outside the hospitals. Pharmaceuticals which are available to patients in hospital treatments must all be contained in the governmental "Vital and Essential Pharmaceuticals" (VEP) list, which also determines the price level for the corresponding pharmaceuticals. Pharmaceuticals which are not purchased as part of hospitalization, however, must normally be paid privately by the individual. Pharmaceutical manufacturers who are included in the VEP list distribute their products under public tender contracts either directly to the hospitals or to pharmacies recognized by the government or through the wholesale trade which participates in the corresponding tenders.

#### Market drivers

- 264. In light of the fact that the statutory healthcare system in Russia is relatively underdeveloped and approximately 70.0% of pharmaceutical expenditures must be privately financed, the regulatory influences on the pharmaceuticals market are relatively small, especially for products which are not included in the VEP list. A revision of the Russian healthcare system could significantly increase the importance of regulatory pricing requirements for the manufacturers. In the context of a planned revision of the healthcare system by 2025, there are already today regional pilot projects which, for example, provide for reimbursement of 90.0% of the costs for pharmaceuticals and a reduction of the own portion of the price to 10.0% for cardiovascular pharmaceuticals.
- 265. Although Russia is one of the countries with a high generics penetration rate, the price erosion in the first fifteen quarters after the market entry of a generic is less strong than, for example,

 $<sup>^{110}</sup>$  See data table - QuintilesIMS Market Prognosis 2017-2021 — OTC Market.

<sup>111</sup> The few exceptions in which patients also are supported with reimbursements include patients with cost-intensive illnesses such as multiple sclerosis as well as orphans and small children.

in Germany. The price deduction on the fixed amount compared to the price of the original pharmaceuticalincreases both in the case of high priced as well as cheap products from approximately 40.0% at market entry to approximately 65.0%. A similar picture appears when considering the sales volume displacement quota, where the portion of high price generics increases to approximately 15.0% and the portion for cheap generics increases to approximately 20.0% in the first fifteen quarters after a generic entered the market.

- 266. Since there is currently still a high proportion of self-payers in Russia, the demand for generics also depends on the development of the GDB. In the recent past, the Ukraine crisis and the low prices for raw materials had a negative effect on the disposable household income and accordingly led in part to substantial decreases in sales in the pharmaceutical industry. Currency exchange rate effects must also be taken into account in this regard, which led in the recent past in part to a substantial sales slowdown when measured in Euro.
- 267. In addition to the macro-economic drivers on the demand side, pharmacies play a significant role in the sale and selection of pharmaceuticals, because they can sell and substitute prescription pharmaceuticals . In the context of a market environment with very intense competition, the manufacturers must accordingly grant large rebates to the pharmacies, in order to be even able to place pharmaceuticals in the market, whereby this market situation is even more amplified as a result of pharmacy chains.

### STADA's current market position

- 268. STADA is in general one of the leading suppliers of generics and branded products in the Russian pharmaceutical market, whereby the sales in Euro in recent years decreased due to the economic and political parameters as well as the strong devaluation of the local currency.
- 269. In light of the fact that STADA was able to establish itself in the Russian segment for branded products in the past, despite decrease in total sales when measured in Euro, and since STADA is the third largest supplier based on market share, the expectation in the future is also that this segment will decisively determine the development of STADA's business activities in Russia. In addition to improved economic parameters, the expectation is that above all STADA's product portfolio will in the future be one of the main drivers of total sales, whereby this depends primarily on the success of the branded products Snup (colds), Aqualor (colds), Vitaprost (prostate disease), among others.
- 270. The generics business was able to in part offset the downturn in sales of branded products in times of economic crisis and the decrease in purchasing power. Due to the expected positive economic development, however, the company plans to again focus more strongly on

 $<sup>^{112}</sup>$   $\,$  See Annex 9. Price level of generics compared to original medications.

See Annex 10. Sales volume replacement rate for generics.

- profitable generics and especially on the market of self-payers in the future. Generics from the central product development will also be introduced into the Russian market in the future.
- 271. Overall, it can be expected that STADA will continue to benefit from potential market growth in the future due to its established market position in the generics and branded products segment.. Since STADA generally has a strong product portfolio and country-specific distribution, a main driver of growth will above all be the economic development and the purchasing power of patients.

## 2.3.4.5. Conclusion about the development of the market

- 272. STADA currently has a broadly diversified portfolio both in generics as well as in branded products which is represented in all important European sales markets. The main growth drivers which will influence the global healthcare market in the future involve the demographic changes, improved healthcare systems and increasing disposable income in emerging countries. The markets are also characterized by a growing competitive environment in which, in addition to smaller and mid-size full range providers and special suppliers, increasingly also globally active pharmaceutical groups compete in existing and new markets. The main customers include, on the one hand, doctors and pharmacists, public hospitals and health insurance organizations, but also the end-consumers. The negotiating power of the customers has different strength depending on the country and the respective regulatory environment. While there is a high level of pressure on prices in the generics market due to the high regulatory influence, which can be offset by using economies of scale in a diversified product portfolio, the market for branded products is relatively liberal in its pricing. Here, distribution occurs through a strong branding with corresponding marketing expenses for differentiation of the brand.
- 273. The success of STADA in the generics market depends on the regulatory environment in the respective market in which there will be increasing demand in the future for cost-efficient generics due to limits on the budgets of the healthcare systems. As a result of the high negotiating power of public customers combined with a high degree of transparency in the market resulting from international pricing systems and fixed amounts, the pressure on prices in the generics market will continue to intensify despite the increasing sales volumes. Furthermore, the economies of scale generated with large sales volumes of the existing suppliers will substantially impede the market entry by new market participants, so that especially the established companies with international distribution structures and cross-selling effects will profit from the increasing sales volumes. Based on the described developments, the global pharmaceutical market will increase annually at approximately 4.9% from currently approximately EUR 1,000 bn. to approximately EUR 1,300.0 bn. in 2021. The expectation in the pharmaceutical market is that the generics market will increase on average by 8.0% annually in 2017 to 2021 and that the market volume will grow by approximately EUR 200.0 bn. in 2017 to more than EUR 272.0 bn. in 2021. Average annual growth in the amount of

<sup>114</sup> See no. 140.

<sup>&</sup>lt;sup>115</sup> See no. 141.

approximately 4.8% is expected for the global market for branded products in the same period of time, so that the market volume in this segment is supposed to increase from approximately EUR 89.0 bn. in 2017 to more than EUR 107.0 bn. in 2021.

- 274. In general, STADA has been able to establish itself in the past among the Top 5 market leaders in most core sales countries in at least one product segment. The company has a wide-ranging network, contacts to all relevant decision-makers, such as doctors, pharmacists or health insurance organizations, as well as distribution structures and can accordingly profit from the main drivers in the market.
- 275. In a manner analogous to the global pharmaceutical market, growth of sales volumes is being forecasted for STADA's core sales markets in a range of 1.4% to 8.2% annually in the period from 2017 to 2021, depending on the respective sales countries. The growth of the countries named in chapter 2.3.4.2 is on average at an annual rate of 3.6%. Based on the high demand for lower price generics, the expectation is that the generic business in STADA's most important sales markets will increase on average at an annual rate of 4.3% in 2017 to 2021 and, thus, still be above growth in the entire pharmaceutical market. While today there is already a high penetration with generics in markets such as Germany or Great Britain, countries such as Italy or Belgium will provide future impulses for growth. In Russia, where the healthcare system is currently still subject to less strong regulatory parameters, the future growth in generics will depend to a relatively strong degree on the economic parameters, such as the development of the GDP and the development of disposable income.
- 276. In addition to the generics segment, the expectation is that branded products segment will also grow in the future in STADA's European sales markets and that the market volume in 2017 to 2019 will increase annually between 0.1% and 5.6%. The countries France and Spain, where there is intense competition which subject the market participants to substantial pressure on prices, constitute the exception. The largest growth in the market in the amount of approximately 5.6% is expected for Russia. This growth, as in the generics segment, will be above all driven by the economic environment. When considering the Top 7 countries, average annual growth in the amount of 2.2% for branded products is expected for 2017 to 2021.
- 277. The expectation on an aggregated basis is that the generics and branded products markets in STADA's core sale countries will increase on average at an annual rate of 3.6% in the reviewed time period. The strongest growth is expected in the Russian sales market, where on average annual growth of 5.8% is expected in 2017 to 2021 for the combined generics and branded products market. However, this growth results both in the generics as well as the branded products segments.
- 278. Overall, STADA is in good position to profit from the growth of already established markets in the field of generics. Furthermore STADA will be able to develop their market shares in currently less established markets and markets where there is generally a low penetration rate for generics. The growth in volumes will continue to be offset by increasing pressure on prices and

<sup>&</sup>lt;sup>116</sup> See no. 142.

costs. STADA will also be able to profit from growth in new markets in the branded products segment. Although the price pressure is relatively small in this market, there is a much higher expense for distribution in order to develop the brand and position of the products with doctors and pharmacists.

## 2.3.5. Earnings position, assets and financial situation

279. The analysis of the earnings position, assets and financial position in the past constitute the starting point for analyzing the business planning and evaluating reasonableness. <sup>117</sup> Therefore, the consolidated business plan for the period 2018 to 2020 is already compared here to the adjusted historic numbers. The original business plan and its adjustments for valuation purposes for 2018 to 2020 will be comprehensively addressed in appendix 3 and 4. We describe the earnings position, assets and financial situation on the basis of the audited annual financial statements of STADA for 2014 to 2016. In order to describe the earnings position, assets and financial situation in 2017, we refer to an extrapolation (best estimate) as of October 2017.

See IDW S 1 in the version 2008, no. 72 as well as DVFA-Recommendations, 2012, p. 23.

### 2.3.5.1. Earnings position

The following overview represents the earnings position of STADA for 2014 to 2017 and the plan period for 2018 to 2020 under IFRS. $^{118}$ 

Adjusted profit & loss statement		Adjusted hi		Plan			
in EUR m	2014	2015	2016 E	BE 2017	2018	2019	2020
Total sales growth (yoy)	2,053.6	<b>2,115.1</b> 3.00%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%	<b>2,414.5</b> 4.79%	<b>2,520.8</b> 4.40%	<b>2,676.9</b> 6.19%
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9	-1,177.4	-1,190.9	-1,272.3
Gross profit	997.9	1,022.9	1,046.4	1,154.2	1,237.1	1,329.9	1,404.6
in % of total sales	48.6%	48.4%	48.9%	50.1%	51.2%	52.8%	52.5%
Selling, general and administration cost	-611.2	-658.7	-670.3	-726.3	-780.3	-811.0	-848.1
thereof selling expenses	-458.4	-482.6	-488.3	-526.2	-570.0	-611.9	-644.4
thereof general and administrative expenses	-152.8	-176.0	-182.0	-200.0	-210.3	-199.1	-203.7
Research and development cost	-56.9	-65.0	-65.1	-72.9	-85.6	-89.4	-99.5
Other operating income	15.8	17.0	11.8	46.0	2.7	1.7	0.6
Other operating expenses	-23.2	-31.0	-27.8	-71.2	-25.5	-25.8	-25.2
EBIT	322.4	285.3	295.1	329.9	348.4	405.4	432.4
in % of total sales	15.7%	13.5%	13.8%	14.3%	14.4%	16.1%	16.2%
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2	134.7	137.0	136.0
EBITDA	431.9	389.4	398.0	435.2	483.1	542.4	568.4
in % of total sales	21.0%	18.4%	18.6%	18.9%	20.0%	21.5%	21.2%
Financial results	-69.1	-64.4	-50.9	-42.8	-46.1	-44.1	-39.0
Income before taxes	253.3	220.9	244.2	287.1	302.3	361.3	393.5
in % of total sales	12.3%	10.4%	11.4%	12.5%	12.5%	14.3%	14.7%
Taxes on income	-61.4	-48.6	-58.4	-76.5	-83.1	-98.5	-105.1
Effective tax rate (in %)	24.2%	22.0%	23.9%	26.6%	27.5%	27.2%	26.7%
Net income / net loss for the year	191.9	172.3	185.8	210.6	219.2	262.9	288.4
in % of total sales	9.3%	8.1%	8.7%	9.1%	9.1%	10.4%	10.8%
Minority interest	5.6	6.5	8.5	4.7	=	=	-

### Adjustment of the historic numbers

- 280. Pursuant to IDW S 1 and the DVFA-Recommendations, the operational surpluses (EBITDA and EBIT) must be adjusted when analyzing the past, in order to emphasize the causes for success that were effective in the past. The adjustments for extraordinary influences must be explicitly explained.
- 281. STADA applies two different types of adjustments in their external reporting. In the first place, the total sales are adjusted for currency exchange rate and so-called portfolio effects ("Adjustment of the historic growth in total sales"), in order to determine the organic growth in total sales which is not influenced by currency exchange rates and portfolio effects. Secondly, the earnings figures, such as EBIT or EBITDA, are adjusted for special effects and one-time effects based on not adjusted total sales earnings., based on the total sales which have not been adjusted for currency and portfolio effects ("Adjustment of the historic earnings position"). Only the latter is relevant for valuation purposes and the evaluation of reasonableness of the business plan.

<sup>118</sup> Adjusted figures are shown for the years 2014 to 2017. No adjustments were made for 2018 to 2020. Within the above described earning position, the item "other operating income" includes the results from at-equity participations.

## Adjustment of the historic earnings position

282. The adjustments of the earnings position for the period covering the financial years 2014 to 2017 are discussed below:

Adjusted profit & loss statement	Unadjusted historicals			Adjustments				Adjusted historicals				
in EUR m	2014	2015	2016	BE 2017	2014	2015	2016	BE 2017	2014	2015	2016	BE 2017
Total sales growth (yoy)	2,062.2	<b>2,115.1</b> 2.56%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%	- <b>8.7</b>	-	-	-	2,053.6	<b>2,115.1</b> 3.00%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%
Cost of goods sold	-1,070.4	-1,101.7	-1,105.3	-1,166.4	-14.8	-9.5	-12.5	-16.5	-1,055.7	-1,092.2	-1,092.8	-1,149.9
Gross profit in % of total sales	<b>991.8</b> 48.1%	<b>1,013.4</b> 47.9%	<b>1,033.9</b> 48.3%	<b>1,137.8</b> 49.4%	6.1	9.5 -	12.5	16.5	<b>997.9</b> 48.6%	<b>1,022.9</b> 48.4%	<b>1,046.4</b> 48.9%	<b>1,154.2</b> 50.1%
Selling, general and administration cost thereof selling expenses thereof general and administrative expenses	-611.2 -458.4 -152.8	-661.0 -482.6 -178.4	-671.0 -488.3 -182.7	-727.9 -526.9 -201.1	-	-2.3 - -2.3	-0.7 - -0.7	-1.7 0.6 -1.0	-611.2 -458.4 -152.8	-658.7 -482.6 -176.0	-670.3 -488.3 -182.0	-726.3 -526.2 -200.0
Research and development cost Other operating income Other operating expenses	-56.9 21.8 -155.2	-65.0 21.6 -83.7	-65.1 20.0 -138.9	-73.4 48.9 -158.7	-6.0 -132.0	-4.6 -52.7	- -8.2 -111.1	-0.5 -2.9 -87.5	-56.9 15.8 -23.2	-65.0 17.0 -31.0	-65.1 11.8 -27.8	-72.9 46.0 -71.2
EBIT in % of total sales	190.3 9.2%	<b>225.3</b> 10.7%	178.9 8.4%	<b>226.7</b> 9.8%	132.1	60.0	116.2	103.2	<b>322.4</b> 15.7%	<b>285.3</b> 13.5%	<b>295.1</b> 13.8%	<b>329.9</b> 14.3%
Total depreciations (throughout all functions)	228.5	151.8	182.7	161.0	-119.0	-47.8	-79.7	-55.8	109.5	104.1	102.9	105.2
EBITDA in % of total sales	<b>418.8</b> 20.3%	<b>377.1</b> 17.8%	<b>361.5</b> 16.9%	<b>387.8</b> 16.8%	13.1	12.2	36.5	47.4	<b>431.9</b> 21.0%	<b>389.4</b> 18.4%	<b>398.0</b> 18.6%	<b>435.2</b> 18.9%
Financial results Income before taxes	-65.6 <b>124.7</b>	-67.5 <b>157.8</b>	-51.4 <b>127.4</b>	-42.8 <b>183.9</b>	-3.6 <b>128.6</b>	3.1 <b>63.1</b>	0.5 <b>116.7</b>	103.2	-69.1 <b>253.3</b>	-64.4 <b>220.9</b>	-50.9 <b>244.2</b>	-42.8 <b>287.1</b>
in % of total sales	6.0%	7.5%	6.0%	8.0%	-	-	-	-	12.3%	10.4%	11.4%	12.5%
Taxes on income Effective tax rate (in %)	-54.6 43.8%	-40.6 25.8%	-31.9 25.1%	-51.8 28.2%	6.8	8.0	26.4	24.6	-61.4 24.2%	-48.6 22.0%	-58.4 23.9%	-76.5 26.6%
Net income / net loss for the year in % of total sales	<b>70.1</b> 3.4%	<b>117.2</b> 5.5%	<b>95.5</b> 4.5%	<b>132.1</b> 5.7%	121.7	55.1 -	90.3	78.6	<b>191.9</b> 9.3%	<b>172.3</b> 8.1%	<b>185.8</b> 8.7%	<b>210.6</b> 9.1%
Minority interest	5.5	6.8	9.6	5.5	0.1	-0.2	-1.1	-0.9	5.6	6.5	8.5	4.7

- 283. In the financial year 2014 an adjustments at the level of the total sales with respective effect on the cost of goods sold were made exclusively in the financial year 2014 in the amount of EUR 8.7 m.
- 284. Adjustments were made for cost of goods sold in 2014 to 2017 in respective amounts of EUR -14.8 m, EUR -9.5 m, EUR -12.5 m and EUR -16.5 m. These adjustments were primarily the result of special effects in all four reporting periods resulting from depreciation of assets under purchase price allocations that went beyond the level of the financial year 2013.
- 285. For the cost of goods sold in 2016 adjustments in connection with expenses due to the end of the distribution contract between STADA and the Belgian distribution partner OMEGA in the amount of EUR 1.1 m were made.
- 286. The adjustments in the amount of EUR 16.5 m in 2017 are analogous to the previous years and primarily relate to depreciation of assets under purchase price allocations in the amount of EUR 14.3 m.
- 287. Adjustments in administrative expenses were applied in 2015 and 2016 and amounted to EUR 2.3 m and EUR -0.7 m. While the reduced administrative cost in 2015 were the result of special effects caused by giving up the German logistics activities, the correction in 2016 had its basis in one-time special effects resulting from consulting services. The general administrative expenses in 2017 include EUR 1.0 m special effects for provisions for anniversaries and had to be adjusted.

- 288. The adjustments in other operating income in the financial years 2014 to 2017 were EUR -6.0 m, EUR -4.6 m, EUR -8.2 m and EUR -2.9 m.
- 289. Overall, the adjustments in other operating expenses in the financial years 2014 to 2017 were EUR -132.0 m, EUR -52.7 m, EUR -111.1 m and EUR -87.5 m.
- 290. The adjustments in the past financial years related primarily to depreciation throughout all functions as well as impairments which were netted with appreciations. They amounted in total for all functions to EUR -119.0 m in 2014, EUR -47.8 m in 2015, EUR -79.7 m in 2016 and EUR 55.8 m in 2017, <sup>119</sup> in each case primarily resulting from depreciation on purchase price allocations and impairment tests.
- 291. Based on corrections of value in connection with derivatives, adjustments were also made at the level of the financial results. While this adjustment had a negative effect of EUR -3.6 m in 2014, the adjustment improved the financial results in 2015 and 2016 in an amount of EUR 3.1 m and EUR 0.5 m respectively. According to the information provided to us, no adjustments were made in the financial results in 2017.
- The special effects in 2014 are primarily the result of extraordinary depreciation and impairments of fixed assets in the amount of EUR -105.6 m which resulted especially for goodwill in the generics segment in the CIS/Eastern Europe region as well as for goodwill in the branded products segment in the Asia & Pacific region. In connection to this, further immaterial assets were impaired because of a significantly changing interest and currency environment and persistently higher risks in the CIS/Eastern Europe region. In addition to the depreciation, currency exchange rate effects that affected results in the amount of EUR 25.0 m were adjusted in the financial year 2014. These resulted above all from changes in the Russian Ruble as well as other foreign currencies in the region CIS/Eastern Europe. The remaining amount of adjustments consists, among other items, of special effects such as legal disputes.
- 293. Extraordinary depreciations and impairments in 2015 and 2016 as well as currency exchange effects and foreign currency exchange rate fluctuations represented the main adjustment components for the other operating expenses. The other operating expenses decreased by EUR -33.2 m due to depreciation on intangible assets and EUR -16.9 m due to currency exchange rate effects. The same special effects had an effect in 2016 in an amount of EUR -65.5 m and EUR -13.8 m. Furthermore, special effects within the other operating expenses resulted in 2016 in connection with the end of the distribution agreement with OMEGA in the amount of EUR 7.7 m and the shutdown of the aesthetics business in the amount of EUR 10.3 m. This was offset by income in the amount of EUR 2.5 m because an expense assumed in the previous year in connection with the closure of a subsidiary was not realized. In addition to these business matters, adjustments in the amount of EUR -14.0 m were applied in the same period. These adjustments related primarily to compensation in the amount of

<sup>119</sup> In the financial year 2017 incl. write-ups to intangible assets as part of the fixed assets in the amount of EUR 2.9 m.

- EUR 7.2 m for the former chief executive officer as well as restructuring measures under corporate law in Germany in the amount of EUR 5.4 m.
- 294. The special effects in 2017 will probably be EUR -87.5 m and relate primarily to extraordinary depreciation and value adjustments in an amount of EUR -44.4 m, expenses for consulting services in the amount of EUR -27.8 m as well as expenses in connection with the compensation for a former member of the executive board and other senior management personnel in the amount of EUR -10.2 m. The extraordinary depreciation was allocated both to the generics as well as the branded products segments. The expenses for consulting services were a one-time special effect and relate to the takeover by Bain Capital and Cinven.
- 295. The decrease in the unadjusted tax quota in the last financial years was primarily the result of non-deductible goodwill impairments in CIS/Eastern Europe as well as Asia/Pacific & MENA in 2014, a reduction of the tax rate in Great Britain and the use of tax loss carry forwards in Germany. The adjustments for income taxes in 2014 to 2017 were EUR 6.8 m, EUR 8.0 m, EUR 26.4 m and EUR 24.6 m respectively. The tax effects on the special effects were calculated to correspond to the country where they occurred. Due to the great importance of depreciation adjustments, the largest portion of the adjusted income taxes were attributable to these special effects. Furthermore, the adjustments in 2014 were driven by currency effects in the CIS region and the product sales in France. While the adjustments that went beyond the depreciation effects in 2015 only related to the branded products segment and were caused primarily by the change in the tax rate in Great Britain, the adjustments to the income taxes in 2016, in addition to the currency effects in the CIS region and the change in tax rates in Great Britain, also resulted from restructuring measures under corporate law in Germany, the end of the OMEGA distribution contract and other individual positions. The adjustment to the tax effects in 2017 consisted primarily of dissolving tax provisions. Additionally, other tax effects resulted from the already listed special effects in case of impairment within the fixed assets, effects from purchase price allocations and consulting services.
- <sup>296</sup>. The special effects at the level of minorities in 2014 to 2017 were EUR 0.1 m, EUR -0.2 m, EUR -1.1 m and EUR -0.9 m. The adjustments relate especially to effects from the purchase price allocations for the Vietnamese companies.

## Description of the adjusted, historic earnings position

297. We describe the adjusted historic earnings position in the financial years 2014 to 2017 below at the level of the individual positions in the profit and loss statement:

Adjusted profit & loss statement	Adjusted historicals							
in EUR m	2014	2015	2016 B	E 2017				
Total sales growth (yoy)	<b>2,053.6</b>	<b>2,115.1</b> 3.00%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%				
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9				
Gross profit	997.9	1,022.9	1,046.4	1,154.2				
in % of total sales	48.6%	48.4%	48.9%	50.1%				
Selling, general and administration cost thereof selling expenses	-611.2 -458.4 -152.8	-658.7 -482.6 -176.0	-670.3 -488.3 -182.0	-726.3 -526.2 -200.0				
thereof general and administrative expenses Research and development cost	-152.8 -56.9	-176.0 -65.0	-182.0 -65.1	-200.0 -72.9				
Other operating income	15.8	-65.0 17.0	-65.1 11.8	46.0				
Other operating income Other operating expenses	-23.2	-31.0	-27.8	-71.2				
EBIT	322.4	285.3	295.1	329.9				
in % of total sales	15.7%	13.5%	13.8%	14.3%				
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2				
EBITDA	431.9	389.4	398.0	435.2				
in % of total sales	21.0%	18.4%	18.6%	18.9%				
Financial results	-69.1	-64.4	-50.9	-42.8				
Income before taxes	253.3	220.9	244.2	287.1				
in % of total sales	12.3%	10.4%	11.4%	12.5%				
Taxes on income	-61.4	-48.6	-58.4	-76.5				
Effective tax rate (in %)	24.2%	22.0%	23.9%	26.6%				
Net income / net loss for the year in % of total sales	<b>191.9</b> 9.3%	<b>172.3</b> 8.1%	<b>185.8</b> 8.7%	<b>210.6</b> 9.1%				
Minority interest	5.6	6.5	8.5	4.7				

- 298. At STADA, total sales result to the greatest extent from delivering products and only to a lower extent from royalties. The adjusted total sales of STADA increased from EUR 2.053.6 m in 2014 to EUR 2,115.1 m in 2015 and subsequently to EUR 2,139.2 m in 2016. The total sales continued to increase in 2017 and reached EUR 2,304.2 m. This corresponds for the financial years 2015, 2016 and 2017 to a relative increase in the amount of 3.0%, 1.1% and 7.7%. In the past, this growth was primarily the result of both generics as well as branded products which STADA was able to successfully place in its sales markets due to a competitive price level and a competitive product portfolio.
- <sup>299.</sup> The total sales non-adjusted for portfolio and currency effects at the segment level are shown as follows: <sup>120</sup>

## Segment specific revenue

Total sales		CAGR			
in EUR m	2014*	2015	2016	BE 2017	2014-2017
Total	2,053.6	2,115.1	2,139.2	2,304.2	3.9%
Generics	1,261.7	1,261.5	1,280.7	1,353.4	2.4%
Branded products	800.5	853.6	858.5	950.8	5.9%

<sup>120</sup> In the financial year 2014 the sales of the trading segment were reclassified to the generics segment. \* = Total sales in 2014 were adjusted, sales on a segment level were not adjusted.

- at relatively low growth rates. Growth was only able to be substantially increased in the financial year 2017 and was 5.7%, so that at the end of the observed time period the total sales were EUR 1,353.4 m. Important drivers for growth in this context were the sales markets in Belgium and Russia, whereby in Belgium above all volume effects and in Russia above all positive currency effects were responsible for the growth. During the observed period of time between the financial years 2014 to 2017, this corresponds to an annual average growth in total sales of 2.4%. A substantially stronger average growth in total sales in the amount of 5.9% annually was observed in the branded products segment in the same observed period of time. Substantially influenced by the positive developments in 2015 and 2017 (increase by 6.6% and 10.7% respectively compared to the previous year), the total sales in the branded products segment increased to EUR 950.8 m in 2017. The main factor for the growth in this financial year involved especially the sales markets in Russia, Italy and Great Britain, which were each able to contribute increases in total sales due to the positive volume effects.
- 301. The German pharmaceutical market was STADA's largest and most important sales market in the past which generated the highest total sales both in the generics segment as well as in the branded products segment. The relevance of the other sales markets, however, is different for the segments generics and branded products, so that, for example, Great Britain was STADA's second largest market for branded products, but at the same time played a much lower role in the generics market.
- 302. When reviewing the entire observation period, Great Britain developed the strongest in 2014 to 2017 with annual growth in the amount of 12.7%, whereby this growth resulted mainly in the branded products segment and from STADA's generally good market position and positive growth in the market. STADA experienced decreases in total sales in the same period in the company's second largest sales market Russia in the amount of -1.9%, which resulted especially from the recent, difficult economic environment and related currency effects.
- 303. The growth in total sales in the generics segment was generated in 2015 and 2016 especially in the sales markets Germany, Italy, Russia and Vietnam. While the total sales in the German generics business were able to increase by 15.7% to EUR 308.3 m in 2015, above all downturns in sales in the amount of 29.2% to EUR 83.6 m in Russia and by 32.9% to EUR 95.0 m in Belgium were recorded. The main reason for the negative development in total sales in these countries were currency effects in Russia and a substantial decrease in prices and sales in Belgium. In 2016, the growth in total sales in the generics segment in the amount of 1.5% was especially driven by the sales markets Russia, Italy and Vietnam, while the growth in sales in Germany stagnated. During 2016, above all higher volumes in sales in Italy led to growth in sales in the amount of 5.8% to EUR 157.7 m. Also, the Russian business was able to increase by 10.7% to EUR 92.5 m due to positive effects on volume and pricing. The Vietnam business, which was able to increase by 9.3% from EUR 63.2 m in 2015 to EUR 69.1 m in 2016 also had a positive development. The main reason for the development in Vietnam was higher sales volume which was able to offset the strong pressure on prices in the country.

- 304. In 2017, the growth in the generics segment in the amount of 5.7% is based primarily on developments in the Belgian and Italian markets. The increase in Italy above all resulted from positive volume growth and new product introductions as well as pricing effects. The growth in total sales in Belgium resulted primarily from volume effects which had their reason in the independent conduct of distribution activities since January 2017. In Germany, as the most important sales market of STADA, there was overall a decrease in total sales which was based on offsetting effects. On the one hand, the subsidiary ALIUD PHARMA GmbH had higher total sales due to its further successful participations in tenders. While STADApharm GmbH had a downturn in sales because because they did not participate in tender proceedings and this could not be offset through other distribution channels.
- in the sales markets Germany, Great Britain, Italy and Vietnam. The growth in sales generated in 2015 in the amount of 7.8% to EUR 853.6 m was above all driven by Great Britain, where STADA had growth in total sales in the amount of 42.1% to EUR 168.0 m. The main drivers for this development were, among other aspects, the acquisition of Internis Pharmaceuticals, the market introduction of Ladival as well as positive currency effects for the British Pound. Italy was also able to generate a positive contribution to the segment's total sales with growth in the amount of 31.2% to EUR 40.4 m which resulted from acquisitions in particular. The growth in Vietnam in the amount of 24.7% to EUR 30.8 m, on the other hand, is based on a higher number of tender proceedings that were won.
- 306. In 2016 STADA generated growth in total sales within the branded products segment primarily in the German business which was able to increase total sales by 38.3% to EUR 177.4 m. The main drivers for growth were optimization of the product portfolio and a higher sales volume of core brands. Vietnam also had a positive development, where growth in sales of 19.1% to EUR 36.7 m were generated. Despite the positive developments in Germany and Vietnam, however, no significant growth in total sales at the segment level were generated in 2016. This was primarily the result of the Russia business where total sales decreased by 29.3% to EUR 150.1 min 2016, whereby this resulted from both increased consolidation at the customer level and a generally weaker demand. The development of the total sales in the Russian branded products segment already took currency effects into account.
- 307. The growth in the branded products segment in 2017 in the amount of 10.8% is caused primarily by newly introduced products and higher demand in the Serbian sub-group Hemofarm. The developments in Great Britain also contributed to the business development, where growth compared to the previous years resulted especially from the acquisitions of the companies BSMW and Natures Aid.
- 308. The cost of goods sold after adjustment increased from EUR 1,055.7 m in 2014 to EUR 1,092.2 m in 2015 and EUR 1,092.8 m in 2016 and included primarily expenditures for materials, scheduled depreciation and other cost of goods sold. Due to the generally constant sales that have already been mentioned, the gross margins in the last three reporting periods remained relatively constant and fluctuated only slightly between 48.4% and 48.9%. The adjusted cost of goods sold will likely increase to EUR 1,149.3 m in the financial year 2017, so

that the gross margin improves by around 1.1 percentage points to 50.0%. The increase in the gross margin results, among other factors, from an improved discount quota in the German generics segment, improvements in the generics and branded products segment in the Serbian sub-group as well as a changed discounting strategy in the Belgian generics segment as a consequence of ending the previously existing distribution agreement with the distribution partner OMEGA.

- 309. The selling expenses include to a great extent also the costs for advertising and marketing measures, in addition to the selling expenses departments and external sales force. Logistics costs incurred for distributing the products are also contained.
- 310. The portion of marketing expenses in the selling expenses in the observed period of time was between 41% and 44%. The selling expenses increased from EUR 458.4 m in year 2014 to EUR 482.6 m in 2015 and to EUR 488.3 m 2016. While the increase in 2015 was the result of higher expenses in Great Britain and Italy, additional marketing expenses were also noted in 2016 for the sales markets Germany and Belgium.
- 311. The selling expenses increased by 7.9% to EUR 526.2 m in 2017 and developed in general parallel to the growth in total sales. The increase in selling expenses results primarily from increased marketing activities in Russia, Great Britain and Italy in connection with the introduction of new products in the brand segment.
- 312. The costs for personnel and costs of materials for the management and administrative offices are shown in the general administrative cost unless charged to other functional areas as internal services.
- 313. The general administrative cost increased after adjustments from EUR 152.8 m in 2014 to EUR 176.0 m in 2015 and to EUR 182.0 m in 2016. The increase in 2015 resulted from income in connection with unrecognized past service costs of the former chief executive officer which was accounted for in the personnel costs in 2014. In 2016 higher administrative costs resulting from acquisitions of businesses lead to the increase of the general administrative cost. In 2017, the general administrative cost increased by EUR 18.0 m to EUR 200.0 m, whereby a main reason for this increase involved higher consulting expenses in connection with various restructuring projects.
- 314. Research and development cost at STADA include especially costs for the continuing satisfaction of regulatory requirements. As a result of the strategy of STADA, mainly development costs and no research costs were incurred in the observed period of time. STADA reflects costs for development which cannot be capitalized as an expense in the period in which they are incurred. This also includes the ongoing expenses for keeping licenses.
- 315. The costs for research and development increased from EUR 56.9 m in 2014 to EUR 65.0 m in 2015 and to EUR 65.1 m in 2016. The increase in the amount of EUR 8.3 m in 2017 was somewhat larger than in the previous year, so that the costs for research and development in

2017 were EUR 73.4 m. This is due to an increase of the ongoing regulatory costs, particularly at STADA AG.

- 316. The position for other operating income includes primarily income from appreciations, income from sales and other operating income (e.g. received milestone payments in the branded products segment, income from insurance compensation and payments of damages). For reporting purposes, the results from shares valued at equity are also shown under other operating income.
- 317. The adjusted other operating income increased from EUR 15.8 m in 2014 to EUR 17.0 m in 2015 and subsequently decreased to EUR 11.8 m in 2016. The other operating income was EUR 46.0 m in 2017.
- 318. The increase of other operating income in 2017 resulted primarily from currency effects in an amount of EUR 22.2 m, other operating income in the amount of EUR 10.1 m, the dissolution of value corrections in the amount of EUR 6.3 m and an expected higher result from participations in the amount of EUR 4.2 m from the at equity valued Bioceuticals Arzeinmittel AG.
- 319. The items constituting other operating expenses include, among other items, impairments of fixed assets, depreciations of goodwill as well as other operating expenses (e.g. currency exchange rate expenses or payments of damages).
- 320. The adjusted other operating expenses increased from EUR 23.2 m in 2014 to EUR 31.0 m in 2015 and again decreased to EUR 27.8 m in. The other operating expenses were EUR 71.2 m in 2017. The increase in this position in 2015 resulted above all from higher other operating expenses and an increase in the expenses for losses on receivables. The main responsibility for the decrease in 2016 involved lower expenses for losses on receivables and positive influences from currency effects caused by the adjustments.
- 321. The increase in the other operating expenses in 2017 resulted primarily from value corrections in the amount of EUR 32.2 m for losses on receivables and in the amount of EUR 6.1 m for net expenses for currency exchange costs.
- 322. After taking into account the special effects in the positions for costs and income, the EBIT decreased from EUR 322.4 m to EUR 285.3 m in 2015 and had a slight improvement to EUR 295.1 m in 2016. In the next financial year, the EBIT increased further and was EUR 329.9 m. The EBIT margins in the financial years 2014 to 2017 after adjustments were 15.7%, 13.5%, 13.8% and 14.3% respectively.
- 323. The depreciation adjusted for special effects in the financial years 2014 to 2016 was EUR 109.5 m, EUR 104.1 m, EUR 102.9 m and will be EUR 105.2 m in 2017.
- 324. After adjusting the special effects contained in the positions for costs and income, the EBITDA decreased from EUR 431.9 m in 2014 to EUR 389.4 m in 2015 and again increased to EUR 398.0 m in 2016. The growth also continued in 2017, so that an adjusted EBITDA in the

amount of EUR 435.2 m was generated at the end of the financial year. Due to the level of total sales that has remained the same after adjustments, the EBITDA margin after adjustments decreased from 21.0% in 2014 to 18.4% in 2015 and improved in 2016 to 18.6%. The EBITDA margin improved only slightly in 2017 compared to the previous year and was 18.9%.

- 325. The financial results after adjustments improved due to lower interest expenses from EUR -69.1 m in 2014 to EUR -64.4 m in 2015 and to EUR -50.9 m in 2016. The financial results decreased further in 2017 and were EUR -42.8 m. The decrease in the interest expense within the financial results in the observed period is primarily the result of the repayment of interest-bearing liabilities, STADA's refinancing at more favorable conditions and a decreased interest expense for hedging transactions.
- The taxes on income include the actual taxes on income and earnings as well as the deferred tax expenses and deferred tax income. While in the financial years 2014 to 2017 the effective tax rate before adjustments was 43.8%, 25.8%, 25.1% and 26.0% respectively, the rate improved after taking into account special effects, except for 2017 and was 24.2%, 22.0%, 23.9% and 26.6% respectively. The adjusted taxes on income and earnings were EUR 61.4 m in 2014, EUR 48.6 m in 2015, EUR 58.4 m in 2016 and EUR 76.5 m in 2017.
- 327. The increase of the adjusted effective tax rate of 22.0% in 2015 to 23.9% in 2016 was primarily the result of a increase in the local trade tax multiplier in Bad Vilbel from 330% to 357%, which led to an increase in the nominal corporate tax rate of STADA from 27.4% to 28.3% under otherwise the same tax conditions (corporate income tax rate incl. solidarity surcharge of 15.8% as well as the local trade tax with the above-mentioned multiplier). The substantially lower effective tax rates in the observed period up to and including 2016 are primarily the result of using existing tax loss carry forwards in Germany. The increase of the effective tax rate in 2017 to 26.2%, however, is especially the result of individual transactions (for example, accrual accounting of future tax liabilities in the third quarter 2017).
- 328. The adjusted net income after taxes (before taking into account minorities) fell from EUR 191.9 m in 2014 to EUR 172.3 m in 2015 and increased to EUR 185.8 m in 2016 as well as to EUR 210.7 m in 2017. This corresponds to a margin of 9.3% in 2014, 8.1% in 2015, 8.7% in 2016 and 9.1% in 2017.

### 2.3.5.2. Assets and financial situation

### Assets

329. The unadjusted historic consolidated assets of STADA following the annual report under IFRS are described below for the financial years 2014 to 2017. An adjustment for valuation purposes of the assets for non-operating assets and dividends for the year 2017 belonging to the shareholders of STADA AG are made in the financial year 2018. These adjustments are taken into account as a special items in the valuation of STADA. The adjustments for valuation purposes of the balance sheet items lead to a representation of the adjusted opening balance sheet which is relevant for the valuation.

330. The following overview compares the unadjusted assets of STADA with the plan for the assets IFRS:<sup>121</sup>

Balance sheet										
Assets		Unadjusted historicals			Reconciliation	on Adjusted Pla			Plan	
in EUR m as of 31 December	2014	2015	2016 BE	2017	Adjustments	BE 2017	2018	2019	2020	
Intangible assets	1,631.5	1,649.0	1,582.4	1,501.4	-	1,501.4	1,470.8	1,496.7	1,534.1	
Tangible assets Financial assets	305.4 12.6	321.6 14.5	322.7 16.1	337.8 50.3	-31.0	337.8 19.3	369.9 19.8	389.3 20.4	406.4 20.9	
Fixed assets	1,949.6	1,985.1	1,921.2	1,889.5	-31.0	1,858.5	1,860.5	1,906.4	1,961.4	
Inventories	498.8	501.5	484.9	496.8	-	496.8	546.4	564.4	605.9	
Receivables and other assets	502.8	485.9	489.1	503.2	-	503.2	595.5	623.0	632.7	
Cash and equivalents	164.2	143.2	352.6	202.0	-52.8	149.1	83.2	107.0	127.5	
Other current assets	170.7	137.6	171.9	102.6	-	102.6	112.5	121.5	150.8	
Deferred taxes	49.4	34.1	20.8	25.5	-	25.5	25.2	25.6	25.9	
Current assets	1,385.9	1,302.3	1,519.3	1,330.1	-52.8	1,277.3	1,362.8	1,441.5	1,542.7	
Total assets	3,335.5	3,287.4	3,440.4	3,219.6	-83.8	3,135.7	3,223.3	3,347.9	3,504.1	

- 331. The reduction of the balance sheet total as of 31 December 2015 is primarily the result of a decrease in cash and equivalents, trade receivables and other current assets. The increase in the balance sheet total as of 31 December 2016 was based on a higher level of cash and equivalents compared to the previous year. The change in the balance sheet total as of 31 December 2017 compared to the previous year results primarily from the decrease in cash and equivalents and the deconsolidation of STADA Vietnam J.V. Co. Ltd.
- The fixed assets increased as a result of acquisitions and investments in production sites from EUR 1,949.6 m as of 31 December 2014 to EUR 1,985.1 m as of 31 December 2015. On the following balance sheet dates, the fixed assets will decreased to EUR 1,899.5 m as of 31 December 2017.
- 333. The intangible assets at STADA consist primarily of licenses, trademarks and similar rights as well as goodwill. STADA has capitalized to a lower degree payments in advance, development costs for ongoing projects, acquired customer relation as well as brand names with undefined useful lives. Development costs which are not eligible to be capitalized are immediately reflected by STADA as an expense in the period when they occur. The scheduled depreciation on intangible assets involves primarily pharmaceutical licenses as well as trademarks and are reflected in the profit and loss statement primarily in the cost of goods sold.
- 334. The changes in intangible assets 2015 and 2016 involve primarily investments in the acquisition of companies and products, including brands and licenses, as well as investments in the area of product development for the acquisition of dossiers and licenses. The investments in 2015 included primarily the acquisition of the Austrian company SCIOTEC Diagnostic Technologies and the British Socialites Group. The acquisitions in 2016 included the companies Laboratorio Vannier, BSMW, NaturesAid and Velexfarm. A product portfolio was also acquired in 2016 through a Serbian subsidiary. Opposing reducing effects on the intangible assets in 2016 had the intended sale of STADA Vietnam J.V. Co. Ltd. by resulting in a reclassification of these intangibles into assets held for sale. Furthermore, scheduled depreciations and unscheduled

<sup>121</sup> The item "deferred taxes" is shown under long-term assets in the consolidated financial statements. Due to the changed allocation in this Report, a reconciliation with the balance sheet total is possible, but nor for the fixed assets and the current assets.

impairments in 2015 to 2017 which included primarily depreciation on license and trademarks and, only to a lesser degree, depreciation on goodwill (in the financial year 2015) reduced the intangible asset base. Compared to the two previous years, no material acquisitions of companies were made in 2017.

- is also other equipment, factory and office equipment as well as assets under construction to become similarly large components. The plans and machinery involves primarily production sites, production equipment as well as testing laboratories at the production sites of STADA.
- 336. The tangible assets increased in the observed period of time successively from EUR 305.4 m to EUR 337.8 m as December 2017. The increase as of 31 December of the financial years 2015 and 2016 resulted, in the first place, primarily from investments in the production sites, production equipment and testing laboratories in Serbia, Great Britain, Russia and Germany, in order to comply and assure the production standards required by law. Secondly, the payments in advance and assets under construction increased. In 2017, the tangible assets increased to EUR 337.8 m, whereby the increase was primarily the result of investments in production equipment in the Serbian sub-group Hemofarm.
- 337. The balance sheet item financial assets includes shares valued at equity, other participations, and other financial assets. The financial assets increased from EUR 12.6 m as of 31 December 2014 to EUR 14.5 m as of 31 December 2015 and to EUR 16.1 m as of 31 December 2016. In the subsequent financial year 2017, the financial assets continued to increase and reached EUR 50.3 m as of 31 December 2017.
- 338. The financial assets remained at a relatively constant level between 2014 and 2016. The shares in non-consolidated companies fluctuated in the observed period only to a minor degree, and were caused by consolidation of companies (2015) and capital increases (2016). The balance sheet item for shares valued at equity includes the shares in associated companies entered in the accounts in accordance with the equity method (as of 31 December 2016: BIOCEUTICALS Arzneimittel AG, Pharm Ortho Pedic SAS and AELIA SAS as well as Dialogfarma LLC). 123 The increase in financial assets to EUR 50.3 m in 2017 is primarily the result of a purchase price receivable in the amount of EUR 31.0 m from the sale of a previously consolidated subsidiary.
- 339. The current assets which includes long-term and short-term items decreased from EUR 1,385.9 m as of 31 December 2014 to EUR 1,302.3 m as of 31 December 2015. The reduction resulted primarily from lower trade receivables, cash and equivalents and a reduction in other current assets. The current assets subsequently increase primarily as a result of increasing the cash and equivalents and the other current assets to EUR 1,519.3 m as of 31 December 2016. The current assets decreased again in the financial year 2017 and were

<sup>&</sup>lt;sup>122</sup> See STADA, Annual report 2016, p. 52; Annual report 2015, p. 102.

