GBC AG
Investment Research

Research Report (Initial Coverage)

amp biosimilars AG

amp biosimilars

“The biosimilars market is set to expand rapidly and amp biosimilars AG is in a very promising position to take advantage of the expected market growth”

Target Price: €40.30

Rating: BUY

IMPORTANT NOTE:
Please take note of the disclaimer/risk warning, as well as the disclosure of potential conflicts of interest as required by section 34b of the Securities Trading Act (WpHG) from page 30 on

Date of Completion: 13/07/2015*

Date of first Publication: 14/07/2015*

***Note: This is the English language version of the earlier published German language research report, which was completed on 13/07/2015 and published on 14/07/2015.**

amp biosimilars AG *5a,5b,11

Rating: BUY
Target Price: €40.30

Current Price: 18.50
13/07/2015 / MCH / 2:30pm
Currency: EUR

Key Information:

ISIN: DE00A0SMU87
WKN: A0SMU8
Ticker symbol: 1YA
Number of shares[3]: 2.05
Marketcap[3]: 37.93
EnterpriseValue[3]: 37.89
[3] in mEUR
Freefloat: 20.0 %

Transparency level:
Freiverkehr
Market segment:
Börse München
Accounting standard:
HGB

Financial year-end: 31.12

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* catalogue of potential conflicts of interests on page 31/32

Company Profile

Sector: Biotechnology

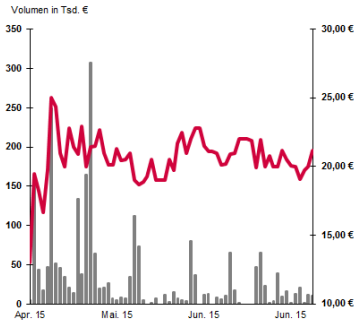
Focus: Development and licensing of biosimilars

Employees : 10 As at : 1/4/2015

Founded : 2008

Registered Office : Hamburg

Executive Board : Dr. Hentz (CEO), G.Janssen (CFO), Dr. Adermann (CTO), G. McGettigan (COO)



The focus of amp biosimilars AG, which was founded in 2008 and has been listed on the Munich Stock Exchange since 1 April 2015, is the development of high-quality biosimilars. In the financial year 2014, key moves were made both in the area of core competences and in the selection of suitable product candidates. While suitable employees could be found, the company carried out preparatory work on developing cell lines and cell banks in the development of biosimilars. Alongside this, amp biosimilars AG held negotiations on potential joint venture deals and business partnerships to ensure the funding for the product pipeline. In this regard, amp biosimilars AG has already licensed the first two projects to Chinese pharmaceutical companies. The development of biosimilars gives the company direct access to an industry characterised by strong momentum. Particularly in light of the progressing discontinuation of patents for originator products (reference products for manufacturing biosimilars), the market for biosimilars should show strong growth in the next few years. The platform approach allows amp biosimilars AG to develop biosimilars more cheaply, efficiently and quickly than was previously possible.

P&L in EUR m	2015e	2016e	2017e	2018e	2019e	2020e
Turnover	0.00	0.00	0.14	0.72	13.14	31.06
EBITDA	-1.37	-3.16	-4.86	-7.03	6.96	24.78
EBIT	-1.37	-3.16	-4.86	-7.04	6.92	24.05
Net profit	-1.37	-3.16	-4.86	-7.04	5.82	20.66

Per Share Figures in EUR						
EPS	-0.67	-1.54	-2.37	-3.43	2.84	10.08

Key Figures						
EV/Turnover	n.def.	n.def.	270.64	52.63	2.88	1.22
EV/EBITDA	-27.62	-12.00	-7.80	-5.39	5.44	1.53
EV/EBIT	-27.66	-11.99	-7.80	-5.38	5.48	1.58
P/B	-27.68	-12.00	-7.80	-5.39	6.52	1.84

EXECUTIVE SUMMARY

- With its focus on developing biosimilars, amp biosimilars AG targets one of the strongest growing subsectors of the pharmaceuticals market. Biosimilars are biologically manufactured medicines that contain an active substance of an organic medicine that is already permitted (reference product). Because a considerable number of patents on biopharmaceuticals are due to expire over the next few years and an increasingly more favourable environment is also emerging due to cost aspects, strong growth can be expected for this type of medicine.

- amp biosimilars AG has established a basis to participate in this growth. Following the increase in personnel and the strengthening of the management team, the company can draw on extensive experience for the development and approval of biosimilars. The development of four biosimilar projects has already begun, of which two were licensed to Chinese pharmaceutical companies at a very early stage. This proves not only the company's development skills but also its excellent contacts with a global commercialisation network.

- The requirements for the approval of biosimilars are wide-ranging and necessitate proof of comparability to the reference product as part of a clinical trials. amp biosimilars AG will only cover preclinical project development in line with its company strategy and will carry out the majority of the time-consuming and cost-intensive clinical development through its licence partner or as part of joint venture partnerships. amp biosimilars AG's funding risk is therefore highly limited.

- There are plans to significantly expand the project pipeline over future financial years from the current four to eight projects. With an average development time (preclinical) of 2-3 years, we expect a rapid expansion of the project pipeline which should be in place by the financial year 2017. On this basis, amp biosimilars AG can license projects at an earlier stage of development and sell the marketing rights for certain regions. The revenue streams include marketing revenue (royalties) and licence revenue as part of the regional sale of marketing rights.

- We have drawn upon average market-based values as a basis for our turnover and profit forecasts. Over the course of the forecasted sale of projects, we expect the first significant turnover and the break even from the financial year 2019 onwards. In general, amp biosimilars AG's business model is very scalable. In the long-term, we therefore assume a high EBIT margin level of over 80.0% in our DCF valuation model.

- **Based on our project pipeline, we determine a fair value of €40.30 per share within the framework of the DCF model. At the current price level of €18.50, we have awarded the rating BUY.**

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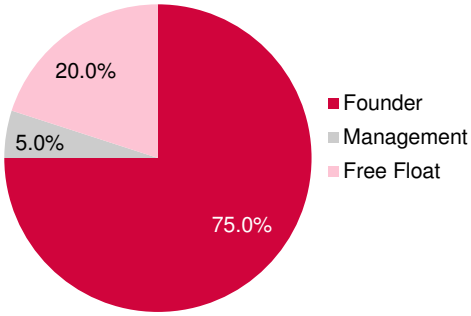
COMPANY & STRATEGY

Shareholder Structure

Shareholder in %	25/06/2015
Founder	75.0%
Management	5.0%
Free Float	20.0%

Source: amp biosimilars AG; GBC AG



History and field of activity of amp biosimilars AG

Year	Event
January 2008	Foundation of the company
2014	Commencement of operations
September 2014	Registration of change of name, change of the purpose of the company with the new focus on the development of biosimilars and transfer of its registered office to Hamburg
January 2015	Registration of capital increase against cash contributions by €2,000,000 from €50,000 to €2,050,000

Source: amp biosimilars AG; GBC AG

The focus of amp biosimilars AG, which was founded in 2008 and has been listed on the Munich Stock Exchange since 1 April 2015, is the development of high-quality biosimilars. In the financial year 2014, key moves were made both in the area of core competences and in the selection of suitable product candidates. While suitable employees could be found, the company carried out preparatory work on developing cell lines and cell banks in the development of biosimilars. Alongside this, amp biosimilars AG held negotiations on potential joint venture deals and business partnerships to ensure the funding for the product pipeline. In this regard, amp biosimilars AG has already licensed the first two projects to Chinese pharmaceutical companies.

The development of biosimilars gives the company direct access to an industry characterised by strong momentum. Particularly in light of the progressing expiration of patents for originator products (reference products for manufacturing biosimilars), the market for biosimilars should show strong growth in the next few years. The platform approach allows amp biosimilars AG to develop biosimilars efficiently and cheaply.

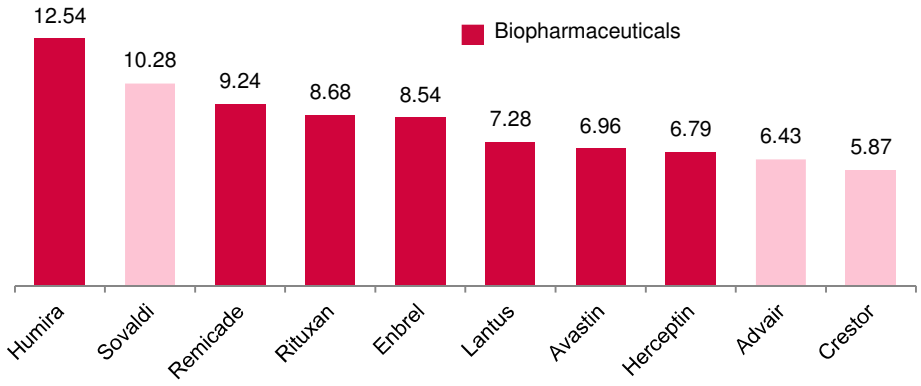
What are biosimilars?

Biosimilars are biologically produced medicines that contain an active substance of an organic medicine that is already permitted (reference product). Even if the comparison to generics (imitation products of chemically manufactured small-molecule medicines) crops up with biosimilars, these are two completely different classes of medicines. This is because of the far greater complexity of the original product which, as a biopharmaceutical, is not produced chemically but rather by means of biotechnology and genetically modified organisms.

