Formycon

(Scale All Share, Health Care, FYB GR)

WARBURG RESEARCH

Buy

EUR 97.00

Price	EUR 58.20
Upside	66.7 %

Value Indicators:	EUR
DCF:	96.50

Warburg ESG Risk Score:	1.7
ESG Score (MSCI based):	1.0
Balance Sheet Score:	2.5
Market Liquidity Score:	1.5

Description:

German biotech company specialising in the development of biosimilars

Market Snapshot:	EUR m
Market cap:	933.5
No. of shares (m):	16.0
EV:	987.3
Freefloat MC:	373.4
Ø Trad. Vol. (30d):	295.60 th

Shareholders:	
Freefloat	40.00 %
Wendeln & Cie	15.00 %
Active Ownership	7.00 %
Founders & Management	6.00 %
Athos KG	27.00 %

Key Figures (WRe):	2023e
Beta:	1.6
Price / Book:	0.1 x
Equity Ratio:	44 %

Capturing a rapidly growing biosimilar market; Initiation with Buy

Formycon is a German biosimilar developer located in Munich. Its Lucentis biosimilar is marketed in the US and UK, and it is targeting further European expansion by the end of 2023. Biosimilars are generic versions of biologic drugs, usually antibodies, that imitate the efficacy and safety profile of drugs that have lost patent protection. Because biosimilars mimic already researched products, their development bears significantly less risk than innovative biotech drugs and is usually four to five years shorter. As a result, biosimilars can be sold at a discount to their reference product. Currently, Formycon develops the biosimilar until market approval and then transfers the assets to a commercial partner against the payment of royalties. But, the company is in the middle of a strategic shift: there has been a change of management and the company is planning to add a new product to its biosimilar pipeline every 18 months to seize the rapidly growing biosimilar market opportunity while making strides towards becoming a fully integrated biosimilar company.

Biosimilars are expected to benefit from a rapid market uptake due to their competitive pricing. Market research indicates that the global biosimilar market should generate USD 33bn sales in 2025 (up from USD 18.7bn in 2021) and is expected to grow to sales of USD 74bn by 2030. The market is driven by strong pressure from healthcare providers in the US and EU to drive down sky-rocketing healthcare costs and administrations in both the US and EU have put regulatory frameworks in place to accelerate the approval of biosimilars in the future. Doctors are increasingly accepting the new entity and biosimilars are often able to capture around 60% of the reference product's market after three years in commercialization.

Formycon is an emergent player in the biosimilar field with strong commercial backing: 27% of the company is owned by the Athos KG, the family office of the Strüngmann brothers, Andreas und Thomas, who founded Hexal and developed the company into a global small molecule generics player.

We project that FYB will generate sales of EUR 77.0m in 2025 and EUR 176.0m in 2026 with three products in the market: FYB201, FYB202 and FYB203. Based on the business model, we estimate that FYB will be able to generate attractive EBIT margins in the range of 50% to 65% by 2027 considering that FYB's partners will foot commercialization and marketing costs and FYB will receive high margin royalty payments.

We chose to determine the fair value of FYB based on a DCF model as biosimilars have a far lower risk profile than traditional biotech development projects. We set our DCF-derived **price target at EUR 97.00**, based on the attractive underlying structural growth market, the strong in-house development expertise, and the robust commercial background infrastructure. **We initiate our coverage of Formycon with a Buy rating.**

Rel. Performance vs Scale All

1 month:	-1.3 %
6 months:	-9.8 %
Year to date:	-27.5 %
Trailing 12 months:	-5.4 %

Company events:

FY End: 31.12. in EUR m	CAGR (22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales	21.9 %	33.2	34.3	36.6	42.5	75.0	45.4	77.0
Change Sales yoy		231.6 %	3.4 %	6.8 %	16.1 %	76.5 %	-39.4 %	69.4 %
Gross profit margin		*35.4 %*	*23.1 %*	*27.6 %*	*28.4 %*	*26.7 %*	*41.1 %*	*51.7 %*
EBITDA	-	12.6	-5.0	-12.4	-15.9	-13.0	-9.6	22.0
Margin		*38.1 %*	*-14.7 %*	*-33.8 %*	*-37.3 %*	*-17.3 %*	*-21.2 %*	*28.6 %*
EBIT	-	11.7	-6.5	-14.0	-17.7	-15.0	-16.8	3.9
Margin		*35.4 %*	*-19.1 %*	*-38.2 %*	*-41.7 %*	*-20.0 %*	*-36.9 %*	*5.0 %*
Net income	-5.3 %	11.7	-6.7	-13.3	36.0	-25.1	5.9	30.6
EPS	-9.7 %	1.17	-0.66	-1.20	2.62	-1.59	0.37	1.93
EPS adj.	-9.7 %	1.17	-0.66	-1.20	2.62	-1.59	0.37	1.93
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		-0.24	-0.50	-1.29	-3.33	-2.90	-1.13	-0.09
FCF / Market cap		-0.8 %	-1.7 %	-2.2 %	-4.8 %	-78.9 %	-30.8 %	-2.4 %
EV / Sales		8.7 x	7.5 x	17.0 x	23.6 x	1.5 x	2.9 x	1.7 x
EV / EBITDA		22.8 x	n.a.	n.a.	n.a.	n.a.	n.a.	6.0 x
EV / EBIT		24.6 x	n.a.	n.a.	n.a.	n.a.	n.a.	33.9 x
P / E		26.5 x	n.a.	n.a.	26.4 x	n.a.	157.3 x	30.2 x
P / E adj.		26.5 x	n.a.	n.a.	26.4 x	n.a.	157.3 x	30.2 x
FCF Potential Yield		-0.5 %	-2.0 %	-1.8 %	-1.6 %	-21.0 %	-7.8 %	9.0 %
Net Debt		-21.8	-35.5	-18.7	56.1	53.8	71.7	73.1
ROCE (NOPAT)		88.3 %	n.a.	n.a.	n.a.	n.a.	n.a.	0.6 %
Guidance:		Sales: EUR 75 to 85m; EBITDA EUR -15 to -5m						

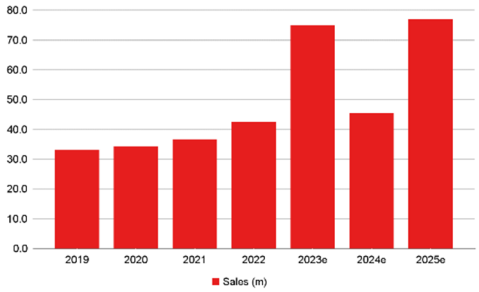
Analyst

Dr. Christian Ehmann

cehmann@warburg-research.com

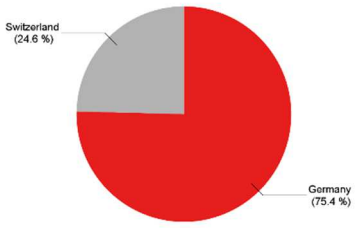
+49 40 309537-167

Sales development
in EUR m



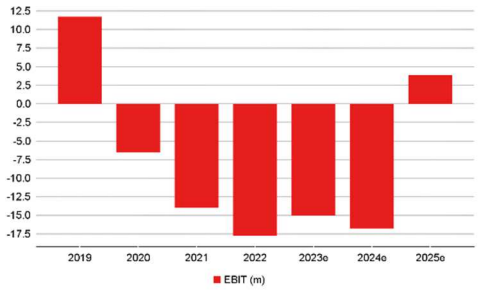
Source: Warburg Research

Sales by regions
2022; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

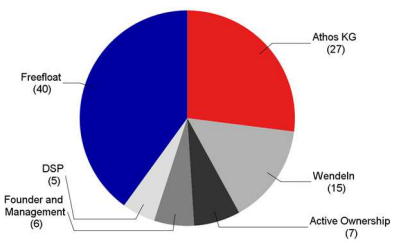
Company Background

- Business model that focusess on income streams from project ownership and royalties
- Pool of biosimilar experts with extensive experience in drug development who are able to develop multiple APIs in parallel
- Strong pipeline boasting three late-stage biosimilars and three preclinical biosimilars
- Formycon is able to present a successful business development track record from product selection to market approval

Competitive Quality

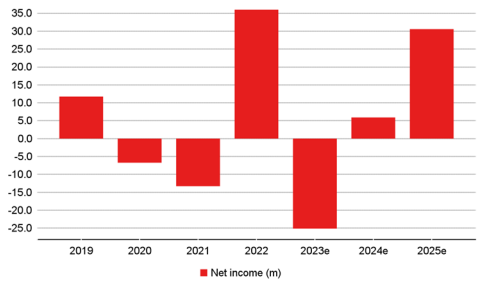
- Commercial stage biosimilar focused biotechnology company – established 2012 in Munich, Germany - with a strong focus on product R&D (some 85% of workforce)
- Biosimilars - generics of biotech products - are the fastest growing segment in Pharma and expected to reach global sales of USD 74bn in 2030
- Athos KG and Active Ownership are impactful, strategic and long term oriented shareholders that bolster Formycon's market position
- Formycon is building an attractive biosimilar pipeline for reference products currently bringing in USD 41bn in annual sales