See STADA, Annual report 2016, p. 140.

EUR 1,330.1 m as of 31 December 2017. The main responsibility for this decrease lies in a substantially lower level of cash and equivalents as well as decreasing other current assets.

- 340. The balance sheet item inventories includes primarily finished goods and merchandise, raw materials and supplies as well as, to a lesser degree, work in progress as well as payments in advance.
- 341. The inventories overall as well as the sub-items fluctuated overall only to a small degree in the financial years from 2014 to 2016. As of 31 December 2015, the balance sheet item increased from EUR 498.8 m to EUR 501.5 m, whereby the increase resulted, among other reasons, from translation effects in Great Britain and Vietnam and were only partially offset by currency effects in Russia. As of 31 December 2016, the inventories decreased by EUR 16.6 m to EUR 484.9 m, which was primarily due to reclassifications of long-term assets held for sale and sales groups with regard to two subsidiaries in Asia. <sup>124</sup> In 2017, the inventories increased to EUR 496.8 m, whereby this growth was primarily the result of the first-time consolidation of Velexfarm.
- The receivables and other assets consist almost exclusively of trade receivables and only to an immaterial extent from receivables from affiliated companies. The shown receivables already constitute net values, taking into account value corrections on receivables which have no value. As of 31 December 2014, the receivables and other assets were EUR 502.8 m and decreased by EUR 16.9 m to EUR 485.9 m as of 31 December 2015. As of 31 December 2016, the balance sheet item increased by EUR 3.2 m to EUR 489.1 m. The trade receivables changed only slightly and increased to EUR 503.2 m in 2017. The increase was primarily due to the first-time consolidation of the Serbian wholesaler Velexfarm.
- 343. The cash and equivalents decreased from EUR 164.2 m as of 31 December 2014 to EUR 143.2 m as of 31 December 2015 and increased to EUR 352.6 m as of 31 December 2016. In the subsequent financial year, the cash and equivalents increased again and were EUR 202.0 m as of 31 December 2017. The decrease as of 31 December 2015 despite a higher operating cash flow with lower investments at the same time resulted from higher disbursements for financing activities. The latter position as of 31 December 2015 was well above the level in the previous year and resulted from a higher redemption of financial liabilities. The increase of cash and equivalents as of 31 December 2016, however, was marked by lower payouts for financing activities as well as raising additional debt with a new promissory note in the amount of EUR 350.0 m to refinance an expiring promissory note in the amount of EUR 188.0 m. The development in 2017 is marked by relatively low payments for investments, an increase in the gross cash flow as a consequence of the development of the results in the current financial year as well as substantially lower payments in connection with discount agreements in Germany. This was offset by substantially higher outflows of funds resulting from

See STADA, Annual report 2016, p. 52.

- a change in the inventories and trade receivables as well as the further redemption of interestbearing liabilities
- The main components in other current assets consist of long-term and short-term other assets, long-term and short-term financial assets, income tax receivables and other assets held for sale (the latter mainly in 2016). In the financial year from 2014 to 2017, the balance sheet item was EUR 41.0 m, EUR 33.4 m, EUR 31.8 m and EUR 72.8 m respectively.
- 345. The income tax receivables decreased between 2014 and 2017 from EUR 17.6 m to EUR 13.1 m. The tax receivables include claims for German and foreign income taxes in the respective financial year and, where applicable, previous years. The reduction of the income tax receivables was mostly the result of received payments for reimbursement of advance payments for taxes in Germany.
- 346. The short-term other financial assets decreased between 2014 and 2017 from EUR 75.8 m, whereby the change is primarily due to a reduction of derivatives and the remaining financial assets.
- 347. The other short-term assets increased from EUR 37.9 m in 2014 to EUR 69.9 m in 2017. The increase results primarily from the development of other tax receivables and of advance payments in 2017.
- 348. The balance sheet item assets held for sale as of 31 December 2016 was EUR 83.0 m. As of the end of the financial years 2015 and 2017, no assets are shown in this balance sheet item. The increase and decrease in the observed period of time is a result of the planned sale of the subsidiaries STADA Vietnam J.V. Co. Ltd. and STADA Import Export International Ltd. which were completed in 2017.<sup>125</sup>
- 349. The deferred tax assets decreased as of 31 December 2015 by EUR 15.3 m to EUR 34.1 m and as of 31 December 2016 by EUR 13.3 m to EUR 20.8 m and increased to EUR 25.5 m in 2017. The decrease in the last three financial years resulted primarily from netting with deferred tax liabilities as well as the use of loss carry forwards for tax purposes for which the deferred taxes had been entered in the accounts in the past. 126

See STADA, Annual report 2016, p. 158.

STADA nets deferred tax assets and liabilities if they are owed to the same tax authority.

#### Financial situation

350. The unadjusted financial situation of STADA was as follows:

Balance sheet									
Equity & liabilities	Unadjusted historicals			Reconciliat	ion	Plan			
in EUR m as of 31 December	2014	2015	2016 BE	2017	Adjustments BE	2017	2018	2019	2020
Equity	903.3	1,018.5	1,047.1	1,033.8	-83.8	949.9	1,080.8	1,157.8	1,286.9
Provisions	17.4	22.5	20.3	17.6	-	17.6	15.9	16.4	17.2
Deferred tax	166.7	160.2	116.4	99.0	-	99.0	96.5	93.6	91.4
Interest bearing liabilities	1,524.9	1,390.0	1,510.1	1,364.3	-	1,364.3	1,272.8	1,264.2	1,252.5
Non-interest bearing liabilities	723.1	696.1	746.6	704.8	-	704.8	757.3	815.9	856.1
Total equity and liabilities	3,335.5	3,287.4	3,440.4	3,219.6	-83.8	3,135.7	3,223.3	3,347.9	3,504.1

- 351. The equity consists of the balance sheet items subscribed capital, capital reserves, retained earnings including net income, other revenue reserves, treasury shares and minorities.
- 352. The equity increased from EUR 903.3 m as of 31 December 2014 to EUR 1,033.8 m as of 31 December 2017. The reason for this development was above all a continuous increase in the retained earnings including net income which includes the consolidated net income for the financial year which is not distributed as well as the results generated in earlier periods. Furthermore in 2015, the conversion of STADA options increased the share capital by EUR 4.5 m and the capital reserve was increased by payments by EUR 28.2 m.<sup>127</sup>
- 353. The equity component other reserves include results which are directly taken into account in equity, such as neutral currency conversions resulting from financial statements with a different functional currency to EUR in the consolidated companies (translation effects). The decrease to EUR 379.1 m shown as of 31 December 2016 was especially the result of currency effects in Russia and Great Britain, whereby this development was amplified in 2017 by additional currency effects for the Vietnamese Dong.
- 354. The portion for non-controlling interests also increased in connection with the positive consolidated results in the period from 31 December 2014 to 31 December 2016 from EUR 67.3 m to EUR 78.1 m. The companies involved in this balance sheet position as of 31 December 2016 were STADA Thailand Company Ltd., STADA Import/Export International

 $<sup>^{127}</sup>$   $\,$  See STADA, Annual report 2015, p. 2011; STADA, Annual report 2016, p. 53.

See p. 160; STADA, Interim Report nine months, November 2017, p. 32.

Pymepharco Joint Stock Company, STADA Pharmaceuticals Ltd., Well Light Investment Services Joint Stock Company, Hemomont d.o.o. and Hemofarm Banja Luka A.D.<sup>129</sup>

- 355. The liabilities of STADA consist of provisions, deferred tax liabilities as well as interest bearing liabilities and non-interest bearing liabilities. For valuation purposes, a representation that deviates from the external reporting of the company was chosen.
- 356. The main components in provisions involved exclusively other short-term provisions. Provisions for pensions are allocated to interest bearing liabilities and, thus, are not shown under provisions.
- 357. The balance sheet item for provisions included provisions for damages resulting from pending legal disputes, including the related litigation costs, and provisions for warranties. The total provisions in the financial years 2014 to 2017 as of 31 December were EUR 17.4 m, EUR 22.5 m, EUR 20.3 m and EUR 17.6 m respectively.
- 358. The balance sheet item for deferred tax liabilities decreased from EUR 160.2 m as of 31 December 2015 to EUR 116.4 m as of 31 December 2016 and to EUR 99.0 m as of 31 December 2017. This development resulted especially from scheduled depreciation on assets from corporate mergers which led to a reduction in timing differences as well as from a decrease in the tax rate in Great Britain.
- 359. The interest bearing liabilities consist of promissory notes, loans from banks and bonds (shown under liabilities to banks) as well as provisions for pensions and liabilities under lease financing. STADA's balance sheet shows the provisions for pensions under the position for other long-term provisions and includes, in addition to pensions, also other long-term provisions in the form of anniversary provisions as well as provisions for time value accounts.
- 360. The financing contracts provide for a right to redeem bonds, promissory loans or loans from banks by the respective investors if a change of control and/or a change in the rating of STADA occur. As a consequence, STADA reallocated all financial instruments affected by a change of control to short-term liabilities in the 3<sup>rd</sup> quarter of 2017. For valuation purposes, no differentiation according to the maturity of liabilities is made, so that these are shown uniformly and without any change under interest bearing liabilities.
- 361. The interest bearing liabilities decreased from EUR 1,524.9 m as of 31 December 2014 to EUR 1,390.0 m as of 31 December 2015 and increased to EUR 1,510.1 m as of 31 December 2016. This item decreased in the subsequent financial year and as of 31 December 2017 it will be EUR 1,364.3 m.
- 362. The increase in interest bearing liabilities as of 31 December 2016 was primarily the result of issuing a further promissory note of EUR 350.0 m which served to finance expiring promissory note totaling EUR 188.0 m. Leasing liabilities were in each case less than EUR 4.0 m in the past

See STADA, Annual report 2016, p. 160.

financial years. The interest bearing liabilities decreased in the financial year 2017 due to redemption payments made by STADA during the course of the year.

- $_{363}$ . The provisions for pensions as of 31 December in the financial years 2014 to 2017 were EUR 30.1 m, EUR 28.9 m, EUR 36.0 m and EUR 39.9 m
- 364. The non-interest bearing liabilities consist of the balance sheet items trade payables (owed to third parties, including non-consolidated group companies), advance payments, liabilities from outstanding charges, liabilities in connection with assets held for sale, other financial liabilities, other liabilities, and income tax liabilities. The non-interest bearing liabilities decreased as of 31 December 2014 from EUR 723.1 m to EUR 696.1 m as of 31 December 2015 and increased to EUR 746.6 m as of 31 December 2016. The positions again decreased in the subsequent year 2017 to EUR 704.8 m.
- 365. The total in the item trade payables, including those owed to non-consolidated group companies, advance payments, liabilities from outstanding accounts and obligations in connection with assets held for sale fluctuated in the past only slightly and in the financial years 2014 to 2017 were EUR 340.8 m, EUR 328.5 m, EUR 351.4 m and EUR 324.3 m.
- 366. The decrease of the item trade payables, received prepayments and liabilities from outstanding accounts as of 31 December 2015 was from EUR 271.8 m to EUR 252.3 m and was based primarily on lower liabilities owed by STADApharm to the health insurance organizations due to decreasing business activity and from the decrease in the business in Belgium. As of 31 December 2016, the trade payables decreased to EUR 244.1 m. The decrease in the item of EUR 12.5 m in 2017 compared to the previous year was due to a lower usage of the term of payments to suppliers.
- 367. The other financial liabilities consisted primarily of liabilities for derivative financial instruments and the sub-item for other financial liabilities. This last item was around EUR 197.2 m as of 31 December 2016 and included primarily liabilities from discount agreements of the German STADA companies. The item other financial liabilities decreased from EUR 259.6 m as of 31 December 2014 to EUR 223.8 m and EUR 214.6 m respectively as of 31 December 2015 and 2016, primarily as a result of a decrease in other financial liabilities. As of 31 December 2017, the other financial liabilities were EUR 169.5 m, whereby the decrease compared to the previous year is based especially on a decrease in deferrals for discount agreements in Germany.
- 368. While the increase of the item other liabilities in the amount of EUR 15.5 m as of 31 December 2015 resulted primarily from higher tax liabilities, above all higher liabilities for personnel in the amount of EUR 64.3 m were responsible in the subsequent year for the growth to EUR 119.9 m. This position decreased by EUR 18.8 m in the subsequent year, so that the

See STADA, Annual report 2015, p. 223.

- other liabilities as of 31 December 2017 were EUR 101.1 m. The main reason for this decrease involved decreasing liabilities in connection with factoring transactions.
- 369. The income tax liabilities increased as of 31 December 2015 by EUR 21.2 m to EUR 60.6 m and as of 31 December 2017 by EUR 49.2 m to EUR 109.8 m. This development was primarily the result of the fact that no final, non-appealable assessments existed for the previous financial years.

### Determination of the balance sheet as of 31 December 2017 for valuation purposes

370. In order to reflect special items for valuation purposes, we have made the following technical adjustments in the balance sheet for valuation purposes on the basis of the balance sheet as of 31 December 2017:

Balance sheet							
Assets		Unadjusted l	nistoricals		Reconciliation	Adjusted	
in EUR m as of 31 December	2014	2015	2016 BE	2017	Adjustments	BE 2017	
Intangible assets	1,631.5	1,649.0	1,582.4	1,501.4	-	1,501.4	
Tangible assets Financial assets	305.4 12.6	321.6 14.5	322.7 16.1	337.8 50.3	- -31.0	337.8 19.3	
Fixed assets	1,949.6	1,985.1	1,921.2	1,889.5	-31.0	1,858.5	
Inventories	498.8	501.5	484.9	496.8	-	496.8	
Receivables and other assets	502.8	485.9	489.1	503.2	-	503.2	
Cash and equivalents	164.2	143.2	352.6	202.0	-52.8	149.1	
Other current assets	170.7	137.6	171.9	102.6	-	102.6	
Deferred taxes	49.4	34.1	20.8	25.5	-	25.5	
Current assets	1,385.9	1,302.3	1,519.3	1,330.1	-52.8	1,277.3	
Total assets	3,335.5	3,287.4	3,440.4	3,219.6	-83.8	3,135.7	

- 371. In light of the signed term sheets for the sale of the subsidiary STADA Vietnam J.V. Co. Ltd. and the related deconsolidation of the assets and liabilities and the account for at equity valued participations under the item financial assets, we apply the expected purchase price for STADA's shares in the equity of the Vietnamese joint venture in the amount of EUR 31.0 m as a value-increasing special item. We accordingly adjust the financial assets in the opening balance sheet for valuation purposes as of 31 December 2017 against a neutral position in the equity. The amount of the book value corresponds to the purchase price agreed in a binding declaration of intent between the potential acquirers and STADA.
- 372. Based on the valuation assumption of distribution of dividends in the same phase, we determine a special item for the dividend of STADA AG for the financial year 2017 which is not included in the valuation model by way of annual distributions. The amount of the dividend corresponds to the dividend planned by STADA AG for the year 2018 in the amount of 40% of the annual surplus in the previous year and is EUR 52.8 m. We accordingly adjust the special

value that is applied as an increase in the opening balance sheet as of 31 December 2017 that is relevant for the valuation as a neutral item against the items cash and equivalents and equity.

373. The liabilities side, as adjusted for technical reasons of the valuation, is accordingly as follows:

Balance sheet						
Equity & liabilities		Unadjusted h	Reconciliation	Adjusted		
in EUR m as of 31 December	2014	2015	2016 BE	2017	Adjustments	BE 2017
Equity	903,3	1.018,5	1.047,1	1.033,8	-83,8	949,9
Provisions	17,4	22,5	20,3	17,6	-	17,6
Deferred tax	166,7	160,2	116,4	99,0	-	99,0
Interest bearing liabilities	1.524,9	1.390,0	1.510,1	1.364,3	-	1.364,3
Non-interest bearing liabilities	723,1	696,1	746,6	704,8	-	704,8
Total equity and liabilities	3.335,5	3.287,4	3.440,4	3.219,6	-83,8	3.135,7

374. The adjusted equity in the opening balance sheet for valuation purposes is EUR 949.9 m and is calculated on the basis of the balance sheet equity as of 31 December 2017 in the amount of EUR 1,033.8 m minus the expected purchase price for the Vietnamese joint venture in the amount of EUR 31.0 m and the dividend planned by STADA for the year 2017 in the amount of EUR 52.8 m. The result is accordingly a reduction of the balance sheet total for the opening balance sheet as of 31 December 2017 in the amount of EUR 83.8 m to EUR 3,135.7 m for technical purposes of the valuation.

## 2.3.6. SWOT analysis

375. A determination of the position of the valuation subject from an internal prospective (analysis of the business and resources) will be described below on the basis of strengths and weaknesses of the business as well as from the external point of view (analysis of the market and competition) on the basis of the opportunities and threats resulting from the market and competitive environment. Specific opportunities and risks for the purpose of the valuation result from the core competency of the company, on the one hand, and the value drivers in the industry, on the other hand.

## 2.3.6.1. Strengths

376. The main strengths of STADA include the following:

- 377. As a manufacturer of generics with many years of experience in the industry and an established network of customers and suppliers, STADA is positioned as one of the leading companies in the important western and eastern European pharmaceutical markets. As a result of the generally organically grown generics segment, STADA profits from an established basis for its business. <sup>131</sup>
- 378. In the generics business, where the local distribution companies in general act as a full assortment provider, STADA has a large product portfolio. This product portfolio is able

See Analyst report, Independent Research, 27 July 2017, p. 4.; See STADA, Capital Market Day, 5 October 2016, p. 9.

- to generate corresponding economies of scale in production resulting in an important competitive advantage in the generics market which has intense price competition.
- 379. The branded products segment of STADA is characterized by higher, sustainable margins, <sup>132</sup> lower regulatory requirements in the area of licensing and international growth, especially in self-payer markets. <sup>133</sup>
- 380. STADA has succeeded with innovative and targeted marketing concepts in positioning brands and reinforcing the position in the market with products such as e.g. Ladival (sun cream), Gripostad (colds), Aqualor (colds), Snup (colds), Covonia (colds) and Mobilat (pain).<sup>134</sup>
- 381. STADA is characterized by a high level of competence in the field of product development and product introduction of generics and branded products. STADA accordingly has a well-filled product pipeline with which the portfolio is continuously renewed and expanded. 135
- 382. As a result of the strategy of in-licensing for originally patent protected pharmaceuticals, STADA is currently only to a minor extent dependent on own developed medications and also has relatively low costs and risks for development. Against the background of the increased focus on co-development activities with partner companies in the area of biosimilars in the future, however, the expectation is that STADA will bear a higher risk for financing and development in the long term. In comparison to original manufactures, STADA bears still a lower development risk because of the lower share of the own developed pharmaceuticals.
- 383. Due to the high share production in low cost countries, STADA already has relatively low production costs.
- 384. STADA was able to position itself well in the past in all core markets and expand leading market positions due to a decentralized distribution structure. As a result of the local

See STADA, Annual report 2016, S. 16.

See Analyst report Bankhaus Lampe, STADA, 20 December 2016, p. 14.

See Analyst report, DZ Bank Research, 26 June 2016, p. 4

See Analyst report, DZ Bank Research, 28 June 2016, p. 4.

- expertise, STADA was able to react both to regulatory as well as consumer-specific circumstances and optimize marketing concepts accordingly.
- 385. Based on an international distribution structure with a decentralized form and short-decision making paths, STADA is able to react quickly to changes in regional markets using efficient communications channels.

#### 2.3.6.2. Weaknesses

386. The main weaknesses of STADA include the following:

- 387. The major portion of total sales are focused on European markets such as Germany, Great Britain, Italy, France, Spain, Belgium and Russia. STADA accordingly has a high level of dependency on changes in the market environment, the competitive situation or the regulatory requirements in this region. 136
- 388. As a result of focusing on generics, STADA is focused on a market segment with very intense competition, high long-term pressure on prices and costs, a high degree of market transparency and a high level of regulatory influence on pricing. STADA depends in this regard to a high degree on results of auction procedures, country-specific price adjustment mechanisms and the development of the demand power of individual customer groups such as e.g. doctors, pharmacists, patients, health insurance organizations, pharmacy chains and wholesalers.<sup>137</sup>
- 389. The market introduction of complex products with large development efforts involves a substantial realization risk. This applies especially for innovative products such e.g. biosimilars in which STADA must acquire and expand the corresponding product knowhow in the future.
- 390. The placement of new branded products and maintaining existing branded products requires substantial investments in the form of classic advertising and marketing expenses. STADA also currently does not have sufficient distribution capacities in all

See Analyst report, Independent Research, STADA Arzneimittel, 27 June 2017, p. 4.; STADA, Annual report 2016, p. 67.

See STADA, Annual report 2016, p. 65.

countries where it distributes products, in order to fully assure successful introductions of products and brands with the existing resources.

- 391. Due to the high quota of third party production and a fragmented supplier network, STADA has limited ability to implement price adjusting. 138
- 392. Important branded products of STADA are to some degree subject to seasonal influences and can thus lead to volatile sales on an annual basis.
- 393. Due to the broadly diversified product portfolio and the strategic focus as a full assortment provider, STADA does not have any clear product and brand focus compared to competitors and not yet main geographic emphasis. While companies with a concentrated product portfolio and selected sales market are principally able to generate higher margins, STADA has a weaker profitability due to the intense price competition and the resulting necessary economies of scale in order to lower prices.
- 394. STADA has a large market share in individual product areas and sales markets, but there are weak margins due to the high level of competition and pressure on prices.
- 395. As a result of the product portfolio which has an international focus, STADA is subject to global currency rate risks and different macro-economic developments both in distribution as well as in production and procurement. STADA must accordingly minimize such risks using hedging strategies, e.g. using natural hedges.
- 396. Due to the national focus of the distribution structures, the broadly diversified and differentiated product portfolio, the selective positioning in niche markets such e.g. Great Britain and the country-specific regulatory environment and influence of fluctuations in currency exchange rates on reporting, the organizational structure and the central corporate management are marked by a high level of complexity.
- 397. There is also the risk in the branded products segment that the marketing expenses and the development of distribution teams will not contribute to the desired positioning of the brand and that the goals of distribution will not be met.

#### 2.3.6.3. Opportunities

398. The following main opportunities result for STADA with regard to the market and competition:

399. The global increase in population, the demographic change observed worldwide and increasing disposable incomes, especially in developing and emerging countries, will

<sup>138</sup> See STADA, Annual report 2016, p. 68.

lead to a sustained increase in demand for pharmaceutical products also in the future and result in growth of the global pharmaceutical market.  $^{139}$ 

- 400. Increasing disposable household income and the strengthened expansion of the health care systems will further support demand for pharmaceuticals in emerging countries in the future. As a result of improved health care, a trend to self-medication with overthe-counter pharmaceuticals can be observed in these countries.
- 401. The continuous pressure on prices in government healthcare systems and the still low generics penetration rates in important European markets, combined with the continuously expiring patent rights, establish a long-term potential for growth for generics which could benefit especially companies with favorable production costs. 141
- 402. Niche markets, for example, vaping products or food supplements, will continue to grow in the future. For example, vaping products as a possibility to stop smoking is also increasingly being positively accepted by public authorities and health insurance organizations in some countries, especially Great Britain.
- 403. Biosimilars will continue to gain importance in the long term, because, among other aspects, the patents for the five strongest biologicals in terms of sale will expire in the year 2020 and can accordingly be substituted with biosimilars.<sup>142</sup>
- 404. The Russian economy slowly stabilizes after the Ukraine crisis and the resulting imposed sanctions as well as the fixing of the oil price by OPEC, so that the possibility for moderate growth in the Russian pharmaceutical market exists in the future. 143
- 405. Due to the increasing awareness for health in industrial and emerging countries, the expectation is that general demand for pharmaceuticals requiring prescriptions and medications for the purpose of self-medication will continue to increase in the coming years and could promote additional growth of sales in many countries.

#### 2.3.6.4. Threats

406. STADA is subject to the following main threats in terms of the market and competition:

407. In the generics market it can be assumed that the pressure on prices and costs resulting from the high transparency of the market, the regulatory structuring of prices, the cost pressure in the health care system, the strong market power of health insurance organizations and the high degree of competition will continue to increase and that

See Analyst report, DZ Bank Research, Pharma-STADA, 28 June 2016, p. 4.

See Analyst report, DZ Bank Research, Pharma-STADA, 16 February 2016, p. 4.

See STADA, Annual report 2016, S.69.; Analyst report, DZ Bank Research, Pharma-STADA, 28 June 2016, p. 4.

See STADA, Annual report 2016, S.60.; See Pharmazeutische Zeitung, online edition 21/2016.

See STADA, Annual report 2016, p. 69.

- inefficient providers will be eliminated from the market. A continuing price erosion could also have a negative effect on the profitability of STADA.
- 408. Due to the high volumes of purchases awarded in tender procedures, unused production capacity or due to purchase commitments unused inventory could arise if existing tenders cannot be won when new contracts are awarded. The corresponding costs could be a burden on STADA's profitability.<sup>144</sup>
- 409. To the extent STADA cannot acquire the necessary production capacity from contract manufacturers or extend the own capacity required to increase sales volumes, there is a risk that STADA cannot participate in the expected growth of the market and also cannot realize the necessary economies of scale to offset the pressure on prices. 145
- <sup>410.</sup> In light of the generally strict regulatory environment, unforeseeable impact could result in changes, cancellations or the issuance of new provisions.<sup>146</sup> In this regard regulatory measures for generics requiring prescriptions could involve licensing provisions, setting of prices by the government and the adjustment of fixed amounts.<sup>147</sup>
- 411. Especially in the generics segment, the business activity has an increased risk of legal disputes involving intellectual property rights, product liability and violation of warranties. As a consequence of these legal disputes, costs can be incurred both for legal defense as well as for a complete or temporary prohibition of the marketing of products.
- 412. Cooperation between competitors, together with the resulting higher production volumes, could lead to economies of scale and increase the ability of the competitors to compete.<sup>148</sup>
- 413. New competitors and the continuing pressure on prices in the generics market could lead to an increase in the already high intensity of competition. Especially in light of the fact that international generics manufacturers participate in German tender proceedings, and the fact that also pharmaceutical companies involved in research

<sup>&</sup>lt;sup>144</sup> See Market Review, European Generic Medicines Markets 2016, p. 12.

See Analysts report, DZ Bank Research, Pharma-STADA, 28 June 2016, p. 4.

See STADA, Annual report 2016, p. 66.

See STADA, Annual report 2016, p. 66.

See Analyst report, DZ Bank Research, Pharma-STADA, 28 June 2016, p. 4.

pursue a second brand strategy, no easing of the tension in this regard is to be expected. 149

- 414. The complexity of the original medications for which protective rights are expiring will increase over the course of time, so that higher development costs and risks are expected in the long term which could place a burden on the profitability of STADA.
- 415. Original medications are subject to intellectual property rights after they have been introduced in the market. When developing generics, there is the general risk of complaints for damages based on infringement of protective rights. <sup>150</sup> Claims for damages can also result from new scientific or medical knowledge as well as defects in quality during production. <sup>151</sup>
- 416. Especially in the branded products segment, but also in general self-payer markets such as e.g. Russia, economic downturns could lower the purchasing power of the end-consumers and slow the growth in these markets.<sup>152</sup>
- 417. There are uncertainties in individual regions with regard to the mid-term development of the economy, such as e.g. with regard to the effects of Brexit or the crisis in the Ukraine for Russia. Against this background, especially currency risks involving the British Pound and the Russian Ruble must be considered. 154
- 418. Against the background of the large production activity in low cost countries, increasing costs for salaries and wages in the emerging and developing countries could have a negative influence on the cost of goods sold in the long term. A potential increase in costs for personnel in industrial nations must also be considered. Due to the high

<sup>&</sup>lt;sup>149</sup> See Analyst report, Bankhaus Lampe, STADA Arzneimittel AG, 20 December 2016, p. 13.

See STADA, Annual report 2016, p. 67.

See STADA, Annual report 2016, p. 67-68.

See STADA, Annual report 2016, p. 67.

<sup>153</sup> See STADA, Annual report 2016, p. 58.

See Analyst report, DZ Bank Research, Pharma-STADA, 28 June 2016, p. 4.

See https://www.cnbc.com/2017/02/27/chinese-wages-rise-made-in-china-isnt-so-cheap-anymore.html; reforms/#6b01e34525c6; https://www.reuters.com/article/us-easteurope-economy-analysis/no-more-low-cost-east-europe-goes-up-in-the-world-idUSKBN1AA1RE; all status 8 November 2017.

- pressure on pricing, there is a risk that increases in production costs cannot be passed on to customers by means of price adjustments.
- 419. There are substantial risks in the short-term to mid-term in terms of production, development and licensing of biosimilars which could lead to a total loss of investments in the expansion of the biosimilars business.

### 2.3.6.5. Aggregated profile of opportunities and risks

- 420. The combination of internal strengths and the opportunities in the market result in the following material chances for STADA as of the valuation date:
  - 421. The core business of STADA in the generics segment is in an environment which is relatively independent of economic developments and in which the company can rely on a strong market position and many years of experience. As a result of the increasing pressure on prices in government health care systems, the demand for generics, especially in markets with low generics penetration, could increase and in general lead to further continuing growth.
  - 422. STADA's strategy of internationalization could also lead to cross-selling effects and the development of new markets in emerging countries and, thus, to further impulses for growth. At the same time, the entry of new participants in the market is made more difficult by the pressure on prices. However, growth requires expansion of the production and distribution capacities.
  - 423. Furthermore, STADA could profit in the branded products segment from the strong market position of the already established brands. As a result of targeted marketing efforts for developing brands and the development and expansion of distribution structures in connection with the new introduction of products, STADA could especially gain market shares in Great Britain, Germany, Spain, Belgium and Russia. This could overall lead to a further increase in importance of the branded products segment for STADA.
  - 424. As a result of the broad product portfolio, STADA, as a full assortment provider, could profit from economies of scale in production and distribution. The corresponding benefits in the cost of production and distribution could offset the continuing price erosion, especially in the generics market, and lead to an improvement of profitability.
  - 425. STADA could also grow further in niche markets with product differentiation, for example, in the field of vaping. STADA could additionally strengthen its concentration on the operational profitability in niche markets instead of gaining market shares at the expense of the margin.
  - 426. Furthermore, the market for biosimilars could offer further opportunities for growth.

    In order to position STADA early in the relatively young market, STADA has already

made corresponding investments in the past. Additional investments and research and development projects to build up the biosimilars know-how on the basis of a co-development model will be made in the future replacing the current in-licensing strategy of obtaining licenses. If this model is successful, the higher risks related to investment and development will be accompanied by higher opportunities for earnings. In the long term, the biosimilars business, however, will only offset the price erosion for generic products.

- 427. In the event of the apparent stabilization in the CIS region<sup>156</sup> and because of the already existing local production sites, STADA is in a good position to profit from a potential growth. Based on the preference for locally produced pharmaceuticals by the Russian healthcare organization, STADA has a competitive advantage because of its Russian production site. An economic upturn could also have a positive effect on the development of total sales in the Russian branded products segment as a result of an increase in purchasing power.
- 428. Furthermore, STADA has initiated various measures to lower the costs of goods sold and the costs for distribution and administration, and these measures could contribute to an improvement of STADA's margins in the mid- to long term.
- 429. On the other hand, there are risks for STADA which result from the combination of the weaknesses and the threats coming from the market. The main risks are:
  - 430. Despite the generally positive expectations with regard to the sales figures in the pharmaceutical market, especially the generics market is expected to be characterized in the long term by a continuing price erosion. The challenge for the market participants in the generics segment is to counter the continuing price erosion by lowering costs for production, distribution and administration while simultaneously developing new sales markets. As a result of the broad product portfolio, cross-selling effects from the internationalization strategy for individual products, the expansion of production capacities and an increased negotiating power with regard to suppliers, STADA could succeed in the strengthening the margins in the mid-term despite the price erosion. However, the assumption in the long term is that especially the strong price erosion will limit the potential for growth of STADA in terms of sales and margins.
  - 431. Although the pharma market can be considered to be independent of the economy, downturns in the economy lower not only the purchasing power of end customers in the self-payer markets, but also increase additional price pressure in the generics segment due to lower budgets in the public healthcare systems. Compared to the generics segment, the demand for branded products is more elastic and dependent on the purchasing power of the end-consumers which has a negative development in the

<sup>156</sup> The CIS Region (Commonwealth of Independent States) defines a group of independent countries of the former Soviet Union. Relevant for STADA are mainly Russia, Ukraine and Kazakhstan.

case of economic downturns and could lead to a decrease in the sales of branded products.

- 432. STADA already has established products and strong brands in the segment of branded products which will probably make a major contribution to the growth of the segment. However, there is the risk that the planned introduction of products in the branded products segment will not realize the expected growth rates and that the expenses for marketing and distribution incurred in connection with introducing these products in the market could burden the profitability of STADA. Main products in this segment, such e.g. cold remedies and crèmes to protect against sunlight, are subject to seasonal influences, which involve uncertainty with regard to forecasting.
- 433. The total sales of STADA are concentrated to only in a few regions which include Russia and Great Britain and, thus, two countries which have political and economic uncertainties. Currency effects also constitute a major risk for STADA in these products. Currency effects can be minimized by hedging strategies, e.g. natural hedges.
- 434. STADA is developing in the long term access to additional sales potential with the codevelopment strategy for the biosimilars portfolio, but this involves high uncertainty with regard to forecasting due to the risks involved in developing and introducing products. STADA also expects that the long-term potential for sales and lower costs in the biosimilars portfolio will be needed to counter the long-term price erosion for generics.
- 435. Furthermore, the long-term supply contracts as well as the own production capacities involve the risk that STADA cannot react quickly enough to changes in regulatory requirements, e.g. adjustments of fixed amounts, by adjusting the cost structure. At the same time, higher requirements for licensing can involve higher development costs and delay or even prevent the licensing of the products. Against the background that STADA's production occurs approximately 75.0% in low cost countries, increasing costs of production there, e.g. due to increasing wages and salaries, could lead to a deterioration in STADA's margins.
- 436. STADA acts in a competitive environment which can be characterized, among other factors, by potential market entry of foreign competitors as well as a two-brand strategy on the part of pharmaceutical companies. An additional risk in this regard results from corporate mergers, because large competitors would have higher production volumes and economies of scale and, thus, could have benefits in costs compared to STADA.
- 437. Changes in the cost structure influence the ability to realize discounts granted to customers which, in turn, has a substantial influence on the potential for growth in

international markets and the maintenance or expansion of the market position in established markets.

438. The opportunities and risks profile of STADA serves to evaluate the reasonableness of the planning and the selection of the group of comparable companies (peer group).

## 2.4. Comparable companies (Peer Group)

439. In order to analyze and check the reasonableness of the earnings power as well as the risk of the expected payments from the company being valued, information about comparable companies (the so-called "peer group") is normally referred to. The peer group is an essential part of a business valuation because it is needed for the industry comparison of the planned accounts (so-called "benchmarking"), the market oriented valuation (including the multiple method) and the determination of the costs of capital (including the beta factor).

## 2.4.1. Approach and selection of the peer group

- 440. As a general rule, companies in the same industry with comparable products and market structures are available for selection of the peer group. An absolute consistency of the companies chosen according to these criteria with the valuation subject is neither possible nor necessary. However, the future cash flow surpluses of the comparable companies and of the business being valued should result from a generally consistent business model. However, capital market data are required for the market oriented valuation (including the multiple method) and the determination of the costs of capital (including the beta factor). Therefore, and in light of the usually limited (public) availability of information and relevant data about unlisted companies, primarily, companies listed in the capital market are taken into account in the peer group in practice.
- 441. Against this background, listed companies with a comparable business model and range of services are analyzed when selecting the peer group. Based on a broad universe of companies attributable primarily to the pharmaceutical and healthcare industry, a large number of national and international companies that are potentially suited for comparison purposes was identified on the basis of qualitative factors. The identification of these 90 companies was made using a primary and secondary approach.
- 442. Using the primary approach and the data base S&P Capital IQ, 36 companies were identified which generate their sales to the greatest portion with generics and/or branded products. The secondary approach was directed towards identifying additional comparable companies which are active in a broad range of healthcare services and, under certain circumstances, also have a comparable operational risk profile. This approach resulted in 54 additional companies.
- 443. Additional selection criteria, such as significant portions of sales in at least one of the two fields of generics and branded products, were used to select 23 companies from the total of 90 companies. In the next step, these 23 companies went through a so-called scoring model.

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- 444. The selection of the finally referenced comparable companies was made on the basis of the scoring model, which is used to evaluate the comparability of the peer group companies with the valuation subject. Under the scoring model, the relevant companies are analyzed and compared with STADA on the basis of qualitative and quantitative criteria.
- 445. The qualitative criterion "operational comparability" was used to examine whether the comparable companies are from the same or a similar industry or have a similar business model. This is supposed to ensure that the companies are subject to similar operational influences and trends. In the present case, the operational comparability of the companies was evaluated on the basis of the distribution of sales in generics and branded products (primary approach) or on the basis of a qualitative analysis of the business model (secondary approach).
- 446. Companies in different markets can be subject to different political, economic and cultural influences and, thus, may not be directly comparable with each other. The second qualitative criterion "regional comparability" assures the geographic relationship to the valuation subject. The regional distribution of sales of each company was compared with the distribution of sales of STADA for this purpose. The portion of sales of the respective peer group company in Europe and industrial countries was relevant in this regard. However, a focus on the European market ensures a better comparability, since the regulatory environment in the USA shows significant differences to some extent.
- 447. The criteria of operational and regional comparability were assessed on the basis of a 5-step scale in the range from "none" to "very high".
- 448. The selected quantitative criteria of size (total sales), profitability (expected EBITDA margin), growth expectations (expected growth in total sales, CAGR) and the capital intensity (capital turnover) are fundamental analytical aspects and empirically increase the quality of purely qualitative selection criteria.

All the six qualitative and quantitative criteria mentioned are taken into account in the scoring analysis, so that 12 companies could be identified which have sufficient comparability with STADA. The qualitative and quantitative criteria were each weighted at 50%. The analysis of the comparable companies finally leads to the following peer group:<sup>157</sup>

Peer group selection								
Comparable Companies	Country	Business Fit	Geographical Fit	Revenue LTM	Revenue CAGR 2017-2019	Ø EBITDA Margin 2017-2019	Capital Turnover 2016	Overall Comparability
Richter Gedeon Vegyészeti Gyár Nyilvánosan Muködo Rt.	Hungary	Best Fit	Best Fit	1,425	9.3%	25.7%	0.6x	•
Krka d.d.	Slovenia	Best Fit	Best Fit	1,250	4.6%	24.7%	0.8x	•
Mylan N.V.	United Kingdom	Best Fit	Strong Fit	10,821	5.7%	33.3%	0.6x	•
Dr. Reddy's Laboratories Limited	India	Strong Fit	Medium Fit	1,937	10.6%	21.3%	0.9x	•
Perrigo Company plc	Ireland	Strong Fit	Strong Fit	4,528	-1.0%	24.2%	0.3x	•
Hikma Pharmaceuticals PLC	United Kingdom	Medium Fit	Medium Fit	1,802	2.4%	25.6%	0.9x	•
Vifor Pharma AG	Switzerland	Strong Fit	Strong Fit	3,968	n.m.	27.6%	1.5x	•
Laboratorios Farmaceuticos ROVI, S.A.	Spain	Strong Fit	Strong Fit	275	10.7%	14.7%	1.3x	•
Aspen Pharmacare Holdings Limited	South Africa	Medium Fit	Medium Fit	2,782	11.4%	27.9%	0.5x	•
Recordati S.p.A.	Italy	Medium Fit	Strong Fit	1,255	9.5%	35.2%	1.0x	•
Impax Laboratories, Inc.	United States	Medium Fit	Medium Fit	717	1.8%	21.9%	0.5x	•
Mallinckrodt Public Limited Company	United Kingdom	Strong Fit	Medium Fit	2,883	-2.3%	41.3%	0.3x	•
Average				2,804	5.7%	26.9%	0.8x	
Median				1,870	5.7%	25.7%	0.7x	
STADA				2,304	5.6%	20.1%	0.9x	

# 2.4.2. Peer Group Overview

450. The companies included in the peer group, especially their business activities, can be briefly summarized individually as follows:

# Richter Gedeon Vegyészeti Gyár Nyilvánosan Muködo Rt.

451. The company Richter Gedeon Vegyészeti Gyár Nyilvánosan Muködo Rt. located in Hungary develops, produces and markets pharmaceutical products, mainly generics and branded products worldwide. The company operates through the distribution channels wholesale trade and retail trade and develops above all pharmaceuticals in the fields of gynecology, cardio-vascular illnesses and illnesses of the central nervous system. The company was established in 1901 with its headquarters in Budapest and is one of the largest pharmaceutical companies in Europe with branches in more than 40 countries. The company has almost 12,000 employees.

## Krka d.d.

452. Krka d.d. was established in Slovenia in 1954 and is a generics company which is active in the development, production, marketing and sale of prescription and non-prescription pharmaceuticals. The company is globally active with an emphasis on Slovenia and the rest of Europe. The prescription pharmaceuticals of Krka are used above all for the treatment of illnesses of the central nervous system and metabolic illnesses. The segment of non-prescription pharmaceuticals consists, among others, of products for the treatment of coughs

<sup>157</sup> In Annex 8 "Peer group selection" the entire peer group can be found, where all the relevant companies are listed which were analyzed and compared in the scope of the scoring model based on qualitative and quantitative criteria.

and colds. In addition, Krka generates sales with products for veterinary medicine and the operation of thermal facilities and tourist services. The company has almost 11,000 employees.

## Mylan N.V

453. The company Mylan N.V. with its headquarters in Hatfield, Great Britain, is active in the generics, branded and OTC field and generates almost half of its total sales in the USA. The business model of the company established in 1961 is limited primarily to pharmaceutical products in the form of tablets, capsules, injectable, gels and creams. Mylan focuses on the therapeutic areas involving the respiratory system, allergies, infective illnesses, cardio vascular problems, oncology and the central nervous system. Mylan also markets the EpiPen Auto-Injector which is used in the case of serious allergic reactions. Mylan has more than 35,000 employees.

# Dr. Reddy's Laboratories Limited

454. The globally active Indian pharmaceutical company Dr. Reddy's Laboratories Limited was established in 1984 and operates in the segments of global generics, pharmaceutical services & active ingredients and proprietary products. A large portion of the total sales results from the generics segment. This segment includes the production and marketing of prescription and non-prescription medications in India and worldwide. The products are used, among others, to treat diabetes, cancer and illnesses of organs as well as pain. The company has more than 22,000 employees.

## Perrigo Company PLC

455. The company Perrigo Company PLC established in Ireland in 1887 is the worldwide largest producer of OTC pharmaceuticals and branded products. Together with its subsidiaries, the company focuses on the development, production, marketing and distribution of OTC products and pharmaceutical products. Perrigo offers corresponding pharmaceuticals especially in the therapy fields for coughs, colds, allergies and sinuses, analgesics, baby food and food supplements. The product portfolio also includes diagnostic products and active substances for veterinary medicine. Perrigo also offers contract production for generics and special prescription pharmaceutical products. The products produced by Perrigo are distributed, among others, in retail trade, supermarkets, department stores, pharmacies and hospitals. The company located in Dublin has almost 13,000 employees worldwide.

# Hikma Pharmaceuticals PLC

456. The company Hikma Pharmaceuticals PLC established in Jordan in 1978 is a multinational pharmaceutical company with its headquarters in London. The business activities of Hikma are focused especially on the USA and the MENA region where a large portion of the total sales distributed among the three segments are generated. The segments involve injection medications, branded products and generics. The therapeutic emphasis of the pharmaceuticals produced by the company involves especially antiinfectives, cardio vascular illnesses, diabetes,

and illnesses of the central nervous system, oncology and respiratory illnesses. The company had around 8,000 employees in the year 2016.

#### Vifor Pharma AG

457. The Swiss company Vifor Pharma AG was established in 1927 and pursues its operational business in the segments Vifor Pharma, health & beauty and services. With Vifor Pharma the company is a worldwide leader in the marketing of branded pharmaceuticals for the treatment of iron deficiency. Further areas of therapy include nephrology, cardiorenal therapies and infective illnesses. The company also distributes healthcare specific data systems and provides management solutions for pharmacies as well as doctors. With more than 8,500 employees, the company is especially active in Switzerland, but also in the rest of Europe and the USA.