Biopharmaceuticals

Biopharmaceuticals, which are reference products for biosimilars, still have a short history compared to chemically manufactured small-molecule medicines. It was only in the 1980s that the first biological medication was approved. This was produced using recombinant DNA techniques. In the last 30 years, this new and highly effective class of medicines has become important in the pharmaceuticals sector and biopharmaceuticals are now one of the medicines with the strongest turnovers in the world:

Strongest turnover in medicines worldwide in 2014 (in billions of US dollars)

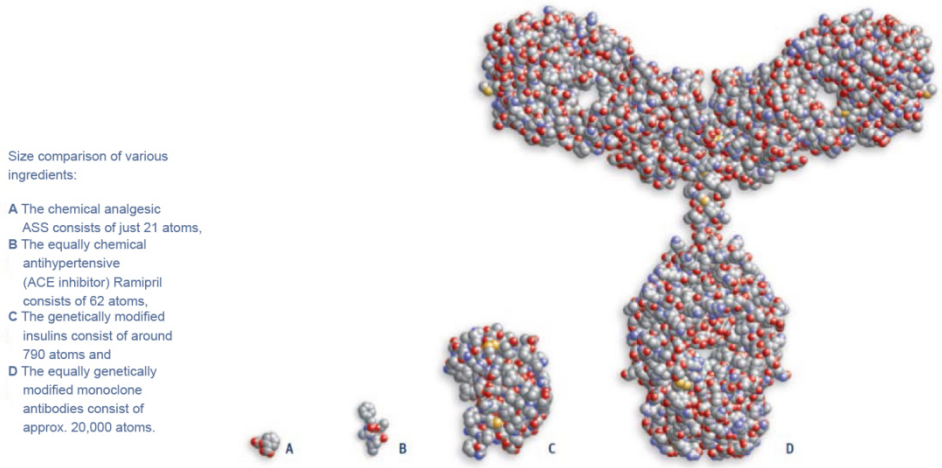


Source: GEN (Genetic Engineering & Biotechnology News); GBC AG

The reason for the high share of turnover for biologicals is also due to the fact that these medicines have been assigned to the high-price segment. For example, the turnover leader, the antirheumatic Humira®, with its package price at over €5,200, ranks among the most expensive medicines in Germany. (Source: Spiegel)

Unlike small-molecule and chemically manufactured medicines, the production of biopharmaceuticals is very complex. Living systems (plants or animal cells, bacteria, viruses, yeast), which are usually genetically modified, are taken as raw material. As part of the production process, these cells are first multiplied and then fermented in bioreactors, which in turn triggers the production of ingredients. Finally, the separation of the desired ingredients from the remaining cell materials (filtering) takes place following production so that they can then be put into a stable form (tablet, liquid, etc.). All in all, the production steps outlined here in a simplified manner are a complex process that needs to be subject to constant supervision. Thus around 250 in-process tests are normally carried out during the manufacture of biopharmaceuticals, while only around 50 tests are performed during the production of small-molecule medicines (source: European Commission). Due to the raw material's organic source, consistent quality and effectiveness and the attainment of uniform results are of crucial importance.

The result is ingredients whose composition may be extremely complex and often consisting of several thousand atoms:

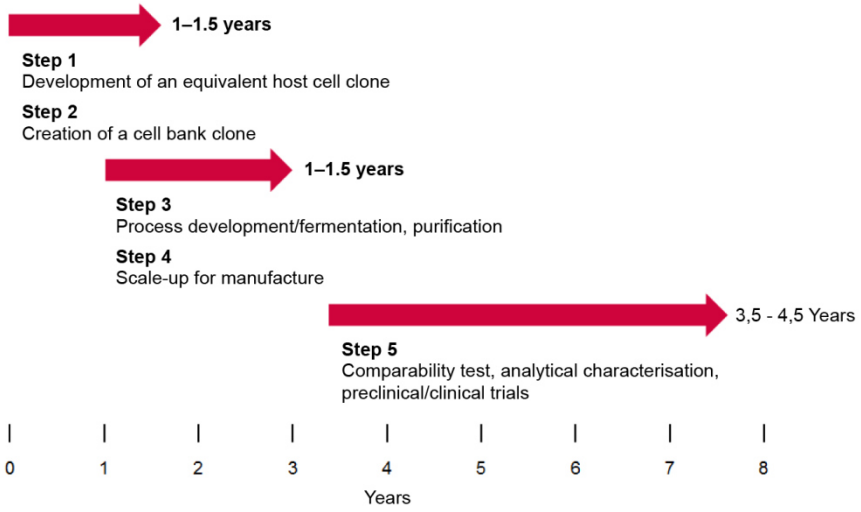


Source: Biopharmazeutika: Hightech im Dienst der Patienten, vfa

Biosimilars

The manufacture and approval of biosimilars is considerably more expensive and time-consuming compared to generics due to the complex characteristics of biopharmaceuticals. While the process in chemical-synthetic ingredients is generally easy to reproduce due to the clearly defined chemical structures, this is significantly harder in biopharmaceuticals. The natural variability in the molecules means that characterisation is more difficult and an exact reproduction is not possible or hardly possible. This is even the case for the manufacturer of the original drugs, where differences may occur between different batches of the same product.

Chronological sequence of the development of a biosimilar medicine



Source: Biosimilars Handbook der European Generic Medicines Association, 2011; GBC AG

The most important principle when developing a biosimilar is comparability with the reference medicine. It is also necessary to ensure that a comparable level of effectiveness and safety as well as comparable quality are guaranteed. In general, the development of a biosimilar, especially with regard to the manufacturing process, should be compared with the production of the original, which in our view can be a significant

entry barrier in terms of both expertise and technology. On average, the development time for a biosimilar is up to eight years, during which time all essential steps for developing a medicine must be covered.

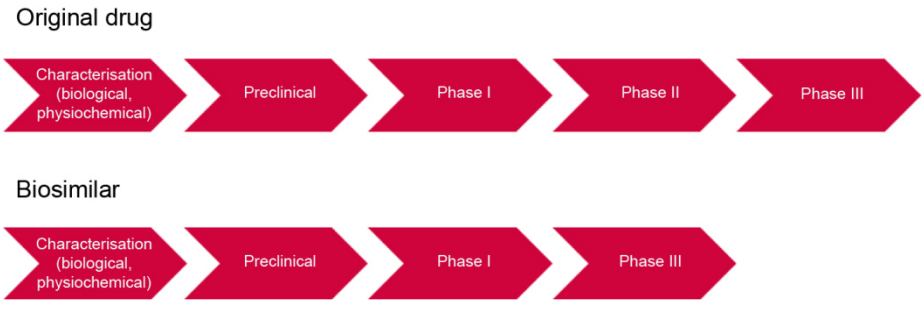
Despite the extensive development process for biosimilars, it is considerably cheaper compared to the originator, which is an interesting and important aspect in light of the increasing pressure on costs in the health sector. According to independent studies, prices of biosimilars approved in Europe are approx. 32.0% lower than the price level for reference products. Despite the comprehensive development and approval process, biosimilar suppliers are able to offer significant price advantages thanks to the comparatively lower research costs and savings in the approval process. This not only causes substitution effects in existing markets, it also makes access to new markets easier, such as “pharmerging markets” (Africa, Asia, South America, etc.).

Approval process for biosimilars

In our view, the approval of a biosimilar is the most critical point in the development process, not only because of the time spent but also in terms of capital intensity. Evidence of safety, effectiveness and quality with regard to the reference product must be produced within a clinical trial programme. According to WHO and EMA guidelines, comparable analytical studies are required to keep the biological heterogeneity of large-molecule medicines as low as possible.

Biosimilar producers also do not know the process steps involved in the production of the original drug, meaning that a separate process has to be implemented. The proof of comparability is provided within sufficiently large preclinical trials and in clinical phase I studies. Unlike the approval of the original drugs, phase II studies in which the formulation, dosage and presentation path are investigated are not required. These aspects are already known for biosimilars, meaning that this approval step may be skipped. In the phase III study, a clinical performance test is carried out on the patient to conclude.

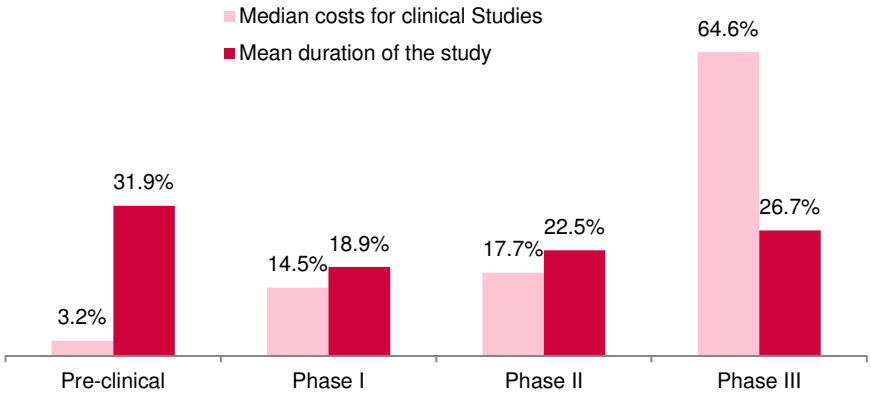
Approval process of original drug v. biosimilar



Source: EMA; GBC AG

The omission of the second clinical study phase is a clear time and financial advantage because clinical study phases are particularly time-consuming and cost-intensive. According to statistics for the US market, study phase II alone is responsible for a total of 17.7% of the total costs and for 22.5% of the entire duration of a clinical approval. The significant savings potential of biosimilars becomes clear from this fact alone, while further savings, though not yet quantified, are also achieved in the research phase.

Median costs and average duration for clinical approval



Source: The price of innovation: new estimates of drug development costs, GBC AG

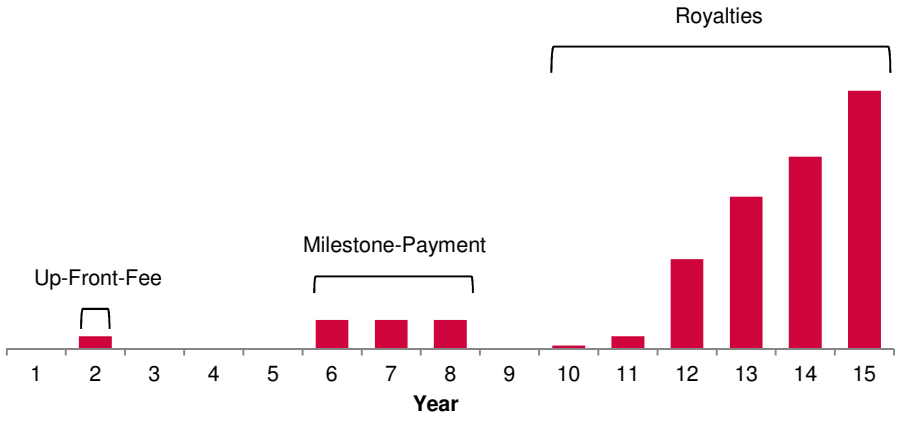
Strategy and Technology of amp biosimilars AG

In total, the individual study phases involved in clinical testing are responsible for 96.8% of the total approval costs. In this regard, amp biosimilars AG's strategy, in which product candidates are only developed up to the start of clinical phase I, is understandable, particularly due to the significantly lower funding requirements which result. Following preclinical development, licensing to large international pharmaceutical companies is planned as part of the company strategy. As a result, the company's current focus is on the development area of biosimilars where, apart from the normal R&D costs and staff costs, there is generally a lower need for investment. The use of bioreactors or reactors to ferment cell lines in this case can be rented from large research institutes, meaning that there is no investment required for this. There are also no plans to set up a production line; this is only an option once the product has been placed on the market.