Shareholder Structure



Source: Company data, Warburg Research

Net income development
in EUR m



Source: Warburg Research

Summary of Investment Case

Investment triggers

- Market entry of FYB202 and FYB203
- Full disclosure of the target indications of FYB208 and FYB209
- Uplisting from Scale to Prime Standard

Valuation

- DCF-based valuation yields a fair value of EUR 1,244m or EUR 96.50 per share, which is the basis of our PT of EUR 97.00
- We utilize a comparatively higher WACC to account for the residual development risk of Formycon's biosimilar portfolio (discount factor: 10.96%)

Growth

- Biosimilars could bring in up to USD 100bn in annual drug costs savings for developed healthcare systems in 2027, giving developed nations a huge incentive to favour the rapid deployment of biosimilars
- The global biosimilar market is expected to grow to USD 74bn in 2030
- As an emergent biosimilar player, FYB will be able to capture a good chunk of this growth and we expect it to grow at a CAGR 35.66% in the period 22-28e
- After initial scepticism, biosimilars are experiencing rapid uptake rates by doctors in the US and EU and competitive prices will drive a rapid uptake of the drug class

Competitive quality

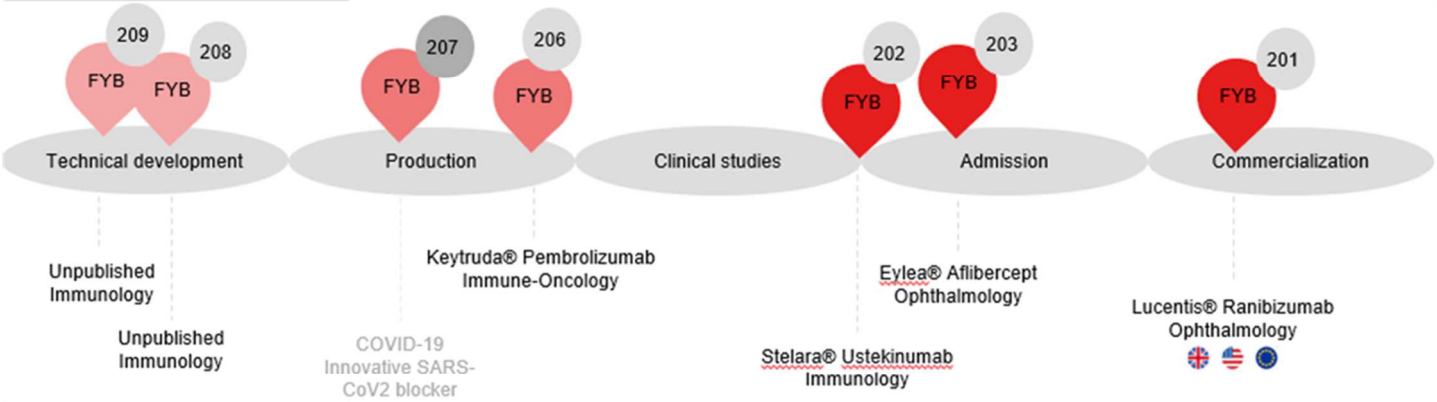
- For biosimilars, early-stage development expertise and keen market surveillance is key to identifying lucrative candidates and bringing them to market in a timely fashion – Formycon features both key abilities
- Innovation in the biosimilar market often stems from advancements in drug application – making drug use more convenient for patients – a key expertise of Formycon
- Formycon is backed by Athos KG, an investment vehicle of the Strüngmann brothers, who are renowned generic experts and built Hexal

Warburg versus consensus

- We choose to determine the fair value of Formycon using a DCF-based approach, as the developmental risk of FYB's products is negligible once they have reached a development and R&D cost inflection point (clinical Phase I). To account for the residual risk, we have instead chosen an increased discount factor.
- In comparison to consensus estimates – which is made up of five brokers (WRe not included) – our top-line expectations are lower than the market. In summary, we expect a slower biosimilar market entry than the market.

Company Overview

	Formycon AG			
Business Model & Strategy	Formycon AG is a leader in the development of high-quality biosimilars, particularly for therapies in ophthalmology, immunology and other important chronic diseases. With an experienced team that has expertise in all stages of development, Formycon helps to provide patients with access to affordable biopharmaceutical follow-on products.			
Product Portfolio	**FYB201 Lucentis® Ranibizumab**	**FYB202 Stelara® Ustekinumab**	**FYB203 Eylea® Aflibercept**	**FYB206 Keytruda® Pembrolizumab**
Commercialization and Approval	FYB201, a ranibizumab biosimilar, treats eye diseases caused by excess blood vessel growth in the retina. It's particularly effective against wet age-related macular degeneration. FYB201 inhibits growth factors that prompt new vessel formation, slowing or stopping vision loss.	FYB202, an ustekinumab biosimilar, targets severe inflammatory conditions like psoriasis, Crohn's disease, and ulcerative colitis. It's designed to mirror Stelara®, blocking interleukin-12 and interleukin-23. The program successfully completed clinical trials, and Formycon secured a global commercialization agreement, pending international approvals.	FYB203, an aflibercept biosimilar developed by Formycon, aims to mitigate vision issues stemming from retinal blood vessel growth. It binds to VEGF-A and PLGF, similar to Eylea®, suppressing blood vessel formation. Positive clinical trial results show its efficacy in treating age-related macular degeneration.	FYB206, an pembrolizumab biosimilar belongs to the immune checkpoint inhibitors and is used to treat a variety of tumours. It binds to the PD-1 receptor and specifically blocks the interaction between PD-1 and its ligand PD-L1. Formycon is about to start clinical trials in 2024/25



Revenue 2022 / Guidance 2023	EUR 42.5m / EUR 75 - 85m
EBITDA 2022 / Guidance 2023	EUR -15.9m / EUR -15 - -5m
Targets	Formycon aims to consolidate its position in the biosimilar market by continuously expanding its pipeline in order to evolve into an integrated biosimilars pharmaceutical company with operational excellence and
Market position	Formycon is operating in a competitive environment with established companies to compete against. With their growing and diversified product pipeline, Formycon is well positioned in this market, shaped by
Customers	Global pharmaceutical market: Medical facilities, Hospitals, Pharmacies and Healthcare organisations
Competitors	AMGEN, CELLTRION, SAMSUNG BIOEPIS, alvotech, Biocon Biologics, FRESENIUS KABI, SANDOZ A Novartis Division, XBRANE BIOSCIENCE

Sources: Company data, Warburg Research

Competitive Quality

- For biosimilars, early-stage development expertise and keen market surveillance is key to identifying lucrative candidates and to bring them to market in a timely fashion – Formycon features both key abilities
- Innovation in the biosimilar market often stems from advancements in drug application – making drug-use more convenient for patients – a key expertise of Formycon
- Formycon is backed by Athos KG, an investment vehicle of the Strüngmann brothers, who are renowned generic experts and founded Hexal

Biosimilar specialist with a high level of expertise

Formycon is a leading developer of biopharmaceutical biosimilars, which focuses on therapeutic areas such as ophthalmology and immunology and addresses chronic illnesses. Formycon is dedicated to biosimilar development for regulated markets like the EU, USA, Japan, Canada and Australia, in alignment with its growth strategy in the expanding biosimilar sector. The global biosimilar market is expected to reach USD 74bn by 2030. The company has a high level of expertise at its disposal across all development stages and its biosimilars significantly contribute to widening patient access to vital and affordable medication, underscoring the company's social responsibility.

Besides its developmental expertise, Formycon has competitive insights into potential markets for a broad range of biosimilar candidates in therapeutic areas. The company also has access to strategic partnerships to support development, approval and marketing of its products in a complex regulatory and competitive market environment.