# Laboratorios Farmaceuticos ROVI, S.A.

458. The company Laboratorios Farmaceuticos Rovi, S.A. was established in Spain in 1946 and has its headquarters in Madrid. The operational business of the company includes the production and sale of pharmaceutical products in Spain and internationally. The company has its focus on generics. Other prescription pharmaceuticals in the product portfolio include the therapy area such as thrombosis, osteoporosis, attention deficit syndrome and hyperactivity in children and adolescent. In addition to prescription pharmaceuticals, Laboratorios Farmaceuticos also offers OTC products. The company has more than 1,000 employees.

# Aspen Pharmacare Holdings Limited

459. The South African company Aspen Pharmacare Holdings Limited established in 1850 produces and distributes pharmaceutical branded products and generics in more than 150 countries, especially in Europe and the sub-Sahara region in Africa. The products of the company cover a broad range with anesthetics and pain medications, consumer health products and infant foods. The generics include, among others, medications such as anti-depressive medications, analgesic medications and inflammation inhibitors. The company also produces anesthetics and pharmaceutical active substances. The products are marketed to customers such as pharmacies, hospitals and doctors. Aspen is the largest pharmaceutical manufacturer in Africa with almost 10,000 employees.

# Recordati S.p.A.

460. The company Recordati S.p.A. was established in 1926 in Italy with its headquarters in Milan and has been listed on the Italian stock exchange since 1984. The company was active with its business in 2016 with 4,100 employees in Europe, Australasia, Africa and the USA. The operational activities of Recordati include research and development in the field of pharmaceuticals and the production and distribution of pharmaceuticals with a focus on branded products. The pharmaceuticals produced by Recordati include a broad range of

therapy, including cosmetic dermatology, cardio vascular illnesses, food supplements, antiallergic medications and oncology.

# Impax Laboratories, Inc.

461. Impax Laboratories, Inc. is a U.S. special pharmaceuticals company established in the USA in 1993 which is active in the segments impax specialty pharma and impax generics. The impax generics segment delivers generics directly to wholesalers, drug store chains and mail order pharmacies, primarily in the USA. The segment impax specialty pharma includes branded products for the treatment of functional disorders of the central nervous system, including migraine, multiple sclerosis and Parkinson's disease. The company is headquartered in Hayward, USA and had around 1,500 employees in 2016.

#### Mallinckrodt PLC

The company Mallinckrodt Public Limited Company located with its headquarters in Staines-Upon-Thames, Great Britain, develops, produces and markets branded products and generics in the USA, Europe, the Middle East and internationally. Mallinckrodt distributes pharmaceutical products in its branded products segment in the fields of neurology, rheumatology, nephrology and pulmology. In the generics segment, the offer includes generic special pharmaceuticals and active pharmaceutical substances (APIs). The branded products of the company are marketed to doctors, pharmacies, hospitals and ambulatory surgery facilities. Generics are distributed through external distribution channels. The APIs allocated to the generics, however, are directly sold to other pharmaceutical companies without intervening dealers.

# 3. GENERAL VALUATION PRINCIPLES

- 463. The valuation principles discussed below are considered to be accepted in theory and practice of business valuation today. They have been reflected in academic literature, in the releases of the Institute of Public Auditors, in particular in the IDW S 1 and in October 2011 by the task force "Corporate Transactions and Valuation" published DVFA-Recommendations, which were finally adopted in December 2012. The valuation principles are generally also recognized by the case law in Germany.
- 464. In accordance with the mandate, we will provide a range of the business value of STADA as of 2 February 2018, taking into account IDW S 1 and the DVFA-Recommendations. The following describes the practices and assumptions arising from these two principles for business valuations and their differences.

# 3.1. Requirements for determining the reasonable compensation under § 305 AktG

- 465. The DPLTA must include, pursuant to § 305 para. 1 AktG, the obligation of the controlling company to acquire the shares of every outside shareholder at its request in exchange for a reasonable compensation set forth in the contract. In the present case, the draft DPLTA provides for a cash compensation.
- 466. In valuation practice and case law, the determination of the reasonable compensation requires the determination of a reasonable business value of the controlled company as of the point in time of the shareholders' meeting that decides about the adoption of the DPLTA. A possible approach for determining the reasonable compensation and a reasonable equity value are the principles for determining an objectified business value according to IDW S 1, which are generally accepted by German courts. In addition, the determination of a fair market value according to the DVFA-Recommendations is one possible approach.
- 467. When determining the reasonable compensation for shares of a listed company, the stock market price may not be disregarded as a possible indicator of the fair market value of the share according to highest court rulings.

# 3.2. Requirements for determining the reasonable recurring compensation payment under § 304 AktG

468. In addition to the obligation to acquire the shares in the controlled company, a DPLTA must include a reasonable recurring compensation payment pursuant to § 304 para. 1 AktG. At the time of conclusion of the DPLTA, the shareholders of the controlled company can choose between a reasonable compensation (Abfindung) and the reasonable recurring compensation payment (Ausgleich). Contrary to the case of the compensation, the shareholders do not transfer their shares in the controlled company, when they choose the recurring compensation payment and instead continue to participate in the company as shareholders.

- 469. The reasonable recurring compensation payment constitutes a payment to the outside shareholder by way of a recurring monetary benefit (recurring compensation payment) on the shareholders' shares in the share capital.
- 470. Pursuant to § 304 para.2 s.1 AktG, the payment must be guaranteed to be at least the payment of the annual amount, which could probably be distributed to the individual share as an average share in the profit based on the previous earnings position of the company and its future prospects for earnings, taking into account reasonable depreciation and corrections of value, but without establishing other profit reserves. Since the business value is based on financial surpluses in the sense of cash flows that can be distributed to the equity holders, this means that the determination of the reasonable recurring compensation payment is made on the basis of the determined compensation and the underlying business value.

# 3.3. Concept of business value under IDW S 1 and DVFA

- 471. The business value is determined by the interaction of all assets in the company. The subject of the valuation is not necessarily identical with the legal delineation of the company; the basis instead is the subject of the valuation defined, in accordance with the mandate, often based on economic criteria.
- 472. Business values must be determined as of a specific point in time, the valuation date. Therefore, only information can be taken into account for the valuation, which could have been obtained as of the valuation date upon exercising a reasonable standard of care. Furthermore, only those measures can be considered, which had already been initiated or were already specifically developed as of the valuation date ("root theory"). 158
- 473. The value of a business under IDW S 1 must be determined in relation to the reason for the valuation. The valuation is determined based on the prerequisite of exclusively financial goals by way of determining the present value of the cash flows to the owners of the company. In order to determine the present value of the cash flows, a capitalization rate is applied, which represents the return on investment from an alternative investment equivalent to investing in the business being valued. The objectified value of the business is accordingly determined solely from its earnings capacity, i.e. its capacity to generate financial surpluses for its owners. 159
- 474. The business value basically results from the financial surpluses, which are generated on a going concern basis and the sale of any assets, which are not needed for the business (so-called "future earnings value"). In accordance with theory and practice, the dividend discount method and variations of the discounted cash flow method ("DCF method") are applied. The liquidation value is conceivable as the business value only in the event that the present value of the

<sup>&</sup>lt;sup>158</sup> See IDW S 1 no. 22 ff.

<sup>159</sup> See IDW S 1 no. 25.

financial surpluses resulting from the liquidation of the entire company (the so-called "liquidation value") exceeds the going concern value. $^{160}$ 

- 475. The value of future earnings depends primarily on the capacity of the business to generate financial surpluses. Therefore a business valuation requires a projection of the entity's future distributable cash flows. However, only those cash flows that are placed at the owners disposal as net receipts are used for valuation purposes (so-called "benefits principle"). The capital structure for determining an objectified business value is determined on the basis of the business concept documented as of the valuation date. An optimization of the capital structure which could, for example, be implemented due to the influence of the majority shareholder, is not decisive for determining the objectified business value according to IDW S 1.
- 476. The equity value can be directly derived by net capitalization using the so-called dividend discount method or the equity approach as a variation of the discounted cash flow method, or indirectly by using gross capitalization in accordance with the concept for the weighted average cost of capital ("WACC approach"), the adjusted present value approach or the total cash flow approach. While in the case of the direct determination the (total) financial surpluses, reduced by the cost of debt, are discounted in one step, the discounting in the indirect determination refers to the financial surpluses from the business activities and a subsequent reduction of the aggregate business value (enterprise value) determined in this manner by the market value of the interest-bearing debt.
- 477. When determining an objectified business value under IDW S 1 in the context of determining the recurring compensation payment and the compensation for structural measures under stock corporation law, a typification of the tax situation of the shareholders must be made in accordance with the principles on the objectified business value under IDW S 1. This typification is based on the perspective of a German, fully taxable natural person, and the corresponding personal income taxes must be taken into account both, when determining the cash flow variable to be discounted, as well as when determining the capitalization rate (so-called Tax-CAPM).
- 478. In the case of business initiatives, in which the valuation serves as an objectified basis for information, an indirect, typified tax situation for the owners can be assumed. In this connection, the assumption is made that the net cash flows from the valuation subject and the alternative investment in a stock portfolio are subject to comparable personal taxation at the level of the shareholder. In this case, an explicit consideration of personal income taxes is not used in the valuation and when determining the financial surpluses and the capitalization rate. This approach was followed in the context of determining a DCF value according to the DVFA-Recommendations as well as a dividend discount value before personal taxes in accordance with IDW S 1.

<sup>&</sup>lt;sup>160</sup> See IDW S 1 no. 101.

479. Unlike the IDW S 1, the DVFA-Recommendations for determination of the fair market value are based on the valuation concept of the "market participant" as a typification for the determination of the derived fundamental value. This is based more strongly on empirically observable approaches of actual buyers of enterprises. This is specified in the principle of methodological diversity, i.e. that the multiple method is equal to the cash flow-based discounting methods, operating explicitly with value ranges for assessing the fair market value of equity and stating specific assumptions regarding the course of action of the market participant transparently.

# 3.4. Relevance of prices and stock exchange prices

- 480. In the case of listed companies, reference can generally be made to the price on the stock exchange. The price for shares in the company is determined by supply and demand on free capital markets. The price is in general determined by the estimated benefits (marginal benefit) for the respective purchaser and seller. Depending on the relationship in volume between supply and demand as well as the possibilities for the owners of the business to influence the policy of the business (e.g. sole ownership, qualified or simple majority, blocking minority or free float), identified stock exchange prices can deviate more or less strongly from the value of the entire business and the proportionate share in the total equity value, so that this price on a specific date can be inappropriate as a starting point for directly determining the business value.
- 481. Actual prices paid for companies and shares in companies can, pursuant to IDW S 1, <sup>161</sup> serve to assess the reasonableness of business values and values of shares if there is comparability with the valuation subject and sufficient proximity in terms of time. According to the DVFA-Recommendations, actual prices paid can also be taken into account as an independent valuation method.
- 482. However, arguments against direct or indirect determination of the value derived from stock exchange prices can be found as these prices can be influenced by numerous special factors, such as the size and tightness of the market, trading activities resulting from a coincidence, the market situation and speculative movements in the market. Using stock exchange prices as a basis for the equity value also cannot be a substitute for a fundamental valuation when that valuation uses a better and broader basis of information than the capital market, for example the adopted business plan.
- 483. Based on the case law of the highest courts, the fair market value of listed shares in the context of the exclusion of minority shareholders is not to be determined without regard to the stock exchange price. If in these cases the dividend discount value is lower than the stock exchange price, the stock exchange price must be used as the lower limit. <sup>162</sup>

<sup>&</sup>lt;sup>161</sup> See IDW S 1, no. 13.

<sup>&</sup>lt;sup>162</sup> See BVerfG, Decision of 27 April 1999 – 1 BvR 1613/94

# 3.5. Valuation based on the dividend discount method or the discounted cash flow method

- 484. The equity value under IDW S 1 can be determined using the dividend discount method or the discounted cash flow (DCF-) method. Since the proper application of different discounting methods has no influence on the valuation result, both discounting methods are considered equivalent under IDW S 1. Both methods lead to the same business values, if the same assumptions are applied for valuation. 164 In addition, since all procedures of the DCF method (cash flow to equity, WACC, adjusted present value and total cash flow approach) lead to the same valuation result if the assumptions are consistent, both according to the principles of IDW S 1 and the DVFA-Recommendations, all DCF approaches may be applied.
- 485. Due to the convertibility of the derivation of the financial surpluses in determining the DCF value before and after personal taxes in accordance with IDW S 1, the determination of the objectified business value is based on the cash flow-to-equity approach before personal taxes.

# 3.5.1. Equity value and DCF value

486. Under the cash flow to equity method, the DCF value is calculated directly by discounting the cash flows to the equity holders (so-called "flow to equity" or "cash flow to equity") with the levered cost of equity as of the valuation date. The equity value results from the DCF value minus minorities plus the special items.

## **DCF Value**

- Minorities
- + Special items

# = Equity value

487. In the cash flow to equity method as well as in the dividend discount method, defining the cash flow relevant for the valuation starts with the consolidated net income after taxes and before minorities. The net investments in fixed assets, the investments in the net current assets and the changes in the interest-bearing liabilities due to changes in the planned capital structure, which in total correspond to the earnings retention, must be deducted. 165

<sup>&</sup>lt;sup>163</sup> See IDW S 1, no. 7.

<sup>164</sup> See IDW S 1, no. 101.

<sup>&</sup>lt;sup>165</sup> This only applies insofar as no capital measures are to be taken into account.

# Earnings before interest and taxes (EBIT)

- Results from financing and participations
- Taxes on income
- Consolidated net income (before minorities)
  - + Depreciation
  - Gross investments (CAPEX) in fixed assets
  - -/+ Change in net current assets (incl. operational cash)
  - -/+ Change in interest-bearing liabilities
- Earnings retention
- Cash flow to equity or dividend distribution
- 488. According to both principles, the calculation of the DCF value is performed before personal income taxes on the shareholder level, so that the so-called indirect typification under IDW S 1 is applied. The dividend discount method using direct typification differs from the DCF value according to the cash flow to equity approach by taking into account the tax situation of the shareholders. Since the distributions to the equity holders correspond to the financial surpluses, they must be discounted with the levered cost of equity after personal taxes.
- 489. In the dividend discount method under IDW S 1, defining the cash flow relevant for the valuation starts with the consolidated net income after taxes, but before minority interest. The net investments in fixed assets, the investments in the net current assets (working capital) and the changes in the interest-bearing liabilities due to changes in the planned capital structure, which in total correspond to the earnings retention, must be deducted.

## Earnings before interest and taxes (EBIT)

- Results from financing and participations
- Taxes on income
- Consolidated net income (before minorities)
- Earnings retention
- = Consolidated net income (after earnings retention)

thereof dividend distribution (less 26.4% withholding tax + solidarity surcharge) thereof fictive retained earnings (less 13.2% withholding tax + solidarity surcharge)

- Distributions to be discounted
- 490. As a result of taking into account personal taxes in the dividend discount method under IDW S

  1, additional assumptions concerning the dividend payout policy and the payout ratio are
  relevant. In order to consistently take into account typified personal tax consequences, it is
  necessary to divide the distributions remaining after the necessary retention of earnings
  resulting from the planning assumptions regarding investments and the capital structure. The

distributions need to be divided into a dividend share and a share of fictive retained earnings as dividends and capital gains (fictive retained earnings) are taxed at different tax rates at the level of the shareholder.

The planning of the cash flow to equity and the distributions is normally performed in three steps. The first so-called detailed plan period includes a period of three to five years and is based in general on a detailed business plan of the valuation subject. Because the valuation subject has often not yet reached the "steady state" at the end of the detailed plan period, corresponding assumptions must be made in a convergence phase, e.g. with regard to long-term investment or product life cycles in order to derive the sustained financial surpluses. The third, so-called continuing phase (hereinafter, the "terminal value" or abbreviated, the "TV" or "perpetuity") assumes a balanced or stable condition within which the annual financial surpluses are assumed to grow constantly or at a constant rate. 166

## 3.5.2. Minorities

492. Since minorities' share in the net income are initially taken into account, when determining the financial surpluses, a separate valuation of the financial surpluses attributable to minorities is made. The financial surpluses attributable to minorities are discounted with the average of the risk free rate and levered cost of equity for the respective subject of the valuation in the respective period. The present value determined in this manner is then deducted from the determined DCF value.

# 3.5.3. Special items and non-operating assets

- 493. Assets which cannot be reflected or can only be incompletely reflected, when determining the DCF value, must generally be valued separately and then added to the DCF value. Special items are, in particular, non-operating assets, such as excess cash. Assets, which can be freely sold without affecting the actual operational business, are considered to be not necessary for the business.
- 494. Instead of using the total number of outstanding STADA shares and accounting for the treasury shares as a special item (gross method), the number of outstanding STADA shares was used for valuation purposes (net method). Both methods lead to the same value per share.

# 3.5.4. Equity value

495. The sum of DCF value, special items and minorities (as a deduction item) ultimately leads to the equity value of the valuation subject.

<sup>&</sup>lt;sup>166</sup> See IDW S 1, no. 75 et seq.

# 3.6. Comparative valuation based on the multiple method

- 496. In addition to the derivation of the business value and the presentation of value ranges on the basis of the DCF method, we determine business values and value ranges using the multiple method.
- 497. The multiple method constitutes a comparative market valuation. The value of the business is considered to be the product of a variable (frequently a variable concerning revenue or profit) of the business and a corresponding multiple normally derived from comparable companies. Just like the DCF and dividend discount method, the multiple method is considered to be a method for determining the aggregate business value.
- 498. In accordance with the mandate and in addition to the principles of IDW S 1, we apply the DVFA-Recommendations. These focus on the perspective of the market participant, who applies various valuation methods, e.g. multiple-based methods and DCF methods, side by side, and makes decisions based on various analyses. Contrary to the IDW S 1, multiple valuations have thus generally equal weight to other methods<sup>167</sup> according to the DVFA-Recommendations, as long as no industry-specific or company-specific circumstances justify the preference for a method.
- 499. The theoretical foundation of multiple valuations is the so-called Law of One Price, which states that same goods should trade at the same price in all markets, otherwise arbitrage opportunities would arise. Broadly, it may also be understood that comparable assets (such as companies or shares of companies) should trade at comparable prices.
- 500. In the case of a valuation on the basis of multiples, reference variables of comparable companies contributing to value, normally variables for earnings and surpluses such as revenue, EBITDA, EBIT, annual surplus etc. are put in relation to the prices that can be observed in the market. Next, the identified ratios (the multiples) are applied to the company which is the valuation subject. The assumption is made that there is a proportional relationship between the underlying reference variables and the business value. The stated reference variables are used as a proxy, because normally no forecasts for cash flow and return on investment variables are prepared and published by analysts (especially for the peer group). The decisive aspect in the multiple method is that the starting point for the valuation are prices that are observed in the market. In order to establish the necessary equivalency with the company being valued, however, these prices are adjusted using various steps in the valuation, in order to receive an estimate of the fundamental value of the business (as analogy to the DCF method) as a final result. Such adjustments can be necessary in the case of distortions in the development of the market price resulting from external shocks (e.g. caused by the financial and economic crisis).
- 501. One benefit from the multiple based business valuation is its strict connection to the market. The underlying relationships in pricing can be observed and are actually used in the capital markets and/or corporate transactions. On the other hand, this valuation method (just as the

See DVFA-Recommendations, 2012.

determination of the capitalization rate based on capital market data) is also accordingly subject to inadequacies and inefficiencies in the market, which can lead to deviations between observed prices and intrinsic values and must be corrected by the valuation expert using adjustments to the valuation. Especially in times of crisis, the available market prices are often viewed critically due to potential distortions and special situations.

- 502. A valuation based on multiples in the context of the recommended approach, just as it is the case with discounting methods, uses internal business planning and internal information. The determined multiples of the peer group companies are applied to the realized reference variables and the reference variables planned by the management of the business (on the basis of the same business plan used also for the DCF method). However, the available period of time for the forecast is much shorter than when applying the discounting method.
- 503. The multiple is the result of the ratio of the price to the reference variable of the comparable company. Analyses are normally based on multiples from the last twelve months or the last year (so-called LTM multiples) as well as the subsequent years (so-called forward multiples; in this case 2018 and 2019). Forward multiples are generally preferred in a market price oriented valuation. Historic multiples, such as LTM multiples, can be distorted by special effects. Forward multiples, however, are typically based on normalized estimates, while the actual values form the basis of LTM multiples. LTM multiples are primarily applied in the case of transaction multiples in order to maintain consistency in terms of time.

# 3.7. Liquidation value

- 504. Liquidation values and substance values are referred to in the literature as individual valuation methods, contrary to the comprehensive valuation methods such as the dividend discount method or DCF method. The liquidation value is referred to as the lowest limit for the value under both the value concept in the IDW S 1 and the framework of the DVFA-Recommendations. Reference is expressly made to a "most favorable possible" realization of the assets. The liquidation value must accordingly be compared to the results of the described valuation methods.
- 505. If it turns out to be more favorable to separately sell individual assets or complete parts of the operations in the business compared to continuing the operations, the total net proceeds that can be realized must generally be taken into account as the liquidation value unless there are legal or factual circumstances which prevent this.<sup>170</sup>
- 506. The value of the assets to be liquidated is determined by the market for the assets and liabilities being liquidated. Intangible assets, real property and buildings as well as technical equipment

See Ballwieser/Hachmeister, 2013, p. 8.

<sup>169</sup> See DVFA-Recommendations 2012. S. 8.

<sup>&</sup>lt;sup>170</sup> See IDW S 1, no. 5, 140 et seq.

can have particular importance because material hidden reserves can be expected in these assets.

- 507. Furthermore, the assumed speed of liquidation has a material influence on the value of the assets. The general rule is that an accelerated liquidation within a short time (dismantling) has a negative effect on the conditions for the sale, especially with regards to the expected price level, although the financial surpluses are realized relatively early in the case of a dismantling. Compared to this, generally more favorable conditions for a sale can be realized in the context of planned liquidation over the course of many years (unwinding), but the proceeds from liquidation are sometimes realized much later and must be discounted to the point in time of liquidation for the purpose of a comparison.
- 508. The existing liabilities must be deducted from the determined value of the assets at the amount due. Liabilities, such as obligations under a social plan, as well as obligations resulting from the liquidation such as reserves for expenses must be considered when determining the value. The surpluses are reduced in a further step in the valuation by the expected costs of liquidation which must be borne by the business being liquidated in connection with the sale as well as taxes on income on any profits from liquidation.
- 509. The valuation of the substance (substance value) under aspects of a replacement value leads to the so-called reconstruction value of the business which only represents a partial value for reconstruction due to the normally lacking intangible assets. This substance value has no independent informative power for determining the total value of a business under the going concern assumption. <sup>171</sup> Substance values are accordingly not determined in light of the purpose for the valuation.
- 510. In addition, we did not determine a liquidation value since the liquidation value is not relevant because of the positive market to book ratio. The planned return of capital employed (ROCE) is always higher than the levered cost of equity during the planning phase, the convergence phase and the terminal value, so that it can be assumed that a continuation of the company is favorable compared to the liquidation.<sup>172</sup>

# 3.8. Consideration of synergies under IDW S 1 and DVFA

511. According to both IDW S 1 and the DVFA-Recommendations, synergies must be evaluated accordingly in the business valuation. Pursuant to IDW S 1, synergy effects are considered to be the change in the financial surpluses resulting from the economic combination of two or more enterprises and deviate from the sum of the surpluses that arise in isolation. Furthermore, a differentiation must be made between so-called real and pseudo synergies when determining an objectified business value under IDW S 1.<sup>173</sup> Pseudo synergies are characterized by the fact that they can be realized also without implementing the measure,

 $<sup>^{171}</sup>$   $\,$  See Ballwieser/Hachmeister, 2013, p. 207 and IDW S 1 2008, no. 6.

See Chapter 4.6.

<sup>&</sup>lt;sup>173</sup> See IDW S 1 2008, no. 33 et seq.

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which forms the reason for the valuation. The financial surpluses resulting from pseudo synergies must generally be taken into account, when determining an objectified business value, but only to the extent that the measures resulting in synergies have already been initiated as of the valuation date, are documented in the business concept or are already sufficiently substantiated.<sup>174</sup> In contrast to this, real synergy effects only arise from the measure forming the reason of the valuation and cannot be taken into account in the business valuation.

- 512. Contrary to the IDW S 1, the DVFA-Recommendations are based on the concept of the market participant. The market participant will not consider his purely individual synergies or value-determining factors in an assumed notional negotiation situation when determining the offered purchase price. Pure individual synergies are independent of the definition of real or pseudo synergies of the IDW S 1. That is why purely individual synergies, irrespective of the reason for the valuation, represent the proportion of the total synergy potential attributable exclusively to the specific acquirer or majority shareholder. These are not to be considered in the valuation. In contrast, synergies that any market participant can realize are taken into account in the valuation ("market participant synergies"). However, this only applies, if the business plan does not already contain these synergies.
- 513. In the present case, it is not necessary to consider pseudo synergies or market participant synergies according to DVFA as the executive board of STADA AG and Nidda Healthcare do not expect any positive synergy potential between the companies. This is because Nidda Healthcare is a financial investor who, unlike strategic investors, cannot realize strategic synergy potential respectively as of the valuation date synergies are not sufficiently substantiated.
- 514. If at STADA negative synergies arise from the necessary refinancing of financial liabilities by Nidda Healthcare due to the change-of-control clauses triggered by the takeover bid, these negative effects can be classified as real synergies. Thus, these effects are not to be taken into account when determining the value range of the objectified business value. These negative synergies, which result from the poorer financing conditions of Nidda Healthcare compared to STADA, also do not represent eligible market participant synergies in accordance with the DVFA-Recommendations, since STADA stand-alone has a higher leverage than the peer group in the plan period, the convergence phase and the terminal value.

See IDW S 1, no. 34. Also in comparison to version of 2005.

# 4. Business planning of the valuation subject

# 4.1. Standard for checking the plausibility of the business plan

## 515. IDW S 1

Pursuant to IDW S 1, the objectified business value constitutes an inter-subjectively verifiable value of future earnings from the viewpoint of the shareholder. This arises if the business is continued on the basis of the current business plan by taking into account all realistic future expectations in the context of market opportunities, market risks, the business' financial possibilities and other influencing factors.<sup>175</sup> Thus, the valuation of a business is based on the existing earning power as at the valuation date and includes the chances of success resulting from measures that have already been initiated or are sufficiently specified in the context of the existing business plan and market situation. Potential measures which are not yet sufficiently specified as well as the presumably resulting financial surpluses from such measures shall not be considered when determining objectified business values.<sup>176</sup> Furthermore, the valuation expert must perform a plausibility assessment of the forecast of the future financial surpluses.<sup>177</sup> The future financial surpluses must be derived from a consistent and integrated business plan (financial model) consisting of an income statement, planned balance sheet and cash flow statement.<sup>178</sup>

 $^{516}$ . The IDW practice note  $^{2/2017^{179}}$  additionally specifies which criteria should be applied when performing a plausibility assessment of the business plan. The plausibility assessment of the business plan should be performed in the three following areas:

- mathematical and formal plausibility
- internal plausibility
- external plausibility
- 517. The first step generally involves the mathematical and formal examination of the business plan in order to assess the accuracy and correctness of the calculations and the consistency of the assumptions within different parts of the business plan. The initial assessment on substantive issues of the business plan is made as part of the internal plausibility assessment. On the one hand, this involves a comparison of the business plan with the strategic and operational goals of the management and, on the other hand, an analysis of the business, i.e. an analysis of the past financial performance and an assessment of the potential of the business as well as their overall consistency with the business plan. Finally, the business plan should also be checked for

 $<sup>^{175}</sup>$  See IDW S 1 in the version 2008, no. 29.

<sup>&</sup>lt;sup>176</sup> See IDW S 1 in the version 2008, no. 32.

<sup>&</sup>lt;sup>177</sup> See IDW S 1 in the version 2008, no. 81.

See IDW S 1 in the version 2008, no. 27 in conjunction with no. 81.

See IDW Practice Note:: Evaluation of a business plan for valuation, restructuring, due diligence and fairness opinions, 2/2017.

plausibility by reference to external criteria. This includes both a general analysis of the market as well as an analysis of the specific competitive environment of the business being valued. The performance of an external plausibility assessment assures that the business plan prepared by the company does not contradict macro-economic developments and forecasts which are specific to the relevant market and the competitive environment. Especially the SWOT analysis, in which the material internal and external factors of the business are analyzed in a concise manner, is essential for checking the external plausibility of the business plan.

# 518. DVFA-Recommendations

As a supplement to IDW S 1 and in accordance with the mandate, we have performed an assessment of the business plan under the concept of a "market participant" as is set forth in the DVFA-Recommendations for business valuation. The market participant determines the value on the basis of an assumed, future planned business policy. In addition to the planned investments in fixed and current assets, this includes acquisitions and/or divestments and also assumptions with regard to the financing policy and the capital structure of the business. These assumptions must be consistent with regards to the market participant, whereby the market participant will not take into account synergies and factors relating to the value which are individual to the market participant when determining the offered purchase price (in this case: recurring compensation payment and cash compensation). The basis is the integrated business plan (also consisting of the income statement, planned balance sheet and cash flow statement) on the basis of the actual expectations and the level of knowledge of the assumed market participant on the valuation date, taking into account the value adjustment principle. 181

- 519. The standard to be applied under the mandate with regard to the business plan forming the basis of the valuation accordingly relates to the mathematical accuracy, the consistency of the premises upon which the business plan assumptions are based, freedom from contradictions as well as the analysis of whether the business plan is consistent with the deemed assumptions of a market participant.
- 520. In order to further interpret the concept of the market participant and the assumed business plan used by this buyer, reference can be made to the concept of a normal market participant established in the accounting standard IFRS 13 for determining the fair market value. The fair market value of an asset is accordingly measured on the basis of the assumptions which market participants would use as a basis when determining the present value for the asset, whereby the market participants act in their best economic interests. At the same time, the capacity of the market participant to produce the highest and best use of the asset to generate economic benefits must be taken into account. When assuming a fictitious negotiating

See DVFA-Recommendations, 2012, p. 11.

<sup>181</sup> See DVFA-Recommendations, 2012, p. 13.

See IFRS 13, Appendix A: The standard defines the fair value on the basis of the "disposal price" and introduces a fair value hierarchy which leads to a market based valuation and not an individualized valuation for the company. The fair value according to the IFRS 13 "the price which would be received on the measurement date when selling an asset in a normal transaction between participants in the market of would have to be paid when a debt is transferred."

<sup>&</sup>lt;sup>183</sup> See IFRS 13, no. 22.

<sup>&</sup>lt;sup>184</sup> See IFRS 13, no. 27.

situation, a rationally acting market participant will determine its threshold price for the purchase of an asset by assuming optimum capacity to economically use the asset. The rationally acting market participant, however, will only pay a premium which is necessary to secure the purchase of the shares and, thus, optimize the purchaser's own value. When assuming a market participant, synergies which are purely individual to the buyer cannot be taken into account in the business plan and the valuation.

521. The assumption of optimum economic benefits from the asset for the market participant cannot be understood as a principle of most favorable treatment which would no longer lead to a realistic and reasonable business plan based on consistent premises. At the same time, optimal economic benefits also do not exist if the underlying assumptions for the business plan turn out to be obviously conservative, pessimistic or also too optimistic or if they are even based on false facts. The DVFA-Recommendations are accordingly consistent with the academic writings on business theory in which the use of expected values to derive business values with risk adjusted interest rates is required.

## 522. Applied standard for checking the reasonableness of the business plan

We analyze below the fundamental structure of the business plan, the planning process and the planning accuracy in the past in order to check the reasonableness of the business plan. The relevant standard with regard to the business plan forming the basis of the business valuation is confirmed and specified by the case law of the German Federal Constitutional Court. The expectations in the business plan must accordingly be based on accurate information and realistic assumptions and may not contain contradictions. Since an independent determination of the business value of STADA must be carried out in accordance with the mandate, the plausibility assessment of the business plan was performed accordingly.

- 523. Therefore, the standard for checking the plausibility of the business plan forming the basis of the valuation is based on mathematical accuracy, lack of contradictions within the business plan as well as the consistency with the premises upon which the plan is based, in accordance with IDW S 1, the DVFA-Recommendations and the case law.
- 524. Against this background, an analysis of the historic as well as the planned results on the basis of KPIs was carried out with reference to the business strategy and the general market environment. As part of this analysis, these KPIs were compared in a benchmarking process with historic results and the estimates of analysts for the peer group.

# 4.2. Analysis of the planning process and structure of the business plan

525. The budgeting process at STADA includes the planning and determination of all functional decisions, above all with regard to fundamental decisions related to the portfolio and segments, human resources and investments. Covering a period of three years, the budgeting process also includes determining all direct and indirect expenses related to revenues and is

<sup>&</sup>lt;sup>185</sup> See BVerfG, 1 BvR 3221/10 dated 24 May 2012, para. 12.

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generally made in a top-down/bottom-up process. The budgeting process follows STADA's external reporting according to IFRS and, thus, the financial numbers reported to the capital market which also determine the emphasis of the internal management and control activities within the group and finally define the economic leeway for each unit in the group to act.

- 526. In a first step, STADA transmits in the middle of August of each year the goals incl. the target rates for services and royalties within the group to the individuals responsible for the local budget. In each individual company, the targets are translated into detailed planning requirements in a top-down approach for the functional area which then leads to setting the budget for each cost center. In November of each year, the budget documents of the individual companies are presented by the persons responsible for the budget (managing directors of the individual companies or the holding companies forming the tops of the sub-groups) to the executive board of STADA AG. The content of this budget presentation is structured into a qualitative, strategic part and a quantitative part.
- The qualitative part of the plan is preceded by an analysis of the business. The persons responsible for the budget provide a description of the respective, national regulatory environment which shows how important figures for sales, prices and costs will likely develop. This includes especially the development of national reimbursement prices, the deletions of potential active substances from the reimbursement catalog, the setting of potential fixed amounts, the combining of certain pharmaceutical indications under a reimbursement price mechanism, the introduction of additional payments by patients etc. The respective subsidiary also provides an analysis of the sales situation compared to other competitors. This "benchmark analysis" relates to sales data which are collected by qualified market research companies and derived from the sales statistics of the pharmacies. This objective market analysis describes the capacity of the respective distribution company for internal management purposes in comparison to all other competitors in the market. The qualitative planning also includes strategic initiatives which show specific growth opportunities. This includes especially an overview of new introductions of products (new introductions of pharmaceutical active substances).
- 528. The quantitative part of the budget presentation is derived from the qualitative strategic planning and includes the financial information relevant for management which is also provided in this format for the current reporting.
- 529. On the cost side, the planned costs for the technical functions are reflected in the budget. The goals of this functional budgeting is to increase the cost transparency within STADA and to raise the sensitivity for costs at the level of mid-management and senior management with regard to operational business activities.
- 530. During the course of the review that follows the budget presentation, the executive board of STADA AG and group controlling pose critical questions to the persons responsible for the presented planning. Based on STADA's existing information systems, it is possible to reliably determine the composition of sales on the basis of individual products and the expenses on the basis of functional costs. Especially cost increases which developed disproportionately to the

corresponding development of sales must be explained by the persons responsible for the budget and can only be justified by special strategic initiatives. The transmitted budget data are supplemented with an ongoing analysis of the actual data as well as the values for the previous year, in order to be able to show an analysis of a series of components in earnings and expenses over a period of time. This analysis over a period of time leads to a general assessment of the performance, together with a definition of a binding benchmark for compensation purposes for the persons responsible for the budget.

- 531. If the provided budget does not correspond to the targets that have been set with regards to certain parameters, specific decisions with regard to changes in the plan are made. This can take the form of different measures, for example, an adjusted target with regard to the allocations within the segment in the sales (e.g. stronger growth in the branded products segment) or the amount of marketing and distribution expenses (e.g. reduction of marketing expenses for advertising or reduction of the external sales force). These adjustments must subsequently be included in a revised version of the budget and must be transmitted again to the group headquarters.
- Based on the individual planning, STADA then prepares the consolidated budget for the entire group. The budget process ends in November/December of each year with a budget resolved by the executive board and approved by the supervisory board which represents the basis for managing the business during the course of the year. In general, a binding determination of the overall goals in the form of an official written approval of the plan of the individual units is issued after the budget process has been completed.
- 533. For valuation purposes, STADA's business plan (budget for the financial years 2018 to 2020) comprising an income statement, balance sheet planning, was resolved by the executive board of STADA on November 29, 2017 and approved by the supervisory board of STADA on December 1, 2017.

# 4.3. Analysis of planning accuracy

534. In connection with the analysis of the plausibility of the business plan, ValueTrust not only considered the structure of the business plan and the planning process but also the accuracy of the business plan in the past in order to gain insights on the planning accuracy. In order to assess the historic planning accuracy, a period of four years was reviewed, and the extent of target achievement was compared with the forecasted performance numbers in the management report. The STADA group is managed on the basis of the KPIs "adjusted group sales", "adjusted EBITDA" and "adjusted group profit" as well as the "ratio of net debt (excluding additional acquisitions) to adjusted EBITDA".

535. The following table shows the one-year forecast quality of the company for 2014 to 2017.

#### Planning accuracy STADA

	201	2014		5	2016	5	2017		
	Forecast*	Actual	Forecast*	Actual	Forecast*	Actual	Forecast*	Actual	
Adjusted group sales	7	✓	7	✓	7	✓	7	✓	
Adjusted EBITDA	7	✓	$\downarrow$	$\checkmark$	7	$\checkmark$	7	✓	
Adjusted group profit	7	$\checkmark\checkmark$	$\downarrow$	$\checkmark$	7	$\checkmark\checkmark$	7	$\checkmark\checkmark$	
Net debt/EBITDA	3.1x	✓	3.0x	$\checkmark$	3.0x	$\checkmark\checkmark$	3.0x	$\checkmark\checkmark$	

low growth ( $\nearrow$ ), significasnt decrease ( $\downarrow$ ), forecast fulfilled ( $\checkmark$ ), forecast beaten ( $\checkmark\checkmark$ ), forecast missed (\*)

- 536. The forecast for the financial year 2014 was generally achieved. Negative deviations from the plan in the generics segment were offset by more than fulfilling the plan in the branded products segment. The forecasted development of the executive board for the key financials in 2015 was fully met. The forecasts with regard to the KPI in group sales, the adjusted EBITDA and the adjusted group profit were slightly exceeded in 2016. The forecast accuracy for 2017 was examined on the basis of the last available extrapolation (best estimate as of October 2017). The expectations were achieved in the KPIs (group sales, EBITDA) or more than fulfilled (adjusted group profit, net debt to EBITDA).
- 537. The analysis of the planning accuracy shows that STADA at least fulfilled or exceeded the forecasts in the past. Based on our analysis, there are no indications that the present business plan of STADA might not constitute an appropriate starting point for the business valuation.

<sup>\*</sup> forecast according to managment report of previous year; BE = best estimate

See STADA AG Annual Report 2014, p. 64.

See STADA AG Annual Report 2016, p. 34.

# 4.4. Analysis of the business plan

The business plan of STADA is analyzed on the basis of further criteria, especially analyzing KPIs relating to a certain time period or certain points in time and benchmarking against the peer group, in order to be able to assure a consistent determination of future cash flows and growth rates. Further explanations with regard to the adjustments to the business plan, please refer to the appendix of the report.

Adjusted profit & loss statement		Adjusted hi	istoricals		Plan			
in EUR m	2014	2015	2016 BI	E 2017	2018	2019	2020	
Total sales growth (yoy)	2,053.6	<b>2,115.1</b> 3.00%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%	<b>2,414.5</b> 4.79%	<b>2,520.8</b> 4.40%	<b>2,676.9</b> 6.19%	
growth (yoy)		3.00%	1.14/0	7.71/0	4.7370	4.40/0	0.1376	
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9	-1,177.4	-1,190.9	-1,272.3	
Gross profit	997.9	1,022.9	1,046.4	1,154.2	1,237.1	1,329.9	1,404.6	
in % of total sales	48.6%	48.4%	48.9%	50.1%	51.2%	52.8%	52.5%	
Selling, general and administration cost	-611.2	-658.7	-670.3	-726.3	-780.3	-811.0	-848.1	
thereof selling expenses	-458.4	-482.6	-488.3	-526.2	-570.0	-611.9	-644.4	
thereof general and administrative expenses	-152.8	-176.0	-182.0	-200.0	-210.3	-199.1	-203.7	
Research and development cost	-56.9	-65.0	-65.1	-72.9	-85.6	-89.4	-99.5	
Other operating income	15.8	17.0	11.8	46.0	2.7	1.7	0.6	
Other operating expenses	-23.2	-31.0	-27.8	-71.2	-25.5	-25.8	-25.2	
EBIT	322.4	285.3	295.1	329.9	348.4	405.4	432.4	
in % of total sales	15.7%	13.5%	13.8%	14.3%	14.4%	16.1%	16.2%	
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2	134.7	137.0	136.0	
EBITDA	431.9	389.4	398.0	435.2	483.1	542.4	568.4	
in % of total sales	21.0%	18.4%	18.6%	18.9%	20.0%	21.5%	21.2%	
Financial results	-69.1	-64.4	-50.9	-42.8	-46.1	-44.1	-39.0	
Income before taxes	253.3	220.9	244.2	287.1	302.3	361.3	393.5	
in % of total sales	12.3%	10.4%	11.4%	12.5%	12.5%	14.3%	14.7%	
Taxes on income	-61.4	-48.6	-58.4	-76.5	-83.1	-98.5	-105.1	
Effective tax rate (in %)	24.2%	22.0%	23.9%	26.6%	27.5%	27.2%	26.7%	
Net income / net loss for the year	191.9	172.3	185.8	210.6	219.2	262.9	288.4	
in % of total sales	9.3%	8.1%	8.7%	9.1%	9.1%	10.4%	10.8%	
Minority interest	5.6	6.5	8.5	4.7	-	-	-	

## 4.4.1. Total sales

539. The total sales planned by STADA are based on a detailed price-volume structure for the individual companies. The total sales consist to the greatest extent of sales of products, but also contain a minor portion of license fees. STADA additionally takes into account reductions in revenue when planning total sales which result, among other reasons, from discount agreements, credits and price reductions. The stated total sales accordingly correspond to the net total sales. <sup>188</sup>

As described in chapter 2.3.4 of this report, it needs to be considered that the analysis of STADA's future sales development is compared with external market growth research data based on gross sales. Therefore, a general comparison of STADA's sales forecast and the respective market growth is not possible.

Allocation of total sales		Adjusted h	istoricals*				CAGR '17-'20	
in EUR m	2014	2015	2016 BE	2017	2018	2019	2020	
Generics	n.a.	1,261.4	1,280.7	1,353.4	1,408.7	1,428.0	1,504.4	3.6%
Branded products	n.a.	853.6	858.5	950.8	1,005.8	1,092.8	1,172.5	7.2%
Total sales	2,053.6	2,115.0	2,139.2	2,304.2	2,414.5	2,520.8	2,676.9	5.1%
growth (yoy)	-	3.0%	1.1%	7.7%	4.8%	4.4%	6.2%	
share generics in %	n.a.	59.6%	59.9%	58.7%	58.3%	56.6%	56.2%	
share branded products in %	n.a.	40.4%	40.1%	41.3%	41.7%	43.4%	43.8%	

<sup>\*</sup> No adjustments to the total sales were made expect for 2014

- 540. The total sales of STADA increase in the plan period from EUR 2,304.2 m in 2017 to EUR 2,676.9 m in 2020, which corresponds to an average annual growth rate of 5.1%. Without taking into account currency effects, the planned growth in total sales accordingly develops better than in the past, where only an annual growth in total sales of 3.0% and 1.1% was generated in 2015 and 2016. The planned growth in total sales in the plan period is slightly above the average expected growth in the global pharmaceutical market in the amount of 4.9% annually, despite taking into account reduction in revenues due to granted discounts or similar effects. <sup>189</sup>
- 541. In the generics segment, STADA plans to increase total sales from EUR 1,353.4 m in 2017 to EUR 1,504.4 m in 2020, which corresponds to an average annual growth of 3.6%. While an average annual growth in the amount of up to 6.3% is expected for the global generics market, 190 the forecasted growth of STADA is accordingly below the generally expected growth in the market, whereby this is influenced to a material degree by the US market in which STADA has only relatively small sales. However, it is necessary to consider that as a result of the difference between gross and net total sales, an actual comparison of growth rates is hardly possible. Significant drivers of growth in the generics segment in the plan period are, on the one hand, increased sales volumes due to an increasing demand for cost-efficient pharmaceuticals as well as, on the other hand, the introduction of new products. Important drivers for total sales growth of STADA will be in this regard, among others, the countries Italy, Great Britain and Belgium, whereby the individual growth strategies in these markets follow different approaches. The growth in sales in the Italian market will be generated above all with newly-introduced products and increasing generics penetration. In Great Britain, STADA focuses on niche segments which permit STADA to generate higher margins in a market environment with intense competition. Furthermore, STADA plans a differentiated discount strategy in the Belgium market. Despite the generally increasing demand for generics, the intense pressure on prices and costs, especially in countries with high generics penetration such as e.g. Germany and Great Britain were taken into account. STADA's planning of total sales up to 2020 also includes sales of biosimilars which, however, still constitute a relatively small portion of generics sales overall in the analyzed period.
- 542. STADA expects in the branded products segment an increase in total sales from EUR 950.8 m in 2017 to EUR 1,172.5 m in 2020, which corresponds to an average annual growth rate of 7.2%. Compared with the expected growth in the global branded products market in the amount of

<sup>&</sup>lt;sup>189</sup> See no. 140.