Under the licensing strategy, the company has already licensed two development projects to Chinese pharmaceutical companies in the current financial year 2015. The respective licence partner then takes on the entire funding for development and approval for the Chinese market. amp biosimilars AG contributes expertise, coordination and copyrights to the partnership.

amp biosimilars AG receives turnover-dependent licence revenue (royalties) for the right to unrestricted marketing in China once the product has been placed on the market. Moreover, the company also has the opportunity to license to other pharmaceutical companies or to tap into other regions, as current licence contracts are limited to the Chinese market. Under this strategy, amp biosimilars AG can profit from inflows in the form of licence payments, milestone payments and royalties. In the marketing phase, extremely high profit margins can be assumed because the revenue situation is almost exclusively dominated by high-margin licence revenue.

Example turnover performance of a product candidate



Source: GBC AG

Accordingly, amp biosimilars AG's core competence is in the preclinical development of biosimilars. Because the clinical trials are carried out by partners, the company can maintain a streamlined staff and cost structure, meaning that the business model can be classified as highly scalable. The current strategy, which is primarily directed towards licensing to pharmaceutical companies from pharmerging markets, allows a rapid time-to-market as well. The setup and implementation of clinical trials can be carried out much more quickly in China than in Europe.

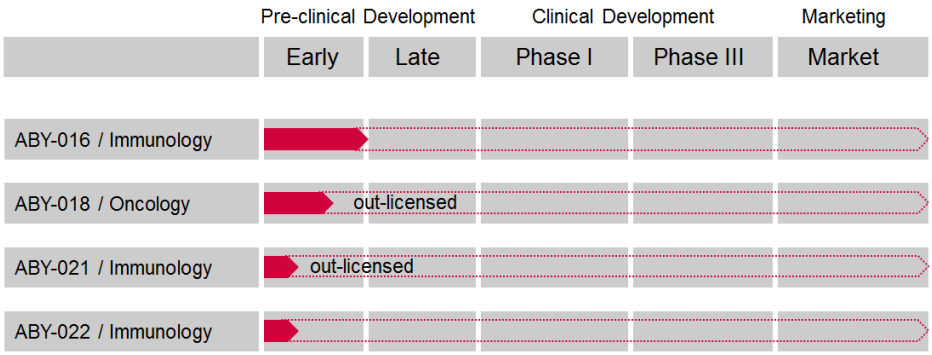
According to the company, amp biosimilars AG also has extensive expertise in approval, study design and the implementation of clinical studies in addition to comprehensive knowledge in the development stage, meaning that a high level of added value can be created within the partnership. In this regard, product development within a joint venture is also conceivable, for example. In contrast with licensing that has already been carried out, the entire product development through to market approval is accompanied by amp biosimilars AG in potential joint ventures, where significant components of the funding are borne by the joint venture partner. In the event of market approval, amp biosimilars AG could obtain significantly greater earnings as a result.

amp biosimilars project pipeline

Currently, amp biosimilars AG's project pipeline includes four biosimilar development projects focusing on immunology and oncology. These are in the preclinical development stage in line with the outlined company strategy. The oncology project ABY-018 and the immunology project ABY-021 were licensed to Chinese pharmaceutical companies early on, with the benefit that the extensive costs of clinical development are borne by the licence partner. The transfer of these projects to the Chinese partner will be possible from the completion of the development phase at the end of 2016/start of 2017, according to our own calculations. In total, we estimate approx. 18 months to be the time required for preclinical development.

The Chinese market is particularly interesting as a "pharmerging market", particularly due to the high growth rates in the pharmaceuticals sector. According to IMS Health, China, as one of the strongest growing markets, will record annual growth of 16.7% until 2017. New patient groups are also being opened up with biosimilars in the pharmerging markets, where treatment for these patient groups with patented and expensive reference medicines was too costly.

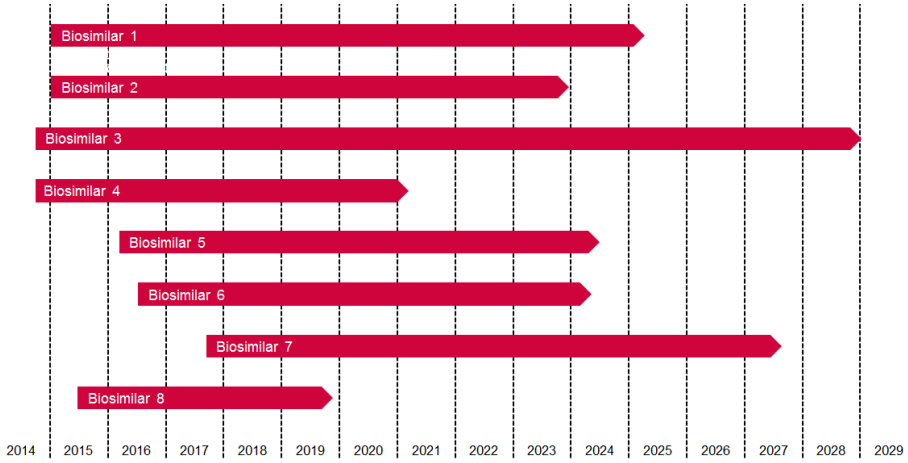
amp biosimilars AG project pipeline



Source: amp biosimilars AG; GBC AG

There are plans to successively expand the current project pipeline and either to further develop or to license individual biosimilars within joint venture partnerships. We expect the following project schedule, taking into account other potential biosimilar projects:

Marketing schedule for biosimilar projects



Quelle: amp biosimilars AG; GBC AG

In future financial years, we expect the development of a total of 8 biosimilars and the Chinese licensing partner has already signalled interest in a large number of projects to the company. With an average development time of 8.3 years and with heterogeneous development specific to each product within the project pipeline, our estimate matches the market average in terms of development time through to market readiness. Accordingly, initial marketing turnover can be expected from the financial year 2019, while licensing revenue and milestone payments can be expected earlier.

The company's executive bodies

Management Board

Dr. Marc Hentz (CEO)

After studying chemistry at Hamburg University and the University of California at San Diego, Marc Hentz earned a PhD in cell and molecular biology. He started his professional career as a management consultant at A.T. Kearney, Dusseldorf where he supported clients with business process re-engineering, strategic sourcing, organisational realignment und supply chain management in the chemical, oil, pharmaceutical, biotech and semiconductor industries. Subsequently, as a life science & chemicals senior manager, Dr Hentz worked for Industrial Investment Council GmbH, Berlin, on several projects to relocate international biotech and chemical companies to the new German states.

Thereafter Dr Hentz joined Biopolis Consultants, Dresden, a boutique consultancy company focused on the life sciences. As a partner at Biopolis he supported numerous clients from the biotech industry with strategies, business development and fundraising. In his last position Dr Hentz was managing director at AMP Therapeutics GmbH, Leipzig, a developer of innovative antibiotics against multi-resistant bacteria and whose investors include the Boehringer Ingelheim and Novartis venture funds. Dr Hentz also serves on the supervisory boards of various international biotech and private equity firms.

Dr. Knut Adermann (CTO)

Dr Adermann received his PhD from the University of Hamburg, Germany where he started his scientific career, focusing on glycopeptide and peptide chemistry and biology. He was then scientific and managing director of various VC-funded biotech/pharma start-up companies in Germany such as IPF Pharmaceuticals, Pharis Biotech and AMP Therapeutics, where he worked on some of the first development and biomedical projects in peptide and protein drug research and development and where he contributed also as investing co-founder.

He has been successfully supporting various pharmaceutical development programs, in particular for CMC issues, covering all development phases up to clinical phase III trials. He qualified as a professor in biochemistry at the Hanover Medical School and is co-author of more than 90 scientific publications. He is also the creator of numerous international patent applications and filed patents and was on the advisory board of a leading GMP manufacturer

Gerry McGettigan (COO)

Gerry McGettigan BSc B.A. (Fellow of TOPRA), a molecular biologist, has twenty five years' experience in the biotechnology and pharmaceutical industries, in regulatory affairs, clinical development and business development, and in various non-executive director roles. He has worked with large and medium-sized pharma companies (Almirall, Spain and GSK, UK) and was regulatory & scientific affairs director of The Liposome Company, a US biotech firm that was acquired by Elan Corp. for USD 575m. He founded the regulatory affairs and product development consultancy company, GMG BioBusiness Ltd, which was sold in 2005 to PRA International, one of the world's leading global contract research organisations.

He also set up and was CEO of the Catalan biotechnology development agency, Biocat, based in Barcelona. Gerry McGettigan has worked with many clients on projects ranging from early stage regulatory strategy for complex biotechnology products, to clinical development and registration of novel healthcare products. He has excellent relationships with top level business, science and governmental executives. Gerry McGettigan has invested in several biotech/pharma companies. Besides being an executive at amp biosimilars, he serves as non-executive chairman at Syntropharma and Clear Surgical.