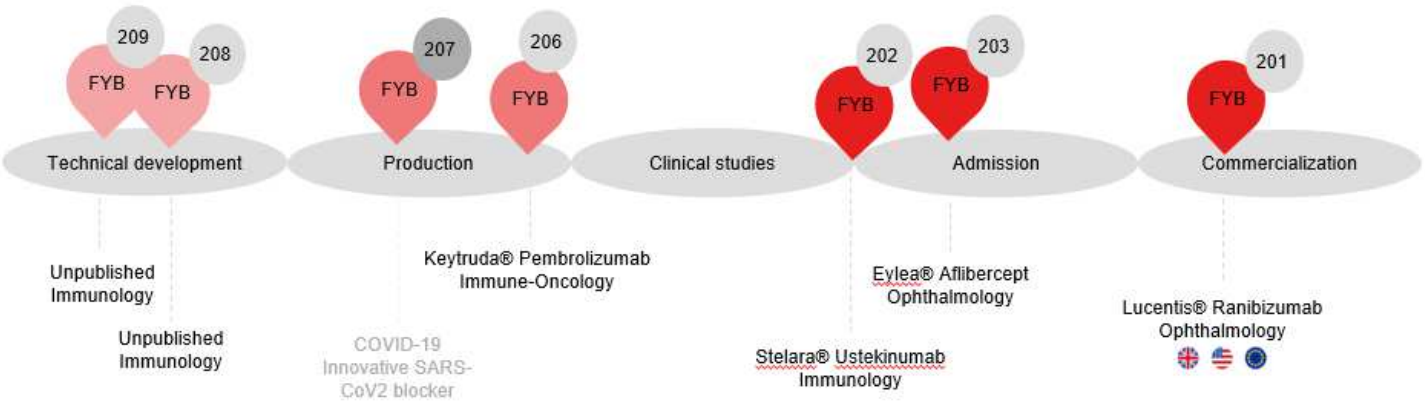
Formycon guides for a new development project every 18 months

Formycon's pipeline: quality, efficient and safe

Formycon has a robust product pipeline comprising various innovative biosimilar products and candidates. The pipeline consists of five distinct stages of development, from technical development and production to clinical studies, regulatory approval, and finally, commercialization.

In total, Formycon's pipeline encompasses six diverse products, all in different stages of development. FYB201 represents Formycon's initial completed product, already launched in the US, UK, and select European countries, thereby generating a consistent revenue stream. FYB203, also categorized in ophthalmology, is currently in the regulatory approval process, awaiting market entry. Meanwhile, FYB202, an immunology biosimilar, has just completed clinical trials, with regulatory submission scheduled for the latter half of 2023. These three products currently stand as the most promising and most advanced offerings in Formycon's pipeline. Furthermore, the company is at the stage of production of its first immune-oncology product, FYB206, which is set to enter clinical trials soon. Additionally, an innovative SARS-CoV2 blocker for COVID-19 has been shelved. Formycon's pipeline also includes FYB209 and FYB208, two unpublished immunology products in the technical development phase, the details of which are yet to be officially disclosed.

Pipeline Formycon



Source: Formycon AG, Warburg Research

Focusing on Formycon's strategic position within the biosimilar market, the company has successfully secured significant intellectual property (IP) and advanced its preclinical development, while actively developing biosimilar candidates for various medical conditions. Since one of its products, FYB201, is already in the market, it generates a consistent revenue stream from these sales, enabling the utilization of this steady cash flow (annual product cash flow in 2025: EUR 61.5m) for further research and development of new products and for the completion of the existing product pipeline. With its broad expertise, IPs, and diverse partnerships, Formycon has established a robust market position, endowed with competitive advantages over the strong competition posed by larger entities such as Alvotech, Amgen, and others. These competitors have either achieved positive interim results, completed Phase III trials, submitted applications for regulatory approval, or already obtained commercialization approval for their biosimilar candidates.

Biosimilar development risk more in line with those of classical generics

Generics and biosimilars vs new developments – risk profiles

Biosimilars are generic versions of already established biological pharmaceutical products, mostly antibodies, designed to mirror those already approved biotech drugs both in structure and safety. They offer comparable therapeutic outcomes and are developed after the expiry of the patent protection of the original biologics. Compared to novel innovative drug developments, biosimilars typically incur development costs between EUR 150-250m (vs EUR 1-2bn for innovative drugs) and feature considerably reduced approval risk due to the already established efficacy of the reference product.

This provides a more affordable alternative for patients. The road to biosimilar approval involves rigorous comparative studies to ensure their equivalence in effectiveness and safety. In contrast, small molecule generics are replicas of chemical drugs, produced once the original drug's patent has lapsed. Biosimilars, dealing with more complex biological molecules like proteins, aim for a high degree of similarity to the reference product, although not exact copies. They undergo extensive clinical scrutiny to validate their effectiveness, safety, and quality.

Overview: structured biosimilar development process

The development of biosimilars follows a structured process that includes several phases to ensure their quality, safety, efficiency and comparability with the reference biological drug. It takes on average seven to eight years to develop a biosimilar, covering all pivotal steps of conventional drug development:

1. **Physicochemical characterization:** The physical and chemical properties of the biosimilar are investigated to ensure that they are similar to those of the reference drug. This includes analyses of the molecular structure, composition and stability.

2. **Biological characterization:** The biological properties of the biosimilar are examined, such as its binding capability to target molecules and biological activity. These tests serve to confirm the biological similarity to the reference product.

3. **Achieve technical proof of similarity (TPoS):** once both the physicochemical and biological characteristics have been confirmed to be similar to the reference product, the drug is considered highly similar.

4. **Pre-clinical studies:** Prior to human clinical trials, preclinical studies are conducted in the laboratory to assess the safety and tolerability of the biosimilar. These studies provide important information on potential side effects, toxicological aspects.

5. **Pharmacokinetics/Pharmacodynamics:** Pharmacokinetics describe the movement of drugs through the body, whereas pharmacodynamics measures the body's biological response to drugs. This phase deals with the absorption, distribution and metabolism of the biosimilar in the human body.

6. **Clinical effectiveness and safety:** In clinical trials, the efficiency and safety of the biosimilar is tested on the human body in three consecutive phases:

    a. **Clinical Phase I:** Healthy volunteers receive the biosimilar to evaluate safety, tolerability and pharmacokinetic properties. This phase is relatively small and aims to lay the groundwork for the further studies.
    b. **Clinical Phase III:** The last and largest clinical trial is the most comprehensive. It is designed to confirm the efficacy, safety and tolerability of the biosimilar in a broader patient population and in comparison, to the reference product.

7. **Achieve biosimilarity:** as the drug has successfully passed all preclinical and clinical stages the drug is now considered biosimilar.

8. **Application for Admission:** The collected data from clinical studies as well as data from the entire development process (CMC, etc.) is used for the submission of an application for admission to the health authorities.

9. **Commercialization:** Once the biosimilar receives regulatory approval, it can be commercialized in the market. Post-marketing surveillance studies will be conducted to monitor safety and effectiveness in real-world use.

Pipeline Formycon

New **chemical** entity (NCE)

Innovative „Small Molecule“ drug
Development: 10-14 years
Budget: 1-2 billion USD

Patent protection
20 - 25 years

Generic drug

Follow-up drug of a „Small Molecule drug
Development: 2-3 years
Budget: 5-10 million USD
Clinical phases: phase I

New **biological** entity (NBE)

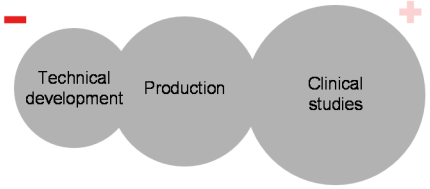
Innovative biopharmaceutical drug
Development: 10-14 years
Budget: 1-2 billion USD

Patent protection
20 - 25 years

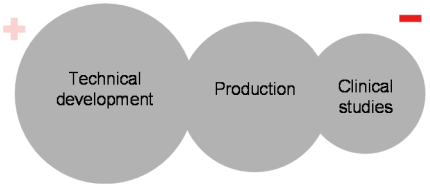
Biosimilar

Follow-up drug of biopharmaceutical drug
Development: 6-8 years
Budget: 150-250 million USD
Clinical phases: phase I + phase III