<sup>&</sup>lt;sup>190</sup> See no. 141.

4.0%, STADA accordingly expects to develop better than the market, <sup>191</sup> whereas both established as well as newly-introduced products are among the sales growth drivers. Important countries for sales according to STADA's planning are especially the countries Germany, Great Britain and Russia, in which the company can continue to differentiate itself from the competitors with well-positioned brands. In this regard, the distribution capacities in the plan period will be expanded in some markets, and the marketing expenses for positioning existing and new brands will be increased. Vaping products will constitute an additional driver of sales within the branded products segment and are supposed to be sold in the coming years also in Germany, in addition to Great Britain and the Netherlands.

543. In light of the stronger growing branded products segment, STADA accordingly expects that the branded products segment will continue to gain importance in the future in relation to total sales. While the portion of the branded products segment in 2017 was still 41.3%, the portion will increase slightly to 43.8% in 2020.

# Development of total sales in the Top 7 countries

544. In addition to analyzing the growth of sales of the two segments generics and branded products, an analysis of the planned total sales in the seven most important countries for sales of STADA (so-called "core sales markets") must be made due to the specific market environment and regulatory parameters in these countries:

Development of total sales	His	toricals		Plan		CAGR '17-'20	
in EUR m	BE	2017	2018	2019	2020		
Germany		470.5	485.6	501.4	515.7	3.1%	
growth (yoy)		-3.1%	3.2%	3.3%	2.9%		
Great Britain		192.2	223.0	251.0	278.6	13.2%	
growth (yoy)		-3.1%	16.0%	12.6%	11.0%		
Italy		214.2	232.4	250.5	273.9	8.5%	
growth (yoy)		6.2%	8.5%	7.8%	9.3%		
France		87.4	91.7	100.8	107.5	7.2%	
growth (yoy)		6.7%	4.9%	10.0%	6.6%		
Spain		124.0	130.2	135.1	143.1	4.9%	
growth (yoy)		17.6%	5.0%	3.7%	6.0%		
Belgium		134.8	146.8	152.5	161.0	6.1%	
growth (yoy)		48.6%	9.0%	3.9%	5.5%		
Russia		341.0	333.1	349.8	368.3	2.6%	
growth (yoy)		40.6%	-2.3%	5.0%	5.3%		
Top 7		1,564.0	1,642.8	1,741.1	1,848.1	5.7%	
growth (yoy)		11.2%	5.0%	6.0%	6.1%		

545. The planned growth of sales varies in STADA's core sales markets in the planned years 2018 to 2020 between 2.6% and 13.2%. While the growth in total sales in Russia is the weakest due to expected currency effects, STADA expects very high growth in the British market. Overall, STADA believes that based on the total sales, Germany will also represent the largest market in 2020, accounting for 19.3% of total sales. Furthermore, the company expects that other important sales markets will be Great Britain, Italy and Russia, which each are supposed to generate more than 10.0% of total sales in 2020. Compared with 2017, STADA accordingly assumes that the country's respective sales share will not shift significantly during the plan period. When analyzing the development of sales in local currency, STADA expects that

<sup>&</sup>lt;sup>191</sup> See no. 142.

Germany, Great Britain, Italy and Russia will be among the most important drivers of sales in 2018 to 2020. While STADA believes that the total sales of 2,304.2 m in 2017 will increase by EUR 372.7 m to EUR 2,676.9 m in 2020, the largest portion of this sales growth will be generated in Great Britain and Italy.

546. The significant trends and developments in STADA's core sales markets which form the basis of STADA's consolidated planning of total sales are explained below:

## Germany

547. STADA expects in general that the total sales in the German market will increase from EUR 470.5 m in 2017 to EUR 515.7 m in 2020. This corresponds to an average growth rate of 3.1%. STADA's planned development of net sales in Germany is accordingly slightly below the market growth expected by IMS in the generics and branded products segment of 3.7% annually. 192 The reason for diverging growth expectations is a different treatment of discounts and credits in the IMS forecast compared to STADA's approach. In contrast to STADA's forecast of expected sales, IMS forecasts do not account for discounts and credits.. Due to the tender processes with the health insurance organizations and the resulting discount agreements in Germany, this effect is especially relevant in the generics segment. For the generics segment, STADA expects that the sales in the analyzed period will increase from EUR 294.8 m in 2017 by an average of 1.6% annually to EUR 309.1 m in 2020, while the IMS forecast assumes an average annual growth in the amount of 4.7% 193. STADA exceeds the IMS expectation of 2.5%, <sup>194</sup> with an average annual growth of 5.5% in the branded products segment, despite the limited comparability of the products forming the basis of the total sales, leading to a total sales increase from EUR 175.7 m in 2017 to EUR 206.6 m in 2020. Overall, STADA expects that it will generate approximately 19.3% of total sales in Germany in 2020.

Development of total sales	His	toricals			Plan		CAGR '17-'20	IMS CAGR '17-'21
in EUR m	BE	2017	2	018	2019	2020		
Generics		294.8	30	1.3	305.4	309.1	1.6%	4.7%
Branded products		175.7	18	4.3	196.0	206.6	5.5%	2.5%
Total sales		470.5	48	5.6	501.4	515.7	3.1%	3.7%
growth (yoy)		-	3.	.2%	3.3%	2.9%		

# Generics

Since the distribution of generics in Germany takes place to the greatest extent in tendered contracts with regard to the health insurance organizations, STADA expects that especially the pressure on prices will have affect the development of sales, despite increasing sales volumes. STADA assumes that it can counter the pressure on prices, among other methods, by optimized bidding strategies and by an active optimization of the portfolio and, thus, be able to stabilize the level of prices. In general, STADA assumes in its sales planning that there will be a stable share of revenue reductions. A significant erosion in prices in the course of decreases in fixed amounts (e.g. mandatory discounts, reference prices) is not expected. At the same time, STADA

<sup>&</sup>lt;sup>192</sup> See no. 174.

<sup>&</sup>lt;sup>193</sup> See no. 174.

<sup>&</sup>lt;sup>194</sup> See no. 174.

expects a continuing increase in competition which, among other sources, will be marked by Asian competitors with low cost structures and vertically integrated value creation chains. In addition to STADA's established position in the market in tender contracts, the growth will also be driven by newly introduced products starting in 2018. Additional biosimilars are supposed to be introduced into the market in 2019.

## Branded products

548. STADA plans the introduction of new products in the branded market segment in the course of internationalization measures which include, above all, the medications Hedrin (head lice), Viruprotect (colds) and Fultium (vitamins). In addition, STADA also expects to further exploit the potential for the sunlight protection substance Ladival with a new packaging design and targeted advertising activities. The product "Ladival" will also have a new positioning in the market in 2018. In addition to the classic branded products, vaping products are also supposed to be introduced into the German market starting 2018. STADA assumes in general that the established brands will be able to further differentiate from the competition and will also be considered in the future by pharmacies and other customers. The relevance of individual top brands is also apparent in the distribution of sales, of which approximately 80.0% are based on the ten most important brands. STADA also intends to be able to improve the targeting of marketing expenditures and, thus, generate further growth.

## Interim conclusion

- Against the background of the general budget restrictions in the German healthcare market and the related goals for savings costs, the expectation is that the generics market will also grow in the future. Since STADA is among the leading market participants with the subsidiary ALIUD PHARMA GmbH, it can be assumed that the company will also benefit accordingly from expected market growth in the future and that it will achieve the generally expected market growth rates measured on the basis of net sales.
- 550. Due to the established portfolio of branded products and the future planned expansion of products, the expectation is that even after taking into account potentially different compositions of the product portfolio, STADA's branded products segment will exceed the generally expected growth in the market.

# **Great Britain**

551. STADA expects that the total sales in the British market will increase from EUR 192.2 m in 2017 to EUR 278.6 m in 2020. This corresponds to an average annual growth rate of approximately 13.2% and is, thus, well above the growth expectation of IMS in the market of generics and branded products in the amount of 2.0% annually. While the sales in the generics segment increase on average 16.7% annually from EUR 23.1 m to EUR 36.7 m during the same period of time, the branded products segment increases from EUR 169.1 m on average by approximately 12.7% to EUR 241.9 m. Therefore, STADA's expected net total sales at the segment level will

<sup>&</sup>lt;sup>195</sup> See no. 174.

also exceed the market growth expected by IMS. At the same time, however, it must be noted that the market growth expected by IMS is based on gross sales and that the portfolio composition as well as the planned sales of the underlying medication may deviate. Especially in the case of branded products, potential discrepancies between STADA's product portfolio and the IMS portfolio are accordingly to be expected, because STADA offers both household products as well as pharmaceuticals, dermatological products and food supplements in the British branded products segment. STADA expects that it will generate approximately 10.4% of its total sales in Great Britain in 2020.

Development of total sales	Hist	oricals	Plan			CAGR '17-'20	IMS CAGR '17-'21
in EUR m	BE	2017	2018	2019	2020		
Generics		23.1	24.9	31.7	36.7	16.7%	2.2%
Branded products		169.1	198.1	219.3	241.9	12.7%	1.3%
Total sales		192.2	223.0	251.0	278.6	13.2%	2.0%
growth (yoy)		-	16.0%	12.6%	11.0%		

#### Generics

552. In general, the generics market in Great Britain is considered to be one of Europe's most competite markets Against this background, STADA plans to generate growth primarily by introductions of new products and focusing on niche markets. STADA plans to place seven new generics in the market in 2018. Additional introductions of generic products are planned for 2019 and 2020; therefore, STADA considers that it will expand its market position in the long term. The company also plans to concentrate on niche areas which, in addition to higher profitability, also promise lower market entry barriers due to less intense competition. Since STADA covers niche markets instead of acting as a full assortment supplier due to the high level of competition, the company assumes above average growth both in generics as well as in the branded products segment compared to the overall market.

## Branded products

- 553. STADA's branded market portfolio in Great Britain is broadly diversified and includes both general pharmaceuticals as well as products for household needs. One of the most important sales drivers in the British branded products segment will be the subsidiary Thornton & Ross Ltd which expects strong sales growth in 2017 to 2020 due to established products such as Covonia (cold remedy) and Fultium (vitamins) as well as Benenox (sleep disorders) which was introduced in 2017.
- 554. A further important driver of growth will also consists of vaping products which are supposed to grow by approximately EUR 6.0 m in Great Britain just in the financial year 2018. STADA expects that the business will increase by approximately EUR 19.5 m from 2017 to 2020. An important driver for growth will be an expansion of the marketing activities which include,

among other items, an expansion of the point-of-sales in places with high public traffic such as shopping centers and similar areas.

#### Interim conclusion

555. Upon taking into account the – due to the composition of the product portfolio – limited comparability with the growth rates obtained by IMS, STADA plans to develop better than the market both in generics as well as in branded products. Main growth drivers, in addition to an established branded products portfolio, are vaping products which are supposed to significantly grow in the future in the British market. Furthermore, the business with generics is supposed to be expanded, whereas the focus in this segment is on niche products with high profitability.

# Italy

sTADA's sales in Italy will be generated almost exclusively through the subsidiaries EG S.p.A. and Crinos S.p.A., whereas EG S.p.A. focuses primarily on the generics segment and Crinos S.p.A. concentrates on the branded products segment. STADA expects overall that the sales in the Italian market will increase from EUR 214.2 m in 2017 to EUR 273.9 m in 2020. This corresponds to an average annual growth rate of approximately 8.5% and is, thus, well above the growth in the generics and branded products segments expected by IMS in the amount of 3.5% p.a. <sup>196</sup> While the sales in the generics segment during the same analysis period increase by an average of 10.6% annually from EUR 170.0 m to EUR 230.1 m, the sales in the branded products segment decrease by an average of approximately -0.3% annually from EUR 44.2 m to EUR 43.8 m. Compared to the annual growth in the generics segment in the amount of 4.4% expected by IMS, <sup>197</sup> STADA is accordingly able to exceed the generally expected market growth for generics even on a net sales basis. Especially in light of the fact that the growth in the market expected by IMS is based on gross sales, STADA's planned development in the generics segment should be considered to be very positive. Overall, the company expects that it will generate approximately 10.2% of its total sales in Italy in 2020.

Development of total sales	Hist	toricals	Plan				CAGR '17-'20	IMS CAGR '17-'21
in EUR m	BE	2017		2018	201	9 2020	1	
Generics		170.0	1	.95.0	210.1	230.1	10.6%	4.4%
Branded products		44.2		37.4	40.4	43.8	-0.3%	1.3%
Total sales		214.2	2	32.4	250.5	273.9	8.5%	3.5%
growth (yoy)		-		8.5%	7.8%	9.3%		

#### Generics

pharmaceutical market with a generics penetration rate of 13.7%. Due to the increasing pressure on costs in the public healthcare sector, STADA believes that the historic growth rates in the generics segment will also continue to be achievable. The development of total sales in the generics segment will be determined by newly introduced pharmaceuticals in 2018 to 2020. The general expectation is that the increase of sales to EUR 195.0 m in 2018 will be attributable

<sup>&</sup>lt;sup>196</sup> See no. 174.

<sup>&</sup>lt;sup>197</sup> See no. 174.

to newly introduced products at approximately 46.0%. In addition to synthetic generics, biosimilars will also most likely be included in the product portfolio starting from 2019, whereas the sales of this category of pharmaceuticals is supposed to increase in 2019 to 2020 from EUR 0.5 m to EUR 4.0 m. Additionally, a further increase in distribution activities targeted at doctors is expected to contribute to the sale of additional prescription pharmaceuticals and other products and a simultaneous reduction of product substitutions by pharmacists. <sup>198</sup>

# Branded products

- 558. The decline in total sales in the branded products segment is primarily attributed to the subsidiary EG S.p.A. whose distribution agreement for the anti-pain portfolio expires at the end of 2017. This will reduce sales within the branded products segment by approximately 50% in 2018. The organic growth of the remaining product portfolio is expected to result from a distribution focus on the branded products Lenirit (dermatology), Egermina (vitamins), Sedatol (sleep medication) and Hedrin (head lice remedy) as well as introduction of other new products. These efforts are expected to almost completely make up for the sales decline in 2018 by 2020. Due to historically weak margins of the branded products segment within EG S.p.A., the decline in total sales will have only a relatively small impact on planned EBITDA levels.
- The positive development of the planned sales of the second subsidiary Crinos S.p.A. provides a major contribution to STADA's sales in the branded products segment in 2017. Despite the decline in sales in the branded products segment at EG S.p.A, the total level of sales in the period of 2017 to 2020 will approximately remain unchanged on a consolidated basis. Important drivers for sales will be new products such as the pharmaceuticals Tiofen (stomach complaints) and Rifamicina (tuberculosis). Strong growth of already established brands, such as for example Hiridoid (dermatology) and Valpinax (sedative) are expected as a result of increased distribution activities.

#### Interim conclusion

- 560. STADA expects to be able to maintain the established market position and even grow more than the generally expected growth in the Italian market. The main reason for this development in light of the generally low penetration rates is an increase in sales volumes in a stable price environment which is additionally supported by an expansion of the product portfolio.
- 561. The planned development of total sales of STADA's branded products segment is primarily characterized by the termination of the distribution agreement for a pain remedy product portfolio in 2018. Due to sales increase at the subsidiary Crinos S.p.A., however, the company

<sup>198</sup> STADA plans in this regard to contact approximately 55.0% of the general physicians in Italy with a targeted product policy; see additional information on prescription policy in no. 214.

expects that the total sales in the plan period will remain virtually constant on a consolidated basis.

## France

STADA's sales in France are primarily generated by the subsidiary E.G. Labo Eurogenerics S.A. STADA expects in general that the total sales in the French market will increase from EUR 87.4 m in 2017 to EUR 107.5 m in 2020. This corresponds to an average annual growth rate of 7.2% and is, thus, significantly above the growth in the market for generics and branded products in the amount of 2.8% annually expected by IMS. <sup>199</sup> While the sales in the generics segment increase in the analyzed period on average by 6.9% annually from EUR 82.8 m to EUR 101.1 m, the branded products segment grows on average by approximately 11.8% from EUR 4.6 m to EUR 6.4 m, so that STADA's expected net sales at the segment level will exceed the growth in the marked expected by IMS. Against the background that the expected growth in the market takes into account gross sales, STADA's planned growth in the generics segment, just as is the case in Italy, should be considered to be very positive. STADA expects in general that it will generate approximately 4.0% of total sales in France in the financial year 2020.

Development of total sales	Hist	oricals		Plan		CAGR '17-'20	IMS CAGR '17-'21	
in EUR m	BE	2017	2018	2019	2020			
Generics		82.8	86.2	94.9	101.1	6.9%	4.7%	
Branded products		4.6	5.4	6.0	6.4	11.8%	-1.4%	
Total sales growth (yoy)		87.4	<b>91.7</b> 4.9%	<b>100.8</b> 10.0%	<b>107.5</b> 6.6%	7.2%	2.8%	

#### Generics

563. STADA continues to expect strong competition in the French market going forward. Against this background, the company expects a further decrease in price levels, which can only be compensated by growing sales volumes and newly introduced products. The forecasted growth results primarily from the introduction of new products as well as chemical active substances and biosimilars. In order to support the distribution activities, STADA plans to expand the existing partnerships with pharmacy groups and to enter into additional partnerships.

## Branded products

segment are overall of lower importance for STADA group. The current and planned sales are based on niche products as well as export sales of the British company Thornton & Ross Ltd which are expected to lead to a relatively high increase in sales primarily due to the low level of sales in the financial year 2017.

#### Interim conclusion

565. STADA plans to grow in the generics segment on a net sales basis stronger than the market, although high pressure on prices will remain present in the French market. The main reason for

<sup>&</sup>lt;sup>199</sup> See no. 174.

the projected growth are new products such as biosimilars, whereas first product launches will be introduced starting in 2019.

#### Spain

standa's total sales in Spain are generated by the subsidiary Laboratorio STADA S.L.. STADA expects that the sales in the Spanish market will increase from EUR 124.0 m in 2017 to EUR 143.1 m in 2020. This corresponds to an average annual growth rate in the amount of 4.9% and is, thus, higher than the growth in the generics and branded products segment in the amount of 4.4% annually expected by IMS.<sup>200</sup> While the total sales in the generics segment increase on average by 1.2% annually from EUR 105.2 m to EUR 109.1 m, the growth in the branded products segment is on average approximately 21.9% annually from EUR 18.8 m to EUR 34.0 m. While the branded products segment accordingly develops better than the expected market growth, it must again be taken into account when observing the generics segment that the expected market growth does not take into account the granted discounts or similar matters. STADA expects overall that it will generate approximately 5.3% of its total sales in Spain in 2020.

Development of total sales	Hist	toricals	Plan				CAGR '17-'20	IMS CAGR '17-'21	
in EUR m	BE	2017		2018	201	.9	2020		
Generics		105.2		105.0	105.	1	109.1	1.2%	5.2%
Brand products		18.8		25.2	30.	)	34.0	21.9%	0.1%
Total sales growth (yoy)		124.0		<b>130.2</b> 5.0%	<b>135.</b> 3.7%	_	<b>143.1</b> 6.0%	4.9%	4.4%

# Generics

567. STADA's planning of sales in 2017 to 2020 reflects primarily the difficult market environment for generics in Spain, in which generics are prescribed less often than in other European markets due to a lack of incentive systems. This lack of incentive systems and high price pressure leads to the consequence that STADA, similar to other generics providers, is effectively forced to grant relatively high discounts. Thus, the planned sales growth in the Spanish generics segment is lower than the IMS forecast. On a product level, the company accordingly plans to supplement the generics portfolio with branded generics, in order to achieve a higher level of recognition among customers. Additional measures in the product portfolio also include the introduction of biosimilars starting in 2019. Biosimilars are supposed to contribute to overall sales growth by focusing on their distribution to hospitals. In order to stand out from competition, the company plans to conduct marketing campaigns, e.g. training events for pharmacists and doctors.

# Branded products

568. The planned average annual growth in the branded products segment is much higher than the forecast growth in the market due to a relatively low level of total sales in 2017. In this regard,

<sup>&</sup>lt;sup>200</sup> See no. 174.

it should be considered that a higher growth rates than forecasted by IMS for the overall market are assumed in Spain due to the composition of the STADA branded products portfolio.

The main drivers of growth in the branded products segment are both established as well as newly introduced pharmaceuticals and other products. The products Lactoflora (probiotic), Ladival (protection against sunlight), Algesal (anti rheumatic) and Hirudoid (inflammation of the veins) contribute significantly to sales growth among the products already introduced in the market. Additionally, the branded products Neositrin (physical hygiene), Benenox (sleep disorders) and ArterioK2 (cardiovascular) will be introduced into the market. In addition to classic distribution channels, the presence on online platforms such as Amazon or online pharmacies will continue to be expanded. At the same time, STADA intends to increase the the headcount of its sales force.

#### Interim conclusion

- 570. In the past STADA was able to establish an attractive product portfolio as one of the leading providers in the Spanish generics market by means of targeted distribution measures. The company expects in the future to maintain the market position, but the planned sales growth in the generics market will be low due to intense competition in the market.
- 571. Due to the low level of sales in the branded products segment, a relatively high average annual growth in the amount of 21.9% is assumed in the plan period. The main growth drivers of this development are both established as well as newly introduced branded products.

# Belgium

572. STADA expects that the sales in the Belgian market will increase from EUR 134.8 m in 2017 to EUR 161.0 m in 2020. This corresponds to an average annual growth rate of 6.1% and is, thus, well above the growth in the generics and branded products segment expected by IMS in the amount of 2.4% annually.<sup>201</sup> While the sales in the analyzed period in the generics segment increase on average by 5.2% annually from EUR 122.0 m to EUR 142.0 m, the branded products segment grows from EUR 12.7 m by on average approx. 14.3% to EUR 19.0 m. Thus, STADA's expected net sales at the segment level exceed the growth in the market expected by IMS. STADA expects that it will generate approx. 6.0% of total sales in Belgium in 2020.

Development of total sales	otal sales Historicals			ls Plan					IMS CAGR '17-'	21
in EUR m	BE	2017		2018	201	9 20	020			
Generics		122.0	:	132.3	135.9	9 142	2.0	5.2%	2.9	1%
Branded products		12.7		14.5	16.0	5 19	9.0	14.3%	2.0	1%
Total sales		134.8	1	146.8	152.	161	1.0	6.1%	2.4	%
growth (yoy)		-		9.0%	3.99	5.5	5%			

# Generics

573. Especially the strong sales growth and constant levels revenue reductions lead to a strong increase in sales in 2018 compared with the previous year. This sales growth is based on

<sup>&</sup>lt;sup>201</sup> See no. 174.

intensified distribution activities to increase the number of prescriptions by doctors and on measures to increase the product availability in pharmacies.

# Branded products

- 574. The two digit increase in total sales in the branded products segment is especially based on the development of the products Fultium and ViruProtect as well as APO-Go introduced in 2017.
- 575. The future growth in the branded products segment will largely depend on targeted marketing measures addressed at doctors pharmacies and end-consumers. Branded discretionary prescription drugs such as (among others) Protectis (stomach complaints), Serelys (menopause), Fultium (vitamins) and Mobiflex (food supplement) will also be specifically marketed to doctors.

## 576. Interim conclusion

STADA is one of the leading market participants in the Belgian generics market and expects that it will be able to defend itsposition in the futuredue to an increasing sales volume which shallbe achieved primarily by targeted marketing activities, an expansion of the sales force and a stronger focus on branded products.

577. In addition to the generics segment, an increase of sales in the branded products segment is also expected in the future. Important products in this regard are the pharmaceuticals APO-Go (Parkinson's), Fultium (vitamins) and ViruProtect (colds).

# Russia

578. Overall, STADA's expectation for the Russian market is that the sales will increase from EUR 341.0 m in the financial year 2017 to EUR 368.3 m in the financial year 2020, which corresponds to an average annual growth rate of 2.6%. At the segment level, STADA plans that the total sales in the generics segment will decrease from 107.3 m in the financial year 2017 on average by approx. -3.1% annually to EUR 97.6 m. In contrast, STADA assumes a positive development in the branded products segment, resulting in an average annual increase of total sales on by approx. 5.0% from EUR 233.7 m in 2017 to EUR 270.7 m in 2020. The company expects that approx. 13.8% of total sales will be generated in Russia in 2020. It must considered that sales are invoiced in Ruble and are converted to Euro when the group planning is consolidated. Insofar, the growth rates are also distorted on the basis of the plan figures in Euro as a result of currency exchange effects. Against the background of currency effects and the low quality of data on the figures for market growth, a reasonable evaluation of the planned development of sales in Euro is not possible. However, analyzing the total sales prior to

currency effects is much more meaningful with regard to growth, where sales growth is supposed to increase on average by approx. 13.4% annually in 2017 to 2020.

Development of total sales	Hist	oricals		Plan		CAGR '17-'20	IMS CAGR '17-'21
in EUR m	BE	2017	2018	2019	2020		
Generics		107.3	102.4	98.4	97.6	-3.1%	6.0%
Branded products		233.7	230.8	251.4	270.7	5.0%	5.6%
Total sales	-	341.0	333.1	349.8	368.3	2.6%	5.8%
growth (yoy)		-	-2.3%	5.0%	5.3%		
Total sales (in Ruble bn)		21.8	29.9	28.2	31.8	13.4%	
growth (yoy)		-	37.2%	-5.7%	12.6%		

#### Generics

579. STADA's sales in the generics segment in Russia are also characterized by a market environment with intense competition. Although STADA's product portfolio does not feature the lowest prices in the market and although the company generally focuses on profitable generics, STADA assumes substantial sales volume growth going forward. In the past, the most important generic products included Essliver Forte (Phospholipide), Glycerin (Laxans) and Diclofenac (pain/inflammation), which are also supposed to represent growth drivers in the future. Since STADA manages its business in Russia locally and carries out important steps of the value creation chain locally, the company is in a good position if the Russian healthcare system puts more importance on a public insurance system in the future.

## Branded products

580. The growth in the branded products segment from 2017 to 2020 is based primarily on increasing future total sales of established products. Important branded products include the medications Snup (stuffy nose), Vitaprost (prostate illness) and Aqualor (colds). As is the case in the generics segment, the distribution of branded products primarily focuses on wholesalers and pharmacy chains. At the same time, various initiatives related to external sales force team and marketing campaigns targeted at doctors, pharmacies and end-consumers are planned.

#### *Interim conclusion*

581. Not taking into account currency effects, STADA holds a very good position in the Russian market and expects to remain a leading market player both in the generics segment as well as in the branded products segment in the future. Against the background of a potential reform of the Russian healthcare system and its tendency to favor Russian providers, STADA considers itself to be in a good position as a result of the local value creation chain and expects to remain successful, also in the context of tender contracts or similar regulatory measures.

# Development of the Top 5 products

582. In addition to the development of sales in STADA's core sales markets, the development of the product portfolio should also be considered in more detail. Against the background that STADA generally has a very broad product portfolio, there are no individual pharmaceuticals on which STADA's successful future development of sales depends. In order to provide an overview of the relatively important products, anyway, the five most important medications over the

course of time are discussed below for the generics segment and the branded products segment.

Total sales generics	Historicals	Plan			CAGR '17-'20
in EUR m	BE 2017*	2018	2019	2020	_
Tilidin	35.3	35.9	36.2	34.0	-1.3%
Atorvastatin	25.1	27.2	28.3	29.1	5.0%
Epoetin Zeta	24.1	23.9	26.3	26.3	2.9%
Pantoprazole	21.8	21.6	22.3	23.3	2.4%
Diclofenac	21.2	20.9	20.8	20.8	-0.6%
	127.5	129.5	133.9	133.6	

<sup>\*</sup> Since sales information on a product level was not available for the last quarter of 2017, the sales displayed for 2017 represent forecasts extrapolated from the sales data of the first 3 quarters of 2017.

The five most important generics in terms of sales will likely have an average portion of total sales in the segment sales of approx. 9.2% in the financial years 2017 to 2020. Due to internationalization activities, individual pharmaceuticals are increasingly offered in multiple countries, resulting in significant market shares within certain sales markets. The medications Tilidine Naloxon (pain), Atorvastatin (increased cholesterol levels) and Epoetin Zeta (anemia) must be mentioned in this regard, which have partly market shares of more than 50.0% in Germany, Belgium, Spain and Italy. Despite the general erosion of prices for all products, STADA expects that total sales of most top generics will increase in the years 2017 to 2020 whereas the largest growth is forecasted for Atorvastatin (cholesterol).

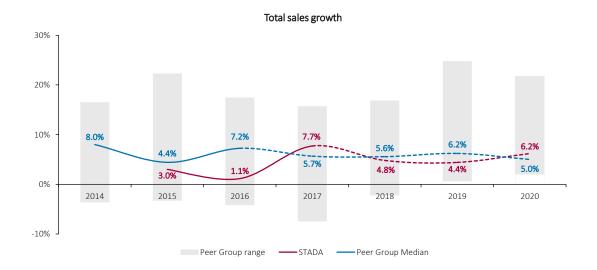
Total sales branded products	Historicals	Plan			CAGR '17-'20
in EUR m	BE 2017*	2018	2019	2020	
APO-go	70.9	68.5	68.9	64.7	-3.0%
Grippostad	45.2	44.9	45.9	46.5	0.9%
Snup	40.7	38.9	37.8	38.2	-2.1%
Vaping Products	18.8	30.5	43.7	51.7	40.0%
Aqualor	33.5	35.7	37.7	38.8	5.1%
	209.2	218.4	233.9	239.8	

<sup>\*</sup> Since sales information on a product level was not available for the last quarter of 2017, the sales displayed for 2017 represent forecasts extrapolated from the sales data of the first 3 quarters of 2017.

584. Compared to the generics segment, the five most important branded products in terms of total sales in 2017 to 2020 have an average portion of total sales in the segment of approx. 16.7%. The strongest growing branded products include vaping products which are supposed to achieve average annual growth of 40.0% in the analyzed period. Another important branded products is Aqualor (colds) which is supposed to reach an annual average growth of 5.1% in the analyzed period. The most relevant sales markets for individual branded products include especially Germany, Great Britain and Russia, in which branded products such as APO-Go (Parkinson's), Grippostad (colds) and Snup (colds) in part have market shares of up to 99.0%, 30.0% and 11.0%.

#### Benchmarking of total sales growth

585. In addition to analyzing the planned sales on the basis of the segments, the countries and the important products, the planned growth in sales by the company is also compared with the forecasts of analysts for the peer group companies:



- 586. The median sales growth by the peer group companies in 2014 to 2017 was between 4.4% and 8.0%. The growth in total sales of STADA in the same period was between 1.1% and 7.7% and, thus, in general within the range of the peer group.
- 587. STADA expects of growth rates in sales within a range of 4.4% to 6.2% in 2018 to 2020. In comparison, analysts estimate growth rates for the peer group companies resulting in a median between 5.0% and 6.2% in the same period. Except for 2014 and 2016, the growth rates of the peer group companies show a median in a range between approx. 5.0% to 6.0%,. Overall, STADA's planned sales growth in the plan period is within the range of growth rates expected for peer group companies.

## Interim conclusion about the planning of sales

The planned sales growth in general is above the historic growth rates and is based both on increasing sales in generics as well as in the branded products segment. The planned growth in sales takes into account, on the one hand, the strong market position in the generics segment, e.g. in Germany, as well as, on the other hand, future growth potential which is based, among other aspects, on introduction of new products, the internationalization strategy, increasing the generics penetration rates in individual markets and the development of biosimilars. At the same time, the growth is limited by the global pressure on prices in the generics segment. STADA expects in general in the branded products segment stronger growth than in the generics market, which results primarily from the strong position of its branded products in individual countries, the introduction of new products and an expansion of the distribution and marketing activities.

- 589. The planned sales growth in general is at the level of the sales growth forecasted by analysts for peer group companies and, despite taking into account reductions in revenues, is slightly above the global market forecast by IMS in the amount of 4.9% with an average growth rate of 5.1% annually. Compared to the rates of growth in the years 2014 to 2016, the planned sales growth is substantially higher than realized growth rates in the past.
- 590. In conclusion, STADA expects an annual average sales growth of 5.1%, resulting in sales of EUR 2,676.9 m. Due to its established product portfolio with strong brands and further product launches also related to STADA's internationalization strategy in the future, especially sales of the branded products segment are expected to grow by 7.1% annually between the financial years 2018 to 2020.

## 4.4.2. Earnings before interest and taxes (EBIT)

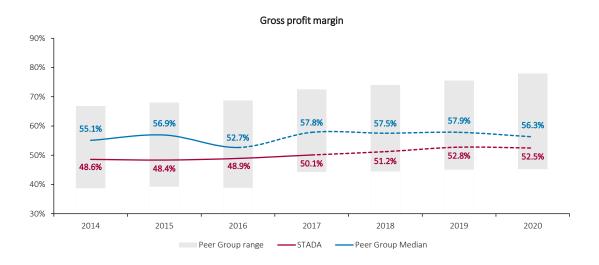
		Adjusted h	istoricals	Plan				
in EUR m	2014	2015	2016 B	E 2017	2018	2019	2020	
Total sales	2,053.6	2,115.1	2,139.2	2,304.2	2,414.5	2,520.8	2,676.9	
growth (yoy)	-	3.00%	1.14%	7.71%	4.79%	4.40%	6.19%	
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9	-1,177.4	-1,190.9	-1,272.3	
Gross profit	997.9	1,022.9	1,046.4	1,154.2	1,237.1	1,329.9	1,404.6	
in % of total sales	48.6%	48.4%	48.9%	50.1%	51.2%	52.8%	52.5%	
Selling, general and administration cost	-611.2	-658.7	-670.3	-726.3	-780.3	-811.0	-848.1	
in % of total sales	29.8%	31.1%	31.3%	31.5%	32.3%	32.2%	31.7%	
thereof marketing expenses	-458.4	-482.6	-488.3	-526.2	-570.0	-611.9	-644.4	
thereof general & adminstrative expenses	-152.8	-176.0	-182.0	-200.0	-210.3	-199.1	-203.7	
Research and development cost	-56.9	-65.0	-65.1	-72.9	-85.6	-89.4	-99.5	
in % of total sales	2.8%	3.1%	3.0%	3.2%	3.5%	3.5%	3.7%	
Other operating income	15.8	17.0	11.8	46.0	2.7	1.7	0.6	
Other operating expenses	-23.2	-31.0	-27.8	-71.2	-25.5	-25.8	-25.2	
EBIT	322.4	285.3	295.1	329.9	348.4	405.4	432.4	
in % of total sales	15.7%	13.5%	13.8%	14.3%	14.4%	16.1%	16.2%	
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2	134.7	137.0	136.0	
EBITDA	431.9	389.4	398.0	435.2	483.1	542.4	568.4	
in % of total sales	21.0%	18.4%	18.6%	18.9%	20.0%	21.5%	21.2%	
Payroll expenses	299.3	337.3	341.0	351.0	366.6	381.8	391.3	
in % of total sales	14.6%	15.9%	15.9%	15.2%	15.2%	15.1%	14.6%	

591. STADA expects that the earnings before interest and taxes (EBIT) will increase from EUR 329.9 m in (adjusted) to EUR 432.4 m in 2020. This corresponds to an improvement in the EBIT margin from 14.3% in 2017 to 16.2% in 2020. The expected EBIT margin improvement primarily relates to a gross margin improvement on the one hand and relatively lower shares of selling and administration expenses relative total sales on the other hand.

## Gross profit

592. The gross profit increases from EUR 1,154.2 m in 2017 to EUR 1,404.6 m in 2020. This corresponds to an improvement in the gross margin from 50.1% in 2017 to 52.5% in 2020. The planned gross margin is accordingly higher than past adjusted gross margins, ranging in a bandwidth of48.4% to 50.1%. The improvement in the expected gross margin is mainly attributed to decreasing material and personnel cost ratios in terms of planned total sales.

- 593. The improvement in the gross margin results from a large number of measures to improve the operational profitability in the individual planning units in specific countries, which can only be addressed comprehensively in this valuation report due to the high level of detail in the planned accounts and the existing intercompany relations among the individual planning units within STADA group.
- 594. A significant factor contributing towards a lower material cost ratio at STADA is the fact that the company intends to realize economies of scale within its production process by investing in its own production capacities and increasing its in-house production share with increasing production and sales volumes. STADA also continuously works on improving the efficiency of the production processes, which also contributes to a relative decrease in the production cost. At the same time, STADA's negotiating power against suppliers increases with growing sales volumes; therefore, STADA assumes in the business plan that it can lower purchasing prices, especially for selected raw materials, supplies and finished goods from suppliers and contract manufacturers within the respective contractual possibilities. Opportunities for lowering costs have also been identified in the area of product packaging and are also reflected in the business plan.
- The strategic shifts in the product mix, the strategic positioning of the product portfolio within the generics segment and within the individual countries also contribute to an increase of the gross margin. In this regard, e.g. the focus on high-margin niche products in Great Britain, the strong growth the high-margin the vaping business as well as repositioning of existing brands and the introduction of new branded products must be mentioned. In addition, the relative share of higher-margin branded products within total sales is expected to increase.
- 596. In addition to analyzing the planned development of the gross margin over the course of time, STADA's planned gross margin is compared with analyst forecasts for the peer group companies:



597. The median gross margin of the peer group companies in the years 2014 to 2017 was between 52.7% and 57.8%, whereas the gross margin of STADA fluctuated at the lower end of the peer

group range between 48.4% and 50.1%. Similar results can be observed in the periods 2018 to 2020, when the median of the peer group companies in 2019 increases slightly to 57.9% and subsequently decreases slightly in 2020 to 56.3%. In comparison, the gross margin of STADA increases from 50.1% in 2017 to 52.5% in 2020. As a consequence, STADA's planned gross margin remains below the median of the peer group companies for all displayed financial periods; however, gross margins of STADA and the peer group converge slightly toward the the peer group level throughout the analyzed period. This is mainly due to the company's shift in the product mix, economies of scale in production and purchasing and measures to lower costs which will lead to a slight overall improvement STADA's gross margin.

A main reason for the slightly lower gross margin compared to the peer group is, among other aspects, the strategic focus of STADA as a global full assortment provider. While, on the one hand, STADA is able to realize economies of scale as a full assortment provider on the basis of a broadly diversified product portfolio, individual peer group companies, on the other hand, have a stronger focus on selected products and sales markets. This enables them to generate higher gross margins than STADA. Furthermore, it must be taken into account that the business model of the peer group companies and STADA differs due to varying degrees of in-house production and the varying use of in-licensing concepts. Therefore, the peer group's cost structure is not comparable with the costs structure of STADA in some aspects. Other factors which may have an impact on deviating gross margins are differing focuses in terms of products and sales markets. Especially the latter aspect leads to distorted gross margins at STADA due to its exposure to foreign currency exchange rates.

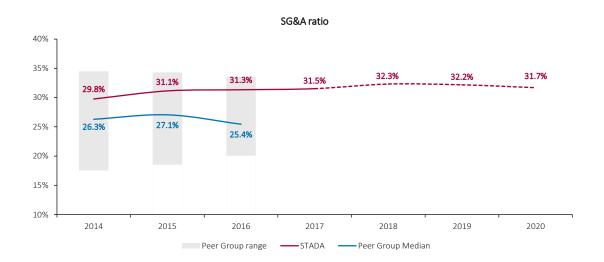
#### **EBIT**

Selling, general and administration costs

- 599. Corresponding to virtually constant cost-to-sales ratio, the selling, general and administration costs increase in the plan period from EUR 726.3 m in 2017 to EUR 848.1 m in 2020.
- administrative cost involves the selling expenses. STADA expects that the selling expenses will increase from EUR 526.2 m in 2017 to EUR 644.4 m in 2020. The selling expenses increase disproportionately faster compared to total sales. This is primarily the result of STADA's increased distribution and marketing activities in the generics segment as well as in the branded products segment. STADA especially plans to expand its distribution capacities in order to increase the sale of branded products especially in Great Britain, Spain and Belgium. The corresponding subsidiaries also receive higher marketing and advertising budgets, in order to further strengthen the respective brand position or establish new brands in the respective countries. This involves, for example, the subsidiary Thornton & Ross Ltd., which has been granted a higher budget for advertising campaigns in connection with the planned increases in sales. Within selling expenses, personnel expenses also increase disproportionately due to the planned expansion of the distribution structures.
- 601. The general administrative costs increase in the entire plan period increase slightly from EUR 200.0 m in 2017 to EUR 203.7 m in 2020. In 2018, an increase to EUR 210.3 m can be

observed, whereas the general administrative remain below this level in all subsequent financial years of the business plan. The decrease in 2019 results especially from a reduction in consulting costs compared to prior years.

602. In order to analyze the planned selling, general and administration cost ("SG&A"), a comparison is also made with the SG&A ratios of the peer group companies in the past:



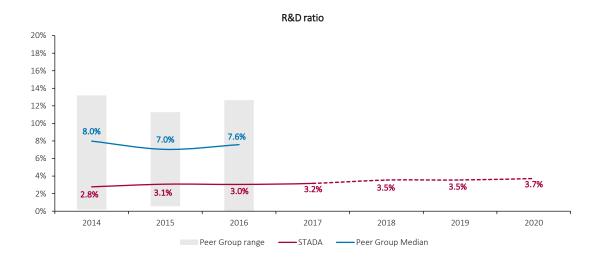
603. Since there are no analyst estimates for future SG&A ratios of peer group companies, we refer to historic values for the financial years 2014 to 2016 when making the comparison with the peer group. The median of historic SG&A ratios at the peer group companies was in a range from 27.1% to 25.4%. During the same time period, STADA's SG&A ratio was in a bandwidth of 29.8% to 31.3% and thus, at the upper end of the peer group range and well above the peer group median. The SG&A ratio at STADA of 31.5% to 32.3% throughout the financial years 2017 to 2020 remains at the upper end of the historic range. The reason for this is, on the one hand, the product mix of STADA which represents a higher sales share of branded products compared with other generics manufacturers and, thus, normally requires higher marketing and selling expenses than pure generics. On the other hand, the SG&A ratio will increase due to the planned internationalization of branded products. With regard to the most comparable peer group companies, e.g. Richter Gedeon and Krka d.d., it must be noted that their historic SG&A ratios also amount to more than 30%. Taking these facts and STADA's specific product and expansion strategy into account, STADA's selling, general and administrative costs appear to be reasonable.

## Research and development cost

604. The research and development cost increases in the plan period from EUR 72.9 m in 2017 to EUR 99.5 m in 2020. This corresponds to an increase of the research and development cost ratio compared to the total sales (the "R&D ratio") of 3.2% in 2017 to 3.7% in 2020. The increase in the R&D ratio is primarily the result of a change in the business model with regard to the development of biosimilars. Whereas STADA previously pursued an in-licensing model in order

to develop new biosimilars, the development of biosimilars is supposed to occur on the basis of a co-development model in the future. Under the co-development model, STADA carries out the development in cooperation with a cooperation partner, leading to the expense of own development costs in contrast to the in-licensing model.

605. The historic R&D ratio of STADA is also analyzed below in comparison to the competitors:



606. As is already the case with the SG&A ratio, we only consider the historic values of the peer group companies due to the lack of analyst estimates for future periods. For the financial periods from 2014 to 2016, the median R&D for peer group companies was between 7.0% and 8.0%. Over the same period of time, STADA's research and development cost where at the lower end of the range, representing only 2.8% to 3.1% of STADA's total sales. The R&D ratio of STADA increases from 2017 to 2020, resulting in a R&D ratio of 3.7% in 2020.

607. STADA's significantly lower R&D ratio is a result of the continuation of the in-licensing model for certain biosimilars within its generics portfolio. Instead of incurring research and development cost in the profit and loss statement, STADA capitalizes a relatively larger portion of the R&D expenditures, leading to a lower R&D ratio than the peer group companies. Furthermore, STADA's R&D ratio is lower compared with pure generics companies due to its significant share of branded products. In conclusion, STADA's R&D ratio appears to be reasonable.

#### Other operating income and expenses

608. The other operating income decreases from EUR 46.0 m in 2017 to EUR 0.6 m in 2020. Other operating income in 2017 essentially consists of compensation payments for damages, repayment of written-off receivables and other income which is not directly attributable to the functional cost areas. The overall influence of other operating income and expenses disappears almost completely in the financial years 2018 to 2020. Other income, amounting to EUR 2.7 m, EUR 1.7 m and EUR 0.6 m respectively throughout the planning period, results, among other aspects, from the reclassification of the results from investments in associates to other income.

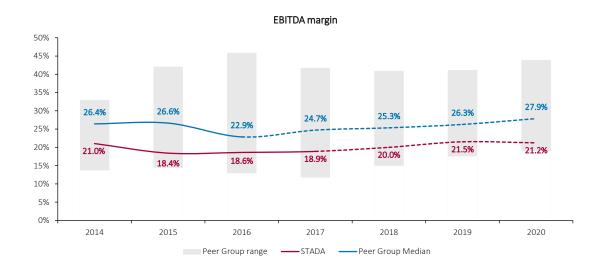
Furthermore, other operating income contains the results from investments and investments under the equity method, the latter accounting for EUR 0.6 m annually in the plan period.