Gunnar Janssen (CFO)

Over his 25 year career, Gunnar Jannsen has built up a wide entrepreneurial network oriented to capital markets. Throughout his career, he has been responsible for countless IPOs, capital increases, etc. in the high three-digit million euro region. Between 1985 and 2011, Mr Janssen occupied management positions at various international investment banks such as Barclays Bank, Deutsche Bank, Credit Suisse, Donaldson, Lufkin & Jenrette, Lehman and Commerzbank.

Between 2012 and 2014, he worked as COO for a German-African company in Ethiopia where he was responsible for new organisational structures, capital market communication and funding. In mid-2014 he became the managing director of German Private Equity GmbH and as chairman of the international partnership he was responsible for the company's strategic positioning and the areas of deal sourcing and investor relations.

Scientific Board

amp biosimilars AG's Scientific Board currently consists of three members and it actively supports the management team in the implementation of its global biosimilar commercialisation strategy. In addition, it is very closely involved in the scientific and regulatory processes. In addition to the chairman, Prof. Werner, the advisory board also includes Dr Holger Ziehr and Dr Xavier Luria as members. Dr Ziehr has already developed various biosimilars for GMP production, e.g. for EPO, G-CSF and ß-interferon. As head of safety and efficacy of medicines at the European Medicines Agency (EMA), Dr Luria coordinated international regulatory teams from 28 EU member states in order to evaluate medical products.

Prof. Dr. Dr. h.c. Rolf G. Werner

Prof. Dr. Dr. Rolf G. Werner has a Professorship for Industrial Biotechnology at the Eberhard Karls University of Tuebingen, Germany. He obtained his MSc in Biology and, after his scientific work at the Max-Planck Institute for Molecular Genetics in Berlin on the molecular mode of action of antibiotics on ribosomes, he obtained his PhD at the University of Tuebingen. He continued his career at Boehringer Ingelheim in the field of infection research. In 1982 he became editorial consultant of the journal "Drug Research".

Prof. Werner acted as overall project leader for the cooperation of Boehringer Ingelheim and Genentech, USA for the development and manufacturing of actilyse and metalyse. In 1990 he was appointed as Professor at the Faculty of Biology at the University of Tuebingen and also became a member of the Scientific Board of Biotechnology at the University of Stuttgart and the Board of Trustees of the Fraunhofer Gesellschaft in Stuttgart. He also serves on the Biotechnical Advisory Board of Deutsche Messe AG. After being appointed as corporate senior vice president of biopharmaceuticals at Boehringer Ingelheim GmbH with responsibility for worldwide development, manufacturing, quality management and drug regulatory affairs, Prof. Werner also served as member of the board of trustees of Boehringer Ingelheim GmbH Deutschland, where he managed the strategic biobusiness area and was responsible for the strategic orientation and the worldwide business of biopharmaceuticals, with focus on Asia.

Prof. Werner received an honorary PhD degree from the University of Chiang Mai for a number of conducted research projects in gene therapy, gene expression and oral delivery of therapeutic proteins. He is also one of the Honorary Senators of the University of Tuebingen. Throughout his scientific career, he has published more than 180 scientific papers, 15 scientific films and is the creator of numerous international patents. Prof. Werner is a well-respected speaker at worldwide conferences where he gives frequent presentations on biotechnology and biopharmaceutical topics.

Dr Holger Ziehr

Holger Ziehr completed his PhD in biology at the Technical University of Braunschweig. His graduate work was focused on the development of technical processes for the manufacture of pharmaceutically active biomolecules based on proteins and nucleic acids. With EPO, G-CSF and ß-interferon, he has developed processes for the GMP manufacturing of several biosimilar proteins. He pursued postdoctoral training in pharmaceutical science, chemical and biochemical engineering. He is currently division head at Fraunhofer ITEM and quality assurance officer and qualified person at Stada Arzneimittel AG, a German generics company. Core components of Dr Ziehr's work are the development and transformation of biotechnological manufacturing processes based on microbes and animal cell culture in compliance with regulatory pharmaceutical requirements. As a lecturer, he teaches a course for applied biochemistry and pharmaceutical regulatory affairs at the Technical University of Braunschweig and the Rheinisch Westfälische Technische Hochschule (RWTH) Aachen.

Dr Xavier Luria

Dr Xavier Luria is founder and chief executive at Drug Development and Regulation (London, UK). He is the former head of safety and efficacy of medicines at the European Medicines Agency (EMA) where he coordinated international regulatory teams from the 28 European Member States in order to evaluate medical products. At EMA he was in charge of several cross-agency projects, including the implementation of electronic submissions using eCTD and the development of other IT tools, the review and reorganisation of CHMP's Working Parties, the coordination and expansion of the EMA's

Scientific Advisory Groups (SAG) and new methodologies on benefit/risk assessment. Prior to joining the EMA, Dr Luria worked for 18 years in the pharmaceutical industry, including 10 years as a medical director with responsibilities in clinical development, medical affairs, drug safety and biometry, and some other corporate functions. He has been a member of working groups in the European Pharmaceutical Industry Association (EFPIA). He participated in a number of ICH initiatives and was also a member of the DIA Steering Committee. He has been involved in a large number of activities with the FDA, the Japanese health authorities and the European national regulatory bodies.

Supervisory Board

Chairman Dr Thomas Zimmer heads the Supervisory Board. The experienced manager from Boehringer Ingelheim is an expert on quality, GMP and risk management in the pharmaceuticals industry and brings 35 years of pharmaceutical experience as well as his extensive network to his work at amp biosimilars AG.

Dr Thomas Zimmer (Chairman of the Supervisory Board)
After studying pharmaceutical sciences, Dr Thomas Zimmer received a PhD at the Institute of Galenic Technologies of the Johann-Wolfgang-von-Goethe-University, Frankfurt. He is a licensed pharmacist. He then joined Thomas Biberach, now part of Boehringer Ingelheim GmbH. After initial duties in pharmaceutical development, the manufacturing of clinical supplies and as head of production, he moved to Boehringer Ingelheim headquarters and was responsible for international production and quality management with leading functions in Brazil, USA and Spain. Dr Zimmer implemented the Production Alliance Europe and was responsible for product transfers and transition management at local production sites for national to international supply. Dr Zimmer was a corporate lead GMP auditor for Boehringer Ingelheim and is a qualified person according to the German Medicines Law (AMG). Subsequently, he became a plant manager at production sites in France and senior vice president for global quality management, responsible (across 30 sites) for human medicines, biopharmaceuticals, and animal health products.

In 2013, Dr Zimmer founded ZS.CTIS Consulting GmbH where he serves as a managing partner with core business in compliance, quality and GMP. Since 2013, he has also been vice president of European operations at the International Society of Pharmaceutical Engineering (ISPE). Dr Zimmer supported various international activities to promote industrial pharmaceutical sciences. He formerly served as the Chair of the Industrial Advisory Board of the Beuth Institute at the University of Applied Sciences, Berlin, Germany, the European Federation of Pharmaceuticals Industries Associations (EFPIA) Anticounterfeiting Working Group in Brussels, is a former member of the WHO taskforce International Medical Products Anticounterfeiting, the Chair of the Board of Directors of the Pharmaceutical Security Institute (PSI), and was member of various working groups of EFPIA for manufacturing and quality (product life cycle management, Technical Development and Operations Committee TDOC, GMP manufacturing), for ICH standards, EU GMP standards, international GMP rules, and Good Distribution Practices (GDP). Dr Zimmer is a frequent lecturer at various advanced training courses for the pharmaceutical industry.

MARKET AND MARKET ENVIRONMENT

There are two critical influential factors for the future development of the biosimilars class of medicines. In particular, the expiring patents of biopharmaceutical medicines provide the basis for the manufacturing of biosimilars on the one hand. On the other hand, the statutory approval criteria are also proving to be an equally important factor for the future development of biosimilars. This becomes especially clear in light of the different approaches in the approval process between the USA and Europe, currently the two largest markets for biopharmaceuticals.

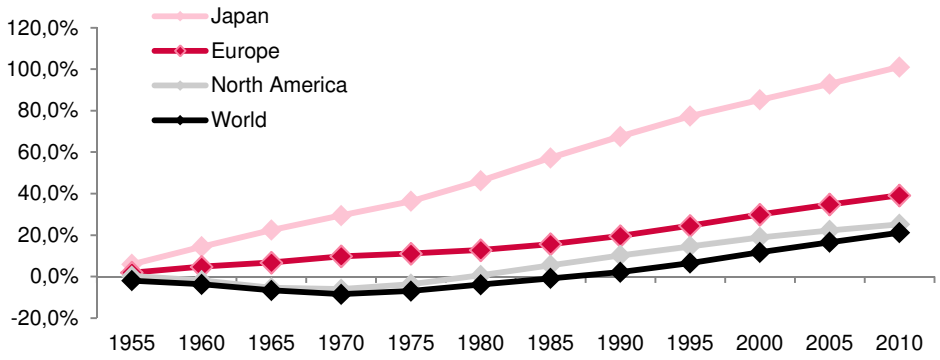
While a legal basis has only recently been worked out for the approval process of biosimilars in the USA, in Europe there has been corresponding legislation since 2005. Consequently, Europe is much further ahead with a total of 19 approved biosimilar products (source: vfa; Verband forschender Arzneimittelhersteller e.V.; as of January 2015) compared to just one approval in the US. This illustrates the significant influencing factor that can result from legal foundations.

Nevertheless, the biosimilar market is generally dependent on the entire pharmaceutical sector, which in turn is influenced by a variety of factors.

General trends in the pharmaceutical industry

A crucial factor for the generally increasing demand for medicines is the disproportionate increase in the relevant higher age group due to demographic changes. The link between the rising likelihood of severe illness and increasing age applies here. According to data from the United Nations, a significant increase in the average age has been identified even at a global level, where the industrial regions targeted by the pharmaceutical industry show comparatively high figures in particular. For example, between 1950 and 2010, the median age increased significantly by 39.2% in Europe, by 25.2% in North America and by 101.0% in Japan. According to United Nations forecasts, this development will continue.