Development and **Risk profile**



Development and **Risk profile**



Source: Formycon AG, Warburg Research

Strategic overview

	Indication	Target market 2022	Partner	Next milestones	Competitive advantages	Formycons' income position	Competitors	Phase III status of competitors	Submission / approval of competitors
FYB201 – Lucentis® Biosimilar (commercial)	Wet, age-related macular degeneration	2.9 billion USD	50% stake in Bioeq AG, which holds the project and commercialization rights	Introduction in other key markets	Exceptional position and strong growth in the USA, as well as pioneering role in the UK and promising positions in key EU markets	Approximately 15% from CIMERLI™ (US), Ranivisio® (EU) and Ongavia® (UK) sales based on net sales	Samsung Biologics, Xbrane	Completed	Both: approval in EU, UK Samsung Biologics: approval in US, CA Xbrane: US-submission
FYB203 - Eylea® Biosimilar Candidate (Phase III finished)	Wet, age-related macular degeneration	9.5 billion USD	License agreement with Klinge Biopharma GmbH/Royalty -Model	EMA submission planned in H2 2023, partnering for Europe and other regions, market entry expected in 2025	Advantages from commercialization experience and leading position of FYB201 in ophthalmology /AMD, advantageous IP position.	Participation in the single- to double-digit percentage range from all revenues of Klinge Biopharma	Alvotech, Amgen, Biocon, Celltrion, Samsung Bioepis, SamChun Dang, Sandoz	beginning, achieved positive interim results, completed or are the end of phase three	US-submission: Biocon, Celltrion
FYB202 - Stelara® Biosimilar Candidate (Phase III finished)	Psoriasis (arthritis), Crohn's disease, ulcerative colitis	9.7 billion USD	100% project and commercialization rights at Formycon	Submission of registration documents for US and EU planned for second half of 2023, market entry expected in 2025	Fresenius Kabi as a strong partner with potential for commercial leadership, additional competitive differentiation	Upfront/milestone payments, after commercialization approx. 50% of revenues	Alvotech, Amgen, Celltrion, Meiji Selka Pharma & Dong A, Samsung Bioepis	Efficacy endpoint met or completed	US-submission: Alvotech, Amgen, Celltrion EU-submission: Alvotech, Meiji Selka Pharma
FYB206 - Keytruda® Biosimilar Candidate (TPoS achieved)	black skin cancer, non-small cell lung cancer, classical Hodgkin's lymphoma and other tumor diseases	21 billion USD	100% project and commercialization rights at Formycon	Entering the clinical phase	Preclinical development well advanced, "Technical Proof of Similarity" achieved, important IP established				

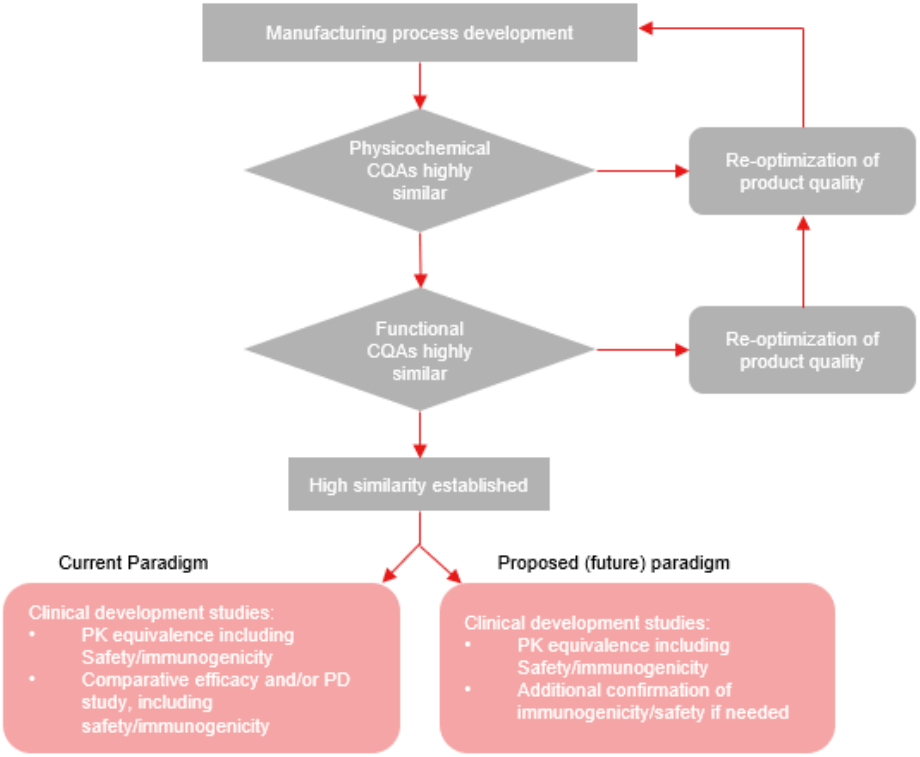
Source: Formycon AG, Warburg Research

Summary pre-clinical development

In its preclinical developments and scientific efforts, Formycon is committed to bring to market not only biosimilars that are competitive in price, but also in their product characteristics. This strategic direction is reflected in several initiatives aimed at conducting biosimilar development in an intelligent and cost-effective manner to ensure competitiveness and to lead the way in biosimilar development. At the same time, Formycon aims to be a leader in the global biosimilar segment to improve patient access to vital medicines.

These efforts are reflected in ongoing innovation and technology initiatives, one of which involves tailored clinical development: Formycon focuses on the development and approval of biosimilars based on pre-clinical PK/PD studies, that would allow for biosimilar approval even without clinical Phase III data. A PK/PD study is conducted in the early stages of the biosimilar's development to obtain information about metabolism, distribution, effect, and interaction between the drug and the human body. This approach can be particularly useful for biosimilars to enable improved development timelines and regulatory approval, even if extensive and costly Phase III data is not available.

Customized clinical development



Source: Formycon AG, Warburg Research

Another focus is the evaluation of innovative dosage forms. This includes the development of formulations with high active ingredient concentration, the transition from lyophilized (freeze-dried) to liquid formulations and the exploration of alternative dosage forms such as ready-to-use forms, autoinjectors and re-usable packaging materials for optimized storage and transport with more stable formulations for longer durability at different temperatures.

Optimization of the early development phase is also an important aspect of these efforts. Specialized contract manufacturers and developers with innovative manufacturing technologies are evaluated to ensure that biosimilar development is at the cutting edge of technology. Furthermore, the technology platforms of competitors are constantly analysed.

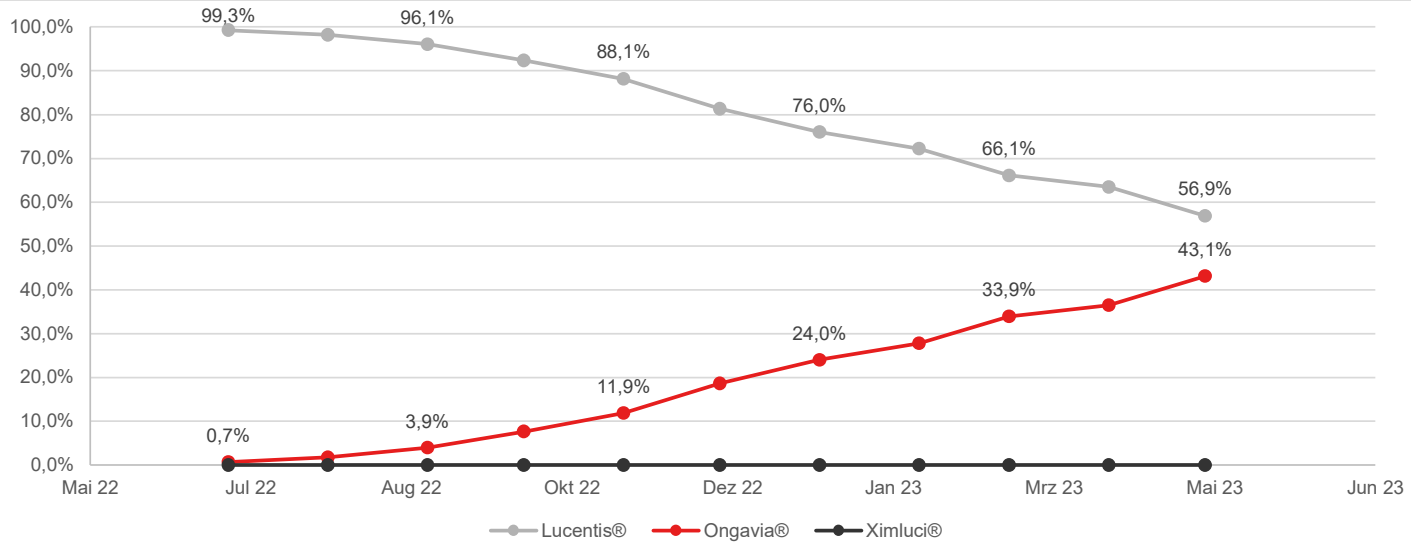
All of these initiatives illustrate Formycon's commitment to scientific excellence and innovation, optimizing its own product portfolio, as well as continuously improving patient care and advancing biosimilar development.