- The other operating expenses decrease from EUR 71.2 m in 2017 to EUR 25.2 m in 2020. As is the case with other operating income, the other operating expenses in 2017 are essentially characterized by other expenses such as expenses for damage payments and insurance-related expenses for insurance claims. STADA expects in the plan period that the other operating expenses will be in a range between EUR 25.2 m and EUR 25.8 m and will consist of flat rate depreciation on intangible assets and other general expenses. Furthermore, adjustments of operating expenses in the plan period amounting to EUR -0.2 m annually were necessary in order to account for reconciliation differences within the business plan between the profit and loss statement and the corresponding assets schedules.
- 610. Based on the planned development of the gross margin, the selling, general and administration cost and the research and development cost, the EBIT will overall increase from EUR 329.9 m in 2017 to EUR 432.4 m in 2020. This corresponds to an improvement of the EBIT margin from 14.3% in the financial year 2017 to 16.2% in the financial year 2020.

#### **EBITDA**

- 611. Since STADA uses the EBITDA as a significant profitability figure in internal group management and external reporting, the EBITDA is also analyzed below. Compared to the EBIT, the EBITDA is not influenced by depreciation and amortization. Due to the application of the cost of sales method, depreciation is generally allocated to the respective functional cost area, e.g. cost of sales or selling, general and administrative cost; therefore, the EBITDA and the total of depreciation, amortization and impairments is displayed for information purposes.
- 612. The EBITDA increases from EUR 435.2 m in 2017 to EUR 568.4 m in 2020. This corresponds to an improvement of the EBITDA margin of 18.9% in 2017 to 21.2% in 2020. Similar to the improvement of the gross margin, the increase of the EBITDA margin in the plan period results from of a large number of individual measures, e.g. the realization of economies of scale in the production process, the increasing level of own production, the cost reductions due to savings regarding packaging, strategic shifts in the product mix, the strategic focus on niche products and high-margin branded products as well as lower discounts ,and higher savings in the area of general administrative costs.

613. The comparison of STADA's and the peer group's historic and analyst-forecasted EBITDA margins in the same period of time yields the following results:



- 614. The historic EBITDA margins of STADA in 2014 to 2016 were in a range of 18.4% to 21.0% and thus well below the median of the peer group, whose median EBITDA margins were in a range of 22.9% and 26.6% in the same period. For all plan periods of the business plan, STADA expects lower margins compared with the median of the analyst forecast of the peer group. The median EBITDA margin forecasted by analysts for the financial years 2017 to 2020 improve from 24.7% to 27.9%. According to the business plan, STADA also assumes a slight EBITDA margin improvement from 18.9% in 2017 to 21.2% in 2020. The relatively low EBTIDA margin results from the low gross profit margin compared to the peer group companies and the significantly higher ratio of selling, general and administrative cost (in terms of total sales) which is only partially off-set by STADA's relatively low R&D ratio.
- 615. STADA's relatively low EBITDA margin results from a variety of factors, e.g. STADA's positioning as a full assortment provider in many core sales markets. Other peer group companies either focus on individual high-margin products or individual sales markets. Furthermore, STADA's relatively high level of dependency on the generics market with intense pricing competition leads to adverse effects on STADA's profitability. Furthermore, the planned selling expenses in the financial years 2018 to 2020 also include high cost for the development and expansion of distribution channels as well as advertising cost in connection with the repositioning of existing products or the launch of new branded products. A significant part of the corresponding sales growth related to these aforementioned costs is expected to occur following the plan period. This applies also for the research and development costs for biosimilars included in the plan period; therefore, STADA expects mid-term and long-term impact from these increased expenses, resulting in future sales growth and a further EBITDA margin improvement.
- 616. Furthermore, both the gross profit margin as well as the EBITDA margin are not suitable as the only profitability measures because they do not establish the required link between the investment ratio, i.e. the capital intensity, and the business model. Therefore, the capital

turnover related to the so-called "capital employed" and the so-called "return on capital employed" or the "ROCE" will be considered in more detail when analyzing the planned balance sheet. This analysis shows that the business plan of STADA, despite the low EBITDA margin, does not lead to a low ROCE compared with the peer group companies.<sup>202</sup>

- 617. Based on the analyses performed on the development of total sales, the gross profit and the development of the EBITDA and the EBIT, we deem the business plan up to the line item EBIT as reasonable. Therefore, the business plan except for the aforementioned adjustments regarding reclassifications and adjustments will be applied for valuation purposes.
- 618. STADA expects that especially the branded products segment will contribute towards higher sales growth. Assuming an average EBITDA margin of approx. 20.9% in the financial years 2018 to 2020, STADA plans to increase profitability compared to prior financial periods. At the segment level, STADA expects slightly decreasing EBITDA margin in the generics segment from 23.1% in 2017 to 22.4% in 2020, whereas the profitability in the branded products segment will increase substantially from 21.9% in 2017 to 26.2% in 2020. Within the generics segment, the development of EBITDA margin is related to biosimilars, whose development costs and investments will have an impact on the EBITDA margin throughout the development phase of new biosimilar products.

#### Segment specific sales, adjusted EBITDA and adjusted EBITDA margins

Total sales	U	nadjusted	historical	S	CAGR	Plan				
in EUR m	2014*	2015	2016	BE 2017	2014-2017	2018	2019	2020		
Total	2,053.6	2,115.1	2,139.2	2,304.2	3.9%	2,414.5	2,520.8	2,676.9		
Generics	1,261.7	1,261.5	1,280.7	1,353.4	2.4%	1,408.7	1,428.0	1,504.4		
Branded products	800.5	853.6	858.5	950.8	5.9%	1,005.8	1,092.8	1,172.5		
EBITDA		Adjusted h	nistoricals		CAGR		Plan			
in EUR m	2014	2015	2016	BE 2017	2014-2017	2018	2019	2020		
Total	431.9	389.4	398.0	435.2	0.3%	483.1	542.4	568.4		
Generics	229.7	232.0	264.9	312.0	10.8%	316.3	327.9	337.2		
Branded products	240.0	220.1	200.7	207.9	-4.7%	249.2	290.3	307.2		
Others	-37.8	-62.7	-67.6	-84.8	30.9%	-82.3	-75.8	-76.0		
EBITDA margin		Adjusted h	nistoricals				Plan			
in %	2014	2015	2016	BE 2017		2018	2019	2020		
Total	21.0%	18.4%	18.6%	18.9%		20.0%	21.5%	21.2%		
Generics	18.2%	18.4%	20.7%	23.1%		22.5%	23.0%	22.4%		
Branded products	30.0%	25.8%	23.4%	21.9%		24.8%	26.6%	26.2%		

<sup>\*</sup> Total sales were adjusted in 2014, Generics and branded products unadjusted.

#### Financial results

- 619. The planned financial results of STADA consist in the plan period of the interest expenses for interest-bearing liabilities and mostly interest expense related to the hedging of foreign exchange risks.
- 620. The interest bearing liabilities consist of financial liabilities (*promissory notes*, liabilities to credit institutions and bonds) and the pension liabilities. The major portion of interest expenses is attributable to these financial liabilities with an average effective interest rate in the amount of

<sup>&</sup>lt;sup>202</sup> See no. 662.

approx. 3.2% to 3.6% and includes expenses related to the hedging foreign exchange risks of intercompany loans in the financial years 2018 to 2020.

- 621. Since the pension liabilities remain virtually constant throughout the plan period, the corresponding interest expenses remain also constant, resulting in an annual interest expense of approx. EUR 0.8 m, based on an effective interest rate of approx. 2.0%.
- 622. The total financial result in the plan period increases from EUR -42.8 m in the financial year 2017 to EUR -39.0 m in the financial year 2020.
- 623. The income before tax accordingly increases from EUR 287.1 m in the financial year 2017 to EUR 393.5 m in the financial year 2020.

#### 4.4.3. Taxes on income

- 624. STADA has prepared a plan for taxes on income which takes into account the existing German tax group of STADA AG with its subsidiaries (i.e. fiscal unit) and the respective taxes on income incurred in foreign countries. The company's tax planning not only considers so-called cashtaxes but also deferred taxes, which occur if differences between the book values for tax purposes and other generally accepted accounting principles (e.g. IFRS) occur.
- 625. The taxable income is calculated for the German tax group, namely STADA AG and its subsidiaries who form the fiscal unit, on the basis of the planned earnings before taxes on income under IFRS and the adjustment for differences in the tax balance sheet. The applicable tax burden consists of trade tax, corporate income taxes as well as the solidarity surcharge. The following tax rates are applied to calculate the taxes on the German companies:

local trade tax multiplier: 357%

corporate income tax rate: 15.0%

solidarity surcharge: 5.5%

- 626. Based on these tax rates, the nominal corporate tax rate for the German companies is accordingly approximately 28.3%. Existing tax-losses carried forwards for purposes of corporate income tax are also taken into account; whereas tax losses carried forward for the German tax group will have been fully utilized by the end of 2018.
- 627. The tax planning for foreign companies within STADA group is done on a decentralized level, assuming the applicable national nominal corporate tax rates. Corporate Controlling at the level of STADA group performs a plausibility check of the applied nominal tax rates.
- 628. Based on the previously described tax planning, taxes on income increase from EUR 76.5 m in 2017 to EUR 105.1 m in 2020. The effective tax rate slightly increases in the plan period from 26.6% in 2017 to 26.7% in 2020. This development of the tax rate takes into account not only the referenced tax losses carried forward but also decreasing tax rates in Great Britain and

Belgium during the plan period. According to the company, no changes impacting the tax rate are expected in the long run; therefore, the effective tax rate of 2020 was extrapolated for purposes of the convergence period and the terminal value period.

629. Taking into account lower tax rates and tax holidays in various foreign subsidiaries, the tax planning of the company appears to be overall reasonable, in our opinion. As a result of this analysis, the effective tax rates planned by the company will be used without any adjustments for valuation purposes.

### 4.4.4. Net income / net loss for the year for STADA group

- 630. The net income increases in the plan period from EUR 210.6 m in the financial year 2017 to EUR 288.4 m. in the financial year 2020. This corresponds to an increase of the return on sales from 9.1% in the financial year 2017 to 10.8% in the financial year 2020.
- 631. Minority shares are not taken into account in the adjusted business plan. The result attributable to minority will be valued separately in the valuation and deducted from the respective DCF value.

#### 4.4.5. Planned balance sheet

632. The planned balance sheets for the plan period from 31 December 2017 to 31 December 2020, were primarily adjusted in order to reflect foreign currency translation effects and the sale of the joint venture STADA Vietnam J.V. Co. Ltd, are shown below:

<b>Balance sheet</b>	
:n FUD m as of	

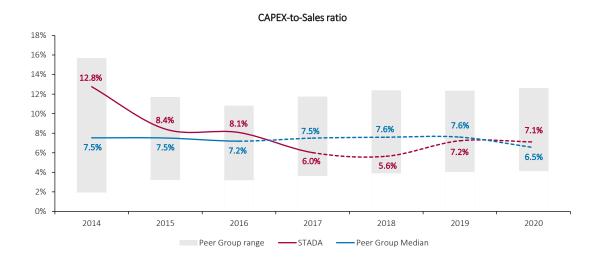
		Adjusted hi	storicals	Plan					
in EUR m as of 31 December	2014	2015	2016 BE	2017	2018	2019	2020		
Intangible assets	1,631.5	1,649.0	1,582.4	1,501.4	1,470.8	1,496.7	1,534.1		
Tangible assets	305.4	321.6	322.7	337.8	369.9	389.3	406.4		
Financial assets	12.6	14.5	16.1	19.3	19.8	20.4	20.9		
Fixed assets	1,949.6	1,985.1	1,921.2	1,858.5	1,860.5	1,906.4	1,961.4		
Inventories	498.8	501.5	484.9	496.8	546.4	564.4	605.9		
Receivables and other assets	502.8	485.9	489.1	503.2	595.5	623.0	632.7		
Cash and equivalents	164.2	143.2	352.6	149.1	83.2	107.0	127.5		
Other current assets	170.7	137.6	171.9	102.6	112.5	121.5	150.8		
Deferred taxes	49.4	34.1	20.8	25.5	25.2	25.6	25.9		
Current assets	1,385.9	1,302.3	1,519.3	1,277.3	1,362.8	1,441.5	1,542.7		
Total assets	3,335.5	3,287.4	3,440.4	3,135.7	3,223.3	3,347.9	3,504.1		
Equity	903.3	1,018.5	1,047.1	949.9	1,080.8	1,157.8	1,286.9		
Provisions	17.4	22.5	20.3	17.6	15.9	16.4	17.2		
Deferred tax	166.7	160.2	116.4	99.0	96.5	93.6	91.4		
Interest bearing liabilities	1,524.9	1,390.0	1,510.1	1,364.3	1,272.8	1,264.2	1,252.5		
Non-interest bearing liabilities	723.1	696.1	746.6	704.8	757.3	815.9	856.1		
Total equity and liabilities	3,335.5	3,287.4	3,440.4	3,135.7	3,223.3	3,347.9	3,504.1		

#### Fixed assets

633. The fixed assets of STADA increase compared to 2017 from EUR 1,858.5 m to EUR 1,961.4 m in 2020, primarily driven by investments in intangible and tangible assets. The CAPEX ratio for

intangible and tangible assets in the years 2018 to 2020 is 5.6%, 7.2% and 7.1% respectively. The increased CAPEX ratios in 2019 and 2020 are driven by necessary investments for entering the market for biosimilars, the expansion of own production capacities and the comprehensive change in IT infrastructure. Despite the strategic decision to emphasize a co-development model in order to develop biosimilars, the existing in-licensing model remains to have a significant impact. In-licensing expenses are capitalized as intangible assets in contrast to development expenses under the co-development model which are treated as regular development expenses.

634. In the chart below, we have compared historical and the planned investments in intangible and tangible assets as a ratio of total sales with the available historical and forecast data for peer group companies:

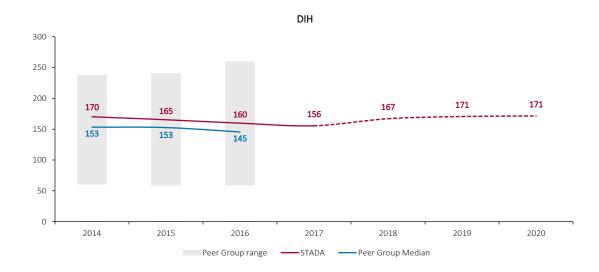


- 635. For the peer group companies, median CAPEX ratios between 7.2% and 7.5% can be observed for the financial periods from 2014 to 2016. For the financial periods from 2017 to 2020, the median analyst forecast for CAPEX ratios remains within a similar range of 6.5% to 7.6%.
- 636. Throughout the entire period of time from 2014 to 2020, STADA's CAPEX ratios remain within the peer group range. STADA's CAPEX ratio in the years 2014 to 2016 was between 8.1% to 12.8%, at the upper end of the range and higher than the peer group median. In the past, the CAPEX ratio was primarily driven, among other factors, by acquisitions. In contrast, the investments in the plan period consist of capitalized intangible assets according to the inlicensing model and investments in tangible assets. STADA's CAPEX ratio of 6.0% is below the peer group median in 2017. For the financial years 2018 to 2020, STADA expects slightly increased CAPEX ratios, arriving at 7.1% in 2020 which is almost equal to the peer group median of 6,5%.
- 637. The increase in investments in tangible and intangible assets in the following years can be mostly attributed to the development and partial capitalization of development expenses for biosimilars. The planned introduction of new IT systems will also increases the need for investments in intangible assets.

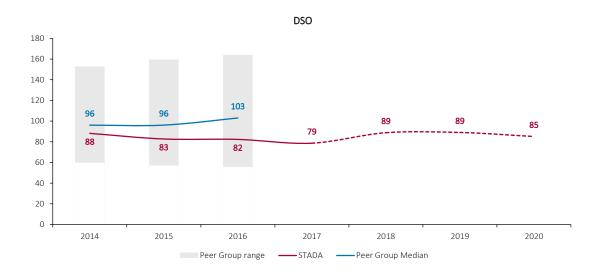
- 638. As a result of the analysis, capital expenditures of STADA in intangible assets and tangible assets in the plan period 2018 to 2020 will be used without any adjustments for valuation purposes.
- 639. Financial assets increases only slightly in the plan period. The reason is a planned increase in the investments accounted for under the equity method.

#### Current assets

- 640. The current assets of STADA increase compared to 2017 from EUR 1,277.3 m to EUR 1,542.7 m in the financial year 2020. This increase is primarily driven by the growth in inventories, receivables and other current assets.
- 641. This development is off-set by the planned decrease in cash and cash equivalents. This decrease results from the assumption that all liquid funds which are not needed to fulfill the minimum operating cash requirement will be automatically distributed to the shareholders.
- 642. According to company information, the minimum operating cash requirement is assumed to within a range of EUR 140.0 m to EUR 180.0 m. This would correspond to a ratio of cash and cash equivalents to planned total sales between 5.8% and 7.5% for the financial year 2018. However, the business plan assumes cash and cash equivalents to be at EUR 83.2 m (which corresponds to 3.4% of total sales) in 2018. Based on the assumptions within the business plan, the balance of cash and cash equivalents increases in the years 2018 to 2020 to EUR 127.5 m in 2020, which corresponds to a ratio of 4.8% of total sales in 2020. The low level of minimum operating cash as at the year-end of 2018 represents a temporary state as of the balance sheet date which is substantially impacted by the termination of factoring agreements.
- 643. The expected increase in inventories is primarily related to the planned increase of unfinished and finished goods in accordance with increased levels of total sales. The planning of inventories at STADA was also subject to a comparison with data of peer group companies:



- 644. For purposes of this analysis, we have analyzed the number of average days inventory outstanding (DIO), sometimes also referred to as days inventory held (DIH). The DIO median of the peer group range was between 145 and 153 days in 2014 to 2016, whereas STADA's DIO in the same period was between 160 days in 2016 and 170 days in 2014 and, thus, within the range but slightly above the peer group median STADA's DIO of 156 to 171 days in 2017 to 2020 is within the historic range of STADA and of the peer group companies. As is the case with days sales outstanding (DSO), the specific aspects related to countries and products must be considered in the case of the DIO. Due to seasonal fluctuations, STADA maintains larger inventory in certain countries such as Russia and Great Britain.
- 645. The planned increase in trade receivables from EUR 503.2 m in 2017 to EUR 632.7 m in 2020 primarily results from the fact that the group-wide factoring agreements expire at the beginning of the financial year 2018 will not be extended. In order to check the plausibility of the development of the level of trade receivables as a material component within the working capital, we conducted an analysis of the past and benchmarking with the peer group:



- 646. The DSO at the peer group companies in 2014 to 2016 had a median between 96 and 103 days, whereas STADA's DSO was significantly shorter, amounting to a range of 79 and 88 days in the financial years 2014 to 2017. Low DSO levels at STADA are due to existing factoring agreements under which STADA sold trade receivables to external service providers in order to shorten the time until receipt of payment. The peer group companies normally do not engage in factoring or only do so to a lower degree.
- 647. STADA expects in the plan period up to the financial year 2020 that the DSO will slightly increase due to the expiration of factoring agreements and will be 89 days in 2018 and 2019 and 85 days in 2020 and, thus, slightly below the historic median of the peer group, but within the historic range.
- 648. The position deferred tax assets increases according to the plan slightly from 25.5 m in 2017 to EUR 25.9 m in 2020.

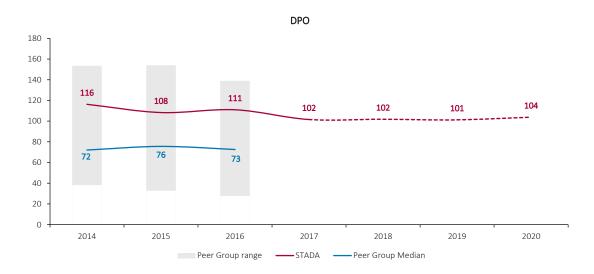
- 649. As a result of the analysis, the planned positions inventories, receivables and other current assets in the financial years 2018 to 2020 will be used without any adjustments for valuation purposes. The planning of the position cash and cash equivalents was made on the basis of the diverging assumptions for dividend distributions (differences with regard to the amount and timing as well as the assumption for minimum operating cash levels) and is therefore different from STADA's business plan.
- 650. The equity and liabilities of the balance sheet include, in addition to the interest-bearing and non-interest bearing liabilities, also provisions as well as equity, which is derived on the basis of the integrated business plan.

#### **Equity and provisions**

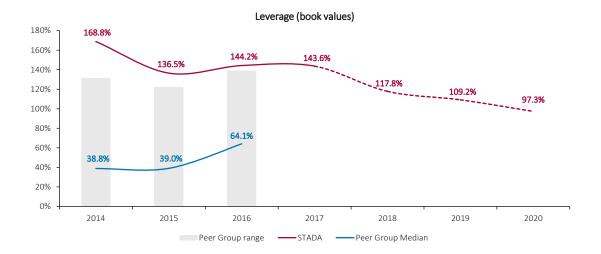
- 651. The equity grows in the plan period from EUR 949.9 m in year 2017 to EUR 1,286.9 m in 2020. In addition to the respective annual results, also the distribution of dividends is assumed to occur in the same period.
- 652. Provisions decreases in the plan period slightly from EUR 17.6 m in the financial year 2017 to EUR 17.2 m in the financial year 2020.

#### Liabilities

- 653. The non-interest bearing liabilities increase from EUR 704.8 m in 2017 to EUR 856.1 m in the 2020. The increase in non-interest bearing liabilities results primarily from the balancing item in order to correctly account for translation effects. Furthermore, trade liabilities, other liabilities and income tax liabilities increase approximately in the same degree. Other financial liabilities increase only slightly during the detailed plan period.
- 654. Similar to the level of trade receivables, an analysis of the past and benchmarking with the peer group was carried out in order to check the plausibility of the development of the non-interest bearing liabilities (i.e. trade payables) as a component of working capital:

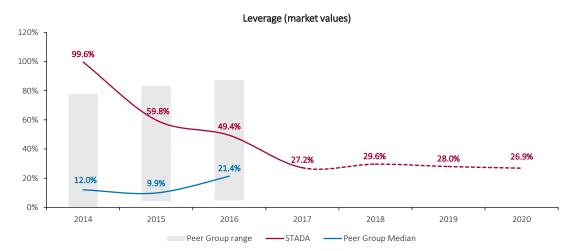


- to 2016 had a median between 72 and 76 days. The DPO at STADA decreased from 116 days in the financial year 2014 to 111 days in 2016, but it was above the median of the peer group in all financial years. In 2017 and in the plan period, the DPO is expected to be between 101 and 104 days. This value is above the historically observed DPO at STADA, but it still lies within the peer group range.
- 656. Deferred tax liabilities decrease according to the plan slightly from EUR 99.0 m in 2017 to EUR 91.4 m in 2020.
- The interest bearing liabilities decrease from EUR 1,364.3 m in 2017 to EUR 1,252.5 m in 2020. The development results exclusively from the repayment of interest bearing liabilities.
- 658. We also compared the planned capital structure at STADA in the sense of the leverage in book values and market values with the peer group companies. Since there are no analyst estimates for the leverage ratio of peer group companies, the comparison covers only historic values of the peer group for the years 2014 to 2016:



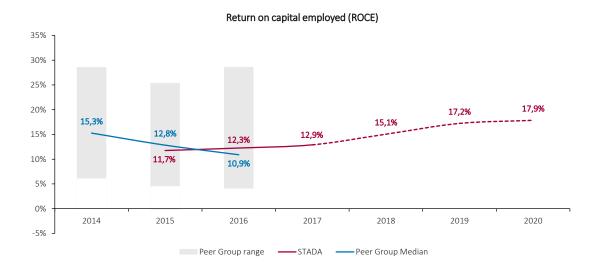
659. Based on the book values of equity and debt, the leverage ratio of STADA lies historically above the range of the peer group companies. The peer group median in 2014 to 2016 was between 38.8% and 64.1%. The leverage at book values at STADA in the financial years 2014 to 2017 continuously decreases from 168.8% in 2014 to 143.6% in 2017 and is, thus, above the range of the peer group companies. In the subsequent financial years the business plan also shows a decrease in leverage at book values and reaches 97.3% in the financial year 2020.

660. The same development is apparent when observing the leverage at market values:



STADA's leverage at market value of 99.6% in 2014 was still well above the median of the peer group which amounted to 12.0% and above the range. In the subsequent financial years the leverage of STADA decreased and was 49.4% in 2016 which was in the middle of the range, but above the median of the peer group of 21.4%. During the plan period up to the financial year 2020, the leverage continues to decrease and, at 26.9% almost reaches the historically observed peer group level (median).

operations and the capital intensity, we also compared the return on capital employed at STADA with the peer group. In order to calculate the ROCE, we determined a ratio between the EBIT and the invested capital ("IC"):

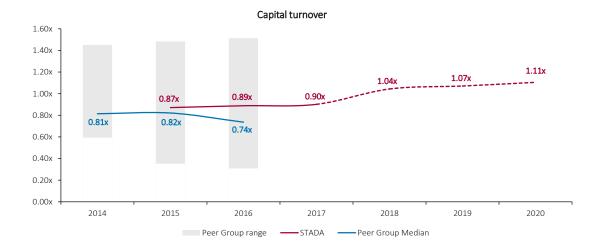


662. The ROCE of STADA was 11.8% in 2015 and 12.4% in 2016, which was in the middle of the range, but in part higher than the historic median of the peer group companies. This median was between 10.9% and 15.3% in 2014 to 2016. STADA plans to improve the ROCE step by step to 17.1% by 2020.

663. The return on capital employed results in general from the interaction from operating margin (EBIT margin) and the capital intensity (capital turnover frequency):

$$ROCE = \frac{EBIT}{Total \ Sales} \times \frac{Total \ Sales}{IC}$$

664. The historically low ROCE at STADA is above all the result of lower profitability compared to the peer group. 203 The positive effect on the ROCE from a higher capital turnover (STADA 2016: 0.89x; median of the peer group 2016: 0.74x) was only able to partially compensate for the lower margin:



- of 12.4% in the financial year 2016 to 17.1% in the financial year 2020 is driven, among other factors, by a higher capital turnover. This increases from 0.89x in the financial year 2016 to 1.11x in the financial year 2020. The increase also is attributable to an improvement in the operating margin.
- 666. The increase in capital turnover to approximately 1.1x by the financial year 2020 continues to be within the historically observed range for the peer group companies and reflects the specific business model of STADA.
- 667. Overall, the expected return on capital employed appears reasonable when taking into account the drivers and the specific business model of STADA. During the plan period, the ROCE of STADA develops towards the middle of the historic peer group level in the last ten financial years.

<sup>&</sup>lt;sup>203</sup> See para. 661.

#### 4.4.6. Result of the business plan analysis

- 668. In order to ensure a consistent derivation of the future cash flows and growth rates, the main assumptions in the business plan are analyzed and checked for plausibility in a benchmarking analysis. The planning process was also analyzed.
- The business plan was prepared in the course of the regular planning process of STADA and is based on the plan prepared in an iterative process for the planning of the individual units which was examined by the management of STADA in the course of the planning discussions. These individual plans were aggregated by the controlling department to make the group plan. The business plan accordingly contains detailed estimates of the individual planning units about the market and competitive environment of STADA, the future earnings and financial position and also individual ambitions on the part of management. The assumptions in the business plan are also based on the documented business concept of the company and the measures which have already been implemented or are sufficiently specified as of the valuation date.
- 670. The "strategic outlook" or so-called "Guidance", which was prepared by the company and communicated to the capital market in March 2017 was prepared according to company information subsequent to the regular planning process and was resolved by the executive board of STADA. In addition to the business plan based on the regular planning process, this Guidance contains ambitions with regard to sales growth and growth in the EBITDA, which represent exclusively the estimates of the former executive board. These estimates were not adopted in the regular planning process and do not include the "bottom-up" planning by the individual planning units. Furthermore, the measures to achieve the targets of the former executive board had not been translated into concrete action plans and were therefore not sufficiently specified according to the so-called "root theory" (Wurzeltheorie)<sup>204</sup>. Therefore, the current executive board of STADA considers the Guidance not to be a relevant basis for the valuation of STADA as of the valuation date.
- 671. The planned total sales are based on a large number of factors specific to the countries and portfolios, which were taken into account by the individual planning units. We analyzed the total sales on the basis of the generics and branded products segments, the Top 7 countries and the most important products of the company and in each case compared them to the market forecasts of IMS. Overall, STADA expects on the basis of the planned net total sales that it will exceed the market growth forecast by IMS (on the basis of gross total sales). The expected sales growth also corresponds to the sales growth estimates of peer group companies by analysts.
- 672. The planned gross profit margin of STADA in the plan period is below the average of the peer group, but this was also the case for STADA in the past. Due to the initiatives to focus on generics and high-margin branded products in the business plan, to lower production cost and realize economies of scale, the gross profit of STADA in the plan period improves and comes close to the level of the peer group. The planned EBITDA margin in the plan period also

<sup>&</sup>lt;sup>204</sup> For details regarding the concept of root theory, please refer to chapter 3.3 of this report.

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increases, but it is still overall below the historic and forecast EBITDA margins for the peer group. When comparing the EBITDA margins, it must also be considered that STADA has already included advertising cost for the new introduction and the repositioning of branded products and the expansion of distribution channels, which will be offset by the sales in subsequent periods. Therefore, a further growth in sales and an improvement in the EBITDA margin can be expected in the convergence phase. This also applies for the research and development cost relating to biosimilars contained in the business plan.

- 673. With regard to the main balance sheet positions of working capital, the business plan of STADA assumes that the DIO, DSO and DPO will be in the range of the peer group companies in the future. The respective times were also derived on the basis of the historic values at STADA. With regard to DSO, there is a slight increase resulting from the expiry of factoring contracts in 2018 which will not be renewed going forward.
- 674. The planned fixed assets of STADA are characterized overall by an increasing CAPEX ratio. However, this lies at the average level of the peer group and is especially the result of the expansion of distribution, the investments in the expansion of the own production and the codevelopment strategy with regard to biosimilars as well as the ongoing in-licensing model for new generics.
- capital lead in general to an ROCE which was at the level of the peer group in the past. During the plan period the planned ROCE exceeds the average level of the peer group due to the growth in sales and the increasing EBITDA margin combined with an increasing capital turnover.
- environment, the planning of the profit and loss statement as well as the planned balance sheet, including the price/volumes structure, the benchmarking analyses with the peer group companies, the discussions conducted with the management of STADA and the analysis of the planning process, we overall assess the business plan as ambitious, but reasonable. With regard to the P&L, the business plan was not adjusted except for adjustments regarding depreciation and amortization and reclassifications within certain P&L positions. The balance sheet planning was adjusted for valuation purposes with regard to the following issues: special values (dividend for the year 2017, purchase price for the joint venture STADA Vietnam J.V. Co Ltd., minorities) and translation effects resulting from currencies other than EUR, planning of cash and cash equivalents as well as balance sheet adjustments directly linked to the separate consideration of special values. Except for the aforementioned adjustments, no further adjustments were made.

## 4.5. Convergence and terminal value phase

#### Convergence phase

- 677. The determination of the equity value on the basis of the DCF method or the discounted dividend model respectively the discounting of future cash flows are divided into at least two planning periods assuming a perpetual life for the business. The first period is called detailed planning period and consists of a finite number of periods which usually covers 3 to 5 years. Furthermore it is appropriate to model an additional transitional phase (the so-called convergence or general planning phase) between the detailed planning period and the terminal value period.<sup>205</sup>
- 678. The DVFA-Recommendations divide the forecast period explicitly into at least two phases. The detailed planning period includes usually 3 to a maximum of 10 years. Detailed plans for the profit and loss statement, the balance sheet and the future surpluses relevant for the valuation must be described here. In a directly subsequent so-called terminal value or annuity phase, a continuing development of the surpluses from the business over a perpetual period of time at a constant growth rate is assumed in order to determine the terminal value. If the company is still in a stage of adjustment, e.g. sustained growth has not yet occurred, a convergence or general planning phase should be modeled before the terminal value phase. This ensures that extraordinary effects in the business plan can accordingly be adjusted and the planning variables can be turned to a sustainable level.
- 679. In order to determine the length of the convergence period, analyses of the speed of convergence processes with regard to the growth of the business and the profitability of the business has to be performed. Empirical studies for Germany show that business growth rates over the long term tend to converge to a target value. On the speed of convergence of growth rates is accordingly not only explained by the influencing factors, such as industry concentration rates, market share or size of the business. Instead, the empirical finding is that convergence processes related to growth are much faster than convergence of profitability. On convergence processes related to profitability are defined as the reduction of excess returns. An excess return exists if the return on the invested capital is higher than the cost of capital or the return on capital for comparable companies. The convergence of profitability takes place over a relatively long period of time and is determined, among other aspects, by convergence parameters which are specific to the industry and the business.
- 680. At the end of the detailed planning period in 2020, the company has not yet reached a sustainable level. Based on the above-mentioned analyses, the planning period was expanded for a 3-year convergence period. The reason for this involve primarily the facts that the total sales of the company are still growing at 6.2% in the last year of the detailed planning period, positive market forecasts, the comprehensive generics portfolio, the strong positioning of

See WP Handbuch II, 2014, para. A 238 for the reasoning of the application of a convergence period.

See Held, T., Konvergenzprozesse in der Unternehmensbewertung, 2013, S. 148.

<sup>&</sup>lt;sup>207</sup> See ibid., p. 184

See Kreyer, F., Strategieorientierte Restwertbestimmung in der Unternehmensbewertung, 2009, p.243-245.

brands and the introduction of biosimilars after the last planned year. Against the background of growing total sales and already initiated measures to increase efficiency, one can also assume that EBITDA margin will continue to improve after the detailed planning period.

- The growth rate in total sales of 6.2% generated in the last year 2020 of the detailed planning period is transitioned within the three year convergence phase on a linear basis to the sustained level assumed for the terminal value period. Especially in the area of generics, STADA is subject to a long-term erosion of prices resulting due to cost pressure from public health insurance organizations and competitive pressure. Limited growth prospects can also be assumed for OTC products which are defined by general growth of the purchasing power of the target groups and an intense competition. Investments in the development of new products, such as biosimilars, and the internationalization of certain products can only partially offset the negative effects, so that in the long term a decrease of growth of total sales to the sustained growth rate appears reasonable.
- 682. The assumption for the gross profit on sales is that the gross margin in 2020 will remain virtually unchanged.
- The EBITDA margin of 21.2% in 2020 is transitioned to a sustainable level of 23.0% in the convergence phase. This level takes into account the high price competition in the generics market, the future product mix and the expected increases in efficiency. This EBITDA margin is also within the historically observed and forecasted range for the peer group companies. In the past and in the detailed planning period the EBITDA margin of STADA was below the peer group median due to the stronger focus of the peer group companies on individual geographic markets and specific products with higher margins. Thus, it appears appropriate to refer to a level below the median of the peer group in the convergence and terminal value period in light of the specific aspects of STADA as a full-range provider. In this context the strategic decision to develop biosimilars in cooperation with partner companies and the corresponding expected increase of long-term research and development costs is also taken into account.
- 684. One assumption for the financial results in the convergence phase is an increasing interest rate for minimum cash on balance required for operations from 0.63% to 1.25% p.a. leading to increasing interest income. With respect to interest expenses, the interest rate is calculated according to the amount of interest bearing debt (without pension liabilities) and an interest rate of 2.25% p.a. The interest rate on pension liabilities is assumed to be 2,0% p.a.
- 685. The effective tax rate in 2020 of 26.7% is considered as the long-term level and is carried forward in the convergence phase without any change.
- 686. In the convergence period the development of the fixed assets is primarily determined by transitioning the capex-to-sales ratio to the sustainable peer group level of 7.0% and a corresponding depreciation planning. The investment level results, on the one hand, from

See the following chapter 4.5. for the derivation of the terminal growth rate.

taking into account the strategy of procuring licenses that exists also after the plan period. In the long-run the capex-to-sales ratio also lies within the range of the peer group companies.

- 687. The inventories and receivables as main components in active working capital are carried forward in the convergence phase so that the days inventory hold of 170 days and the days sales outstanding of 85 days are achieved. These values correspond to a sustainable level in the peer group and to the timing and duration realized historically and expected in the detailed planning period.
- 688. The level of cash on balance is based on the required minimum cash on balance requirement for operations and, thus, converge towards a share of total sales in the amount of 5.8% which corresponds to the estimate of the company.
- 689. The development of equity is based on an integrated financial model which takes into account the annual results in the respective period and the distributions of dividends. The cash on balance which go beyond the minimum cash required for operations is completely distributed to the shareholders.
- 690. The assumptions with regard to the development of the interest bearing liabilities in the convergence phase is based on the continuation of dividend distribution as in the detailed planning period. The degree of leverage of STADA equals the peer group level at the end of the convergence phase in 2023.
- 691. The non-interest bearing liabilities converge to a level of days payable outstanding of 105 days with regard to the trade liabilities which is within historic range of STADA and the peer group. The remaining positions are extrapolated as constant shares compared to the total sales.
- 692. The assumptions for the convergence period made above result in an increasing return on capital employed (ROCE) from 17.9% in 2020 to 18.4% in 2023. Considering the peer group level of ROCE over an extended period of time, the ROCE of STADA is within the range of the 10 year average of 19.5% and the median of 16.9%.
- 693. The assumptions that have been made assure that at the end of the convergence period, the financial surpluses are in a stabilized condition. The long-term return on employed capital also lies within the common range of the industry.

## 694. Terminal value phase

The terminal value phase then describes an estimate of a sustained earnings level with constant growth. <sup>210</sup> This sustainable growth rate of financial surpluses is the rate at which all positions in the plan must grow so that a sustained and stable condition of the company can be achieved. The equivalent growth of all items in the profit and loss statement and all positions in the

See Ballwieser/Hachmeister, 2013, p. 63 ff.

balance sheet at book values assures, in addition to constant, sustained operational profitability, also a constant asset turnover, level of leverage and return on capital.

- 695. The business plan of STADA constitutes nominal planning. When discussing sustained growth of financial surpluses for applying the terminal value, reference must be made to nominal growth. This consists economically of increases in prices and growth resulting from inflation and real growth. Real growth, in turn, can include growth in volumes and structural effects (shifts in product mix). In valuation practice, exclusively inflation related growth is assumed when forecasting the terminal value phase. Real growth beyond the plan period is frequently not taken into account. Since the nominal growth rate in the industry and the market position of the company are relevant for the estimate of the terminal growth rate, it is necessary to include also other components especially volume induced growth when estimating the nominal terminal growth rate, in addition to growth resulting from pricing.
- 696. When discussing expected growth in prices, it is necessary to consider that individual industries or individual companies can be subject to individual inflation rates which are different from the consumer price index. In order to evaluate the long-term growth rate, various studies by the International Monetary Fund and the Organization for Economic Cooperation and Development ("OECD") as well as from other institutions, such as e.g. the respective central banks, are generally used as a reference. The corresponding inflation targets of the central banks pursued using monetary measures provide a basis for estimating the long-term inflation rates. As of the valuation date, a major portion of the total sales is realized in the Eurozone. Since the planning of the valuation subject is made completely in Euro, the emphasis must also be placed on this currency with regard to inflation. The European Central Bank pursues an inflation target of 2.0% for Europe.<sup>212</sup> It was already possible to see in the past that the inflationary growth regularly fluctuates around the target value set by the central banks. An introductory analysis was already made in this regard in the chapter "Macro-economic situation and outlook". The actual (average) inflation rate in the Eurozone is normally below 2.0% and is within a range of 0.7 to 1.6%. (see chapter 2.3.3.3). An inflation rate of on average 2.4% is expected in Great Britain, but historically this inflation rate has been substantially lower. An average inflation rate of 4.0% is expected in Russia, but this depends to a great extent on the development of the oil price.
- 697. In addition to the development of inflation, expected real growth must also be considered. Based on the analysis of the real growth of the GDP in the past and the forecasts of the IMF, real growth rates result in the relevant markets of STADA in a range of approximately 0.5% to 1.7% annually. The historic and expected real growth in GDP in Great Britain and Russia is at a similar level.
- 698. Furthermore, STADA is active in a market environment which continues to be marked by growth in volumes in the generics market, on the one hand, due to the expiration of patents for original medications. At the same time, however, the generics market is characterized by a

<sup>211</sup> See WP Handbuch II, 2014, para A 390 f.

<sup>&</sup>lt;sup>212</sup> See ECB, 2011, p. 7 and 64.

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relatively high transparency, high regulatory influence, a high level of competition and also high pressure on prices due to limited budgets in the healthcare systems. Despite the good positioning of STADA's in the branded product segment, there continues to be high competitive pressure and pressure on prices. In addition, the potential for growth is generally limited in niche markets, such as e.g. Great Britain. At the same time, the possibilities for increasing profitability by shifts in the product mix and economies of scale are limited in the long-term. Thus, the growth of long-term financial surpluses is not only influenced by pressure on prices, but also by a lack of possibility for additional decreases in costs. Furthermore, STADA only has limited possibilities for adjustments of purchase prices, so that STADA, with regard to the high pressure on prices, can only partially pass on increasing purchasing prices to customers by way of price increases in the long-term.

699. Based on an overall evaluation of all growth components, especially in light of the intense competition in the market, a terminal growth rate of 1.25% was chosen (see chapter 2.3.4 and 2.3.6). We consider a market risk premium of 6.0% after personal taxes (or 7.0% before personal taxes) as reasonable, even so for the purpose of a sensitivity analysis we also calculate the equity value with a market risk premium of 5.5% after personal taxes (or 6.25% before personal taxes). For the latter analysis, we consider a terminal growth rate of 1.0% to be appropriate in order to take into account interdependency effects.

# 4.6. Overview of KPIs and value drivers

700. The profit and loss statement and planned balance sheet are finally shown (for scenario 1 after personal taxes) and are determinative for deriving the free cash flows, and we summarize them with an overview of the financial value drivers (see chapter 4.4.).