Increase in median age of the population (in % comparison) 1950)



Source: United Nations – World Population Prospectus; GBC AG

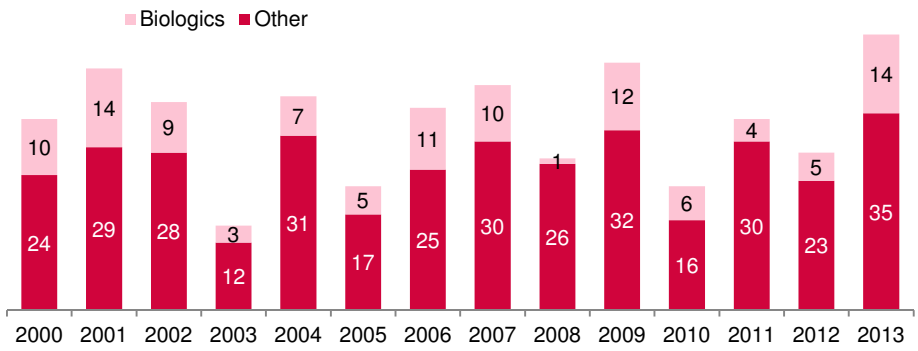
The increasing ageing of the population is the main reason why there is increasing demand for medical services, including the consumption of medicines. This trend is confirmed when measured as a proportion of health expenditure. While in Germany health expenditure increased considerably by 24.8% within 12 years (2000–2012), in the US it increased by 59.2% and in Japan by 46.7%. These regions are representative of the largest and therefore most important markets in the pharmaceutical industry.

In addition to demographic trends, political conditions (reimbursement, insurance cover, etc.) and trends in population income also play an important role in driving the healthcare industry. Technological progress is also a key component in the increase in expenditure. According to data from the Fraunhofer Institute for Systems and Innovation Research, between 40-60% of growth in the healthcare industry can be traced back to new technologies. This relationship is explained in theory as follows: technological progress in medicine encourages the ageing of a population, resulting in higher healthcare expenditure due to demographic changes.

Development of biopharmaceuticals

New developments in medicines can also be included under medical technological progress, as well as the comparatively new subgroup of biopharmaceuticals. It was only in 1982 that human insulin was approved as the first biopharmaceutical in the USA and Germany. Now biopharmaceuticals occupy a key position in the medicine market and alone they made up approx. 30% of new approvals in Germany in 2013.

New approvals in Germany

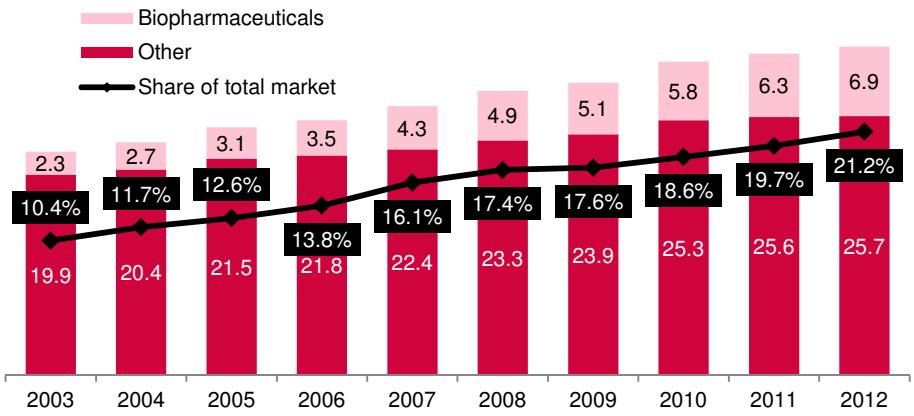


Source: BCG: The Boston Consulting Group; vfa; GBC AG

This share has risen continuously over recent years, leading to the conclusion that biologically produced medicines benefit disproportionately from the overall market trend. This assumption is confirmed by statistics from the market research company IMS Health, according to which the turnover for biologically produced medicines has risen on average over a ten-year period (2003-2013) with a CAGR of 13.0%. Compared to overall market development, which had recorded a CAGR of 2.9%, the biotech medicine market grew faster by a factor of 4. This should therefore be understood as a meaningful indicator for the increasing importance of biopharmaceuticals.

Similar trends with a disproportionate rise in biologically produced medicines can be observed around the globe. The worldwide market share of biopharmaceuticals climbed considerably from 11% (2002) to 18% (2012) according to data from IMS Health. This should continue to 20% by 2017.

Sales in the German pharmaceuticals market (in billion €)



Source: IMS Health; GBC AG

Even today, in terms of turnover, eight of the top 10 medicines can be allocated to the biopharmaceuticals sector and are responsible for 81.9% of turnover in this blockbuster sector. The comparatively high nominal share within the medicine group with the strongest turnover is due to the fact that biopharmaceuticals are highly effective yet also very expensive medicines. For example, the turnover leader, the antirheumatic Humira®, with its package price at over €5,200, ranks among the most expensive medicines in Germany. (Source: Spiegel)

The increasing importance of biopharmaceuticals will continue to increase over the next few years. According to forecasts by the market research institute “Research and Markets”, global turnover will continue to increase until 2020 at a much greater rate than the overall market, with an average compound annual growth rate (CAGR) of 13.5%.

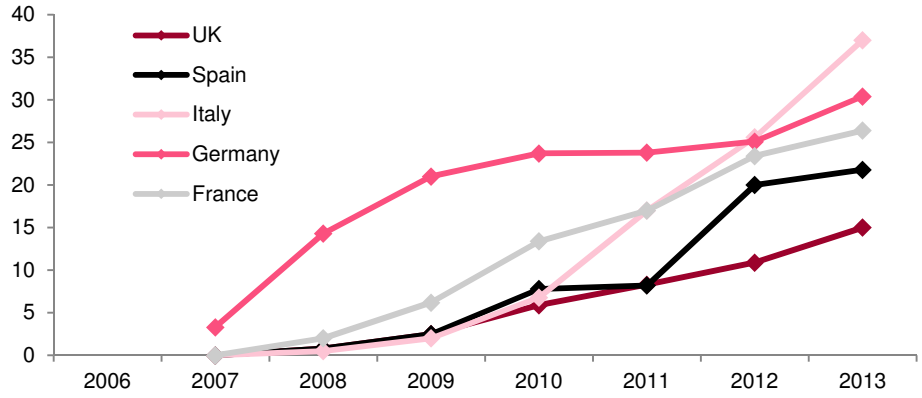
Development of biosimilars

The anticipated disproportionate growth of biologically produced medicines in comparison to the overall market is characterised by considerable additional expenses in terms of costs because they are significantly more expensive than chemical-synthetic medicines. According to the Barmer BEK Arzneimittelreport 2014, the biologicals segment was responsible for 36.0% of total expenditure, making up just 3.3% of prescriptions. There is therefore an unfavourable relationship between cost and the number of prescriptions. The high price level in this sector can be seen particularly in the average price per package of around €575, according to the GEK report. The antirheumatic Humira® alone was responsible for 2.6% of total expenditure of GEK with costs of just under €110 million.

In light of the comparatively high price level of biologics, biosimilars have been assigned high market potential as a less expensive imitation product. As expected, the cost effect of biosimilars will not only tap into new patient groups for which first-line treatment with patent-protected drugs was too costly. Furthermore, potential in “pharmerging markets” such as Brazil, India and China should be developed more heavily than was the case with the original drugs.

While biosimilars still currently play a subordinated role within healthcare markets, strong growth can be predicted. In 2014, the share of biosimilars in patent-free biopharmaceuticals in Germany was only 0.8%, with a total of 7.2 million DDD (defined daily doses). The potential in Germany alone could be 596 million DDD, meaning that opportunities for high growth are clear for this class of medicines.

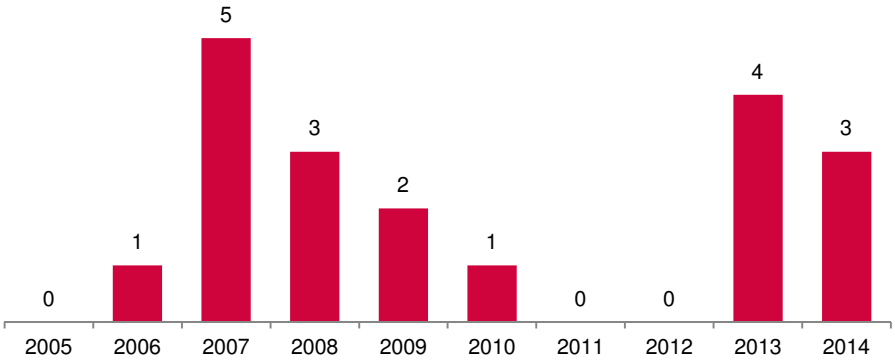
Revenue from biosimilars in Europe (in million USD)



Source: IMS Health, MIDAS, GBC AG

Even in Europe, growth is only just starting. The current level is therefore still considered low. It should be taken into account, however, that corresponding legislation for the approval of biosimilars was only passed in Europe in 2005. The EMA (European Medicines Agency) has since approved a total of 19 biosimilar drugs for trade in Europe. This low number is also due to a comparatively long development and approval process that generally lasts a total of seven to ten years (source: Pro Generika e.V.).