FYB's biosimilars show encouraging early market performance

Formycon is pursuing a targeted marketing strategy for its products Cimerli, Ongavia, and Ranivisio, aiming to establish a presence in the competitive Anti-VEGF market. Market launches have already been successfully completed in the U.S., U.K., France, Spain, Germany and other European countries. Further expansion is planned in Belgium, the Middle East, and Saudi Arabia in 2023, followed by Canada, Brazil, Algeria, and Iraq in 2024. In this early stage of market entry, Formycon is experiencing moderate competitive pressure from other biosimilar competitors, while Lucentis originators adopt aggressive pricing strategies. FYB201 has already successfully established a solid position in tender (UK) and buy & bill (US) markets and, particularly in the US, Cimerli (trade name of FYB201 in US) has outperformed biosimilar competition. FYB201 has successfully established itself as the first ranibizumab biosimilar in the European market in general, but conversion is slower in retail markets. Marketing concepts and distribution channels vary across EU markets, with a particularly promising start to marketing in the core markets of

France and Spain. Formycon AG is focused on continuous improvements in manufacturing costs to ensure long-term profitability and further expand its robust market presence.

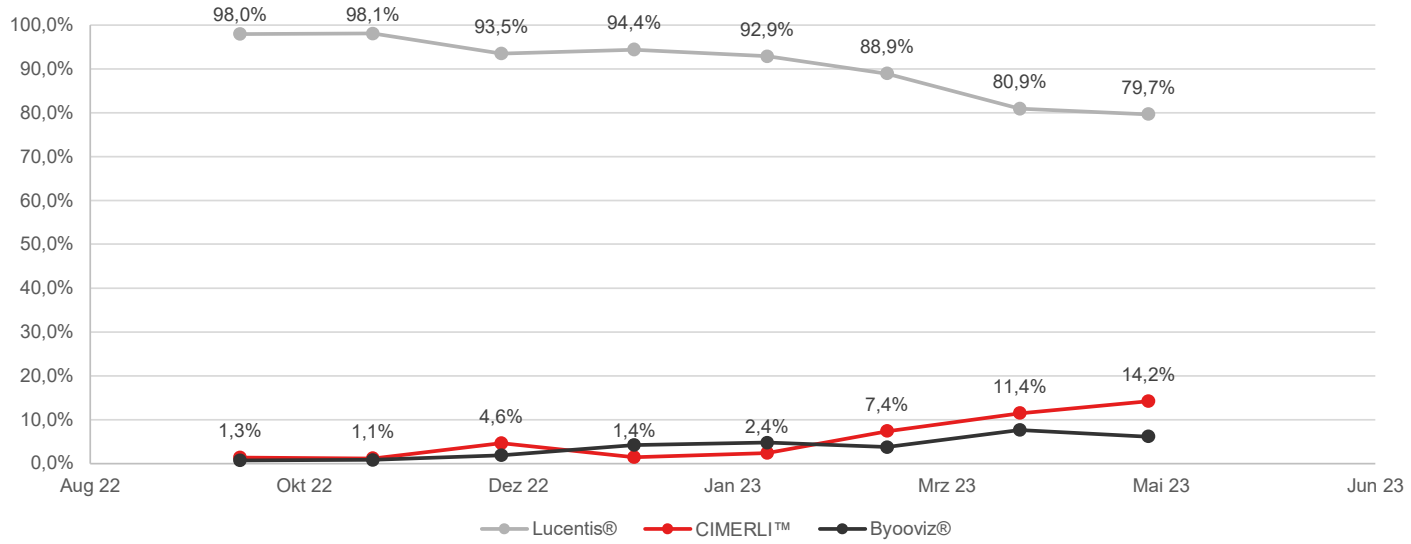
Market share development Ongavia in Great Britain



Source: Formycon AG, Warburg Research

Looking at market share development of Ongavia in the United Kingdom, the upwards growth trend is clearly observable. After introduction, Ongavia's market share increased from less than 1% in July 2022 to 43% in May 2023. It took only 10 months for this strong increase in market share, with further growth potential in the future.

Market share development CIMERLI™ in the US



Source: Formycon AG, Warburg Research

The same trend can be observed in the US market: Cimerli's market share has grown from 1.3% in October 2022 to around 14% only seven months later in May 2023, while Lucentis' market share has continuously dropped since then. Furthermore, Cimerli also outperforms its direct competition, meaning other biosimilar products that are offered as alternative for Lucentis.

Analysis of Return on Capital

- FYB's balance sheet is dominated by intangible assets, consisting mainly of the value of biosimilar candidates in development
- Sales and EBIT margin step-up expected for 2026, as sales of FYB202 (reference product: Stelara) are transforming the earnings potential
- Biosimilar development costs become balance-sheet activated R&D expenditure after TPoS (2-3 years after project start). We expect higher intangible asset capex after 2026e to fuel development of new projects.

Balance-sheet structure

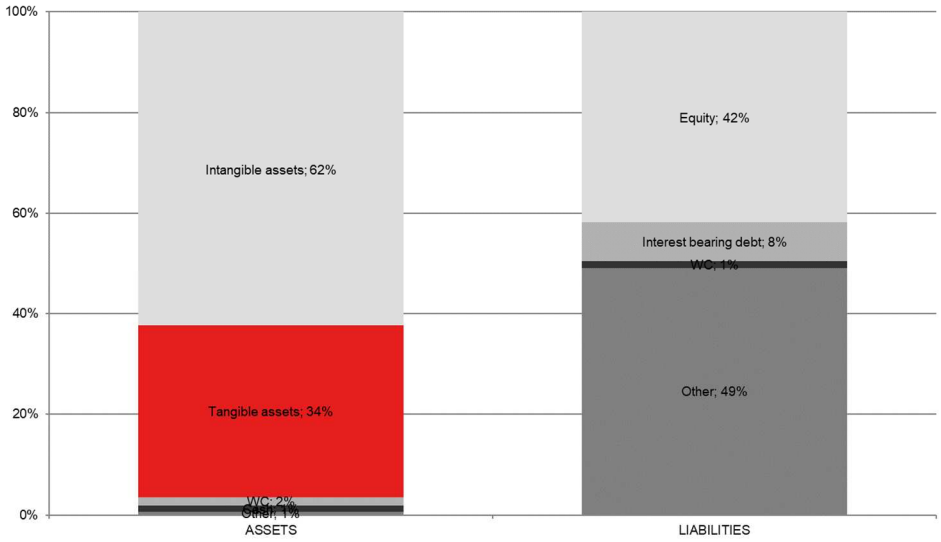
Formycon boasts a healthy balance sheet with a high equity ratio of 42%. On the asset side, the largest position is intangible assets which represent activated R&D expenses and book values of the company's various biosimilar candidates in development.

Intangible assets consist of a total EUR 533m book value which is split into EUR 488m intangibles and EUR 45m goodwill. The value of EUR 488m is associated with the FYB202 project which was transferred to Formycon after the acquisition of FYB202 Project GmbH.

Tangible assets consist mainly of financial assets which originate from the ownership of BioEq AG and a Loan-receivable against BioEq AG.

Other liabilities consist of earn-out obligations towards Athos KG resulting from the FYB201 transaction and a shareholder loan.

Balance-sheet structure (FY 2022)

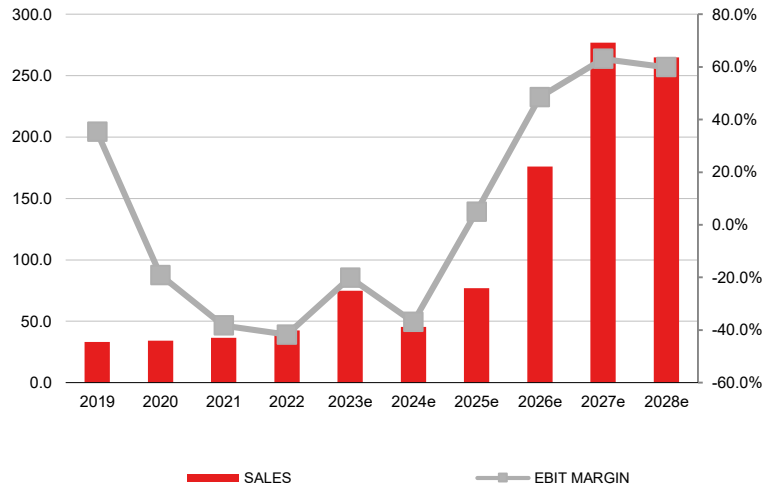


Source: Company data, Warburg Research

Sales step-up expected for 2026

FBY and its partners currently sell FYB201 in the US and some ex-US regions, giving the company's top line an encouraging early boost. We expect a market entry of FYB202, Formycon's Stelara biosimilar, no later than April 2025, which will improve the top line and bottom line significantly. We expect the EBIT margin to remain on a high level in subsequent years as most of the development costs of FYB206, FYB208 and FYB209 are accounted for under capex spending (see below).

Sales and EBIT-margin development



Source: Company data, Warburg Research

Capex spending to increase in 2025

As biosimilars have a high probability of success once they reach the TPoS stage, Formycon is required to activate most of the (75%) developmental expenses for the respective products on its balance sheet and only 25% of those R&D costs will be visible in the P&L (see below).