## Profit and loss statement

Adjusted profit & loss statement	Adjusted historicals				Plan		c	TV			
in EUR m	2014	2015	2016 BE	2017	2018	2019	2020	2021	2022	2023	
										_	
Total sales	2,053.6	2,115.1	2,139.2	2,304.2	2,414.5	2,520.8	2,676.9	2,798.6	2,879.7	2,915.7	2,952.2
growth (yoy)	-	3.00%	1.14%	7.71%	4.79%	4.40%	6.19%	4.55%	2.90%	1.25%	1.25%
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9	-1,177.4	-1,190.9	-1,272.3	-1,333.7	-1,376.9	-1,394.1	-1,411.5
Gross profit	997.9	1,022.9	1,046.4	1,154.2	1,237.1	1,329.9	1,404.6	1,464.9	1,502.8	1,521.6	1,540.6
in % of total sales	48.6%	48.4%	48.9%	50.1%	51.2%	52.8%	52.5%	52.3%	52.2%	52.2%	52.2%
Selling, general and administration cost	-611.2	-658.7	-670.3	-726.3	-780.3	-811.0	-848.1	-851.2	-839.5	-850.0	-860.6
thereof selling expenses	-458.4	-482.6	-488.3	-526.2	-570.0	-611.9	-644.4	-651.2	-637.9	-645.9	-654.0
thereof general and administrative expenses	-152.8	-176.0	-182.0	-200.0	-210.3	-199.1	-203.7	-200.0	-201.6	-204.1	-206.7
Research and development cost	-56.9	-65.0	-65.1	-72.9	-85.6	-89.4	-99.5	-123.5	-147.1	-149.0	-150.8
Other operating income	15.8	17.0	11.8	46.0	2.7	1.7	0.6	0.6	0.6	0.7	0.7
Other operating expenses	-23.2	-31.0	-27.8	-71.2	-25.5	-25.8	-25.2	-28.0	-30.6	-30.9	-31.3
EBIT	322.4	285.3	295.1	329.9	348.4	405.4	432.4	462.9	486.3	492.4	498.5
in % of total sales	15.7%	13.5%	13.8%	14.3%	14.4%	16.1%	16.2%	16.5%	16.9%	16.9%	16.9%
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2	134.7	137.0	136.0	156.7	177.3	179.5	181.8
EBITDA	431.9	389.4	398.0	435.2	483.1	542.4	568.4	619.6	663.6	671.9	680.3
in % of total sales	21.0%	18.4%	18.6%	18.9%	20.0%	21.5%	21.2%	22.1%	23.0%	23.0%	23.0%
Financial results	-69.1	-64.4	-50.9	-42.8	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-26.1
Income before taxes	253.3	220.9	244.2	287.1	302.3	361.3	393.5	436.5	460.9	466.6	472.5
in % of total sales	12.3%	10.4%	11.4%	12.5%	12.5%	14.3%	14.7%	15.6%	16.0%	16.0%	16.0%
Taxes on income	-61.4	-48.6	-58.4	-76.5	-83.1	-98.5	-105.1	-116.5	-123.1	-124.6	-126.2
Effective tax rate (in %)	24.2%	22.0%	23.9%	26.6%	27.5%	27.2%	26.7%	26.7%	26.7%	26.7%	26.7%
Net income / net loss for the year	191.9	172.3	185.8	210.6	219.2	262.9	288.4	319.9	337.8	342.0	346.3
in % of total sales	9.3%	8.1%	8.7%	9.1%	9.1%	10.4%	10.8%	11.4%	11.7%	11.7%	11.7%
Minority interest	5.6	6.5	8.5	4.7	-	-	-	-	-	-	-

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# Balance sheet:

### Balance sheet

	Adjusted historicals			Plan			С	TV			
in EUR m as of 31 December	2014	2015	2016 BI	2017	2018	2019	2020	2021	2022	2023	
									·		
Intangible assets	1.631,5	1.649,0	1.582,4	1.501,4	1.470,8	1.496,7	1.534,1	1.566,5	1.585,7	1.605,5	1.625,6
Tangible assets	305,4	321,6	322,7	337,8	369,9	389,3	406,4	416,3	421,4	426,7	432,0
Financial assets	12,6	14,5	16,1	19,3	19,8	20,4	20,9	20,9	20,9	21,2	21,4
Fixed assets	1.949,6	1.985,1	1.921,2	1.858,5	1.860,5	1.906,4	1.961,4	2.003,7	2.028,0	2.053,3	2.079,0
Inventories	498,8	501,5	484,9	496,8	546,4	564,4	605,9	632,5	650,2	658,3	666,6
Receivables and other assets	502,8	485,9	489,1	503,2	595,5	623,0	632,7	661,1	679,9	688,4	697,0
Cash and equivalents	164,2	143,2	352,6	149,1	83,2	107,0	127,5	147,8	167,0	169,1	171,2
Other current assets	170,7	137,6	171,9	102,6	112,5	121,5	150,8	157,6	162,2	164,2	166,3
Deferred taxes	49,4	34,1	20,8	25,5	25,2	25,6	25,9	27,0	27,8	28,2	28,5
Current assets	1.385,9	1.302,3	1.519,3	1.277,3	1.362,8	1.441,5	1.542,7	1.626,0	1.687,1	1.708,2	1.729,6
Total assets	3.335,5	3.287,4	3.440,4	3.135,7	3.223,3	3.347,9	3.504,1	3.629,8	3.715,1	3.761,6	3.808,6
Equity	903,3	1.018,5	1.047,1	949,9	1.080,8	1.157,8	1.286,9	1.368,6	1.423,1	1.440,9	1.458,9
Provisions	17,4	22,5	20,3	17,6	15,9	16,4	17,2	18,0	18,5	18,7	19,0
Deferred tax	166,7	160,2	116,4	99,0	96,5	93,6	91,4	95,5	98,3	99,5	100,8
Interest bearing liabilities	1.524,9	1.390,0	1.510,1	1.364,3	1.272,8	1.264,2	1.252,5	1.252,5	1.252,5	1.268,2	1.284,1
Non-interest bearing liabilities	723,1	696,1	746,6	704,8	757,3	815,9	856,1	895,1	922,7	934,3	945,9
Total equity and liabilities	3.335,5	3.287,4	3.440,4	3.135,7	3.223,3	3.347,9	3.504,1	3.629,8	3.715,1	3.761,6	3.808,6

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## Wesentliche Kennzahlen und Werttreiber:

	Adjusted historicals				Plan		c	TV			
in EUR m	2014	2015	2016 E	BE 2017	2018	2019	2020	2021	2022	2023	
Total sales growth (yoy)	<b>2,053.6</b>	<b>2,115.1</b> 3.00%	<b>2,139.2</b> 1.14%	<b>2,304.2</b> 7.71%	<b>2,414.5</b> <i>4.79%</i>	<b>2,520.8</b> 4.40%	<b>2,676.9</b> 6.19%	<b>2,798.6</b> 4.55%	<b>2,879.7</b> 2.90%	<b>2,915.7</b> 1.25%	<b>2,952.2</b> 1.25%
EBITDA in % of total sales	431.9 21.0%	389.4 18.4%	398.0 18.6%	435.2 18.9%	483.1 20.0%	542.4 21.5%	568.4 21.2%	619.6 22.1%	663.6 23.0%	671.9 23.0%	680.3 23.0%
EBIT in % of total sales	322.4 15.7%	285.3 13.5%	295.1 13.8%	329.9 14.3%	348.4 14.4%	405.4 16.1%	432.4 16.2%	462.9 16.5%	486.3 16.9%	492.4 16.9%	498.5 16.9%
Net income / net loss for the year in % of total sales	191.9 <i>9.3%</i>	172.3 <i>8.1%</i>	185.8 <i>8.7%</i>	210.6 <i>9.1%</i>	219.2 <i>9.1%</i>	262.9 10.4%	288.4 10.8%	319.9 <i>11.4%</i>	337.8 11.7%	342.0 11.7%	346.3 11.7%
NOPLAT in % of total sales	<b>245.2</b> 11.9%	<b>223.5</b> 10.6%	<b>226.6</b> 10.6%	<b>289.4</b> 12.6%	<b>239.1</b> 9.9%	<b>281.6</b> 11.2%	<b>305.1</b> 11.4%	<b>335.6</b> 12.0%	<b>353.5</b> 12.3%	<b>357.9</b> 12.3%	<b>362.4</b> 12.3%
Fixed assets growth (yoy) Turnover Fixed assets in % of total revenues CAPEX in % of total sales	<b>1,949.6</b> n.a. n.a. n.a. n.a. n.a.	1,985.1 1.83% 1.1x 92.2% -178.2 -8.4%	1,921.2 -3.22% 1.1x 92.8% -172.7 -8.1%	1,858.5 -3.26% 1.2x 83.4% -138.6 -6.0%	1,860.5 0.11% 1.3x 77.0% -136.2 -5.6%	1,906.4 2.47% 1.4x 73.8% -182.3 -7.2%	1,961.4 2.88% 1.4x 71.2% -190.4 -7.1%	2,003.7 2.16% 1.4x 70.1% -199.0 -7.1%	2,028.0 1.21% 1.4x 69.6% -201.6 -7.0%	2,053.3 1.25% 1.4x 69.6% -204.6 -7.0%	2,079.0 1.25% 1.4x 69.6% -207.2 -7.0%
Net working capital growth (yoy) Turnover	<b>478.7</b> n.a. n.a.	<b>423.3</b> -11.56% 4.4x	<b>636.0</b> 50.23% 5.1x	<b>455.8</b> -28.33% 3.6x	<b>493.1</b> 8.19% 5.3x	<b>515.6</b> 4.57% 5.1x	<b>578.1</b> 12.11% 5.2x	<b>617.4</b> 6.80% 4.8x	<b>647.6</b> 4.90% 4.7x	<b>655.7</b> 1.25% 4.5x	663.9 1.25% 4.5x
DIH (Cost of goods sold) DSO (Total sales) DPO (Cost of goods sold)	170.1x 88.1x 116.2x	165.3x 82.7x 108.3x	159.7x 82.3x 111.0x	155.5x 78.6x 101.5x	167.1x 88.8x 101.8x	170.6x 89.0x 101.2x	171.4x 85.1x 103.8x	170.7x 85.0x 104.4x	170.0x 85.0x 105.0x	170.0x 85.0x 105.0x	170.0x 85.0x 105.0x
Invested capital (asset side) growth (yoy) Turnover	<b>2,428.2</b> n.a. n.a.	<b>2,408.5</b> -0.81% 0.9x	<b>2,557.2</b> 6.17% 0.9x	<b>2,314.3</b> -9.50% 0.9x	<b>2,353.6</b> 1.70% 1.0x	<b>2,422.0</b> 2.91% 1.1x	<b>2,539.4</b> 4.85% 1.1x	<b>2,621.1</b> 3.22% 1.1x	<b>2,675.6</b> 2.08% 1.1x	<b>2,709.1</b> 1.25% 1.1x	<b>2,742.9</b> 1.25% 1.1x
Interest-bearing debt Financial debt/EBITDA Equity (book value) Debt ratio (book values) Leverage (book values) Equity (market values after taxes) Debt ratio (market values after taxes) Leverage (market values after taxes)	1,524.9 3.5x 903.3 62.8% 168.8% n.a. n.a.	1,390.0 3.6x 1,018.5 57.7% 136.5% n.a. n.a.	1,510.1 3.8x 1,047.1 59.1% 144.2% n.a. n.a.	1,364.3 3.1x 949.9 59.0% 143.6% n.a. n.a.	1,272.8 2.6x 1,080.8 54.1% 117.8% 4,318.4 22.8% 29.5%	1,264.2 2.3x 1,157.8 52.2% 109.2% 4,539.9 21.8% 27.8%	1,252.5 2.2x 1,286.9 49.3% 97.3% 4,687.6 21.1% 26.7%	1,252.5 2.0x 1,368.6 47.8% 91.5% 4,869.5 20.5% 25.7%	1,252.5 1.9x 1,423.1 46.8% 88.0% 4,995.0 20.0% 25.1%	1,268.2 1.9x 1,440.9 46.8% 88.0% 5,089.0 19.9% 24.9%	1,284.1 1.9x 1,458.9 46.8% 88.0% 5,152.6 19.9% 24.9%
Return on capital employed (ROCE)	n.a.	11.7%	12.3%	12.9%	15.1%	17.2%	17.9%	18.2%	18.6%	18.4%	18.4%
Return on invested capital (ROIC)	n.a.	9.2%	9.4%	11.3%	10.3%	12.0%	12.6%	13.2%	13.5%	13.4%	13.4%
Return on equity (ROE)	n.a.	19.1%	18.2%	20.1%	23.1%	24.3%	24.9%	24.9%	24.7%	24.0%	24.0%

## 5. DISCOUNT RATE

- 701. In order to value a business, the future expected free cash flows must be discounted to the valuation date with an appropriate interest rate. This interest rate is developed from the (expected) earnings and the price for the best alternative use of capital compared to the valuation subject. Economically, the capitalization rate reflects the alternative decision of an investor, who compares the return of an investment in a specific business with the return of a corresponding alternative investment in corporate shares. The discount rate then represents the return of an adequate alternative investment that is equivalent to investing in the business valued, in case this investment is equivalent to the capitalized cash flows with regard to timing, risk and taxation.<sup>213</sup>
- 702. For determining the equity value before personal taxes according to IDW S 1 and DVFA-Recommendations, the cash flow to equity approach of the DCF method was applied. The discount interest rate was also determined in the context of the direct typification with the dividend discount method under IDW S 1 after personal taxes.
- 703. The cash flow to be discounted, which serves as the basis for determining the value under the dividend discount method according to IDW S 1, is the cash flow, which accrues to shareholder. The cash flow to equity is discounted with the levered cost of equity before personal taxes, which corresponds to the average expected return on investment for the equity providers. The levered cost of equity are calculated for each period.

704. The levered cost of equity are determined as follows:

$$\mathsf{r}^{\mathsf{V}}_{\mathsf{EK}} = r_{f(before\ pers.\ taxes)} + \beta_{V} \ \mathsf{x} \ \mathsf{MRP}_{before\ pers.\ taxes}$$

whereby the variables have the following meanings:

 $\mathbf{r}_{\mathsf{EK}}^{\mathsf{V}}$ : Levered cost of equity

 $r_f$ : Risk free rate (before personal taxes)

 $\beta_{\nu}$ : Levered beta

MRP<sub>before pers. taxes</sub>: Market risk premium (before personal taxes)

705. The starting point for determining the alternative returns on investment especially involves capital market returns for participations in companies (in form of stock portfolios). These

<sup>213</sup> See IDW S 1, nos. 113 et seq.

returns can generally be divided into a risk free rate and a risk premium for assuming entrepreneurial risks by shareholders.

706. The described approach for determining the cost of equity before personal taxes also applies to the variable after personal taxes.

## 5.1. Cost of equity

#### 5.1.1. Risk free rate

- 707. The risk free rate represents a (virtually) risk free investment with equivalent maturity. In order to estimate the risk free rate, the interest yield curve for government bonds can be used as a basis since the zerobonds ,derived from such interest yield curves, assure the compliance with the maturity equivalence principle. The interest yield curve shows the relationship between the interest rates and the maturity for zero coupon bonds without any credit risk.
- 708. In order to estimate the interest yield curve, <sup>214</sup> reference can be made to the interest yield data of the Deutsche Bundesbank or the ECB. When using an interest yield curve, as a general rule, the discounting must be conducted for every year using a corresponding interest rate with equivalent maturity. Alternatively, a uniform risk free rate over the entire maturity, i.e. beginning with the first year, can be calculated and used on the basis of the interest yield curve (so-called present value equivalent interest rate).
- 709. Based on this approach, as of the valuation date we assume a uniform risk free rate of 1.25% before personal taxes. After taking into account the withholding tax of 25% and the solidarity surcharge of 5.5%, respectively, the risk free rate after personal taxes is 0,92%.

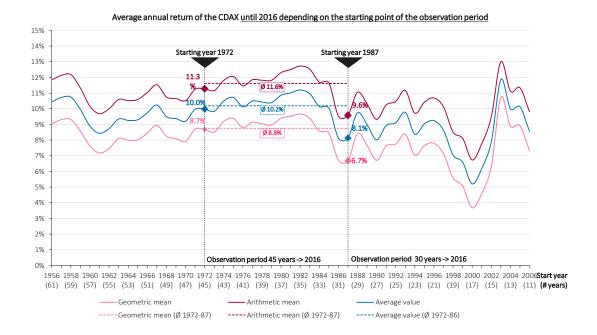
#### 5.1.2. Risk premium

villingness of individual shareholders, but instead based on the behavior of the entire market. The assumption is that investors are subject to a particular risk, when investing in a business (investor risk). In this context, the required risk premium can be derived on the basis of capital market pricing models, using the empirical stock returns from the capital market. The Capital Asset Pricing Model (hereinafter, the "CAPM") represents, in its standard form, a capital market model in which cost of capital and risk premia are explained without taking into account the effects of personal income taxes.

<sup>214</sup> Estimate using the Svensson method.

### Market risk premium

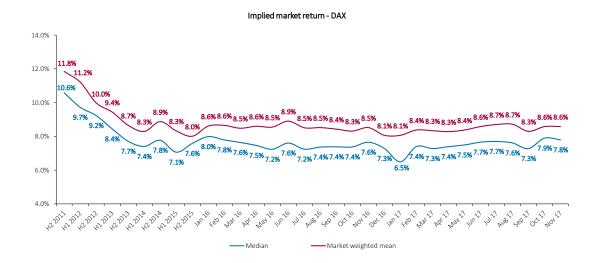
- 711. The market risk premium is defined as the difference between the expected value of the long-term returns on an investment in the market portfolio, consisting of risk bearing securities, and the current risk free rate as of the valuation date, where the latter variable is represented by the risk free rate on government bonds.
- 712. Capital market studies have shown that in the past investments in stocks generated higher returns than investments in risk free securities. Historically, the long-term total returns for a market portfolio, depending on the considered time period and the method of determining the average value, lie within a range of 8.8% to 11.6% before personal taxes.<sup>215</sup>



713. Since historically calculated total returns depend on the underlying time period and therefore for instance are influenced by the financial crisis in 2007 as well as by the current environment of relatively low risk free rates, the calculated results may be affected by certain sensitivities. Therefore, historic, implicit market returns can be derived on the basis of analyst estimates. In

Own analysis taking into account of the CDAX as a market portfolio and various terms.

the time period between H2 2011 and the valuation date, the implicit market returns for the  $DAX^{216}$  are in a range between 8,0% and 11,8% before personal taxes:



- 714. Therefore, there are no indications that investors will demand a different total return in the future. Upon reflecting the lower end of the range and deducting the risk free rate, for the market risk premium a range of 7.0% to 7.5% before personal taxes is estimated. Based on current data from the capital market (November 2017), the implied market risk premium of 7.25%, with an implied market return of 8.6% and an unrounded risk free rate of 1.35%, also lies within this range.
- In accordance with the recommendation of the Fachausschuss für Unternehmensbewertung und Betriebswirtschaft des IDW ("FAUB") dated 19 September 2012, a market risk premium before personal taxes of 5.5% to 7.0% must be assumed due to the currently changed risk tolerance. According to a notification on this range, the FAUB maintained this recommendation through the 118<sup>th</sup> meeting of the FAUB in 2016, which was again confirmed on 8 February 2017. The FAUB has set a range of 5.0% to 6.0% for after tax analyses. Based on the capital market studies we have conducted, however, upon taking into account the current risk free rate, a market risk premium before personal taxes above the range recommended by the FAUB can also be justified. In the current risk free rate, a market risk premium before personal taxes above the range recommended by the FAUB can also be justified.
- 716. Since the current capital market data indicates a market risk premium before personal taxes greater than 7.0%, we consider the upper end of the range of 7.0% before personal taxes and of 6.0% after personal taxes to be reasonable for determining the dividend discount value under IDW S 1.

<sup>216</sup> Since there are not sufficient forecasts of analysts for the companies in the CDAX, reference was made to the DAX.

<sup>217</sup> See minutes of the 108th meeting of the Technical Committee for Business Valuation and Economics of the IDW dated 19 September 2012.

<sup>218</sup> See chapter 5.4.1.2.

- 717. However, since under stock corporations law it is also common market practice to calculate the dividend discount value using the middle of the market risk premium range recommended by the IDW, we have also applied a market risk premium before personal taxes of 6.25% and a market risk premium after personal taxes of 5.5% for the purpose of the sensitivity analysis only. Due to reasons of consistency, however, by applying a lower market risk premium, the terminal growth rate must also be reduced, which is reflected in the sensitivity analysis.
- 718. The alternative application of the so-called global CAPM would not lead to any lower cost of capital. In that method, the risk free rate is determined on the basis of American Treasury Bonds with a maturity of 30 years, and is currently trading at around 2.8%. Since the so-called country risks (compared to the US market) must additionally be taken into account, the market risk premium before personal taxes in the global CAPM is systematically above the US market risk premium of currently 5.5% to 6.0%. <sup>219</sup> Furthermore, this observation is also consistent with the implied market return of the MSCI World index, which is currently trading at around 8.7%. <sup>220</sup>

#### Beta

719. The market risk premium discussed in the previous chapter must be modified with regard to the specific risk structure of the business being valued. The specific risk of the company and the respective industry is expressed under the CAPM by the so-called beta.

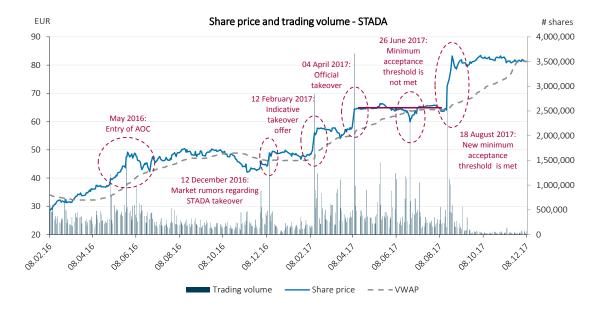
Beta of STADA shares

720. Since STADA is a listed company, the estimate of a reasonable beta can be determined by STADAs own beta, as long as the own beta represents an adequate estimate of the applied business risk during the planning period. This approach particular applies in case the company strategy of the past is expected to be continued in the future as well. Additionally, the underlying stock price must not be distorted by any special events or items.

<sup>219</sup> See Duff & Phelps, https://www.duffandphelps.com/insights/publications/cost-of-capital/us-equity-risk-premium-recommendation-2017; A. Damodaran, http://pages.stern.nyu.edu/~adamodar/, both status 11 December 2017.

The implied market return of the MSCI World was determined on the basis of a current estimate of the forward P/E multiple in the amount of 16.2x (https://www.vardeni.com/pub/mscipe.pdf) and a gordon growth model with a growth rate of 2.0%.

721. In view of STADAs consistent strategic planning, we analyze STADA's stock price development since February 2016 in the following. Particularly, we put our emphasis on special events and significant stock price movements:<sup>221</sup>



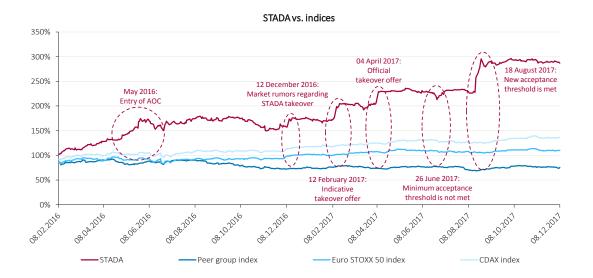
- The first event for which a significant influence on the stock price of STADA was observed was the entry of the activist shareholder AOC in May 2016. As a consequence of the entry of the investor AOC, there was public reporting about the new composition of the supervisory board and the executive board of STADA. As is apparent from the above description, not only the trading volume increased subsequently, but also the stock price. Thus, this already indicates a distortion of the stock price for STADA starting in May 2016.
- 723. On 12 December 2016, several press releases announced that the two pharmaceuticals companies Mylan and Novartis considered to acquire STADA. On the same day, STADA shares increased from EUR 44.32, the closing price on Friday, 9 December 2016, to EUR 48.95. This corresponds to an increase of 10.5%, whereby a substantially higher trading volume of 1.6m traded shares compared to the previous (approximately 485k) and the subsequent (approximately. 390k) trading day was noticed.
- 724. With the beginning of takeover rumors in December 2016 and the significant movements in STADAs stock price, we conclude that the development of the stock is distorted. In association with additional takeover rumors between the beginning of December 2016 and the announcement of the DPLTA on 24 August 2017, STADAs stock increased from around EUR 44 to around EUR 80, implying a jump of over 80%.
- 725. On 12 February 2017, STADA confirmed the existence of two legally non-binding declarations of interest with regard to the acquisition of up to 100% of the STADA shares. The stock price of STADA subsequently increased by 12.4% from EUR 49.70 on 10 February 2017 to EUR 56.03 on

<sup>&</sup>lt;sup>221</sup> The capital markets data incl. the stock exchange price using the capital data base S&P Capital IQ.

- 13 February 2017, which corresponded almost to the indicative offer price of EUR 56.00. The trading volume of 2.8m shares was also multiple times higher than on the previous (approximately 160k) and subsequent (approximately 895k) trading days.
- On 4 April 2017, STADA announced its support for the announced voluntary takeover offer by Bain Capital and Cinven for a price of EUR 66.00 per share, reflecting the offer price of EUR 65.28 plus the expected dividend of EUR 0.72 to be probably paid during the ongoing offer period. The offer corresponded to a premium of approximately 48.9% on the closing price on 9 December 2016, the last stock price prior to the first specific takeover rumors, and a premium of approximately 19.6% on the VWAP of the last three months at that point in time. The stock price of STADA subsequently increased by 10.6% from EUR 58.25 on 7 April 2017 to EUR 64.45 on 10 April 2017. The trading volume of 3.7m traded shares was again multiple times higher than on the previous (approximately 496k) and the subsequent (approximately 988k) trading days.
- 727. On 26 June 2017, STADA announced that the takeover offer of EUR 66.00 of Nidda Healthcare was not successful as only 65.52% of the issued shares were offered for sale. Thus, the minimum acceptance threshold, which the bidder had reduced on 7 June 2017 from originally 75.0% to 67.5%, was not achieved. The stock price of STADA subsequently fell by 10.6% to EUR 63.76 on 23 June 2017 and to EUR 59.92 on 27 June 2017, the first trading day after the notification. The trading volume of 2.8 m traded shares was multiple times higher than on the previous (approximately 199k) and the subsequent (approximately 677k) trading days.
- 728. On 10 July 2017, STADA announced that Nidda Healthcare requested with approval of STADA the exemption of the one year blocking period for a new offer at BaFin . Compared to the first offer Nidda Healthcare further increased its bid to EUR 66.25 per STADA share, reflecting the offer price of EUR 65.53 plus a dividend of EUR 0.72. Contrary to the takeover offer published on 27 April 2017, the new offer had a reduced minimum acceptance threshold of 63% as well as an acceptance period of four weeks. As a reaction to the new takeover offer, with increased trading volume the STADA stock price increased from EUR 64.50 on 7 July 2017 to EUR 65.38 on 10 July 2017.
- 729. On 18 August 2017, STADA announced that the increased takeover offer of Bain Capital and Cinven had been successful. The minimum acceptance threshold of 63% was achieved, and a total of 63.85% of the STADA shares were offered for sale in the offer period. The stock price for STADA increased subsequently substantially by 13.2% from EUR 64.10 on 17 August 2017 to EUR 72.55 on 18 August 2017. The trading volume of 2.8m traded shares was multiple times higher than on the previous (approximately 149k) and subsequent (approximately 1.1m) trading days.
- 730. On 24 August 2017, STADA announced that Nidda Healthcare intended to conclude a DPLTA with STADA. The remaining shareholders of STADA were supposed to receive an offer from Nidda Healthcare for the acquisition of their shares in exchange for cash compensation and receive a recurring compensation payment for the duration of the contract. The stock price for

STADA subsequently increased by 3.6% from EUR 80.34 on 24 August 2017 to EUR 83.20 on 25 August 2017.

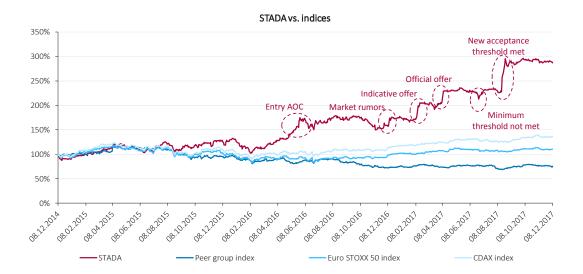
- 731. Other relevant corporate events such as the publication of annual and quarterly financials did not seem to have had any significant influence on STADAs stock price.
- Passed on the analysis we conclude, that since December 2016 STADAs stock price development has been heavily influenced by takeover rumors and the final takeover offer. Particularly, the significant price reaction in relation to potential or actual offer prices, as well as the consequent reflection of STADAs stock price of these offer prices, clearly confirm that in the past months STADAs stock price was heavily influenced.
- 733. Due to the strong reactions of STADAs stock price in the past, we also analyze the extent to which the stock price was decoupled from the development of the German and European stock market or the shares of the peer group companies:



- 734. The development of STADAs share price indexed in comparison to the CDAX, the Euro STOXX 50 as well as a peer group index is shown in the illustration. The peer group index includes the companies in the peer group, weighted with the respective market capitalization. <sup>222</sup>
- 735. The development of STADAs share price shows, as described above, various noticeable jumps during the analyzed period resulting from extraordinary events such as takeover offers.
- 736. Since the AOC entry in May 2016, the STADA shares have reacted positively and showed a decoupled development compared to the peer group index. With each further extraordinary event, this difference in performance increased, so that in the observed period STADA shares increased by 159% after 28 January 2016, while at the same time the peer group index fell by 13%. The CDAX and Euro STOXX 50 show a positive, relatively smooth development of 49% and 29%. In this context, it must also be noted, that between the individual jumps, STADAs share

<sup>&</sup>lt;sup>222</sup> See chapter 2.4.2.

price developed rather constantly. This observation again confirms, that STADAs share price had been significantly influenced by the indicative or actually offered takeover prices.



- 737. By analyzing a longer time period, the influence of the market rumors and the takeover offer becomes even more clearer. While the STADA shares as well as the CDAX, Euro STOXX 50 and the peer group index had a relatively synchronous development between December 2014 and April 2016, and STADA initially still had the weakest development of its price, there has been a substantially more positive development of the STADA shares since May 2016. This was caused by the entry of the activist Investor AOC and its demands for a clear product strategy as well as a new composition of the supervisory and executive board.
- The analysis of STADAs stock price development reveals that particularly in the past months market rumors and takeover offers strongly led to significant jumps and hence decoupled the share price from the reference indices. Since the beta is based on the weekly and monthly returns on the STADA shares compared to the reference index, no undistorted own beta, representing the risk of STADAs business model, can be obtained for the time period after the entry of AOC in May 2016. Furthermore, since the own beta based on financial data prior to May 2016 (first reference point in the past for calculating a potential undistorted beta) also does not meet the requirements of the reporting date principles, as the time lag between May 2016 and the valuation date is too wide, we conclude that the use of the own beta to represent the risk of STADAs business model is to be disregarded.

### Beta of STADA

739. In context of STADAs distorted stock price development in the past, reference to a beta derived from a group of the best possible comparable companies is an alternative method. This peer group beta - assured by an scoring analysis - shows a comparable operational risk to that of the

valuation subject and, accordingly, can be used as an alternative in order to determine the cost of capital for the valuation subject.<sup>223</sup>

740. The following table provides a brief analysis of the identified peer group companies with regard to the observed betas:

		Levered beta		Leverag	ge	Unlevered beta	
Company Index	5 years monthly	2 years weekly	5 years monthly	2 years weekly	5 years monthly	2 years weekly	
Krka d.d.	Slovenian Blue Chip Index	0.83	1.03	4%	5%	0.80	0.99
Richter Gedeon Rt.	Budapest Stock Index	0.89	0.79	7%	5%	0.84	0.76
Dr. Reddy's Laboratories Ltd.	S&P BSE 500 Index	n.a.	0.84	n.a.	11%	n.a.	0.77
Hikma Pharmaceuticals PLC	FTSE 100 Index	1.25	1.07	15%	17%	1.11	0.94
Recordati S.p.A.	FTSE MIB INDEX	0.52	0.28	9%	7%	0.49	0.28
Mylan N.V.	S&P 500	1.39	1.52	51%	58%	0.98	1.02
Vifor Pharma AG	Swiss Performance Index	0.86	1.14	18%	16%	0.75	0.99
Impax Laboratories Inc.	S&P 500	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Aspen Pharmacare Holdings Ltd.	Dow Jones - South Africa Stocks	0.82	0.69	30%	35%	0.69	0.60
Perrigo Company PLC	S&P 500	0.70	0.69	24%	34%	0.59	0.56
Laboratorios Farmaceuticos S.A.	Madrid Ibex 35 Index	0.50	0.31	7%	6%	0.48	0.30
Mallinckrodt PLC	S&P 500	n.a.	1.70	n.a.	118%	n.a.	0.93
Median		0.83	0.84	15%	16%	0.75	0.77
Average		0.86	0.92	18%	28%	0.75	0.74

- 741. Beta is calculated based on the weekly returns on investment over a period of two years, as well as on the monthly returns based on a period of over five years.
- 742. In the following we apply the beta based on the two years' time frame. While this approach takes into account the most recent developments in the capital markets, any changes in the business models of the peer group companies, which emerged more than two years ago, are not reflected when determining beta.
- 743. Based on the levered betas of the respective companies, the unlevered betas are determined after considering the respective capital structures (which refers to the degree of leverage) and uncertain tax benefits in the debt financing. The determination of the debt beta itself is based on a rating of the respective company (if available) or, alternatively, on the implied costs of debt. Available ratings are converted using corresponding credit spreads of comparable industrial companies. Finally, we make a correction to the unsystematic risk contained in the credit spreads.
- 744. As a result, the unlevered beta for the peer group companies lies in a range of 0.28 to 1.02. The average (arithmetic mean) results in a beta of approximately 0.74. The median beta is approximately 0.77. When viewed overall, and in light of the ambition reflected in the plan period, we consider an unlevered peer group beta of 0.75 to be reasonable for STADA. Regarding the planned increase of ROCE, the ambitions reflected in the plan period of the valuation as well as the expected expansion of biosimilar activities, we also consider an beta of 0,8 to justifiable.

See chapter 2.4.

- 745. Based on the above described market risk premium of 7.0% before personal taxes and the unlevered beta of around 0.75, a risk premium (for the operational risk) of 5.25% before personal taxes can be derived.
- 746. The unlevered cost of equity before personal taxes are accordingly:

$$1.25\% + 0.75 \times 7.0\% = 6.5\%$$
.

- 747. The average degree of leverage of STADA based on market values is around 21.7%. Thus, a present value equivalent levered beta of approximately 0.89 results.
- 748. In this context, the average levered cost of equity for STADA before personal taxes are:

$$1.25\% + 0.89 \times 7.0\% = 7.48\%$$
.

# 5.2. Alternative cost of capital

- 749. In addition to the CAPM, the costs of equity can also be checked for reasonableness on the basis of alternative concepts for determining the cost of capital. For this purpose, we analyze the implied costs of capital and the empirical cost of capital (total shareholder returns) based on the peer group as well as on the pharmaceutical and healthcare companies in the DACH region.
- 750. Analogous to our previous discussion on determining the market risk premium, we estimate the cost of equity based on the following two methods:
  - implied (ex ante) cost of equity
  - empirical (ex post) costs of equity

## 5.2.1. Implied (ex ante) cost of equity

751. In order to determine the implicit cost of equity, the expected future returns for capital market participants and the stock prices are reviewed. Based on this data, the implied cost of equity for the capital market participants are determined as an internal return rate. This method can be applied to companies in the peer group in order to enable a risk-appropriate estimate for the cost of equity at STADA. In this specific case, we carry out the calculations to determine the implied costs of equity for the peer group companies using a form of the residual income model:<sup>224</sup>



Implied costs of equity - peer group

752. Over a long-term period (H2 2011 to H1 2017), for the peer group companies this analysis reveals an average unlevered cost of equity in a range of approximately 5.7% to 7.6%. Consequently, we consider the CAPM based unlevered cost of equity of 6.5% (before personal taxes) to be reasonable in light of the implied, unlevered costs of equity of the peer group companies, as the 6.5% lie within the identified range for the peer group companies.

See Aders/Aschauer/Dollinger: Die implizite Marktrisikoprämie am österreichischen Kapitalmarkt, in: RWZ 6/2016, p. 195-202; ValueTrust / JKU Linz / finexpert: DACH Capital Market Study as of 30 June 2017, Analysis of industry- specific costs of capital (parameters) and multiples for the German Austrian and Swiss capital markets (http://www.value-trust.com/fileadmin/pdfs/publikationen-studien/ValueTrust\_DACH\_Capital\_Market\_Study\_powered\_by\_finexpert\_and\_JKU\_06.2017.pdf).

753. We have conducted a corresponding analysis also for the pharmaceutical and healthcare companies in the DACH region:

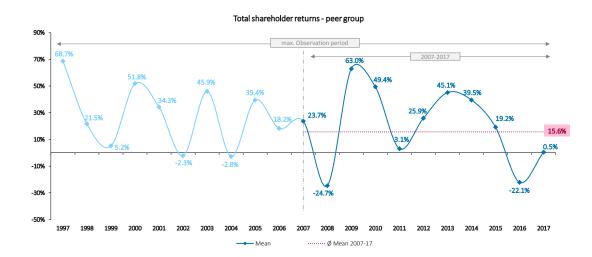


#### Implied costs of equity - DACH - Pharma & Healthcare

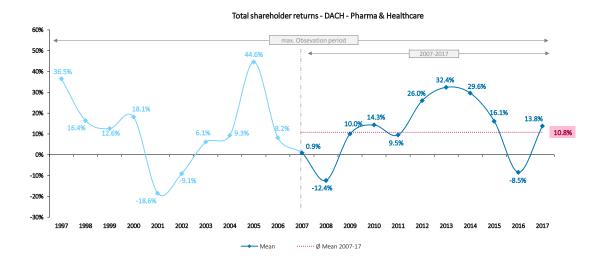
- 754. The resulting range of 6.0% to 8.5% also does not reveal any indication that the unlevered cost of equity in the amount of 6.5%, determined by the CAPM, are not reasonable.
- 755. In this context, we point out that when determining implied cost of equity, there is discretion when selecting the appropriate model and its parameters. Additionally, the results are also based on possibly non-representative estimates by analysts as well as potential distortions due to, in part, a low number of analyst estimates.
- 756. Notwithstanding these reservations, the determined implied costs of equity do not result in any indications for rejecting the estimated cost of equity using the CAPM.
- 5.2.2. Empirical (ex post) costs of equity (total shareholder returns)
- 757. Historic costs of equity in the form of so-called total shareholder returns<sup>225</sup> can be identified in the capital market on the basis of empirical information. In order to enable an appropriate risk estimate of the costs of equity of STADA, this empirical method can generally be also applied to the peer group companies.
- 758. In this context, we have conducted our own calculations of the historic costs of equity of the peer group companies. As a result, we determined the annual returns in the form of dividends

<sup>&</sup>lt;sup>225</sup> The Total Shareholder Return consists out of capital gains and dividends

and capital gains (total shareholder returns) over a long-term observation period (30 November 1996 to 30 November 2017):



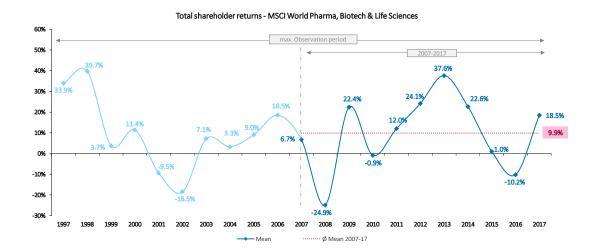
759. Additionally, we have also determined the annual total shareholder returns over this long-term observation period for pharmaceutical and healthcare companies in the DACH region:<sup>226</sup>



760. In order to further check the reasonableness, it is possible to refer to an industry index and calculate the corresponding total shareholder returns. In the present case, the MSCI World Pharmaceuticals, Biotechnology & Life Sciences Index was chosen. This index reflects the

See ValueTrust / JKU Linz / finexpert: DACH Capital Market Study as of 30 June 2017. Capital market and financial data from our analyses of the data base Capital IQ of the service provider Standard & Poor's.

development of 70 companies in the pharmaceutical, biotechnology and life sciences industry in industrial countries:



The analyses show a high volatility in the annual returns resulting from special effects and fluctuating dividend payments, which results in large differences in the returns between the individual years. This analysis illustrates the variability of annual returns over the course of time, so that only a long-term analysis of the average permits identifying informative, expected total shareholder returns. In the ten-year period from 2007 to 2017, the peer group companies had on average an annual total shareholder return of 15.6%, while in the same timeframe the pharmaceutical and healthcare companies in the DACH region had an average total shareholder return of 10.8%. The total shareholder return in the analyzed worldwide industry index over the last ten years was on average 9.9%. Since all these returns are well above the cost of capital under the CAPM, we don't see any indications that the CAPM based costs of equity are too high.

## 5.3. Terminal growth rate

The costs of capital must be technically corrected in the terminal value phase for a terminal growth rate, in order to take into account the planned long-term expectations for growth. In a manner equivalent to deriving and applying the terminal growth rate described in chapter 4.5 for the sustained financial surpluses, a terminal growth rate for transformation to the terminal value of 1.25% annually is set for the cost of capital (at a market risk premium of 6.0% after taxes or 7.0% before personal taxes). In order to show the sensitivity with regard to the market risk premium of 5.5% after taxes and 6.25% before taxes, we consider it appropriate to decrease the terminal growth rate to 1.0% in order to reflect interactions consistently.

## 6. Business value of STADA

763. Based on the profit and loss statement as well as the planned balance sheet, <sup>227</sup> the cash flows to equity before personal taxes are derived below and the equity value of STADA is determined using the DCF method under IDW S 1 taking into account minorities and special items. Due to the standard application of the dividend discount method under IDW S 1 when determining compensation in structural measures under stock corporations law, the equity value after personal taxes is determined with application of indirect typification. Furthermore, the fair market value of STADA is derived in accordance with the principles of the DVFA-Recommendations.

# 6.1. Equity value under IDW S 1 before personal taxes and under the DVFA-Recommendations

of the concept of the market participant as a standard for typification for the purpose of determining the business value. The market participant values the business on the basis of an assumed, future planned business policy. In addition to the planned investments in the fixed assets and current assets, acquisitions and/or divestments, this includes also assumptions with regard to the financing policy and the capital structure of the business. These assumptions must be consistent with regard to the market participant, whereby the buyer will not take into account purely buyer specific synergies or value determining factors when determining the offered purchase price (here: recurring compensation payment and compensation).228 Contrary to this, synergies which every market participant can realize must be taken into account in the valuation (so-called "market participant-synergies"). However, this applies only if the business plan does not already contain synergies.

765. Taking into account pseudo-synergies or market participant-synergies under the DVFA is not necessary in the present case because the executive board of STADA AG and the management of Nidda Healthcare do not expect any positive synergy potentials between the companies. Due to the lack of different synergies, the determination of the equity value under IDW S 1 before personal taxes as well as the fair market value under the DVFA-Recommendations accordingly lead to the same result.

See chapter 4.4.

See DVFA-Recommendations, 2012, p. 11.

### 6.1.1. DCF value

- 766. For valuation purposes a market risk premium before personal taxes of 7.00% and a terminal growth rate of 1.25% are considered. For the sensitivity calculation a market risk premium before personal taxes of 6.25% and a terminal growth rate of 1.00% are applied.
- 767. In the following the cash flows to equity<sup>229</sup> of STADA are derived on the basis of the business plan<sup>230</sup>:

#### Derivation of cash flows to equity

	Plan			Co	TV		
in EUR m	2018	2019	2020	2021	2022	2023	2024
EBIT	348.4	405.4	432.4	462.9	486.3	492.4	498.5
-/+ Financial results	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-26.1
- Income taxes	83.1	98.5	105.1	116.5	123.1	124.6	126.2
Net income after taxes	219.2	262.9	288.4	319.9	337.8	342.0	346.3
+ Depreciations	134.7	137.0	136.0	156.7	177.3	179.5	181.8
-/+ Investments/disinvestments in fixed assets	-136.8	-182.9	-190.9	-199.0	-201.6	-204.9	-207.5
-/+ Change in working capital	-37.3	-22.5	-62.5	-39.3	-30.2	-8.1	-8.2
-/+ Change in financial liabilities	-91.5	-8.6	-11.7	-	-	15.7	15.9
= Cash flow to equity	88.3	185.8	159.3	238.2	283.3	324.3	328.3

For the sensitivity calculation the following derivation of the cash flows to equity results based on the different assumptions for the terminal growth rate:

#### Derivation of cash flows to equity

	Plan			Co	TV		
in EUR m	2018	2019	2020	2021	2022	2023	2024
EBIT	348.4	405.4	432.4	460.3	480.3	485.1	490.0
-/+ Financial results	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-25.9
- Income taxes	83.1	98.5	105.1	115.8	121.5	122.7	123.9
Net income after taxes	219.2	262.9	288.4	318.0	333.4	336.8	340.2
+ Depreciations	134.7	137.0	136.0	158.8	181.7	183.5	185.3
-/+ Investments/disinvestments in fixed assets	-136.8	-182.9	-190.9	-198.9	-201.1	-203.7	-205.8
-/+ Change in working capital	-37.3	-22.5	-62.5	-39.1	-29.4	-6.5	-6.5
-/+ Change in financial liabilities	-91.5	-8.6	-11.7	-	-	12.5	12.7
= Cash flow to equity	88.3	185.8	159.3	238.8	284.7	322.6	325.9

768. Based on the cash flows to equity, the DCF value is determined on the basis of levered costs of equity of 7.7% to 8.0% before personal taxes. For the sensitivity calculation these are in the range of 6.9% to 7.1%.

<sup>229</sup> See annex 5 for presentation of the consistently derived cash flow statement showing cash flow from operating activities, investment and financing activities.

See chapter 4.4.