Approval of biosimilars in Europe

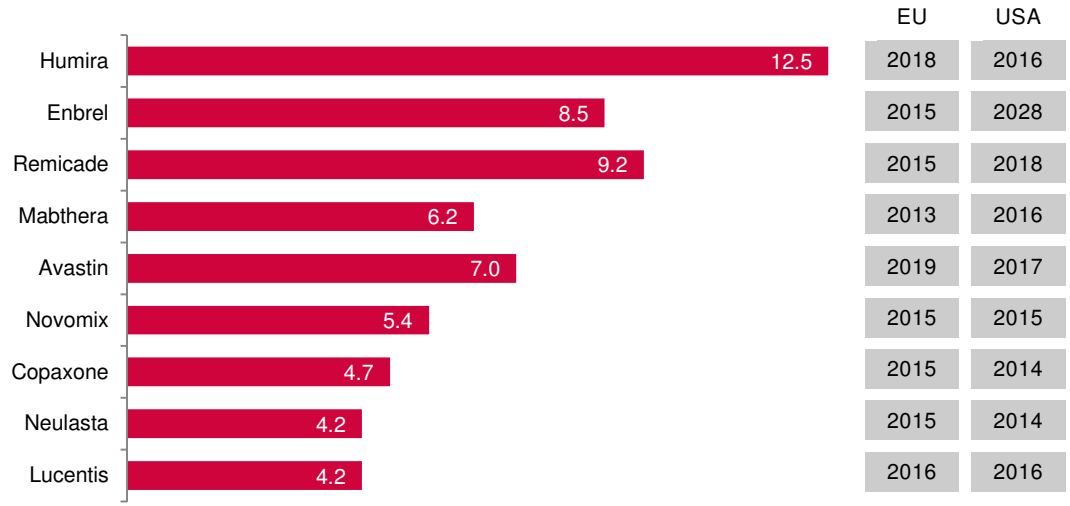


Source: EMA; GBC AG

In the USA where, for example, the first biosimilar was approved for marketing in 2015, there is a lack of a corresponding historical database. However, the fact that the US Food and Drug Administration (FDA) issued the first approval after several years of delay should be considered positive and forward-looking. The American market, which is the world's most important market for medicines, should be a crucial driver for the future demand for biosimilars.

A key aspect of the future development and market penetration of biosimilars includes the expiring patents of biopharmaceutical medicines. In total, 12 of the top-selling biopharmaceuticals and thus the top-selling medicines overall will lose their patent protection in the USA and Europe by 2020 (source: Monitor Versorgungsforschung 06/2013). By 2020, the volume of expiring patents of biopharmaceuticals around the world should be around €67 billion.

Blockbuster biopharmaceuticals (turnover in billion USD) and their patent expiry



Source: IMS MIDAS; GBC AG

The summary shows different influence factors on the future development of the emerging biosimilar market. At the top of the list is the prevailing cost pressure on healthcare expenditure, which should increase acceptance of cheaper imitation products. In particular, the fact that the original biopharmaceutical drugs have become one of the largest cost drivers in the supply of medicines gives the cost aspect greater significance. The possibility of a cheaper supply with biologically prepared drugs should tap into new patient groups and new sales regions.

The supply side should also grow at the same time over the coming years as patents expire. In this respect, current biosimilar market figures do not provide much information on the future because the near future will be shaped by fundamental changes. Growth will become more dynamic than expected. Particularly as currently approved imitation drugs, biosimilars, are made from relatively simple proteins. Future patent expiries involve very different monoclonal antibodies.

Different forecasts recognise that the biosimilars sector will experience the highest growth rates in the pharmaceutical industry. According to ThomsonReuters, biosimilars turnover should rise worldwide to around USD 35.0 billion by 2020. IMS Health expects a total turnover of €11 to 13 billion by 2020. Given global turnover of USD 1.3 billion in 2013, a high growth momentum is assumed as a result. amp biosimilars AG has consequently positioned itself in one of the fastest growing pharmaceutical markets with its company strategy and product pipeline. The company strategy is worth mentioning in particular, which focuses on broad regional coverage for licensing (several licence partners). Accordingly, amp biosimilars AG should be able to profit from the expected high level of momentum for biosimilars in pharmerging markets as well as from the largest pharmaceutical markets.

BUSINESS DEVELOPMENT & ESTIMATES

Key financial figures

P&L (in €m)	FY 2014	FY 2015e	FY 2016e	FY 2017e	FY 2018e	FY 2019e	FY 2020e
Revenue	0.00	0.00	0.00	0.14	0.72	13.14	31.06
Other operating income	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material expenses	-0.02	-0.14	-1.94	-3.74	-6.44	-4.82	-4.86
Personnel expenses	-0.06	-0.86	-0.90	-0.95	-0.99	-1.04	-1.10
Other operating expenses	-0.01	-0.38	-0.32	-0.32	-0.32	-0.32	-0.32
Depreciations	0.00	0.00	0.00	0.00	-0.01	-0.04	-0.73
EBIT	**-0.09**	**-1.37**	**-3.16**	**-4.86**	**-7.04**	**6.92**	**24.05**
Financial result	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EBT	**-0.09**	**-1.37**	**-3.16**	**-4.86**	**-7.04**	**6.92**	**24.05**
Taxes	0.00	0.00	0.00	0.00	0.00	-1.10	-3.39
Net profit or loss for the period	**-0.09**	**-1.37**	**-3.16**	**-4.86**	**-7.04**	**5.82**	**20.66**

Quelle: amp biosimilars AG; GBC AG

Forecasts and Model Assumptions

In the past financial year 2014, amp biosimilars AG's focus was initially on the selection and development of suitable biosimilar product candidates and the setup and expansion of the organisation and processes. As expected, the company does not yet currently have any turnover due to a lack of marketing resulting in negative earnings. Last financial year this was at €-0.09 million (2013: €0.00 million) and is not relevant in our view because of the early stage of development of amp products.

In terms of the company's asset situation, the equity increase to €1.91 million that took place in the current financial year 2015 (as of: 31 January 2015, outlined in the securities prospectus in line with the company's financial accounting) is worth mentioning in particular, which is exclusively due to the capital increase against cash contributions of €2.00 million carried out on 23 January 2015. As a result, amp biosimilars AG has a liquidity of €2.00 million as at 31 January 2015 (31 December 2014: €0.04 million), which in our view and based on our forecasts should be sufficient at least until the middle of the financial year 2016.

Forecast principles

The basis for our turnover and result forecasts for future financial years is the project pipeline and the associated marketing timescale developed by us, while taking into account other biosimilar developments. The marketing turnover derived from this, yet only expected from 2019, is the key driver of revenue. amp biosimilars AG is also set to collect upfront fees as part of the additional planned licensing of product candidates and the regional expansion of licence contracts that have already been concluded. We also considered the option of a complete sale of the products as a basis for our turnover forecasts, where we assumed a potential sale at a more advanced stage of development, with correspondingly high revenues.

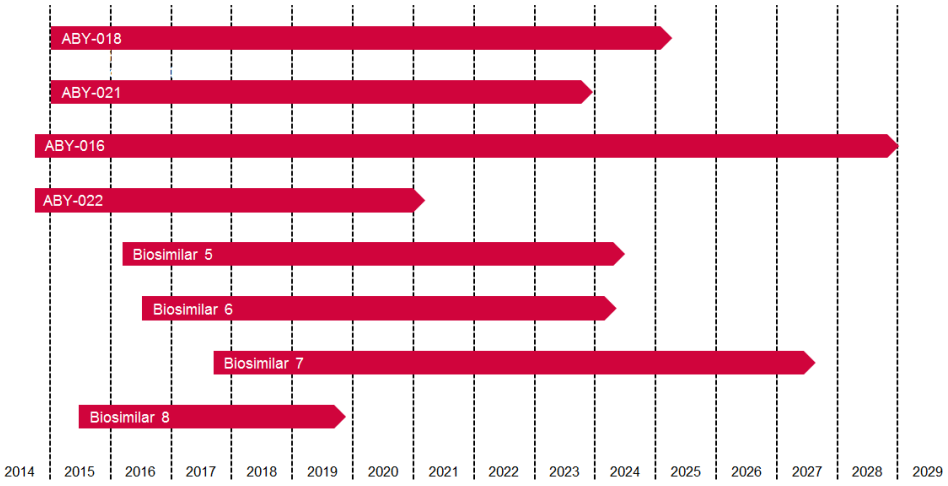
The company currently has four specific development projects in the biosimilar sector, of which two projects, ABY-018 and ABY-021, have already been licensed and an important milestone has already been reached at an early stage as a result. For competitive reasons and due to the confidentiality agreement with the licence partner, only the therapeutic area and the internal name of the development candidates are

known and not the reference product, which makes a derivation of the turnover potential more difficult. Helpfully, we have drawn on average market-related values for this.

According to company data, further biosimilar projects will be developed in coming years and the project pipeline will be successively expanded as a result. With an average development time of 2 to 3 years until clinical phase I is reached (source: Biosimilars Handbook of the European Generic Medicines Association), an expansion to the project pipeline can be implemented comparatively quickly. amp management team's competence in development should be mentioned at this point. It has a long history in the development and approval of biosimilars within large pharmaceutical groups. This includes a complete understanding of process development, expertise in the microbial fermentation of cell cultures and in bioanalytics.

By 2017, we expect the identification and the start of the preclinical development of four additional biosimilar candidates, meaning that the product pipeline will then be expanded to a total of eight. It is notable that the current Chinese licence partner has signalled interest in a significantly higher number of biosimilar developments. amp biosimilars AG is also in discussions regarding additional partnerships, meaning that new licence partners could be envisaged even for the current financial year 2015. Based on our assumptions, the following development schedule (preclinical and clinical) has been worked out, taking into account the planned expansion of the project pipeline:

Project schedule of amp biosimilars AG

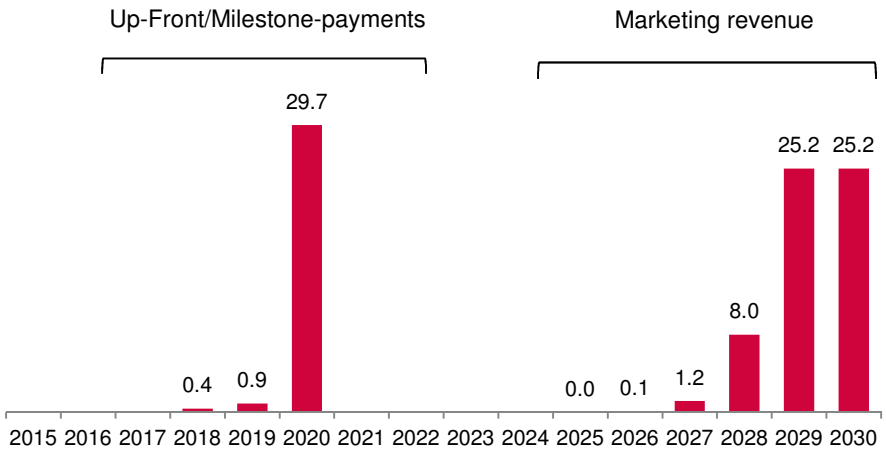


Source: amp biosmilars AG; GBC AG

For our turnover forecasts, we assume early licensing of projects in the preclinical development stage, similar to the licences already in place. As we assume that licence partners will take over the funding for the clinical trials, the financial requirements for amp biosimilars AG are deemed low. This should also be the case for potential joint venture partnerships in which the partner company takes on the majority of the financing for the clinical trial.