R&D expenses will be activated on Formycon's balance sheet

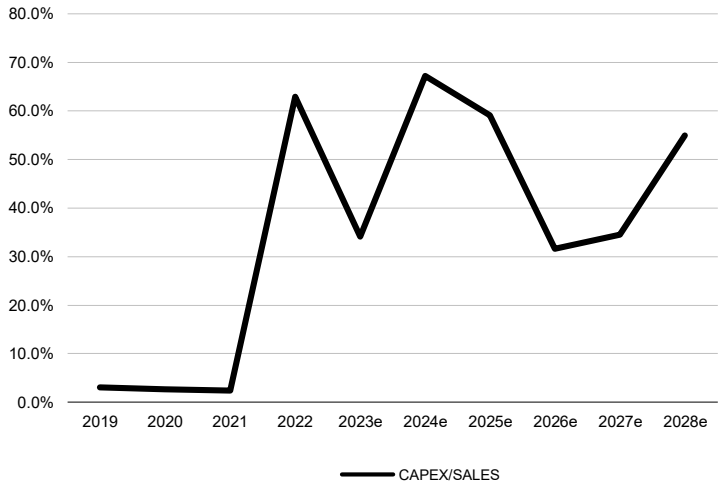
Developmental costs	2023	2024	2025	2026	2027	2028	2029	2030	2031
FYB206 until TPoS									
FYB206 from TPoS	10.0	10.0	30.0	55.0	35.0	15.0	10.0		
FYB208 until TPoS			10.0	20.0					
FYB208 from TPoS					30.0	65.0	65.0	10.0	
FYB209 until TPoS			10.0	20.0					
FYB209 from TPoS					30.0	65.0	65.0	10.0	
booked in P&L	**0.0**	**0.0**	**20.0**	**40.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
booked only in CAPEX	**10.0**	**10.0**	**30.0**	**55.0**	**95.0**	**145.0**	**140.0**	**20.0**	**0.0**
total CAPEX	**25.6**	**30.6**	**45.6**	**55.6**	**95.6**	**145.6**	**140.6**	**20.6**	**25.6**

TPoS: technical proof of similarity; Source: Warburg Research

Biosimilar development cost will be funnelled through capex

As a result, capex is expected to remain volatile over course of the next years but will be closely associated with specific developmental projects for biosimilars. According to our calculations, Formycon will be able to fund its investments from its own operating CF between 2026 and 2028.

Capex/sales ratio



Source: Company data, Warburg Research

Growth / Markets

- Biosimilars could bring in up to USD 100bn in annual drug costs savings for developed healthcare systems in 2027, giving developed nations a huge incentive to favour the rapid deployment of biosimilars
- The global biosimilar market is expected to grow to USD 74bn in 2030
- As an emergent biosimilar player, FYB will be able to capture a good chunk of this growth and we expect it to grow 35.66% in the period 22-28e
- After initial scepticism, biosimilars experienced rapid uptake rates by doctors in the US and EU and competitive prices will drive a rapid uptake of the drug class

In terms of regulation, the US and EU have paved the way for a rapid biosimilar uptake

Market forces for biosimilars

Biosimilars are cheaper versions of already established biologics drugs. The main rationale behind the introduction of biosimilars is to increase competition which directly results in reduced prices. Biosimilars are typically discounted by 40% in the first year in comparison to the reference product and continued pricing pressure leads to continued price discounts.

The main driving force behind the rapid uptake of biosimilars is the effort of public and private health insurers to combat sky-rocketing healthcare costs in the developed world. In Germany, drug costs amount to 15% of the nation's EUR 474bn annual healthcare expenditure.

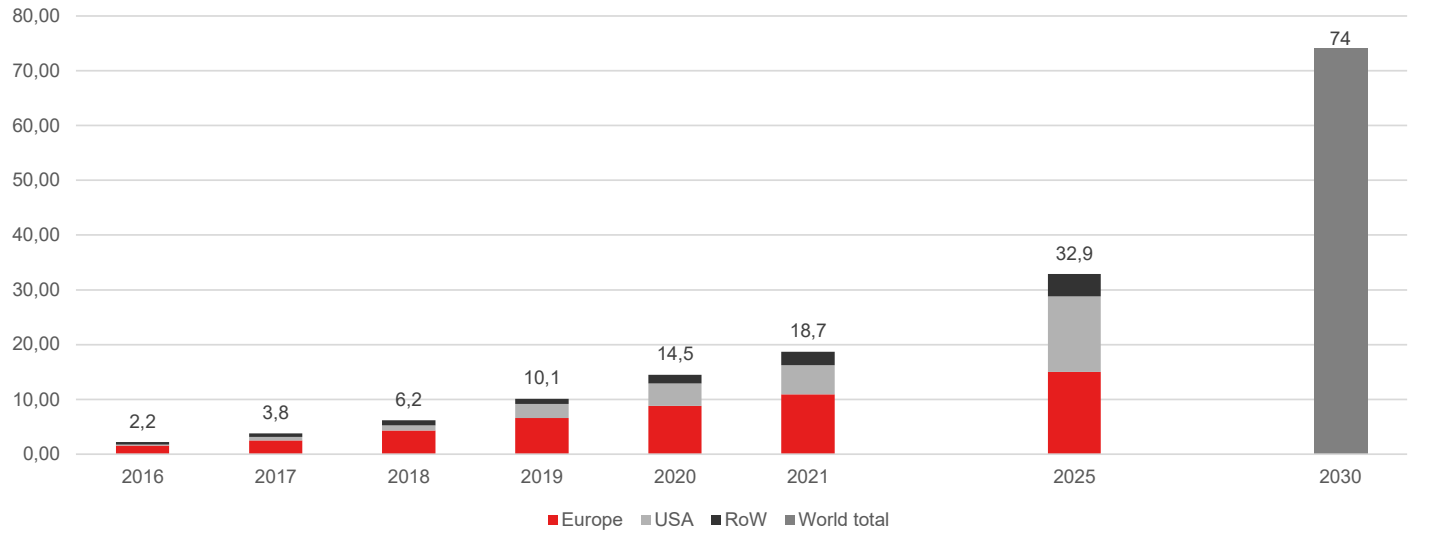
As a result of these cost developments, the EU and USA have implemented regulatory measures to promote the use of biosimilars: the FDA launched its Biosimilar Action Plan (BAP) in 2018. This plan implements the Biologics Price Competition and Innovation Act of 2009 and lays out the respective framework for biosimilar approval in the US, shortening approval procedures and timeframes. In the EU, which pioneered the use of biosimilars, biosimilar medicines are regulated in a similar fashion. Most importantly, the European Medicines Agency (EMA) and Heads of Medicines Agencies (HMA) have emphasized that approved biosimilars are interchangeable with their respective reference product, opening the door for biosimilars in the market.

Both major healthcare agencies, the FDA and EMA, actively promoted the use and development of biosimilars for their respective regions.

Biosimilars: market potential

The bar-chart below shows the growth potential of the biosimilar market until 2030. Biosimilars are the fastest growing segment of the pharmaceutical industry with total worldwide revenue increasing from USD 2.2bn in 2016 to USD 18.7bn in 2021. Worldwide revenue is expected to increase further to USD 32.9bn in 2025 and USD 74bn in 2030. The US market showed the highest growth with a CAGR of 97% between 2015 and 2021. Over the same time horizon, Europe grew at a CAGR of 48%, while the rest of the world combined had a CAGR of 39%. Even though forecasts predict lower growth until 2025, the USA is expected to remain in the top position with a CAGR of 26% between the years 2021 and 2025.

General overview biosimilar performance EU vs USA in USD bn



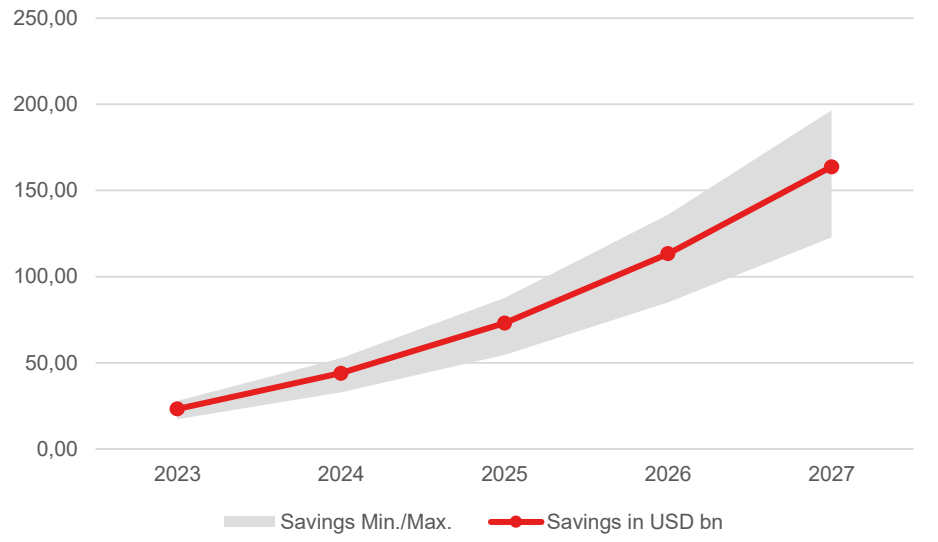
Source: Formycon AG, Warburg Research

Biosimilars offer significant healthcare savings

Samsung Bioepsis is a biosimilar-focused subsidiary of Samsung Biologics. Samsung Biologics is a major pharmaceutical company with a market capitalization of EUR 37bn.