769. Taking into account a market risk premium of 7.0% before personal taxes and a terminal growth rate of 1.25%, a DCF value in the amount of EUR 4,229.5 m results as of 2 February 2018:

DCF value before personal taxes								
			Plan		Co	nvergence		TV
in EUR m	_	2018	2019	2020	2021	2022	2023	2024
Cash flow to equity		88.3	185.8	159.3	238.2	283.3	324.3	328.3
Discount rate		7.96%	7.78%	7.79%	7.75%	7.72%	7.69%	6.44%
Discount factor		0.9	0.9	0.8	0.7	0.7	0.6	9.9
Present value of cash flows to equity		81.8	159.7	127.0	176.3	194.6	206.8	3,254.0
DCF value as of 31 December 2017	4,200.3							
Compounding factor	1.007							
DCF value as of 2 February 2018	4,229.5							

770. Taking into account a market risk premium of 6.25% before personal taxes and a terminal growth rate of 1.00% a DCF value in the amount of EUR 4,690.3 m results for the sensitivity calculation as of 2 February 2018:

DCF value before personal taxes								
			Plan		Co	nvergence		TV
in EUR m	_	2018	2019	2020	2021	2022	2023	2024
Cash flow to equity Discount rate		<b>88.3</b> 7.09%	<b>185.8</b> 6.95%	<b>159.3</b> 6.97%	<b>238.8</b> 6.95%	<b>284.7</b> 6.92%	<b>322.6</b> 6.90%	<b>325.9</b> 5.90%
Discount factor		0.9	0.9	0.8	0.8	0.7	0.7	11.3
Present value of cash flows to equity		82.5	162.2	130.0	182.3	203.2	215.4	3,685.8
DCF value as of 31 December 2017 Compounding factor	<b>4,661.4</b> 1.006							
DCF value as of 2 February 2018	4,690.3							

#### 6.1.2. Minorities

- as a special item from the DCF value. Overall, among others, the minority shares in Pymepharco Joint Stock Company, STADA Pharmaceuticals Ltd., Well Light Investment Services Joint Stock Company, Hemomont d.o.o and Hemofarm Banjy Luka A.D must be taken into account. Since the minorities do not receive any guaranteed dividends and instead the normal dividends, the value of the minorities is determined by discounting with the levered cost of equity for STADA.
- 772. The determination of the equity value of non-controlling shareholders is shown below. The value of the minorities is around EUR 65.0 m as of 2 February 2018:

Minorities (before personal taxes)			Plan		Co	nvergence		TV
in EUR m	_	2018	2019	2020	2021	2022	2023	2024
Net income distributed to minorities		3.5	3.6	3.9	4.3	4.5	4.6	4.6
Discount rate		7.96%	7.78%	7.79%	7.75%	7.72%	7.69%	6.44%
Discount factor		0.9	0.9	0.8	0.7	0.7	0.6	9.9
Present value of cash flows to equity		3.2	3.1	3.1	3.2	3.1	2.9	45.9
Present value of minorities as of 31 December 2017	64.5							
Compounding factor	1.007							
Present value of minorities as of 2 February 2018	65.0							

773. The determination of the equity value of non-controlling shareholders for the sensitivity calculation is shown below. The value of the minorities is around EUR 70.9 m as of 2 February 2018:

Minorities (before personal taxes)		Plan		Co	nvergence		TV
in EUR m	2018	2019	2020	2021	2022	2023	2024
Net income distributed to minorities Discount rate	<b>3.5</b> 7.09%	<b>3.6</b> 6.95%	<b>3.9</b> 6.97%	<b>4.3</b> 6.95%	<b>4.5</b> 6.92%	<b>4.5</b> 6.90%	<b>4.6</b> 5.90%
Discount factor Present value of cash flows to equity	0.9 <b>3.2</b>	0.9 <b>3.1</b>	0.8 <b>3.2</b>	0.8 <b>3.2</b>	0.7 <b>3.2</b>	0.7 <b>3.0</b>	11.3 <b>51.5</b>
Present value of minorities as of 31 December 2017 70.	5						
Compounding factor 1.00	<u>6</u>						
Present value of minorities as of 2 February 2018 70.	9						

## 6.1.3. Special items and non-operating assets

- 774. In the course of the analysis and discussions with the persons responsible for the planning, nonoperating assets were identified, which are taken into account as special items in the valuation of STADA.
- 775. This involves in the first place the joint venture STADA Vietnam J.V. Co. Ltd., for which the contribution to the earnings is not included in the consolidated planning of the profit and loss statement. On 29 November 2017 STADA signed a "Binding Term Sheet" for the sale of the joint venture for a purchase price of EUR 31.0 m. The special item of the joint venture is accordingly taken into account in the amount of the agreed purchase price.
- 776. Secondly, cash and cash equivalents in the amount of EUR 52.8 m were identified as a special item in the course of assets adjustments. This cash and cash equivalents are available for the planned dividend distribution for the financial year 2017 in 2018 and are thus non-operational.
- 777. Furthermore, for the reasons of materiality, the book equity values of the subsidiaries and other investments that are not considered in the business plan and are currently not operatively active are taken into account as special items in the amount of EUR 3.8 m.
- 778. In total, the special items (without minorities) amount to rounded EUR 87.7 m as of the valuation date.

### 6.1.4. Equity value before personal taxes

Taking into account the DCF value of around EUR 4,229.5 m, the minorities in the amount of EUR 65.0 m and the special items in the amount of EUR 87.7 m, the equity value before personal taxes is a total of around EUR 4,252.2 m as of 2 February 2018. This corresponds in the case of around 62.3 m outstanding STADA shares to a value of EUR 68.30 per share.

780. The bridge from the DCF value to the equity value before personal taxes is shown below:

#### Equity value before personal taxes

DCF value as of 31 December 2017	4,200.3
Compounding factor	1.007
DCF value as of 2 February 2018	4,229.5
- Minorities (before personal taxes)	-65.0
+ Non-operating assets	87.7
Equity value after minorities as of 2 February 2018	4,252.2
Number of shares outstanding in m	62.3
Value per share	68.30

- 781. For the sensitivity calculation, the equity value before personal taxes and under consideration of the DCF value of around EUR 4,690.3 m, the minorities of EUR 70.9 m and the special items of EUR 87.7 m, amounts to EUR 4,707.1 m in total as of 2 February 2018. This corresponds to a value per share of EUR 75.61.
- 782. The bridge from the DCF value to the equity value before personal taxes for the sensitivity calculation is shown below:

#### Equity value before personal taxes

DCF value as of 31 December 2017	4,661.4
Compounding factor	1.006
DCF value as of 2 February 2018	4,690.3
- Minorities (before personal taxes)	-70.9
+ Non-operating assets	87.7
Equity value after minorities as of 2 February 2018	4,707.1
Number of shares outstanding in m	62.3
Value per share	75.61

# 6.2. Equity value under IDW S 1 after personal taxes

#### 6.2.1. Dividend discount value

- 783. In light of the underlying reason for the valuation, i.e. the determination of a reasonable compensation under § 305 AktG, there is a significant conceptual difference between the cash flow to equity approach (before personal taxes) and the dividend discount method under IDW S 1 (after personal taxes) in taking personal taxes at the level of the shareholders into account. When determining the objectified value under IDW S 1 in the context of the assessment of the recurring compensation payment and compensation for structural measures under stock corporations law, a typification of the personal tax situation of the shareholders must be made pursuant to the principles of objectified business value under IDW S 1. For purposes of this typification, the perspective of a fully taxable domestic individual must be applied, and the corresponding personal income taxes must be taken into account both, when determining the size of the cash flow to be discounted, as well as when determining the discount rate (so-called Tax-CAPM).
- 784. Due to the consideration of personal taxes in the dividend discount method under IDW S 1, additional assumptions with regard to the dividend distribution policy and the payout ratio are also relevant. In order to consistently take into account the typified personal tax consequences, it is necessary to differentiate the distributions remaining after the necessary retention of

earnings based on the plan assumptions for the investment program and the capital structure. For valuation purposes the remaining distributions are divided into dividends and a share of fictive retained earnings, because dividends and capital gains represented through fictive retained earnings are taxed at different tax rates at the level of the shareholders. A sustained payout ratio of around 40% is assumed, which corresponds to the average payout ratio of the company and the peer group companies.

785. The tax deposit account is not relevant for determining the cash flows to be discounted.

#### Derivation of cash flows to equity to be discounted

- FUD		Plan		Convergence			TV	
in EUR m	2018	2019	2020	2021	2022	2023	2024	
EBIT	348.4	405.4	432.4	462.9	486.3	492.4	498.5	
-/+ Financial results	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-26.1	
- Income taxes	83.1	98.5	105.1	116.5	123.1	124.6	126.2	
Net income after taxes	219.2	262.9	288.4	319.9	337.8	342.0	346.3	
+ Depreciations	134.7	137.0	136.0	156.7	177.3	179.5	181.8	
-/+ Investments/disinvestments in fixed assets	-136.8	-182.9	-190.9	-199.0	-201.6	-204.9	-207.5	
-/+ Change in working capital	-37.3	-22.5	-62.5	-39.3	-30.2	-8.1	-8.2	
-/+ Change in financial liabilities	-91.5	-8.6	-11.7	-	-	15.7	15.9	
= Retention	130.8	77.1	129.1	81.7	54.5	17.8	18.0	
= Cash flow to equity	88.3	185.8	159.3	238.2	283.3	324.3	328.3	
Implied payout ratio before personal taxes	40.3%	70.7%	55.2%	74.5%	83.9%	94.8%	94.8%	
Dividend planned by STADA	88.3	105.8	115.3					
Planned payout ratio by STADA	40.3%	40.3%	40.0%					
Dividends before personal taxes	88.3	105.8	115.3	128.0	135.1	136.8	138.5	
Implied payout ratio after personal taxes (IDW S 1)	40.3%	40.3%	40.0%	40.0%	40.0%	40.0%	40.0%	
Personal taxes (26.4%)	-23.3	-27.9	-30.4	-33.8	-35.6	-36.1	-36.5	
Dividend after personal taxes	65.0	77.9	84.9	94.2	99.5	100.7	102.0	
Dividend	88.3	105.8	115.3	128.0	135.1	136.8	138.5	
Operative reinvestment	39.3	68.4	117.4	81.7	54.5	33.4	33.9	
Increase / decrease of financial liabilities	91.5	8.6	11.7	-	-	-15.7	-15.9	
Fictive reinvestment before personal taxes	-	80.0	44.0	110.3	148.2	187.4	189.8	
Personal taxes (13.2%)	-	-10.5	-5.8	-14.5	-19.5	-24.7	-25.0	
Fictive attribution of reinvestment after personal taxes	-	69.4	38.2	95.7	128.7	162.7	164.8	
Cash flow to be discounted	65.0	147.3	123.1	189.9	228.1	263.5	266.7	

786. For the sensitivity calculation the following deviation of the cash flows to be discounted results based on the different assumptions for terminal growth rate:

#### Derivation of cash flows to equity to be discounted

		Plan		Co	TV		
in EUR m	2018	2019	2020	2021	2022	2023	2024
EBIT	348.4	405.4	432.4	460.3	480.3	485.1	490.0
-/+ Financial results	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-25.9
- Income taxes	83.1	98.5	105.1	115.8	121.5	122.7	123.9
Net income after taxes	219.2	262.9	288.4	318.0	333.4	336.8	340.2
+ Depreciations	134.7	137.0	136.0	158.8	181.7	183.5	185.3
-/+ Investments/disinvestments in fixed assets	-136.8	-182.9	-190.9	-198.9	-201.1	-203.7	-205.8
-/+ Change in working capital	-37.3	-22.5	-62.5	-39.1	-29.4	-6.5	-6.5
-/+ Change in financial liabilities	-91.5	-8.6	-11.7	-	-	12.5	12.7
= Retention	130.8	77.1	129.1	79.1	48.8	14.1	14.3
= Cash flow to equity	88.3	185.8	159.3	238.8	284.7	322.6	325.9
Implied payout ratio before personal taxes	40.3%	70.7%	55.2%	75.1%	85.4%	95.8%	95.8%
Dividend planned by STADA	88.3	105.8	115.3				
Planned payout ratio by STADA	40.3%	40.3%	40.0%				
Dividends before personal taxes	88.3	105.8	115.3	127.2	133.4	134.7	136.1
Implied payout ratio after personal taxes (IDW S 1)	40.3%	40.3%	40.0%	40.0%	40.0%	40.0%	40.0%
Personal taxes (26.4%)	-23.3	-27.9	-30.4	-33.5	-35.2	-35.5	-35.9
Dividend after personal taxes	65.0	77.9	84.9	93.6	98.2	99.2	100.2
Dividend	88.3	105.8	115.3	127.2	133.4	134.7	136.1
Operative reinvestment	39.3	68.4	117.4	79.1	48.8	26.7	26.9
Increase / decrease of financial liabilities	91.5	8.6	11.7	-	-	-12.5	-12.7
Fictive reinvestment before personal taxes	-	80.0	44.0	111.6	151.3	187.9	189.8
Personal taxes (13.2%)	-	-10.5	-5.8	-14.7	-19.9	-24.8	-25.0
Fictive attribution of reinvestment after personal taxes	-	69.4	38.2	96.9	131.3	163.1	164.8
Cash flow to be discounted	65.0	147.3	123.1	190.6	229.5	262.3	264.9

- 787. With regard to the cost of capital under the Tax-CAPM, the risk free rate and the market risk premium must each be determined after personal taxes.
- 788. This means specifically that the risk free rate of 1.25% before personal taxes based on the Svensson method must be reduced by the withholding tax rate plus the solidarity surcharge in an amount of total 26.38%. This results in a risk free rate of 0.92% after personal taxes.
- 789. For valuation purposes a market risk premium after personal taxes of 6.00% and a terminal growth rate of 1.25% are considered. For the sensitivity calculation a market risk premium after personal taxes in the amount of 5.5% and a terminal growth rate of 1.00% are applied.
- 790. This results in the following discount rates:

### Derivation of cost of capital after personal taxes

		Plan			Convergence		
	2018	2019	2020	2021	2022	2023	2024
Risk free rate (before personal taxes)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
Personal tax (26.4%)	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%
Risk free rate (after personal taxes)	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Market risk premium (after personal taxes)	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Relevered beta	1.0	0.9	0.9	0.9	0.9	0.9	0.9
Levered cost of equity (after personal taxes)	6.64%	6.50%	6.51%	6.48%	6.45%	6.43%	6.43%
Terminal growth rate							1.25%
Discount rate (after personal taxes)	6.64%	6.50%	6.51%	6.48%	6.45%	6.43%	5.18%

791. For the sensitivity calculation the following capitalization rates result:

#### Derivation of cost of capital after personal taxes

		Plan			Convergence			
	2018	2019	2020	2021	2022	2023	2024	
Risk free rate (before personal taxes)	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	
Personal tax (26.4%)	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	0.33%	
Risk free rate (after personal taxes)	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	
Market risk premium (after personal taxes)	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	
Relevered beta	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
Levered cost of equity (after personal taxes)	6.07%	5.96%	5.97%	5.95%	5.93%	5.92%	5.92%	
Terminal growth rate							1.00%	
Discount rate (after personal taxes)	6.07%	5.96%	5.97%	5.95%	5.93%	5.92%	4.92%	

792. The levered cost of equity after personal taxes lie in a range of 6.4% to 6.6% in the case of a market risk premium of 6.0% after personal taxes and in a range of 5.9% to 6.1% in the case of a market risk premium of 5.5% after personal taxes.

793. Taking into account a market risk premium of 6.0% after personal taxes and a terminal growth rate of 1.25%, a dividend discount value of EUR 4,343.6 m results as of 2 February 2018:

	=		Plan		C	TV		
in EUR m	_	2018	2019	2020	2021	2022	2023	2024
Cash flow to be discounted		65.0	147.3	123.1	189.9	228.1	263.5	266.7
Discount rate Rollback		6.64% 4,318.4	6.50% 4,539.9	6.51% 4,687.6	6.48% 4,869.5	6.45% 4,995.0	6.43% 5,089.0	5.18% 5,152.6
Discount factor Present value of cash flow		0.9 <b>61.0</b>	0.9 <b>129.7</b>	0.8 <b>101.8</b>	0.8 <b>147.5</b>	0.7 <b>166.4</b>	0.7 <b>180.6</b>	13.2 <b>3,531.4</b>
Dividend discount value as of 31 December 2017 Compounding factor Dividend discount value as of 2 February 2018	4,318.4 1.006 4,343.6							

794. For the sensitivity calculation, upon taking into account a market risk premium of 5.5% after personal taxes and a terminal growth rate of 1.00%, a dividend discount value of EUR 4,635.5 m results:

#### Dividend discount value after personal taxes

			Plan		Convergence			TV
in EUR m		2018	2019	2020	2021	2022	2023	2024
Cash flow to be discounted		65.0	147.3	123.1	190.6	229.5	262.3	264.9
Discount rate Rollback		6.07% 4,610.9	5.96% 4,825.6	5.97% 4,965.6	5.95% 5,139.1	5.93% 5,254.5	5.92% 5,336.7	4.92% 5,390.0
Discount factor Present value of cash flow		0.9 <b>61.3</b>	0.9 <b>131.1</b>	0.8 <b>103.4</b>	0.8 <b>151.0</b>	0.7 <b>171.7</b>	0.7 <b>185.3</b>	14.4 3,807.1
Dividend discount value as of 31 December 2017 Compounding factor	<b>4,610.9</b> 1.005							
Dividend discount value as of 2 February 2018	4,635.5							

795. This results in a range of EUR 4,343.6 m to EUR 4,635.5 m for the dividend discount value as of 2 February 2018.

#### 6.2.2. Minorities

- 796. Minorities were not taken into account when deriving the financial surpluses and are deducted as a special item from the dividend discount value. The minorities correspond to what is described in chapter 6.1.2.
- 797. The determination of the equity value of non-controlling shareholders is shown below:

Minorities (after personal taxes)		Plan		Co	nvergence		TV
in EUR m	2018	2019	2020	2021	2022	2023	2024
Net income distributed to minorities  Net income distributed to minorities after personal taxes	3.5 2.5	3.6 2.6	3.9 2.8	4.3 3.2	4.5 3.3	4.6 3.4	4.6 3.4
Discount rate	6.64%	6.50%	6.51%	<b>3.2</b> 6.48%	6.45%	6.43%	5.18%
Sistement and	0.0 170	0.5070	0.5170	0.7070	0.7570	0.7570	3.1070
Discount factor	0.9	0.9	0.8	0.8	0.7	0.7	13.2
Σ Present value of cash flows to equity	2.4	2.3	2.3	2.4	2.4	2.3	45.2
Present value of minorities as of 31 December 2017 59.4	ı						
Compounding factor 1.006	<u>i</u>						
Present value of minorities as of 2 February 2018 59.8	3						

798. The determination of the equity value of non-controlling shareholders for the sensitivity calculation is shown below:

Minorities (after personal taxes)		Plan		Co	TV		
in EUR m	2018	2019	2020	2021	2022	2023	2024
Net income distributed to minorities	3.5	3.6	3.9	4.3	4.5	4.5	4.6
Net income distributed to minorities after personal taxes	2.5	2.6	2.8	3.1	3.3	3.3	3.4
Discount rate	6.07%	5.96%	5.97%	5.95%	5.93%	5.92%	4.92%
Discount factor	0.9	0.9	0.8	0.8	0.7	0.7	14.4
Σ Present value of cash flows to equity	2.4	2.4	2.4	2.5	2.5	2.3	48.2
Present value of minorities as of 31 December 2017 62.6							
Compounding factor 1.005							
Present value of minorities as of 2 February 2018 62.9							

## 6.2.3. Special items and non-operating assets

- 799. In the course of the analysis and discussions with the persons responsible for the planning, nonoperating assets were identified which are taken into account as special items in the valuation of STADA. The special items and their amount correspond to what is set forth in chapter 6.1.3.
- 800. The special items (without minorities) amount to EUR 87.7 m as of the valuation date.

## 6.2.4. Equity value after personal taxes

- 801. Upon taking into account the dividend discount value of around EUR 4,343.6 m, the minorities of EUR 59.8 m and the special items of EUR 87.7 m, an equity value after personal taxes of around EUR 4,371.5 m in total results as of 2 February 2018. This corresponds for around 62.3 m outstanding STADA shares to a value per share of EUR 70.22.
- 802. The bridge from the discount dividend value to the equity value after personal taxes is shown below:

#### Equity value after personal taxes

Dividend discount value as of 31 December 2017 Compounding factor	<b>4,318.4</b> 1.006
Dividend discount value as of 2 February 2018	4,343.6
- Minorities (after personal taxes)	-59.8
+ Non-operating assets	87.7
Equity value after personal taxes	
as of 2 February 2018	4,371.5
Number of shares outstanding in m	62.3
Value per share	70.22

803. For the sensitivity calculation, upon taking into account the dividend discount value of around EUR 4,635.5 m, the minorities of EUR 62.9 m and the special items of EUR 87.7 m, an equity value after personal taxes of around EUR 4,660.2 m in total results as of 2 February 2018. This corresponds to a value per share of EUR 74.85.

804. The bridge from the dividend discount value to the equity value after personal taxes for the sensitivity calculation is shown below:

#### Equity value after personal taxes

<b>Dividend discount value as of 31 December 2017</b> Compounding factor	<b>4,610.9</b> 1.005
Dividend discount value as of 2 February 2018	4,635.5
- Minorities (after personal taxes)	-62.9
+ Non-operating assets	87.7
Equity value after personal taxes	
as of 2 February 2018	4,660.2
Number of shares outstanding in m	62.3
Value per share	74.85

# 6.3. Comparison oriented valuation using the multiple method

805. In addition to determining the equity value on the basis of the DCF method and the dividend discount method, ranges for values are determined on the basis of the multiple method. The multiple method represents a comparative market valuation. The business value is accordingly the product of a reference variable (frequently sales or profit) of the company and the corresponding multiple, which is normally derived from listed comparable companies (trading multiples) as well as from comparable transactions (transaction multiples).

## 6.3.1. Valuation based on trading multiples

- 806. In order to value STADA, the stock prices observed for comparable companies in the capital market and the multiples derived from those values are initially considered. Contrary to deriving the beta using a peer group, the length of the historic listing on the exchange is not determinative in a comparative market valuation using trading multiples and instead the quality of the forward looking estimates by analysts for the reference variables are decisive. Therefore, at first all comparable companies identified in the selection of the peer group<sup>231</sup> can be included in the valuation. The following analysis is based on multiples for the financial years 2018 and 2019.
- 807. The comparative valuation on the basis of multiples serves to check the reasonableness of the dividend discount value in the concept of the IDW S 1. Insofar, the determined multiples are not considered to be an independent valuation. The DVFA-Recommendations, on the other hand, apply the multiple valuation generally as an equivalent method in addition to other valuation methods.
- 808. For the derivation of multiples for STADA the business plan of the valuation subject is compared with the estimates for the peer group companies. In order to derive reasonable multiples from the peer group, reference is also made to the relevant growth factors influencing the value. Despite any incompleteness and price distortions resulting in the market, the relationship of multiples to growth always exists because the growth expectations are implicitly included in

See chapter 2.4.

the multiples.<sup>232</sup> In order to continue to consider different investment intensity of the peer group companies in an adequate manner, reference is also made to the so-called cash contribution multiples. The respective reference variable for the cash contribution multiple is determined by subtracting the investments in tangible assets (CAPEX) from the EBITDA.

809. We have not taken into account sales multiples because the different level of the operational profitability only permits a very limited comparison. Overall, the specific business models, despite their general comparability, are too different to apply a range of values derived from sales multiples.

## **EBITDA** multiples

810. For EBITDA multiples the growth profile is the main driver. Accordingly, when selecting the appropriate multiples, reference was made especially to the future growth profile:

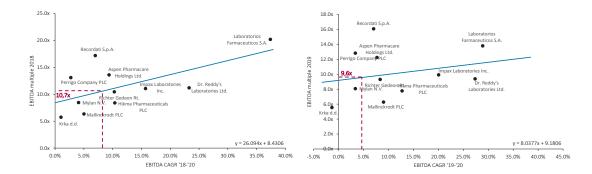
EBITDA multiple:	Ε	BI	TD	Αr	nul	ltip	les
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	EBITDA growth yoy		EBITDA	CAGR	EBI	EBITDA margin			EBITDA multiple		
	2018	2019	2020	'18-'20	'19-'20	2018	2019	2020	2018	2019	10y Median
Richter Gedeon Rt.	8.8%	12.3%	8.3%	10.3%	8.3%	25.4%	26.7%	27.9%	10.4x	9.3x	9.4x
Krka d.d.	4.6%	3.4%	-1.3%	1.0%	-1.3%	24.8%	24.8%	24.0%	5.7x	5.5x	6.6x
Mylan N.V.	11.3%	4.8%	3.4%	4.1%	3.4%	33.6%	34.3%	34.5%	8.5x	8.1x	10.2x
Dr. Reddy's Laboratories Ltd.	40.5%	19.3%	27.4%	23.3%	27.4%	22.0%	23.5%	24.6%	11.2x	9.4x	14.5x
Perrigo Company PLC	3.8%	2.1%	3.4%	2.7%	3.4%	24.3%	24.3%	24.4%	13.1x	12.8x	15.4x
Hikma Pharmaceuticals PLC	0.6%	8.1%	12.7%	10.4%	12.7%	25.3%	25.9%	27.8%	8.4x	7.8x	13.6x
Vifor Pharma AG	26.5%	31.2%	38.0%	34.5%	38.0%	27.3%	31.2%	37.8%	n.m.	n.m.	12.7x
Laboratorios Farmaceuticos S.A.	31.5%	46.4%	28.9%	37.4%	28.9%	14.9%	17.5%	18.9%	20.2x	13.8x	15.3x
Aspen Pharmacare Holdings Ltd.	28.5%	11.1%	7.7%	9.4%	7.7%	28.8%	29.9%	30.4%	13.6x	12.2x	16.0x
Recordati S.p.A.	9.1%	6.9%	7.0%	7.0%	7.0%	35.1%	35.2%	34.8%	17.2x	16.1x	8.0x
Impax Laboratories Inc.	23.4%	11.5%	20.1%	15.7%	20.1%	22.5%	24.0%	27.4%	11.1x	9.9x	10.4x
Mallinckrodt PLC	-4.1%	1.2%	9.0%	5.0%	9.0%	40.9%	41.2%	43.8%	6.3x	6.3x	10.9x
STADA	11.0%	12.3%	4.8%	8.5%	4.8%	20.0%	21.5%	21.2%	-	-	-
Average	15.4%	13.2%	13.7%	13.4%	13.7%	27.1%	28.2%	29.7%	11.4x	10.1x	11.9x
Median	10.2%	9.6%	8.7%	9.8%	8.7%	25.3%	26.3%	27.9%	11.1x	9.4x	11.8x

811. A linear regression was performed in analyzing the relationship between EBITDA growth rates and EBITDA multiples.

See on the connection between multiple, profitability and growth, among others, Koller/Goedhart/Wessels, 2010, pp. 315-317; Viebig/Poddig/Varmaz, 2008, pp. 363 et seq.

812. The two regression lines for the EBITDA multiples in 2018 and 2019 are based on the analysts' expectations for the average EBITDA growth rates of peer group companies in 2018 to 2020 and 2019 to 2020:



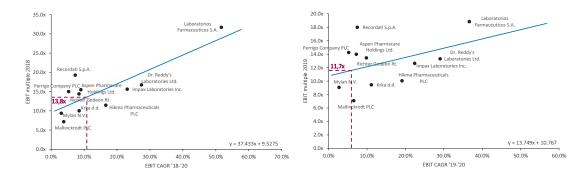
- 813. The regression analysis shows that a positive connection between the expected EBITDA growth and the EBITDA multiples exists in the peer group. STADA plans an EBITDA growth of approximately 8.5% (CAGR) in the plan period 2018 to 2020, so that an EBITDA multiple for 2018 of 10.7x results from the regression analysis.
- 814. An EBITDA multiple of 9.6x results accordingly in 2019 upon taking into account the average EBITDA growth rate of 4.8% (CAGR) in the plan period 2019 to 2020.

## **EBIT** multiples

815. The growth profile is also the main driver for the EBIT multiples. When selecting the appropriate multiple, reference is also made to the future growth profile:

EBIT multiples											
	EBIT	growth	/oy	EBIT C	EBIT CAGR		EBIT margin			EBIT mul	tiple
	2018	2019	2020	'18-'20	'19-'20	2018	2019	2020	2018	2019	10y Median
Richter Gedeon Rt.	25.9%	7.1%	9.8%	8.5%	9.8%	18.4%	18.5%	19.6%	14.4x	13.4x	14.2x
Krka d.d.	6.0%	5.9%	11.1%	8.5%	11.1%	14.2%	14.5%	15.8%	10.0x	9.4x	9.6x
Mylan N.V.	12.9%	3.4%	2.7%	3.1%	2.7%	30.3%	30.5%	30.5%	9.4x	9.1x	16.4x
Dr. Reddy's Laboratories Ltd.	70.7%	25.8%	29.0%	27.4%	29.0%	14.7%	16.6%	17.5%	16.8x	13.3x	19.6x
Perrigo Company PLC	5.4%	5.3%	5.2%	5.3%	5.2%	21.2%	21.8%	22.3%	15.0x	14.2x	19.9x
Hikma Pharmaceuticals PLC	3.4%	14.1%	19.1%	16.6%	19.1%	18.5%	20.0%	22.7%	11.5x	10.0x	18.0x
Vifor Pharma AG	67.7%	58.2%	56.3%	57.3%	56.3%	14.8%	20.4%	28.0%	n.m.	n.m.	15.6x
Laboratorios Farmaceuticos S.A.	53.5%	68.4%	36.6%	51.7%	36.6%	9.5%	12.8%	14.7%	31.7x	18.8x	17.6x
Aspen Pharmacare Holdings Ltd.	28.7%	10.8%	7.2%	9.0%	7.2%	25.3%	26.1%	26.5%	15.5x	14.0x	17.6x
Recordati S.p.A.	8.8%	7.1%	7.5%	7.3%	7.5%	31.3%	31.4%	31.2%	19.3x	18.0x	9.2x
Impax Laboratories Inc.	35.9%	23.8%	22.4%	23.1%	22.4%	15.9%	18.8%	21.9%	15.6x	12.6x	16.1x
Mallinckrodt PLC	-5.3%	1.2%	6.6%	3.8%	6.6%	36.2%	36.4%	37.9%	7.2x	7.1x	19.0x
STADA	5.6%	16.4%	6.7%	11.4%	6.7%	14.4%	16.1%	16.2%	-	-	-
Average	26.1%	19.3%	17.8%	18.5%	17.8%	20.9%	22.3%	24.1%	15.1x	12.7x	16.1x
Median	19.4%	9.0%	10.5%	8.8%	10.5%	18.5%	20.2%	22.5%	15.0x	13.3x	17.0x

816. In analogy to the approach with the EBITDA multiples, in the case of the EBIT multiples a regression was performed to the future expected EBIT growth:



817. The regression analysis shows that a positive relationship between the expected growth and the EBIT multiples exists in the peer group. The regression analysis results in an EBIT multiple of 13.8x in 2018 and 11.7x in 2019 for the planned EBIT growth of STADA of 11.4% (2018 to 2020) and 6.7% (2019 to 2020).

## Cash contribution multiples

Cash contribution multiples

STADA

Average

Median

- 818. In order to take into account the different capital intensity and accounting policies of the peer group companies, the cash contribution multiple is applied. The cash contribution is defined as EBITDA less CAPEX.
- 819. The growth profile is the main driver also for the cash contribution multiples. Reference was accordingly made to the growth profile, when selecting the appropriate multiples, just as was the case with the EBIT(DA) multiple:

EBIT growth yoy

26.1%

19.4%

19.3%

9.0%

17.8%

10.5%

	2018	2019	2020	'18-'20	'19-'20	2018	2019	2020	2018	2019	10y Median
Richter Gedeon Rt.	25.9%	7.1%	9.8%	8.5%	9.8%	18.4%	18.5%	19.6%	15.5x	13.5x	6.8x
Krka d.d.	6.0%	5.9%	11.1%	8.5%	11.1%	14.2%	14.5%	15.8%	10.0x	9.6x	4.7x
Mylan N.V.	12.9%	3.4%	2.7%	3.1%	2.7%	30.3%	30.5%	30.5%	9.3x	8.8x	8.8x
Dr. Reddy's Laboratories Ltd.	70.7%	25.8%	29.0%	27.4%	29.0%	14.7%	16.6%	17.5%	16.4x	12.9x	10.8x
Perrigo Company PLC	5.4%	5.3%	5.2%	5.3%	5.2%	21.2%	21.8%	22.3%	14.6x	14.1x	13.0x
Hikma Pharmaceuticals PLC	3.4%	14.1%	19.1%	16.6%	19.1%	18.5%	20.0%	22.7%	11.4x	10.6x	6.6x
Vifor Pharma AG	67.7%	58.2%	56.3%	57.3%	56.3%	14.8%	20.4%	28.0%	n.m.	n.m.	10.4x
Laboratorios Farmaceuticos S.A.	53.5%	68.4%	36.6%	51.7%	36.6%	9.5%	12.8%	14.7%	28.4x	18.4x	11.2x
Aspen Pharmacare Holdings Ltd.	28.7%	10.8%	7.2%	9.0%	7.2%	25.3%	26.1%	26.5%	20.6x	15.5x	13.6x
Recordati S.p.A.	8.8%	7.1%	7.5%	7.3%	7.5%	31.3%	31.4%	31.2%	18.2x	17.1x	7.4x
Impax Laboratories Inc.	35.9%	23.8%	22.4%	23.1%	22.4%	15.9%	18.8%	21.9%	13.7x	12.0x	7.0x
Mallinckrodt PLC	-5.3%	1.2%	6.6%	3.8%	6.6%	36.2%	36.4%	37.9%	7.4x	7.2x	8.1x

EBIT CAGR

EBIT margin

16.1%

22.3%

20.9%

18.5%

16.2%

24.1%

22.5%

15.1x

14.6x

12.7x

12.9x

9.0x

8.4x

Cash contribution multiple

820. When analyzing the relationship between growth rates and cash contribution multiples, the approach was analogous to determining the EBIT(DA) multiples.

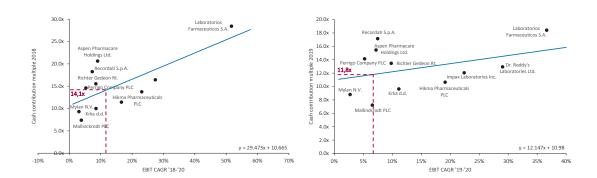
18.5%

8.8%

17.8%

10.5%

821. The two regression lines are accordingly based on the expected average EBIT growth rates in 2018 to 2020 compared to the cash contribution multiples in 2018 and on the expected average growth rates in 2019 to 2020 compared to the cash contribution multiples in 2019:



- 822. The regression analysis shows that a positive relationship between the expected EBIT growth and the cash contribution multiples exists for the peer group. STADA plans an average EBIT growth of around 11.4% (CAGR) in the plan period 2018 to 2020, so that the regression analysis results in a cash contribution multiple of 14.1x in 2018.
- 823. A cash contribution multiple of 11.8x results in respectively in 2019, when taking into account an average EBIT growth of 6.7% in the plan period 2019 to 2020.

## Equity value on the basis of trading multiples

- 824. In order to finally determine the range of values resulting from the trading multiples, we have referred below in each case to a range between the multiple derived from the regression and the median of the peer group. This approach takes into account both the specific growth profile of STADA as well as the mid-level for the peer group companies. In the long-term the EBITDA margin of STADA approaches the average peer group level.
- 825. Based on the selected multiples, the lowest and the highest levels shown in the following illustration result for the total enterprise value. The shown range of the total enterprise value is built in the next step using the average of these multiple-specific ranges:

#### Value range based on trading multiples

in EUR m	Selected multi	Selected multiple range			Value range		
Selected multiples	Min	Max	STADA metric	Min	Max		
EBITDA multiple 2018	10.7x	11.1x	483.1	5,169.5	5,341.3		
EBITDA multiple 2019	9.4x	9.6x	542.4	5,087.6	5,206.9		
EBIT multiple 2018	13.8x	15.0x	348.4	4,807.7	5,229.0		
EBIT multiple 2019	11.7x	13.3x	405.4	4,743.4	5,398.7		
Cash contribution multiple 2018	14.1x	14.6x	420.6	5,930.0	6,141.4		
Cash contribution multiple 2019	11.8x	12.9x	490.0	5,782.1	6,339.4		
Enterprise value (Ø)				5,253.4	5,609.4		

- 826. As is the case with the cash flows to equity and the dividend discount method, the interest-bearing liabilities are taken into account when deriving the equity value. The total interest-bearing liabilities in the amount of EUR 1,364.3 m must accordingly be deducted from the total enterprise value determined using the multiple method.
- 827. As is the case with the cash flows to equity and the dividend discount method, the value of the minorities in the amount of EUR 59.8 m is also deducted in addition to the interest-bearing liabilities. The investment in Vietnam and the non-operational companies as well as the still outstanding dividends in the amount of EUR 87.7 m are also taken into account as special items in 2017. Excess cash and cash equivalents do not exist.
- 828. Based on the reference variables EBITDA, EBIT and cash contribution, the range of the equity value after reducing the total enterprise value by interest-bearing liabilities and minorities as well as after adding special items is between EUR 3,917.0 m to EUR 4,273.0 m:

#### Value range based on trading multiples

in EUR m	Selected multi	Selected multiple range			Value range		
Selected multiples	Min	Max	STADA metric	Min	Max		
EBITDA multiple 2018	10.7x	11.1x	483.1	5,169.5	5,341.3		
EBITDA multiple 2019	9.4x	9.6x	542.4	5,087.6	5,206.9		
EBIT multiple 2018	13.8x	15.0x	348.4	4,807.7	5,229.0		
EBIT multiple 2019	11.7x	13.3x	405.4	4,743.4	5,398.7		
Cash contribution multiple 2018	14.1x	14.6x	420.6	5,930.0	6,141.4		
Cash contribution multiple 2019	11.8x	12.9x	490.0	5,782.1	6,339.4		
Enterprise value (Ø)				5,253.4	5,609.4		
- Financial debt				-1,364.3	-1,364.3		
- Minorities				-59.8	-59.8		
+/(-) Special items				87.7	87.7		
Equity value (before premium)				3,917.0	4,273.0		

- 829. When preparing the valuation using the multiple method, premiums (e.g. takeover premiums) and discounts (e.g. liquidity discounts) are taken into account under common valuation practice with regard to the range of equity value determined based on trading multiples. Empirical observations show that the premiums are normally higher than deductions. As a result of the listing of STADA on the stock exchange, no liquidity deduction is made.
- 830. The takeover premium is conceptually based on the assumption that trading multiples only reflect the prices for minority shares and that the control of a business has a value, because this changes a sub-optimum business policy and synergies with the buyer can be realized. Conceptually, the takeover premium must be divided into the so-called financial control value and the so-called strategic control value, <sup>233</sup> whereby the latter value reflects rationalization and synergy effects. The determined business values, when considering trading multiples, must accordingly be adjusted by means of a financial control premium.

<sup>233</sup> See Grbenic/Zunk, The Value of Control: Transaktionsorientierte Kontrollprämien für Europa, 2015, pp. 16 et seq.; Eichner, Übernahmeprämien bei M&A, 2017, p. 191.

831. As can be seen in the following table, the takeover premiums observable in the market are on average between 26.3% and 31.8%, and the median is between 11.5% and 26.9%. These transactions include transactions from the pharmaceutical and healthcare sector<sup>234</sup> for which data concerning the premiums paid were available:

#### Premia analysis

Transaction details			Premium			
Buyer	Target	Stake acquired	Closing	1 Day	1 Week	1 Month
Karo Pharma AB	Weifa ASA	100.0%	2017	10.1%	12.5%	13.6%
Mylan N.V.	Meda AB	100.0%	2016	98.8%	87.6%	74.3%
Vectura Group plc	Skyepharma PLC	100.0%	2016	4.2%	8.6%	10.8%
Allergan plc	Warner Chilcott plc	100.0%	2013	4.5%	6.2%	44.7%
LLC Garden Hills	Open Stock Company Veropharm	52.0%	2013	32.9%	32.9%	38.4%
BASF AS	Pronova BioPharma ASA	100.0%	2013	12.5%	22.7%	15.4%
TPG Capital, L.P	Par Pharmaceutical Companies Inc.	100.0%	2012	36.7%	39.5%	49.0%
Sanofi	Zentiva N.V.	69.4%	2009	10.6%	12.3%	8.4%
		А	verage	26.3%	27.8%	31.8%
		N	1edian	11.5%	17.6%	26.9%

- 832. A problematic aspect in the determined takeover premiums is that, in the first place, they reflect financial and strategic control, and in the second place, international data cannot be applied to the German market without corrections, because the financial control premiums are dependent on the country, the industry and the size. <sup>235</sup> This aspect was developed in the study by Grbenic/Zunk (2015), which shows that financial control premiums are also dependent on the multiple used. When applying EBITDA and EBIT multiples, the financial control premium determined in the study lies in a range of around 5.0% to 10.0%.
- 833. Eichner (2017), however, examines in his study the extent to which the observable takeover premiums in Europe can be divided into different components. The results indicate that approximately one fourth to one third of the entire takeover premium is attributable to the financial control premium. If this portion is applied to the takeover premiums observable in the market in the pharmaceutical and healthcare sector (see the table above), a financial control premium of 7.0% to 10.0% appears reasonable.
- 834. Based on this, we assume a financial control premium of 10.0%.

When using an appropriate definition of the relevant market focus for the transaction multiples, a premium analysis is not possible due to the lack of reliable information

See Grbenic/Zunk, The Value of Control: Transaktionsorientierte Kontrollprämien für Europa, 2015, pp. 16 et seq.; Grebenic, Transaction Control Premium/Minority Discount Study Germany, 2014, pp 26 et seq.

835. Upon taking into account a financial control premium of 10.0%, the range of the equity value of STADA amounts to EUR 4,308.7 m to EUR 4,700.3 m:

#### Value range based on trading multiples

in EUR m	Selected multiple range		Value range			
Selected multiples	Min	Max	STADA metric	Min	Max	
EBITDA multiple 2018	 10.7x	11.1x	483.1	5,169.5	5,341.3	
EBITDA multiple 2019	9.4x	9.6x	542.4	5,087.6	5,206.9	
EBIT multiple 2018	13.8x	15.0x	348.4	4,807.7	5,229.0	
EBIT multiple 2019	11.7x	13.3x	405.4	4,743.4	5,398.7	
Cash contribution multiple 2018	14.1x	14.6x	420.6	5,930.0	6,141.4	
Cash contribution multiple 2019	11.8x	12.9x	490.0	5,782.1	6,339.4	
Enterprise value (Ø)				5,253.4	5,609.4	
- Financial debt				-1,364.3	-1,364.3	
- Minorities				-59.8	-59.8	
+/(-) Special items				87.7	87.7	
Equity value (before premium)				3,917.0	4,273.0	
+ Control premium (10.0%)				391.7	427.3	
Equity value (after premium)				4,308.7	4,700.3	
Number of shares in m				62.3	62.3	
Value per share in EUR				69.21	75.50	

836. The per share value with a number of around 62.3 m outstanding shares resulting from the trading multiples is in a range of EUR 69.21 and EUR 75.50.

## 6.3.2. Valuation based on comparable transactions

- 837. In addition to valuation using stock exchange multiples, transaction multiples can alternatively be used. The business value is determined by reference to observable transactions involving comparable companies which do not necessarily have to be listed on the stock exchange. In order to derive these multiples, the paid purchase price for the comparable company is placed in relation to a reference variable. Transaction multiples are different from trading multiples due to the fact that they are regularly observed for share packages and purchases of majority stakes.
- actual purchase prices are influenced by subjective interests of the transaction parties. The transaction prices take into account, for example, synergy effects and other subjective expectations, which can only be realized as a result of the intended transaction. There are also interdependencies between the prices paid and the structure of the purchase contract (e.g. guarantees etc.). Purchase prices paid for majority stakes can accordingly contain premiums. In general, reference is made in this regard to so-called takeover premiums, which take into account these effects, contrary to stock exchange multiples, which do usually not contain any such premiums prior to rumors about a takeover. These effects can be observed frequently in practice, but they normally cannot be individually quantified or separated. Negative premiums and deductions can also sometimes be observed. The measurement of premiums paid (without splitting them into individual effects that do not overlap) is possible for transactions of listed majority stakes by deriving the difference in (proportionate) market capitalization before takeover rumors and the offered or paid takeover price.

- 839. It must be pointed out that no individual synergies can be taken into account in the valuation concept of IDW S 1, which first arise on the basis of the intended transaction (so-called real synergies). Thus, transaction multiples only have a very small importance.
- 840. Furthermore, the time reference of the transaction compared to the valuation date must also be considered in the case of transaction multiples. Transaction prices that took place a long period before the valuation date have only limited applicability, because they can be subject in part to large fluctuations (in the market). The informative value of this approach above all compared to the trading multiples derived from stock prices is limited for a business valuation. As is also the case with trading multiples, there is also the possibility of market distortions, which can lead to transaction prices without informative value, so that the criterion of timing compared to the valuation date must be given less weight in order to avoid carrying forward temporary distortions.
- 841. In addition to these limitations, the database of comparable transactions is also usually limited, because the data base results from publicly available information, for which in the case of transactions there are no publication duties comparable to stock exchange information.
- 842. From a large number of transactions those M&A transactions of comparable companies were selected for which the corresponding information and key figures are publicly available.<sup>237</sup> The time period for the analysis covers the years starting in 2008 until the valuation date. When selecting the comparable transactions an analogous approach to the selection of the peer group companies<sup>238</sup> was applied and transactions in the pharmaceutical and healthcare industry were identified. In a further step, we selected exclusively majority transactions, which show an implied total capital value of more than EUR 50 m, in which the target company has its headquarters in Europe and which were carried out in the last 4 years.
- 843. As has already been described, a final, well-founded evaluation of the respective transactions is normally not completely possible on the basis of exclusively publicly available information. Thus, the selected transactions might not be comparable or only be comparable to a limited degree. Especially the premiums paid or deductions can directly relate to granted guarantees

<sup>236</sup> See Ballwieser/Hachmeister, 2013, p. 218, in addition to their criticism of stock exchange multiples.

From the data base S&P Capital IQ. We especially get the implicit total capital values and respective reference variables from this data base and then calculate the corresponding multiples on this basis. Other comparable transactions are also relevant, but they are not entered in the data base of S&P Capital IQ and instead we had them from analysts' reports and were also included in our analysis.

See chapter 2.4.1.

or other obligations under the purchase contract. Despite these limitations, we identify the following 7 transactions and derive multiples from them, depending on the availability of data.