Under this strategy, amp biosimilars AG should receive a small amount of upfront payments and milestone payments at the point of licensing and depending on the development progress of the products. Our expected sales growth for the ABY-018 project, which is already licensed, is representative of the rest of the project pipeline:

Project ABY-018 sales growth (in € million)



Source: GBC AG

There are plans in general to expand the licensing of products regionally and therefore to issue other licences. There is also the option of selling all distribution rights (excluding already licensed regions), which would accordingly entail high yields. Based on the assumption of a sale of the ABY-018 project in the financial year 2020, amp biosimilars AG should generate the first significant revenue. It is only once marketing has begun in the regions in which marketing rights have been licensed to partners that the first marketing revenue will be generated from the financial year 2026 onwards. This approach is the basis for our sales and earnings estimates for the coming financial years.

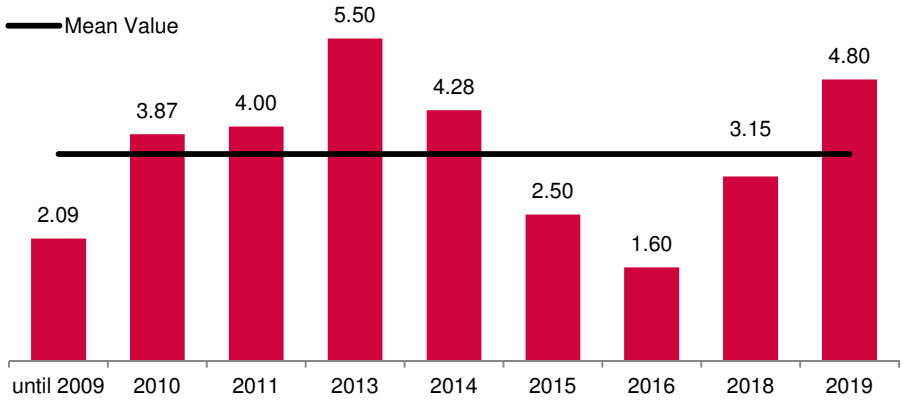
Sales forecasts

in €m	FY 2015e	FY 2016e	FY 2017e	FY 2018e	FY 2019e	FY 2020e
Revenue	0.00	0.00	0.14	0.72	13.14	31.06
EBIT	-1.37	-3.16	-4.86	-7.04	6.92	24.05
Net profit or loss	-1.37	-3.16	-4.86	-7.04	5.82	20.66

Source: GBC AG

Due to the unpublished information on the reference product and the resulting lack of foundation for estimations regarding the market potential of corresponding biosimilar drugs, we geared ourselves towards the average value of biopharmaceuticals in terms of revenue. We considered global turnover for biopharmaceuticals whose patents had already expired or will expire by 2019. According to our calculations, the average turnover per biopharmaceutical is 3.53 billion US dollars, which is additional proof of the high-priced approach of this type of medicine. Even if there are different characteristics within the therapeutic ranges or classes, we still consider this mean value to be valid. The derived calculation basis for the turnover potential of the original drugs puts our estimates at around €2.9 billion.

Sales/biopharmaceutical depending on patent expiry (in billion USD)

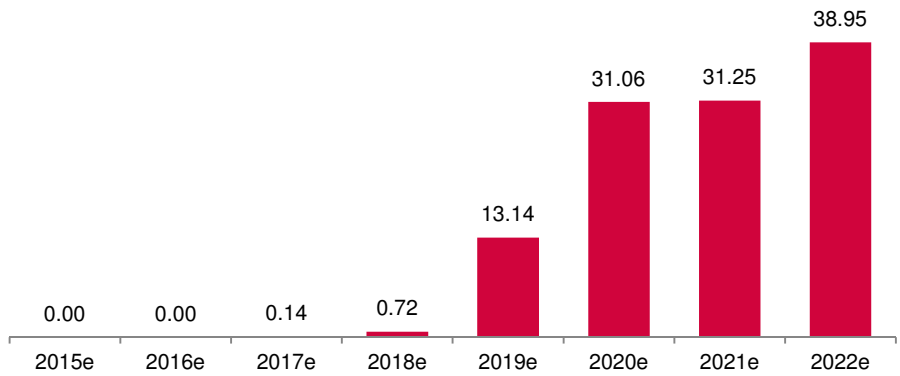


Source: The impact of biosimilars' entry in the EU market; GBC AG

We also considered the average markdown of a biosimilar determined in individual calculations compared to the reference product. Taking the biosimilars already approved in Europe as a basis, this value was 31.9% and therefore a biological imitation drug costs 68.1% of the original patent-protected biopharmaceutical. This price level remains comparatively high due to the complex structure of the large-molecule biosimilar, which will be tested for comparability in both preclinical and clinical tests.

In Germany, biosimilars have as yet only achieved a low level of penetration on the market for biosimilars, with a current share of just 1.6% (source: ProGenerika market data 2014). On the one hand, this is down to the fact that these are still a relatively new class of medicine and there is therefore still little experience in terms of exchangeability with the original product. On the other hand, only a few biosimilars have been approved so far following the expiry of the original drug's patent. As a result, the market for biosimilars, especially in light of increasing cost pressures, has considerable potential and statistics are expecting considerable growth in market penetration in this respect. The market shares of the biosimilars for Epoetine or Filgrastim can be given as examples. In Germany these shares are well over 50% of the original drug's. In the "pharmerging markets", significantly higher market shares should be achieved due to the higher sensitivity to prices. We expect a biosimilars market penetration of 40%. Based on the marketing pipeline and taking into account the assumptions mentioned, the following sales forecasts have been calculated for future financial years:

Sales forecasts (in € million)



Source: GBC AG

Most of our sales assumptions up to 2022 can be attributed to licensing and the sale of patent rights. The marketing of the eight expected biosimilar products in the project

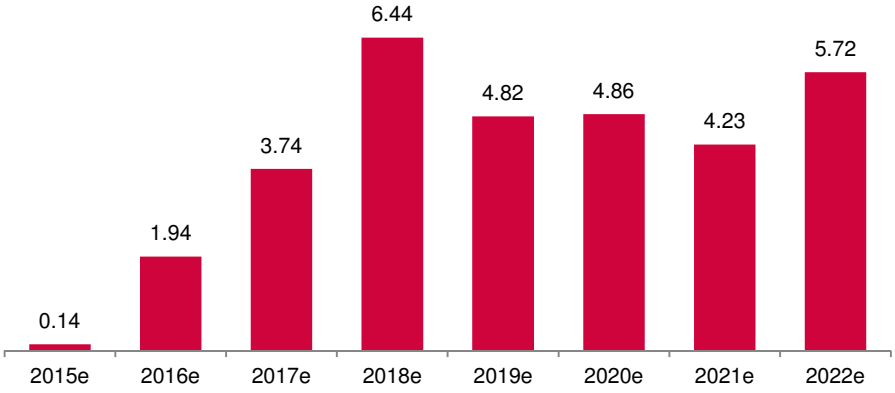
pipeline should gain momentum only after our specific estimate period and should also generate considerable corresponding turnover. According to the assumptions we postulated above, even licensing revenue totalling over €100.00 million is possible, which should be considered additional upside potential.

Earings forecasts

Given the business strategy in which the preclinical development of biosimilars is a priority, amp biosimilars AG should have a streamlined cost structure and a high level of cost flexibility. In our view, the high level of development expertise should be considered paramount in staff costs. Because staff structures were largely set up in 2014/2015, there should be a significant increase in staff costs for the financial year 2015. However, in subsequent financial years we expect relatively stable growth for this cost item.

With average development costs of approx. €90.0 million for one biosimilar, approx. €3.00 million occur in the preclinical phase, which makes up approx. 3.2% of total development costs (source: Journal of Health Economics). We took these costs into account under material costs as project-related costs. In addition to this, amp biosimilars AG should also record further project-related costs not only in basic research but also in terms of licensing, preparatory measures for marketing, etc., meaning that we expect average total costs per project of €4.60 million.

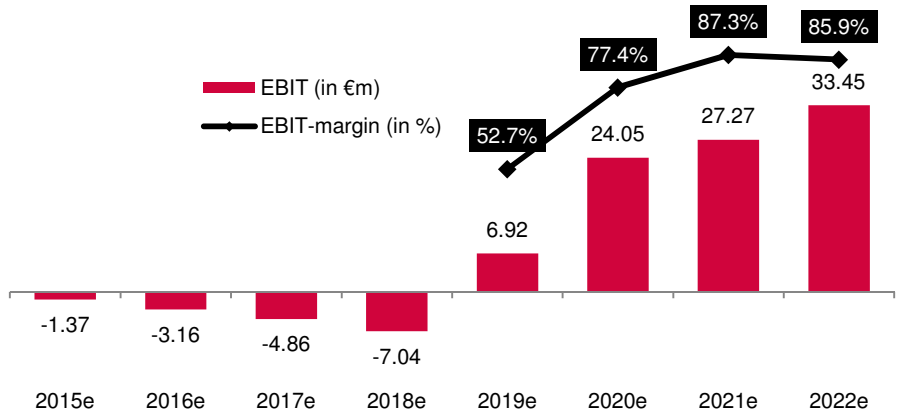
Development of forecasted material costs (in € million)



Source: GBC AG

As expected, amp biosimilars AG will still generate negative operating results in coming financial years (until 2019) due to the continued lack of any notable revenue. It is only once the expected first sale of distribution rights for biosimilar projects in the financial year 2019 has taken place that corresponding profit contributions will be generated. However, amp biosimilars AG's business model, with revenue consisting of licensing revenue or revenue from the sale of distribution rights, is highly scalable. This means that an increase in the sales base is accompanied by an increase in earnings. With an expected steady growth of the cost base, even EBIT margins of over 80.0% are possible, which we also suggested as a long-term target figure in our DCF valuation model.