According to Samsung Bioepsis, the initial biosimilar sticker price of Lucentis biosimilars was 30% to 42% below the refence products selling price at the time of market entry. Because of increased competition, the combined average selling price (ASP) of biosimilars is set to decline in the first three years after the first biosimilars enter the market. High sticker price indications such as oncology in some cases even saw a 77% decline in ASP during the first three years post biosimilar competition entry. These ASP reductions will yield significant savings for global healthcare systems as forecast by as forecast by US-based pharmaceutical market research institute, IQVIA.

Potential savings of biosimilars from IQVIA

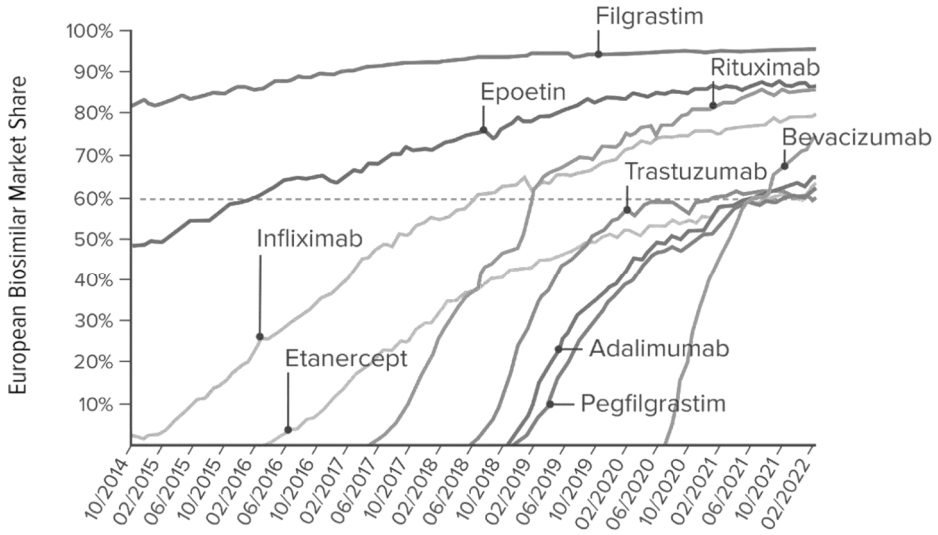


Source: IQVIA Market Prognosis, Warburg Research

The cumulative reduction in drug spend for classes with biosimilar competition is estimated to have been USD 21bn over the past six years. Annual savings from biosimilars could exceed USD 100bn in the years 2026 and 2027. By that time, biosimilars will be available for some of the currently best-selling biologic medicines. The potential savings will provide many more people worldwide with access to highly effective biopharmaceutical therapies.

This five-year savings scenario predicts total savings of USD 383bn in the base case with a min/max range between USD 290bn and USD 476bn.

Biosimilar market performance in Europe

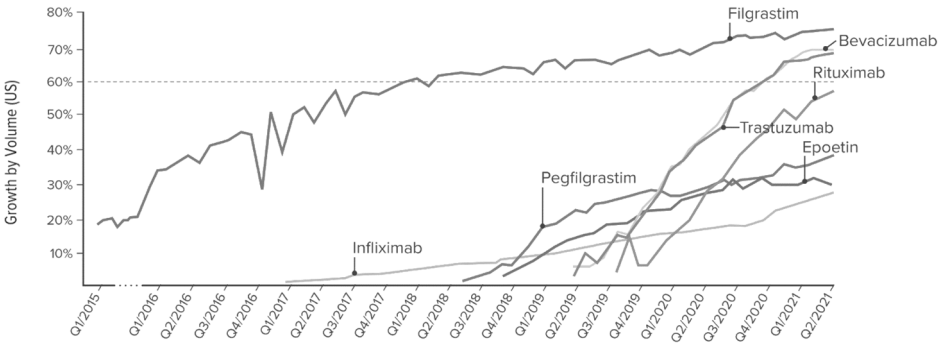


Source: AMGEN 2022 Biosimilar Trend Report, Company data, Warburg Research

Biosimilar cost savings drive rapid uptake

In Europe, biosimilars have experienced a rapid uptake after their respective initial market entry and have, in some cases, replaced 90% of the original drug's market share. Today, most biosimilars hover around a market share of 60%, the rest is still occupied by the reference product. On average, after three years the biosimilar market share was 75%. Additionally, first-to-launch biosimilars tend to capture a greater portion of the segment compared to later entrants.

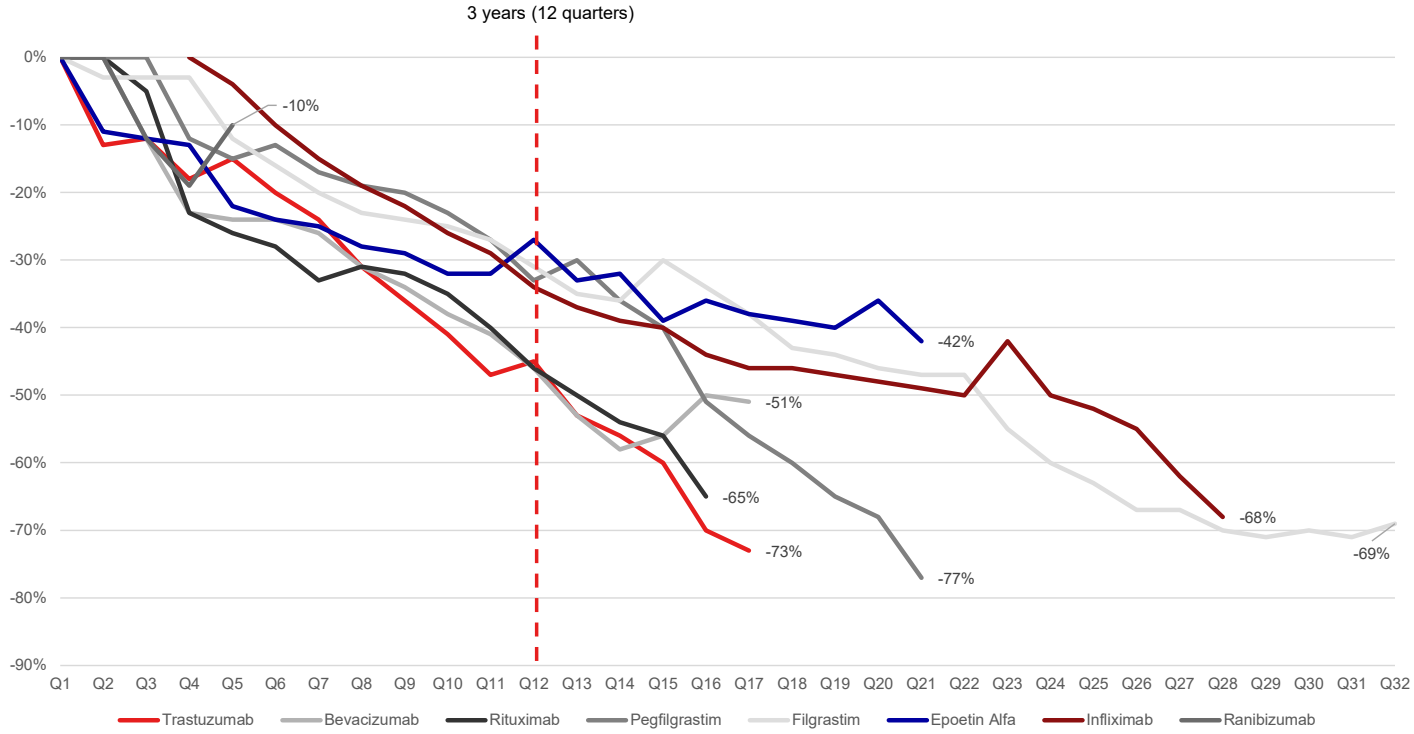
Biosimilar market performance in the US



Source: AMGEN 2022 Biosimilar Trend Report, Company data, Warburg Research

In the US, the market uptake rate of biosimilars has been sluggish. In general, the US has lagged behind Europe in terms of biosimilars legislation, with the legal framework for their approval only put into place in 2009. In Europe this was established in 2003. But, as we can see above, the uptake rate has normalized on a high level in recent years. Newly introduced biosimilars experience a rapid market uptake and can boast market shares of around 60% three years after market entry.