Transaction multiples								
	Tı	ransaction details						
						Impl. enterpr.	EV /	Stake
Buyer	Target	Country	Closing	Revenue	EBITDA	value (EV)	EBITDA	acquired
CVC Capital Partners Limited	Doc Generici s.r.l.	Italy	2016	180	61	675	11.1x	100.0%
Mylan N.V.	Meda AB	Sweden	2016	19,648	6,425	83,602	13.0x	100.0%
BC Partners	Pharmathen S.A.	Greece	2015	180	47	588	12.5x	80.0%
Concordia Healthcare Corp.	Amdipharm Mercury Company Limited	Great Britain	2015	446	256	3,531	13.8x	100.0%
Actavis UK Ltd	Auden Mckenzie Holdings Limited	Great Britain	2015	130	n/a	324	n/a	100.0%
Perrigo Company plc	Omega Pharma Invest NV	Belgium	2015	1,276	265	3,639	13.7x	100.0%
Meda AB	Rottapharm S.p.A.	Italy	2014	5,092	1,351	20,777	15.4x	100.0%
						Average	13.2x	
						Median	13.4x	

- 844. Based on the previously conducted analysis of the trading multiples, reference is made to the EBITDA for the valuation based on transaction multiples. Due to the lack of financial information with regard to the EBITs and the investments, the EBIT and cash contribution multiples are not taken into account. Just as is the case with trading multiples, the sales multiples are not taken into account because an estimate of profitability is not possible due to the limited availability of data.
- 845. As can be seen from the above table, the EBITDA multiples observable in the market lie in a range of 11.1x to 15.4x. Compared to this, the median and the arithmetic mean are 13.4x and 13.2x respectively.
- 846. The transaction Mylan N.V. / Meda AB marked in the table was identified as the most comparable transaction in context of the business model and the geographic focus of the target company. This transaction has an EBITDA multiple of 13.0x.
- 847. Due to the lack of detailed information (including non-listed companies, no further public information about transaction details, etc.), a regression analysis of the transaction multiples on the basis of the growth expectations of the target companies is not possible or has no informative value.
- 848. The valuation based on transaction multiples below is based on a range between the best comparable transaction and the median of all transactions.

## Equity value based on transaction multiples

849. Based on the selected EBITDA multiples, the range of the equity value for STADA shown below results in the same manner as determining the equity value on the basis of trading multiples:

#### Value range based on transaction multiples

in EUR m	Selected multi	Selected multiple range			Value range	
Selected multiples	Min	Max	STADA Metric	Min	Max	
EBITDA multiple LTM	13.0x	13.4x	435.2	5,657.1	5,831.2	
Enterprise value				5,657.1	5,831.2	
- Financial debt				-1,364.3	-1,364.3	
- Minorities				-59.8	-59.8	
+/(-) Special items				87.7	87.7	
Equiy value				4,320.7	4,494.7	
Number of shares in m				62.3	62.3	
Value per share in EUR				69.40	72.20	

- 850. As of the valuation date, the range of the equity value of STADA based on EBITDA multiples derived from comparable transactions with the selected multiple range is in between EUR 4,320.7 m and EUR 4,494.7 m. Based on around 62.3 m outstanding shares, this corresponds to a value per share of between EUR 69.40 and EUR 72.20.
- 851. Control premiums are not applied in this method because a control premium is already contained in the purchase prices paid for transactions involving a majority stake. Since reference is made to LTM financial figures, a further application of a control premium cannot be made in order to avoid double counting.
- 852. We point out here the already explained limitations of transaction multiples. However, based on the analysis we conducted for comparable transactions, there are no indications for unreasonableness of the multiples for comparable listed companies.

## 6.4. Comparison oriented valuation based on the stock price

- 853. Pursuant to IDW S 1 and the DVFA-Recommendations, the stock price can be considered for purposes of a plausibility check or generally as an independent valuation method. However, stock price cannot replace a fundamental valuation, if this valuation is based on a better and broader basis of information than the capital market, such as e.g. the adopted business plan.
- 854. Pursuant to the BVerfG case law in the DAT/ALTANA decision, <sup>239</sup> the stock price generally the minimum compensation offered to outstanding shareholders. The BGH confirmed and specified this case law in the scope of two decisions. <sup>240</sup> According to the Stollwerck decision, this reference price is calculated on the basis of the volume weighted average share price over a reference period of three months prior to the announcement (so-called "VWAP" or the "three month average price") of the measure (here: of the DPLTA). Contrary to a price on a specific

<sup>&</sup>lt;sup>239</sup> See BVerfG order dated 27 April 1999 –1 BVR 1613/94.

<sup>240</sup> See BGH order dated 12 March 2001 – II ZB 15/00 - "DAT/Altana" as well as the order dated 19.July 2010 – II ZB 18/09 – "STOLLWERCK".

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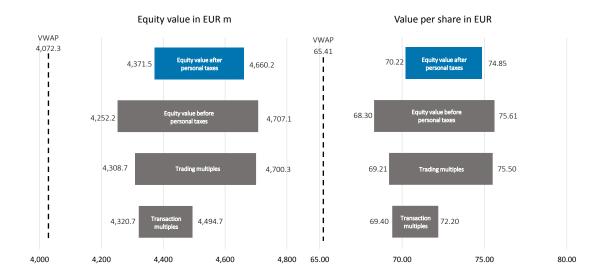
date, this average price is less susceptible to random influences and short-term distortions. This is supported also by the- WpÜGAngebV, <sup>241</sup> under which the reasonable consideration to be offered under the Securities Acquisition and Takeover Act in the case of a public takeover offer is also determined as the volume weighted three month average price of the domestic stock prices.

- 855. On 24 August 2017, Nidda Holding announced that it intended to enter into a DPLTA between Nidda Holding or one of its affiliates as the controlling and STADA as the controlled company. On the same day, the executive board of STADA decided to enter into discussions with Nidda Holding regarding the conclusion of such an agreement and announced this ad-hoc on 24 August 2017. The relevant reference period for calculating the three month average price of STADA shares thus covers the period from 24 May 2017 to 23 August 2017.
- 856. The three month average share price calculated and confirmed by BaFin for this reference period is EUR 65.41 per STADA share. This corresponds to a market capitalization of STADA of EUR 4,072.3 m.
- 857. Thus, the determined ranges for the equity value before and after personal taxes lie above the three month average share price of BaFin. Accordingly, this three month average share price pursuant to the Stollwerck and DAT/ALTANA case law is not relevant for assessment of the reasonable compensation. Since between the calculation date for the three month average share price and the general shareholders meeting of STADA AG adopting the resolution on 2 February 2018 does not lie a long time period, an extrapolation pursuant to the Stollwerck and DAT/ALTANA case law is not necessary.

<sup>§ 5</sup> para. 1, 3 WpÜGAngebV.

# 6.5. Conclusion about the equity value

858. The range of the equity value of STADA as of 2 February 2018, determined using the various valuation methods and premises, is as follows:



- as relevant for determining the reasonable compensation in the case law. As of 2 February 2018, the respective equity value amounts to EUR 4,371.5 m or EUR 70.22 per share, when using a market risk premium after personal taxes of 6.0% and a terminal growth rate of 1.25%.
- 860. For the sensitivity calculation the equity value after personal taxes amounts to EUR 4,660.2 m or EUR 74.85 per share, when using a market risk premium after personal taxes of 5.5% and a terminal growth rate of 1.00%.
- 861. The combination of these values results in a value range after personal taxes under IDW S 1 of EUR 4,371.5 m to EUR 4,660.2 m or EUR 70.22 to EUR 74.85 per STADA share
- 862. STADA's equity value before personal taxes based on the DCF method amounts to EUR 4,252.2 m or EUR 68.30 per share as of 2 February 2018, when using a market risk premium of 7.0% and a terminal growth rate of 1.25%.
- 863. For the sensitivity calculation the STADA's equity value before personal taxes amounts to EUR 4,707.1 m or EUR 75.61 per share, when using a market risk premium before personal taxes of 6.25% and a terminal growth rate of 1.00%.
- 864. STADA's equity value was also determined using the trading and transaction multiples. The range of the equity value, as determined by the transaction multiples, is at the lower end of the ranges determined using the other valuation methods. In addition, the value range based on trading multiples is similar to the equity value before and after personal taxes. Against this

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background the determined ranges of the equity value before and after personal taxes appear to be plausible.

865. Moreover, the equity values lie above the average stock exchange price (VWAP) of EUR 65.41 per share. Therefore, it is not necessary to consider the average stock exchange price as the minimum value for determining the compensation.

# 7. DERIVATION OF THE RECURRING COMPENSATION PAYMENT

- 866. Pursuant to § 304 para. 2 AktG, a reasonable recurring compensation payment must assure at least the annual payment of the amount, which could probably be the average profit of each share based on the current and future earnings position of the company taking into account reasonable depreciation and value adjustments, but without allocation to other profit reserves (§ 304 para. 2 sentence 1 AktG).
- 867. The future development of the earnings of a company is regularly subject to fluctuations over the course of time. It is appropriately illustrated in a forecast oriented value of future earnings. The business value represents the payments between the company and its owners taking into account interest and tax effects. In the case of companies with positive annual results, these payments consist of the expected dividend payments to the shareholders and fictive retained earnings. In the interest of evening out the annual payment of the recurring compensation payment, the legislative body does not relate the duty to pay the annually different expected profits, but instead requires the average profit, which could be distributed to each share. The average amount is supposed to reflect fluctuations in earnings in the calculations, but smooths out these fluctuations by using a uniform, average amount.
- 868. The reasonable recurring compensation payment generally results as an annuity on the value of future earnings of STADA. In order to determine the annuity interest rate for the reasonable recurring compensation payment, the specific structure of the (individual) contract, the possibilities of both contracting parties to act during its term and the possible circumstances after the end of the DPLTA must be reasonably taken into account.
- During the term of the DPLTA, the minority shareholders have two material risks which must be taken into account when determining the annuity interest rate. First, the recurring compensation payment represents a fixed series of payments which are similar to interest payments for fixed interest bonds. Pursuant to § 302 AktG, the controlling company is also required during the term of the DPLTA to absorb losses unless these losses can be offset by other profit reserves which were built up during the term of the DPLTA. The minority shareholders bear the risk of loss if the obligor (i.e. the controlling company) cannot pay both with regard to the payment of the recurring compensation payment as well as for the absorption of losses. Thus, the cost of debt of Nidda Healthcare represent the lower limit for the annuity interest rate when determining the reasonable recurring compensation payment.
- 870. There are generally two simplified methods applied in valuation practice for determining the risk equivalent annuity interest rate. The annuity interest rate is determined either as the average of the risk free rate and the levered cost of equity of the controlled company or as the average value of the cost of debt of the controlling company and the present value equivalent levered cost of equity of the controlled company. <sup>242</sup> In particular, the simplified determination using the average of the risk free rate and levered cost of equity of the controlling company bears the risk that the annuity interest rate lies below the cost of debt of the controlling

<sup>&</sup>lt;sup>242</sup> See Popp, WPg 2008, pp. 33 et seq.

company. In contrast, the application of the average of the cost of debt of the controlling company and the levered cost of equity of the controlled company excludes this risk. However, the mere use of average values constitutes a simplification.

safeguard clause under which the remaining minority shareholders in STADA can put their shares at the end of the DPLTA by termination for the determined compensation per share. Under the statutory provisions on assumption of losses, the minority shareholders do not have a risk of a loss of assets during the term of the DPLTA due to the safeguard clause. At the end of the DPLTA resulting from notice of termination, the minority shareholders can receive the compensation which was determined as the reasonable compensation at the conclusion of the DPLTA. Therefore, taking into account any additional risk premium on top of the cost of debt is not necessary. This also excludes the use of an average value of the cost of debt of the controlling company and the levered cost of equity of the controlled company as a simplification when determining the annuity interest rate due to the risk premium on the cost of debt implied in this approach. As a result of the safeguard clause, the minority shareholders only bear credit risk for the payment of the recurring compensation payment and the final payment at the end of the DPLTA. Thus, when determining the annuity interest rate, the basis must be the term and risk equivalent cost of debt of Nidda Healthcare.

#### Cost of debt Nidda Healthcare

Senior notes		Comparable corporate bonds		
Bond volume (in EUR m)	340.0			
Coupon p.a.	5.00%		Min	Max
Yield to maturity	4.85%	Yield to maturity	4.40%	4.60%
Rating S&P	B+			
Term	8 years			
Maturity	30. September 2020			

- 872. In order to derive the cost of debt of Nidda Helthcare, reference can be made to the yield of the unsecured corporate bonds issued by Nidda Holding and Nidda BondCo GmbH, Frankfurt am Main, which are direct respectively indirect shareholders of Nidda Healhcare and comparable corporate bonds.
- 873. Nidda Holding issued so-called Senior Secured Notes on 29 September 2017 in an amount of EUR 735 m and an interest coupon of 3.5% p.a. Nidda BondCo GmbH issued Senior Notes in an amount of EUR 340 m and an interest coupon of 5.0% p.a. on 29 September 2017. The recurring compensation payments have the same ranking as the Senior Notes, but are subordinated to the Senior Secured Notes. Therefore, the basis for determining the annuity interest rate consists of the costs of debt for the Senior Notes because they correspond to the credit risk of the reasonable recurring compensation payment. The Senior Notes have a yield of 4.85% p.a. with a total term of 8 years and a credit rating of B+. In addition, comparable, unsecured corporate bonds having a term of 7 to 8 years and a rating of B+ show yields in a range of 4.4%

to 4.6% in the capital market.<sup>243</sup> These yields are slightly lower than the yield of the Senior Notes.

- 874. The general assumption is that DPLTAs have a long term. This applies especially if the contracting parties are primarily pursuing strategic goals and potential long-term synergies are can be realized by integrating the controlled company into the controlling company. In the present case, the conclusion of the DPLTA, however, is being made in light of an investment by Nidda Healthcare as a financial investor. Compared to strategic investors, Nidda Healthcare cannot realize strategic synergy potentials. Since financial investors usually have a holding term of 5 to 8 years for their participations, the assumption is that the DPLTA between Nidda Healthcare and STADA AG will not exist much longer than the necessary minimum term of 5 years for recognizing a tax consolidation group. Therefore, we consider a determination of the annuity interest rate on the basis of the risk equivalent cost of debt of the Senior Notes and the yields of comparable corporate bonds to be reasonable. Based on the yield of the Senior Notes in the amount of 4.85% and the yields of comparable corporate bonds in a range of 4.4% to 4.6%, we consider an annuity interest rate in the amount of 4.75% before personal taxes to be reasonable.
- 875. The reasonable recurring compensation payment is based on the currently applicable corporate income tax rate plus the solidarity surcharge (Körperschaftsteuer plus Solidaritätszuschlag). The Federal Supreme Court of Justice (Bundesgerichtshof, "BGH") decided in its order dated 21 July 2003 (case no. II ZB 17/01, "Ytong") that a reasonable recurring compensation payment must guarantee to the outside shareholders the average (fixed) portion of gross profits per share (before corporate income tax) eligible for payout, minus the corporate income tax (Körperschaftsteuer plus Solidaritätszuschlag) to be paid by the company on the distributions at the respectively applicable tax rate.
- 876. As a consequence of receiving tax exempt earnings, the future profit of STADA is partially not subject to German corporate income tax. Against this background, the probable average gross profit eligible for payout must be divided into a share burdened by German corporate income tax (Körperschaftsteuer plus Solidaritätszuschlag) and component without such income tax component, in accordance with the requirements of the BGH. This division is made by

<sup>&</sup>lt;sup>243</sup> The yields were determined on the basis of interest structure curves of S&P Capital IQ.

- alternatively deriving the business value of STADA by taking into account or by not taking into account the German corporate income tax plus the solidarity surcharge.
- 877. The determination of the reasonable annually recurring compensation payment based on the determined equity value range after personal taxes pursuant to IDW S 1 of EUR 70.22 to EUR 74.85 per STADA share is shown in the following overview:

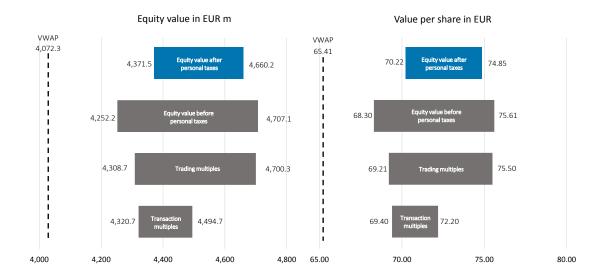
Derivation of the gross and net recurring compensation payment	Minimum			Maximum		
In EUR	With corp. taxes + Sol	Without corp. taxes + Sol	Total	With corp. taxes + Sol	Without corp. taxes + Sol	Total
Dividend discount value acc. IDW S1 as of 2 Feb 2018 (in EUR m)	1.894,2	2.477,3	4.371,5	2.019,3	2.640,9	4.660,2
Number of outstanding shares (in m)	62,3	62,3	62,3	62,3	62,3	62,3
Value per share	30,42	39,79	70,22	32,43	42,42	74,85
Annuity interest rate	4,75%	4,75%	4,75%	4,75%	4,75%	4,75%
Net recurring compensation payment per share	1,45	1,89	3,34	1,54	2,01	3,55
+ corporate income tax and solidarity surcharge	0,27	-	0,27	0,29	-	0,29
Gross recurring compensation payment per share	1,72	1,89	3,61	1,83	2,01	3,84

3.34 to EUR 3.55 for each STADA share (net recurring compensation payment per share). The applicable corporate income tax rate (*Körperschaftsteuer*) including the solidarity surcharge at the time the contract is concluded is 15.825%; this results in a deduction for corporate income tax in a range of EUR 0.27 to EUR 0.29 per share. In the case of an unchanged corporate income tax rate of 15.0% and the solidarity surcharge of 5.5%, the gross reasonable recurring compensation payment lies in a range of EUR 3.61 to EUR 3.84 per share (gross recurring compensation payment per share).

# 8. SUMMARY OF THE REASONABLENESS OF THE COMPENSATION AND THE RECURRING COMPENSATION PAYMENT

- 879. The management board of Nidda Healthcare and the executive board of STADA AG intend to conclude a DPLTA on 19 December 2017. The approval of the general shareholders' meeting is supposed to be given in an extraordinary general shareholders' meeting on 2 February 2018. Under the DPLTA, Nidda Healhcare undertakes to acquire the outstanding STADA shares in exchange for granting reasonable compensation pursuant to § 305 AktG. Nidda Healthcare also guarantees to the outside STADA shareholders the payment of a reasonable recurring compensation payment pursuant to § 304 AktG for the duration of the DPLTA. The reasonable compensation as well as the reasonable recurring compensation payment are set by the management board of Nidda Healthcare and the executive board of STADA AG.
- 880. In order to assess the business value of STADA, ValueTrust, in accordance with its mandate, determined a business value range on the basis of the valuation methods recognized in business valuation practice and the case law. ValueTrust accordingly determined a range for the objectified business value in accordance with the IDW Standard 1 "Principles for the Performance of Business Valuations" (*Grundsätze zur Durchführung von Unternehmensbewertungen*) (IDW S 1) in the function of a neutral expert. ValueTrust also took into account the "Best Practice Recommendations Corporate Valuation" (*Best-Practice-Empfehlungen Unternehmensbewertung*) of the German Association for Financial Analysis and Asset Management e.V. (status: December 2012). As set forth in the DVFA-Recommendations, ValueTrust issued the Expert Report as an independent expert.
- 881. In accordance with the case law on determining reasonable compensation for structural measures under stock corporations law, ValueTrust checked the business plan for plausibility. Using this basis, ValueTrust determined the equity value acc. to IDW S 1 before and after personal taxes and acc. to the DVFA-Recommendations before personal taxes and determined value ranges. In addition, comparative valuation methods, such as trading and transaction multiples and the stock exchange price of STADA were taken into account.

882. As of the valuation date 2 February 2018, the ranges for the equity value in EUR m and the equity value per STADA share in EUR are as follows:



- 883. The range for the equity value under IDW S 1 which are referred to in determining the compensation in the case of structural measures under stock corporations law amounts to EUR 4,371.5 m to EUR 4,660.2. Taking into account the number of outstanding STADA shares of 62,258,129, this results in a range for the reasonable compensation under § 305 AktG of EUR 70,22 to EUR 74,85 per STADA share.
- 884. This range lies above the three months average stock exchange price (VWAP) prior to publication of the intent to conclude a DPLTA on 24 August 2017 in the amount of EUR 65.41. This value constitutes the minimum compensation according to case law.
- 885. Taking into account the number of outstanding shares of 62,258,129 and the equity value after personal taxes acc. to IDW S 1 results in a range for the reasonable recurring compensation payment under § 304 AktG of EUR 3,34 to EUR 3,55 per STADA share (net), respectively EUR 3,61 to EUR 3,84 (gross).

## VALUETRUST

- 886. While performing the valuation, no particular difficulties according to § 293 a para. 1. S. 2 AktG occurred.
- 887. In case material changes, which influence the determination of ranges for the reasonable compensation and the reasonable recurring compensation payment, occur between the end of our work on 18 December 2017 and the extraordinary shareholder meeting of STADA AG on 2 February 2018 these changes have to be considered subsequently.
- 888. We make our Expert Report to the best of ours knowledge and belief on the basis of thorough analyses and with reference to the information that was provided to us.

Munich, 18 December 2017

Prof. Dr. Christian Aders

Chief Executive Officer ValueTrust Financial Advisors SE Florian Starck

Tax Advisor

Member of the Executive Board

ValueTrust Financial Advisors SE

Annexes

#### 1. List of the main documents and information used

In order to prepare this report, the company provided primarily the following documents:

- Business plan for the financial years 2018 to 2020 of STADA AG, consisting of the planned profit and loss statement as well the balance sheets, adopted in the meeting of the supervisory board on 1 December 2017
- Planning documents for the financial years 2018 to 2020 for the main subsidiaries of STADA ("Budget presentations") as well as additional planning documents of the executive board
- Extrapolation ("best estimate") of STADA AG for the consolidated balance sheet and the consolidated profit and loss statement for the financial year 2017 dated October 2017
- Budget presentation for the supervisory board meeting on 30 November 2017
- Internal STADA document for the future biosimilars strategy dated November/December
   2017
- Minutes of meetings of the supervisory board of STADA AG in the years 2016 and 2017 up to and including 29 August 2017
- Binding Term Sheet on the sale of STADA-Vietnam Joint Venture Co. Ltd.
- Audit reports and annual reports on the consolidated financial statements for the financial years 2014 to 2016 of STADA AG as well as quarterly reports
- Current organigram of STADA as of 30 September 2017
- Draft of the joint report: "Joint contract report of the executive board of STADA Arzneimittel Aktiengesellschaft, Bad Vilbel, and the managing directors of Nidda Healthcare GmbH, Frankfurt am Main, pursuant to § 293 a German Stock Corporations Act about the Domination and Profit and Loss Transfer Agreement between STADA Arzneimittel Aktiengesellschaft and Nidda Healthcare GmbH" dated 15 December 2017 (the "Contract report").

#### 2. Contact persons

During the course of our work, primarily the following persons (in alphabetical order) were available as contact partners at STADA:

- Tim Adolphs, Vice President Corporate Controlling
- Dr. Claudio Albrecht, Chief Executive Officer
- Daniel Buschmann, Director Tax Management Services
- Torsten Eisenbach, Vice President Corporate Accounting
- Marcus Engelbrecht, Director Management Reporting & Corporate Planning
- Christian Göllert, Senior Vice President Corporate Accounting & Tax
- Mark Keatley, Chief Financial Officer
- Frank Seiler, Vice President Corporate Treasury
- Dr. Anna Wilcken, Director Corporate Governance

During the course of our work, primarily the following persons (in alphabetical order) were available as contact partners at Nidda Healthcare:

- Thomas Allen
- Andreas Grundhöfer
- Matthew Norton

Jan Schönfeld

## 3. Profit and loss statement

Adjusted profit & loss statement	Adjusted historicals			Plan			Convergence			TV	
in EUR m	2014	2015	2016 BE	2017	2018	2019	2020	2021	2022	2023	
Total sales	2,053.6	2,115.1	2,139.2	2,304.2	2,414.5	2,520.8	2,676.9	2,798.6	2,879.7	2,915.7	2,952.2
growth (yoy)	-	3.00%	1.14%	7.71%	4.79%	4.40%	6.19%	4.55%	2.90%	1.25%	1.25%
Cost of goods sold	-1,055.7	-1,092.2	-1,092.8	-1,149.9	-1,177.4	-1,190.9	-1,272.3	-1,333.7	-1,376.9	-1,394.1	-1,411.5
Gross profit	997.9	1,022.9	1,046.4	1,154.2	1,237.1	1,329.9	1,404.6	1,464.9	1,502.8	1,521.6	1,540.6
in % of total sales	48.6%	48.4%	48.9%	50.1%	51.2%	52.8%	52.5%	52.3%	52.2%	52.2%	52.2%
Selling, general and administration cost	-611.2	-658.7	-670.3	-726.3	-780.3	-811.0	-848.1	-851.2	-839.5	-850.0	-860.6
thereof selling expenses	-458.4	-482.6	-488.3	-526.2	-570.0	-611.9	-644.4	-651.2	-637.9	-645.9	-654.0
thereof general and administrative expenses	-152.8	-176.0	-182.0	-200.0	-210.3	-199.1	-203.7	-200.0	-201.6	-204.1	-206.7
Research and development cost	-56.9	-65.0	-65.1	-72.9	-85.6	-89.4	-99.5	-123.5	-147.1	-149.0	-150.8
Other operating income	15.8	17.0	11.8	46.0	2.7	1.7	0.6	0.6	0.6	0.7	0.7
Other operating expenses	-23.2	-31.0	-27.8	-71.2	-25.5	-25.8	-25.2	-28.0	-30.6	-30.9	-31.3
EBIT	322.4	285.3	295.1	329.9	348.4	405.4	432.4	462.9	486.3	492.4	498.5
in % of total sales	15.7%	13.5%	13.8%	14.3%	14.4%	16.1%	16.2%	16.5%	16.9%	16.9%	16.9%
Total depreciations (throughout all functions)	109.5	104.1	102.9	105.2	134.7	137.0	136.0	156.7	177.3	179.5	181.8
EBITDA	431.9	389.4	398.0	435.2	483.1	542.4	568.4	619.6	663.6	671.9	680.3
in % of total sales	21.0%	18.4%	18.6%	18.9%	20.0%	21.5%	21.2%	22.1%	23.0%	23.0%	23.0%
Financial results	-69.1	-64.4	-50.9	-42.8	-46.1	-44.1	-39.0	-26.5	-25.4	-25.7	-26.1
Income before tax	253.3	220.9	244.2	287.1	302.3	361.3	393.5	436.5	460.9	466.6	472.5
in % of total sales	12.3%	10.4%	11.4%	12.5%	12.5%	14.3%	14.7%	15.6%	16.0%	16.0%	16.0%
Taxes on income	-61.4	-48.6	-58.4	-76.5	-83.1	-98.5	-105.1	-116.5	-123.1	-124.6	-126.2
Effective tax rate (in %)	24.2%	22.0%	23.9%	26.6%	27.5%	27.2%	26.7%	26.7%	26.7%	26.7%	26.7%
Net income / net loss for the year	191.9	172.3	185.8	210.6	219.2	262.9	288.4	319.9	337.8	342.0	346.3
in % of total sales	9.3%	8.1%	8.7%	9.1%	9.1%	10.4%	10.8%	11.4%	11.7%	11.7%	11.7%
Minority interest	5.6	6.5	8.5	4.7	-	-	-	-	-	-	-

## 4. Balance sheet

#### **Balance sheet**

_		Adjusted hi	istoricals			Plan		С	onvergence		TV
in EUR m as of 31 December	2014	2015	2016 BE	2017	2018	2019	2020	2021	2022	2023	
Intangible assets	1,631.5	1,649.0	1,582.4	1,501.4	1,470.8	1,496.7	1,534.1	1,566.5	1,585.7	1,605.5	1,625.6
Tangible assets Financial assets	305.4 12.6	321.6 14.5	322.7 16.1	337.8 19.3	369.9 19.8	389.3 20.4	406.4 20.9	416.3 20.9	421.4 20.9	426.7 21.2	432.0 21.4
Fixed assets	1,949.6	1,985.1	1,921.2	1,858.5	1,860.5	1,906.4	1,961.4	2,003.7	2,028.0	2,053.3	2,079.0
Inventories	498.8	501.5	484.9	496.8	546.4	564.4	605.9	632.5	650.2	658.3	666.6
Receivables and other assets	502.8	485.9	489.1	503.2	595.5	623.0	632.7	661.1	679.9	688.4	697.0
Cash and equivalents	164.2	143.2	352.6	149.1	83.2	107.0	127.5	147.8	167.0	169.1	171.2
Other current assets Deferred taxes	170.7 49.4	137.6 34.1	171.9 20.8	102.6 25.5	112.5 25.2	121.5 25.6	150.8 25.9	157.6 27.0	162.2 27.8	164.2 28.2	166.3 28.5
Current assets	1,385.9	1,302.3	1,519.3	1,277.3	1,362.8	1,441.5	1,542.7	1,626.0	1,687.1	1,708.2	1,729.6
Total assets	3,335.5	3,287.4	3,440.4	3,135.7	3,223.3	3,347.9	3,504.1	3,629.8	3,715.1	3,761.6	3,808.6
Equity	903.3	1,018.5	1,047.1	949.9	1,080.8	1,157.8	1,286.9	1,368.6	1,423.1	1,440.9	1,458.9
Provisions	17.4	22.5	20.3	17.6	15.9	16.4	17.2	18.0	18.5	18.7	19.0
Deferred tax	166.7	160.2	116.4	99.0	96.5	93.6	91.4	95.5	98.3	99.5	100.8
Interest bearing liabilities Non-interest bearing liabilities	1,524.9 723.1	1,390.0 696.1	1,510.1 746.6	1,364.3 704.8	1,272.8 757.3	1,264.2 815.9	1,252.5 856.1	1,252.5 895.1	1,252.5 922.7	1,268.2 934.3	1,284.1 945.9
Total equity and liabilities	3,335.5	3,287.4	3,440.4	3,135.7	3,223.3	3,347.9	3,504.1	3,629.8	3,715.1	3,761.6	3,808.6

#### 5. Cash flow statement

Cash flow statement		Plan		Co	nvergence		TV
in EUR m	2018	2019	2020	2021	2022	2023	
Results from ordinary activities	302.3	361.3	393.5	436.5	460.9	466.6	472.5
- Taxes on income	-83.1	-98.5	-105.1	-116.5	-123.1	-124.6	-126.2
+ Depreciation	134.7	137.0	136.0	156.7	177.3	179.5	181.8
-/(+) Change in inventories	-49.6	-18.0	-41.5	-26.6	-17.7	-8.1	-8.2
-/(+) Change in receivables and other assets	-92.3	-27.5	-9.7	-28.4	-18.8	-8.5	-8.6
-/(+) Change in deferred tax assets	-0.3	0.4	0.3	1.2	0.8	0.3	0.4
-/(+) Change in other current assets	-9.3	-9.8	-29.8	-9.2	-6.1	-2.7	-2.8
+/(-) Change in provisions	-1.7	0.5	0.8	0.8	0.5	0.2	0.2
+/(-) Change in non-interest bearing liabilities	52.5	58.6	40.2	39.1	27.6	11.5	11.7
+/(-) Change in deferred income	-2.6	-2.9	-2.2	4.2	2.8	1.2	1.2
Cash flow from operating activities	250.7	401.1	382.4	457.6	504.1	515.6	522.0
(+)/- (Investments) / Desinvestment in fixed assets	-136.2	-182.3	-190.4	-199.0	-201.6	-204.6	-207.2
(+)/- (Investments) / Desinvestment in financial assets	-0.5	-0.5	-0.5	-	-	-0.3	-0.3
Cash flow from investing activities	-136.8	-182.9	-190.9	-199.0	-201.6	-204.9	-207.5
+/(-) Proceeds from capital increase	=	=	=	=	=	=	=
+/(-) Increase / (Decrease) in interest bearing liabilities	-91.5	-8.6	-11.7	-	-	15.7	15.9
- Distribution of dividends	-88.3	-185.8	-159.3	-238.2	-283.3	-324.3	-328.3
Cash flow from financing activities	-179.8	-194.4	-171.0	-238.2	-283.3	-308.6	-312.5
Change in cash and equivalents	-66.0	23.8	20.5	20.3	19.2	2.1	2.1
Sum source of funds	87.5	124.7	156.1	125.7	85.4	46.4	47.0
Sum use of funds	153.5	100.8	135.6	105.4	66.2	44.4	44.9
Delta source of funds	-66.0	23.8	20.5	20.3	19.2	2.1	2.1
Delta cash	-66.0	23.8	20.5	20.3	19.2	2.1	2.1
Delta credit in current account	-	-	-	-	-	-	-

#### 6. Adjustments to the profit and loss statement

We show below the adopted planned profit and loss statement of STADA for the financial years 2018 to 2020 and our adjustments to the business plan which we describe in detail below:

Adjusted profit & loss statement	Unadjusted plan			Ad	justments		Plan			
in EUR m	2018	2019	2020	2018	2019	2020	2018	2019	2020	
Total sales growth (yoy)	<b>2,414.5</b> 4.79%	<b>2,520.8</b> 4.40%	<b>2,676.9</b> 6.19%	-	-	-	<b>2,414.5</b> <i>4.79%</i>	<b>2,520.8</b> 4.40%	<b>2,676.9</b> 6.19%	
Cost of goods sold	-1,177.4	-1,190.9	-1,272.3				-1,177.4	-1,190.9	-1,272.3	
Gross profit	1,237.1	1,329.9	1,404.6	-	-	-	1,237.1	1,329.9	1,404.6	
in % of total sales	51.2%	52.8%	52.5%				51.2%	52.8%	52.5%	
Selling, general and administration cost	-780.3	-811.0	-848.1	-	-	-	-780.3	-811.0	-848.1	
thereof selling expenses	-570.0	-611.9	-644.4	-	-	-	-570.0	-611.9	-644.4	
thereof general and administrative expenses	-210.3	-199.1	-203.7	-	-	-	-210.3	-199.1	-203.7	
Research and development cost	-85.6	-89.4	-99.5	-	-	-	-85.6	-89.4	-99.5	
Other operating income	2.1	1.2	0.0	0.6	0.6	0.6	2.7	1.7	0.6	
Other operating expenses	-25.7	-25.9	-25.3	0.2	0.2	0.2	-25.5	-25.8	-25.2	
EBIT	347.6	404.6	431.7	0.8	0.8	0.7	348.4	405.4	432.4	
in % of total sales	14.4%	16.1%	16.1%				14.4%	16.1%	16.2%	
Total depreciations (throughout all functions)	135.0	137.2	136.1	-0.2	-0.2	-0.2	134.7	137.0	136.0	
EBITDA	482.5	541.8	567.8	0.6	0.6	0.6	483.1	542.4	568.4	
in % of total sales	20.0%	21.5%	21.2%				20.0%	21.5%	21.2%	
Financial results	-45.5	-43.5	-38.4	-0.6	-0.6	-0.6	-46.1	-44.1	-39.0	
Income before taxes	302.1	361.1	393.3	0.2	0.2	0.2	302.3	361.3	393.5	
in % of total sales	12.5%	14.3%	14.7%				12.5%	14.3%	14.7%	
Taxes on income	-83.1	-98.5	-105.1	-	-	-	-83.1	-98.5	-105.1	
Effective tax rate (in %)	-27.5%	-27.3%	-26.7%				27.5%	27.2%	26.7%	
Net income / net loss for the year	219.0	262.7	288.2	0.2	0.2	0.2	219.2	262.9	288.4	
in % of total sales	9.1%	10.4%	10.8%				9.1%	10.4%	10.8%	
Minority interest	3.5	3.6	3.9	-3.5	-3.6	-3.9	-	-	-	

To summarize, we made the following adjustments for valuation purposes to the planned profit and loss statement provided and adopted by STADA, in order to derive to the business plan which we used for the valuation:

Adjustments for the valuation purposes:

- The result from investments in associated companies was reallocated from the financial result to other operating income based on the external reporting.<sup>1</sup>
- In order to have complete integration between the profit and loss statement and the planned balance sheets, the depreciation was adjusted for immaterial differences.
- The planned minority share was also not considered in the profit and loss statement because minorities were taken into account as a special item.

See STADA, Annual Report 2016, p. 39.

#### 7. Adjustments to the balance sheet

We show below the adopted planned balance sheets of STADA as of 31 December 2018 to 31 December 2020 and our adjustment to the business plan which we describe below in detail:

Balance sheet	Adjusted	Un	adjusted plar	<u> </u>	Ad	justments			Plan	
in EUR m as of 31 December	BE 2017	2018	2019	2020	2018	2019	2020	2018	2019	2020
Intangible assets Tangible assets Financial assets	1,501.4 337.8 19.3	1,429.7 359.1 50.8	1,440.9 372.1 51.4	1,464.3 383.2 51.9	41.1 10.8 -31.0	55.8 17.2 -31.0	69.7 23.2 -31.0	1,470.8 369.9 19.8	1,496.7 389.3 20.4	1,534.1 406.4 20.9
Fixed assets	1,858.5	1,839.6	1,864.3	1,899.5	20.9	42.1	61.9	1,860.5	1,906.4	1,961.4
Inventories	496.8	546.4	564.4	605.9	-	-	-	546.4	564.4	605.9
Receivables and other assets	503.2	595.5	623.0	632.7	-	-	-	595.5	623.0	632.7
Cash and equivalents	149.1	90.0	154.7	215.2	-6.8	-47.7	-87.7	83.2	107.0	127.5
Other current assets	102.6	112.5	121.5	150.8	-	-	-	112.5	121.5	150.8
Deferred taxes Current assets	25.5 <b>1,277.3</b>	25.2 <b>1,369.6</b>	25.6 <b>1,489.3</b>	25.9 <b>1,630.4</b>	-6.8	- -47.7	- -87.7	25.2 <b>1,362.8</b>	25.6 <b>1,441.5</b>	25.9 <b>1,542.7</b>
Total assets	3,135.7	3,209.2	3,353.6	3,529.9	14.1	-5.7	-25.8	3,223.3	3,347.9	3,504.1
Equity	949.9	1,098.4	1,241.2	1,380.1	-17.6	-83.4	-93.2	1,080.8	1,157.8	1,286.9
Provisions	17.6	56.0	56.5	57.8	-40.1	-40.1	-40.6	15.9	16.4	17.2
Deferred tax	99.0	96.5	93.6	91.4	-	-	-	96.5	93.6	91.4
Interest bearing liabilities Non-interest bearing liabilities	1,364.3 704.8	1,232.8 725.5	1,224.1 738.2	1,211.9 788.7	40.1 31.7	40.1 77.7	40.6 67.4	1,272.8 757.3	1,264.2 815.9	1,252.5 856.1
Total equity and liabilities	3,135.7	3,209.2	3,353.6	3,529.9	14.1	-5.7	-25.8	3,223.3	3,347.9	3,504.1

To summarize, we made the following adjustments for valuation purposes to the planned balance sheet provided and adopted by STADA, in order to get to the business plan which we used for the valuation:

Adjustments for the valuation purposes:

- For valuation purposes, the opening balance sheet explained in chapter 2.3.5.2. was used.
- The pension provisions were allocated to the item interest-bearing liabilities instead of the item provisions.
- An integrated plan model consisting of the planned profit and loss statement, planned balance sheet and derived cash flow was used for the business valuation. In order to be able to determine the cash flow without taking into account translation effects from foreign currencies, the planned balance sheet of the company was adjusted and with reference to the reserve for new valuation planned by STADA an offsetting item for foreign currency effects in other liabilities was recognized upon consultation with the company. The offsetting item is EUR 31.7 m, EUR 77,7 m and EUR 67.4 m as of 31 December 2018 to 2020 respectively.
- The planned balance sheet item for financial assets contains the purchase price in the amount of EUR 31.0 m planned as a constant number throughout the detailed plan period for the joint venture STADA Vietnam J.V. Co. Ltd. which is currently being sold. This is taken into account separately as a special item and accordingly adjusted out of the planned balance sheet.

## VALUETRUST

- Dividend distributions were planned in the same period in the valuation model in contrast to the planning by the company, so that the level of cash and equivalents is already different as a result of this effect.
- According to information from the company, an operational minimum level of cash and equivalents in the amount of EUR 140.0 m to EUR 180.0 m is required for business operations of STADA, which corresponds to a ratio with regard to total sales of 5.8% to 7.5% in 2018. We oriented the long-term planning of the minimum operational liquidity at the lower end of the range and assumed a linear convergence for the minimum level of liquid funds to 5.8% of total sales by 2022.
- Corresponding to the profit and loss statement, the share of other shareholders contained in the equity (minority share) was not carried forward. Instead, the minorities were valued separately as special item.

#### 8. Peer group selection

The peer group selection resulted in a total of 90 companies after an initial screening, which we narrowed down to a list of 23 companies based on geographical sales distribution and specific business models (short list):

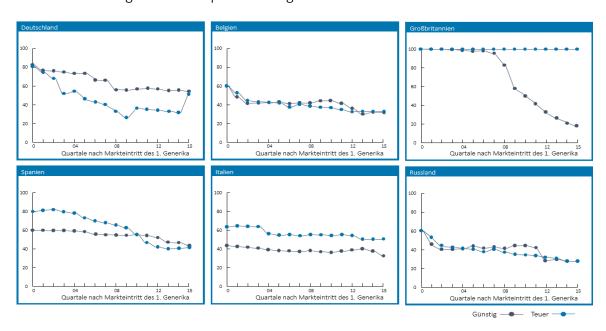
#### Peer group selection ("short list")

Comparable company	Country	Peer group
Richter Gedeon Vegyészeti Gyár Nyilvánosan Muködo Rt.	Hungary	yes
Krka d.d.	Slovenia	yes
Mylan N.V.	Great Britain	yes
Dr. Reddy's Laboratories Limited	India	yes
Perrigo Company plc	Ireland	yes
Hikma Pharmaceuticals PLC	Great Britain	yes
Vifor Pharma AG	Switzerland	yes
Laboratorios Farmaceuticos ROVI, S.A.	Spain	yes
Aspen Pharmacare Holdings Limited	South Africa	yes
Recordati S.p.A.	Italy	yes
Impax Laboratories, Inc.	United States	yes
Mallinckrodt Public Limited Company	Great Britain	yes
Almirall, S.A.	Spain	no
Prestige Brands Holdings, Inc.	United States	no
HAEMATO AG	Germany	no
Beiersdorf Aktiengesellschaft	Germany	no
Sinclair Pharma plc	Great Britain	no
Allergan plc	Ireland	no
Lannett Company, Inc.	United States	no
Sanofi	France	no
Teva Pharmaceutical Industries Limited	Israel	no
Mayne Pharma Group Limited	Australia	no
ANI Pharmaceuticals, Inc.	United States	no

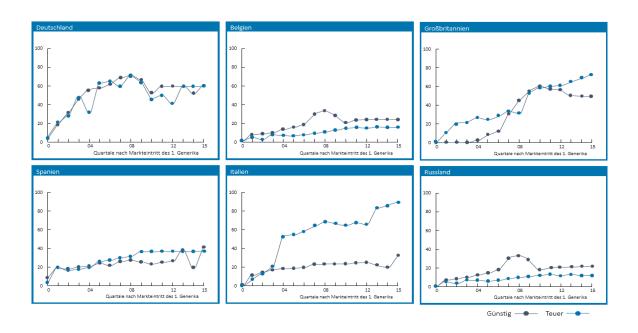
After a detailed analysis of these companies and taking into account geographical, business model-specific and financial selection criteria, the short list was narrowed down to a peer group of 12 comparable companies.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> See chapter 2.4.2

## 9. Price level of generics compared to original medications



## 10. Sales volume replacement rate for generics



## 11. Definition of key figures

Investment ratio -	CAPEXt					
Investment ratio <sub>t</sub> =	Total sales <sub>t</sub>					
	Trade payables <sub>t</sub> ³ · 360					
Days payable outstanding (DPO) $_t$ =	Adjusted cost of goods soldt					
	· · · · · · · · · · · · · · · · · · ·					
Days sales outstanding (DSO) <sub>t</sub> =	Trade receivables <sub>t</sub> ⁴∙ 360					
Days sales outstanding (DSO)(	Total sales <sub>t</sub>					
December 1997	Inventories <sub>t</sub> <sup>5</sup> · 360					
Days inventory outstanding $(DIH)_t =$	Adjusted cost of goods sold <sub>t</sub>					
	$EBIT_t$					
Return on Capital Employed (ROCE) <sub>t</sub> =	Invested capital (IC) <sub>t-1</sub>					
	Total sales <sub>t</sub>					
Capital turnover <sub>t</sub> =	Invested capital (IC) <sub>t-1</sub>					
	Interest-bearing liabilities <sub>t</sub>					
Debt ratio (Bv.) <sub>t</sub> =						
	Book equity value <sub>t</sub>					
Dobt ratio (My) =	Interest-bearing liabilities <sub>t</sub>					
Debt ratio (Mv.) <sub>t</sub> =	Equity (market) value <sub>t</sub>					
	Net income <sub>t</sub>					
Return on Equity <sub>t</sub> (ROE)=						
	Book equity value <sub>t-1</sub>					

<sup>&</sup>lt;sup>3</sup> Trade payables<sub>t</sub> include trade payables including the ones against non-consolidated group companies<sub>t</sub>, advance payments received<sub>t</sub> and liabilities from outstanding cost accounting<sub>t</sub>.

 $<sup>^4</sup>$  Trade receivables<sub>t</sub> include trade receivables including the ones against associated companies<sub>t</sub>.

Inventories<sub>t</sub> include raw materials and supplies<sub>t</sub>, work in progress<sub>t</sub>, finished goods and merchandise<sub>t</sub>, payments in advance<sub>t</sub>.