Forecasted EBIT (in Mio. €) and EBIT-margin (in %)



Source: GBC AG

Based on EBIT, total financial requirements of €16.43 million have been forecasted until the end of the financial year 2018 or until break-even is reached. According to company data, various funding options may be taken. For example, a major shareholder made a funding commitment. Various capital market instruments, both of a debt or an equity nature, could also be issued. There are currently no specific plans for this yet.

SWOT-Analysis

Strengths	Weaknesses
• amp biosimilars AG provided "proof of concept" early on with the licensing of two biosimilars. • The company's executive management has extensive experience in the development and approval of biosimilars. • The company has strong partnerships for the commercialisation of biosimilars. • In the early stage of the company, amp biosimilars AG had already identified four products and transferred these to the development stage. • The company only develops the products until clinical study phase I, resulting in a considerable reduction in financial risk	• Amp biosimilars AG is currently in an early company and development stage, with break-even only expected in the financial year 2019. • Until break-even is reached, there is a need for liquidity totalling €16.43 million according to our forecasts which still needs to be covered. • The project pipeline currently includes four biosimilar projects and is therefore highly dependent on individual projects.
Opportunities	**Risiks**
• The biosimilars market has very high growth potential in light of expiring patents. • The "pharmerging markets", the current target regions for amp biosimilars AG, are showing particularly strong growth. The approval costs in these regions are also relatively low. • An expansion to the project pipeline can be achieved quickly, particularly in light of the comprehensive expertise of the executive management and the company's partners. • There is a high entry barrier for biosimilars with regard to expertise and technology.	• The process build-up for a biosimilar may vary considerably from the reference product and approval could be delayed as a result. • Several companies could be developing a biosimilar from the same reference product. This could have a negative effect on the marketing potential of amp products. • Licence partners could decide against the clinical development of the biosimilars that have already been licensed, meaning that revenue might not be received as planned.

VALUATION

Model assumptions

We rated amp biosimilars AG using a two-stage DCF model. Starting with the specific estimates for 2015 to 2022 in phase I, a residual value is determined in the second phase by using the perpetual annuity following the end of the forecast horizon. As for the terminal value, we assume a sales growth rate of 3.0% and a target EBITDA margin of 85.0%.

Determining of capital costs

The weighted average cost of capital (WACC) of amp biosimilars AG is calculated using capital costs and the cost of debt. The market premium, the company-specific beta, as well as the risk-free interest rate have to be determined in order to determine the equity cost.

Note: Since 28/01/2015 we have no longer been using the interest rate on ten-year government bonds to determine the risk-free interest rate, but rather have switched to a new methodology instead.

The risk-free interest rate is now derived in accordance with the recommendations of the expert committee for company valuations and business administration (FAUB) of the IDW (Institut der Wirtschaftsprüfer in Deutschland e.V.) from the current interest rate yield curves for risk-free bonds. The zero bond interest rates according to the Svensson method published by the German Federal Bank form the underlying basis. To smooth out short-term market fluctuations, we use the average yields over the previous three months and round up the result to 0.25 basis points. **The value of the currently used risk-free interest rate is 1.25%.**

We set the historical market premium of 5.50% as a reasonable expectation of the market premium. This is supported by historical analyses of stock market returns. The market premium reflects by which percentage the stock market is expected to be more profitable than the low-risk government bonds.

According to GBC estimates, a beta of 2.57 is currently determined.

Using the assumptions implied, cost of equity is calculated to amount to 15.39% (beta multiplied by the risk premium plus the risk-free interest rate). Since we assume a sustainable weighting of the equity costs of 100%, the resulting weighted average costs of capital (WACC) amount to 15.39%. The costs of capital sufficiently take into account the early stage of the company and also the break-even, which is only expected in the financial year 2019.

Evaluation results

The discounting of future cash flows is based on the entity approach. In our calculation, the result for the corresponding weighted average costs of capital (WACC) is 15.39%. The resulting fair value per share at the end of the 2016 financial year corresponds to the stock price target of €40.30.

DCF-Model

amp biosimilars AG - Discounted Cashflow (DCF) Valuation

Value driver of DCF-model after the estimate phase:

final - Phase	
Perpetual growth rate	3.0%
Perpetual EBITA margin	85.0%
Taxe rate terminal value	30.0%

Three phases DCF - Model:

Phase				**estimate**					**Terminal**
in Mio. EUR	FY 15e	FY 16e	FY 17e	FY 18e	FY 19e	FY 20e	FY 21e	FY 22e	**value**
Sales	0.00	0.00	0.14	0.72	13.14	31.06	31.25	38.95	
Sales change	n.def	n.def	n.def.	0.0%	1725.1%	136.4%	0.6%	24.7%	3.0%
Sales to fixed assets	0.00	0.00	1.80	1.80	1.80	1.80	1.80	1.80	
EBITDA	-1.37	-3.16	-4.86	-7.03	6.96	24.78	25.54	31.72	
EBITDA-margin	n.def	n.def	neg.	neg.	53.0%	79.8%	81.8%	81.4%	
EBITA	-1.37	-3.16	-4.86	-7.04	6.92	24.05	23.82	29.98	
EBITA-margin	n.def	n.def	neg.	neg.	52.7%	77.4%	76.2%	77.0%	85.0%
Taxes on EBITA	0.00	0.00	0.00	0.00	-1.10	-3.39	-7.15	-8.99	
Taxes to EBITA	0.0%	0.0%	0.0%	0.0%	15.9%	14.1%	30.0%	30.0%	30.0%
EBI (NOPLAT)	-1.37	-3.16	-4.86	-7.04	5.82	20.66	16.67	20.99	
Return on capital	n.def.	n.def.	n.def.	n.def.	1214.8%	236.3%	80.7%	100.9%	92.1%
Working Capital (WC)	0.00	0.00	0.02	0.08	1.45	3.42	3.44	4.29	
WC to sales	0.0%	0.0%	15.0%	11.0%	11.0%	11.0%	11.0%	11.0%	
Investment in WC	-0.08	0.00	-0.02	-0.06	-1.37	-1.97	-0.02	-0.85	
Operating fixed assets (OFA)	0.02	0.05	0.08	0.40	7.30	17.26	17.36	21.64	
Depreciation on OFA	0.00	0.00	0.00	-0.01	-0.04	-0.73	-1.73	-1.74	
Depreciation to OFA	0.0%	0.0%	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
Investment in OFA	-0.02	-0.03	-0.03	-0.33	-6.94	-10.69	-1.83	-6.02	
Capital employed	0.02	0.05	0.10	0.48	8.75	20.67	20.80	25.93	
EBITDA	-1.37	-3.16	-4.86	-7.03	6.96	24.78	25.54	31.72	
Taxes on EBITA	0.00	0.00	0.00	0.00	-1.10	-3.39	-7.15	-8.99	
Total investment	-0.10	-0.03	-0.05	-0.39	-8.31	-12.66	-1.85	-6.87	
Investment in OFA	-0.02	-0.03	-0.03	-0.33	-6.94	-10.69	-1.83	-6.02	
Investment in WC	-0.08	0.00	-0.02	-0.06	-1.37	-1.97	-0.02	-0.85	
Investment in Goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free Cashflow	-1.47	-3.19	-4.91	-7.42	-2.45	8.74	16.55	15.86	186.32

Value operating business	72.83	87.23
Net present value explicit free CF	4.44	8.31
Net present value of terminal value	68.39	78.92
Net debt	1.44	4.62
Value of equity	71.40	82.61
Minority interests	0.00	0.00
Value of share capital	71.40	82.61
Outstanding shares in m	2.05	2.05
Fair value per share in €	34.83	**40.30**

Cost of capital:

Risk free rate	1.3%
Market risk premium	5.5%
Beta	2.57
Cost of equity	15.4%
Target weight	100.0%
Cost of debt	4.5%
Target weight	0.0%
Taxshield	28.7%
WACC	**15.4%**

Return on capital	**WACC**				
	14.8%	**15.1%**	**15.4%**	**15.7%**	**16.0%**
91.6%	43.31	41.65	40.08	38.60	37.20
91.8%	43.42	41.76	40.19	38.70	37.29
92.1%	43.54	41.87	**40.30**	38.81	37.39
92.3%	43.66	41.99	40.41	38.91	37.49
92.6%	43.78	42.10	40.51	39.01	37.59

Peer-Group

Alongside the DCF model, we also created a peer group market comparison for further valuation information. In principle, the comparability of the peer group companies we selected is guaranteed by focusing on biosimilars, even though considerable differences may result due to the variety of indications and an associated heterogeneity in expected revenues. Because of the different development phases, there may also be significant fluctuations in valuation. We have included this peer group representation only for further information and not as a basis for valuation.

Company	EV/Sales 14	EV/Sales 15e	EV/Sales 16e	EV/Sales 17e	EV/Sales 18e	EV/Sales 19e
Formycon AG	1.43	13.28	13.28	10.24	7.99	13.09
Bioton S.A.	1.84	1.67	1.60	1.52	-	-
Celltrion Inc.	23.81	20.18	13.81	10.58	11.34	9.64
Hospira Inc.	3.60	3.43	3.19	2.95	2.78	2.71
Pfenex Inc.	33.02	41.23	38.40	38.19	13.09	1.85
EPIRUS Biopharmaceuticals, Inc.	-	62.57	5.32	4.29	2.75	1.21
Coherus BioSciences	27.88	31.54	29.91	8.18	3.73	2.18
Median	**21.62**	**20,18**	**13.28**	**8.18**	**5.86**	**2.44**

Source: GBC AG; Thomson ONE; Geschäftsberichte der Unternehmen

The current enterprise value of the expected future turnover of our peer group selection provides an indication of the large demand of investors for companies involved in the biosimilars sector. The peer group companies are currently valued at 20 times the expected 2015 turnover, reflecting the strong growth forecasted for the biosimilars sector.

ANNEX

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