Biosimilars are reducing drug costs across multiple therapeutic areas by lowering prices



Source: Samsung Bioepis Biosimilar Market Report Q3 2023, Warburg Research

Obviously, the main differentiator of biosimilars is their heavy price discount compared to the reference products, driven mostly by increased competition and the significantly lower developmental risk profile than innovative products.

On average, three years after market launch, biosimilars offer a 40% discount compared to the actual selling price (ASP) of the reference product. This discount extends further as more and more competitors enter the market, driving the price down -60% after five years.

As a result of this price pressure and emerging innovative competition, biosimilar peak sales are typically achieved after three years in the market. Therefore, only the first three to four market participants can significantly profit from the liberalization of the drug market.

Markets / Financials

- We have constructed price/quantity models for FYB201, FYB202; FYB203 and FYB206, which include our price decline and market-size decline assumptions for the respective generic biosimilar markets
- We assume that FYB208 and FYB209 will have the same commercial scope as FYB202 (reference product: Stelara)
- Based on our models, we expect that FYB will be able to generate sales of EUR 77.0m in 2025 and 176.0m in 2026.

Biosimilar market forecasts

We have opted to forecast FYB's revenue potential based on the established markets of the respective reference products of FYB201, FYB202, FYB203 and FYB206. Based on FY 2022 reported sales of Lucentis, Stelara, Eylea as well as Keytruda and the reported ASPs, we have devised a simple price-quantity model to calculate the units sold annually.

As described above, biosimilars are subject to considerable pricing pressure once they reach the market. In some cases, prices start to drop even before biosimilars enter the market (see Lucentis sales 2021 vs 2022). Hence, we have modelled an initial 40% discount for Formycon's biosimilars once they reach the market. This primary discount subsequently culminates in an average discount of 60% five years after the entry of biosimilar competition. In addition, we expect that six years after the loss of patent exclusivity, the number of units sold also decreases as a result of innovative new drugs entering the market and displacing the older, less effective drugs.

Historical data for the US and EU biosimilar uptake rate indicates that biosimilars reach around 60% market share after two to three years. Consequently, we assume the 60% market share will be divided between the emergent biosimilar players.

As a result, we expect that biosimilar players will generally see their respective products sales peak three years after market launch. Below, we show our detailed product sales and FYB participation forecast for the currently marketed products or named candidates in development.

FYB201

FYB201 – Reference product: Lucentis

Lucentis is a ranibizumab biosimilar candidate, used for adults to treat eye diseases in which endothelial growth factors cause excessive formation of blood vessels in the retina, resulting in progressive loss of central vision. The respective patents in the US and in the EU already expired in 2020 and 2022.

The product is sold by Novartis and generated sales of USD 2.9bn in 2022, of which USD 1.1bn were generated in the US and USD 1.8bn in ex-US regions, mainly Europe. Based on an ASP of EUR 1.331 per syringe we assume that around 2.2m units are sold annually.

Formycon has marketing partners for each region: Coherus Biosciences is responsible for US sales, Teva and MS Pharma are targeting ex-US regions and MENA. Marketing will initially focus on the US and Europe, while MENA and Australia will remain potential expansion targets once approval has been granted.

Currently, two major competitors are expected to be active in this market besides originator Novartis: Samsung Biologics and Xbrane. Coherus Bioscience forecasts that the company will generate FYB201 sales of above USD 100m in the US in 2023.

FYB201 market forecasts

FYB201 (Lucentis)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
US (EUR)													
Total units p.a.	830,158	838,459	846,844	855,312	863,866	431,933	215,966	107,983	53,992	26,996	13,498	6,749	3,374
YoY	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%	-50%	-50%	-50%
Market share	**15%**	**25%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**
Units sold Partner	124,524	209,615	254,053	256,594	259,160	129,580	64,790	32,395	16,197	8,099	4,049	2,025	1,012
Price per unit (EUR)	1,210	1,029	926	833	750	675	607	547	492	443	398	359	323
YoY	-32%	-15%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
US Sales Partner	150.7	215.6	235.2	213.8	194.3	87.4	39.3	17.7	8.0	3.6	1.6	0.7	0.3
US Profit margin	8%	9%	11%	13%	15%	15%	15%	15%	15%	15%	15%	15%	15%
US Profit FYB	12.1	19.4	25.9	27.8	29.1	13.1	5.9	2.7	1.2	0.5	0.2	0.1	0.0
ex-US (EUR)													
Total units p.a.	1,370,443	1,384,148	1,397,989	1,411,969	1,426,089	1,440,350	720,175	360,087	180,044	90,022	45,011	22,505	11,253
YoY	1%	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%	-50%	-50%
Market share	**1%**	**15%**	**25%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**	**30%**
Units sold Partner	13,704	207,622	349,497	423,591	427,827	432,105	216,052	108,026	54,013	27,007	13,503	6,752	3,376
Price per unit (EUR)	1,210	1,029	926	833	750	675	607	547	492	443	398	359	323
YoY	-32%	-15%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%	-10%
ex-US Sales Partner	16.6	213.5	323.5	352.9	320.8	291.6	131.2	59.0	26.6	12.0	5.4	2.4	1.1
ex-US Profit margin	8%	9%	11%	13%	15%	15%	15%	15%	15%	15%	15%	15%	15%
ex-US Profit FYB	1.3	19.2	35.6	45.9	48.1	43.7	19.7	8.9	4.0	1.8	0.8	0.4	0.2
Sum Revenue for FYB	**13.4**	**38.6**	**61.5**	**73.7**	**77.3**	**56.9**	**25.6**	**11.5**	**5.2**	**2.3**	**1.0**	**0.5**	**0.2**

Red boxes indicate expected effective market entry points; Source: Warburg Research

As of May 2023, Ongavi (trade name of FYB201 in UK) boasted a market share of 43.1% in the UK and Cimerli (trade name of FYB201 in US) had a market share of 14.2%. Based on the above-mentioned assumptions for biosimilar market developments (discount development and emergence of new medicines) and existing competition, we expect FYB201 to reach a peak market penetration of 30% in 2025 in the US and in 2026 in ex-US regions. Consequently, we forecast that FYB201 will reach peak sales of EUR 235.2m in 2025 in the US and EUR 352.9m in 2026 in ex-US. We further assume, that Formycon will receive effective royalties of initially 8%, which will increase to 15% peak royalty rate in the subsequent years.

As a result, we forecast that FYB will receive peak royalties of EUR 73.7m in 2026, which is to be distributed 40:60 between the revenue and at-equity P&L items. Formycon books 60% of its share on its at-equity P&L item because of the 50% ownership of BioEq, which was transferred from Athos KG during the latest capital increase against contribution in kind.

Formycon has transferred its global marketing rights to Fresenius Kabi and retains semi-exclusive rights for Germany, parts of MENA and Latin America, where it may choose to market FYB202 in parallel to Fresenius Kabi using its own sales team. However, as this would require investment in dedicated local M&S infrastructure and as FYB would seem to favour an asset-light business model in our view, we chose to assume that Fresenius Kabi will remain the sole distributor of FYB202. Based on this deal structure, we expect that FYB will receive an effective royalty rate of initially 35% in net sales of FYB202, which will decline to 30% once sales reach certain thresholds.

FYB202

FYB202 – Reference product: Stelara

Stelara is a ustekinumab biosimilar candidate, which is a human monoclonal antibody that targets the cytokines interleukin-12 and interleukin-23 and is used to treat various severe inflammatory diseases such as moderate to severe psoriasis. The respective patents will expire in 09/2023 in the US and in 07/2024 in the EU.

Stelara is sold by J&J and generated US sales of USD 6.4bn and ex-US sales of USD 3.3bn in 2022.

FYB202 market forecasts

FYB202 (Stelara)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
US (EUR)													
Total units p.a.	253,045	255,575	258,131	260,712	263,319	265,952	132,976	66,488	33,244	16,622	8,311	4,156	2,078
YoY	1%	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%	-50%	-50%
Market share	**0%**	**0%**	**1%**	**7%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**
Units sold Partner	0	0	2,581	18,250	31,598	31,914	15,957	7,979	3,989	1,995	997	499	249
Price per unit (EUR)	23,411	23,645	14,187	12,768	11,747	10,807	9,943	9,147	8,415	7,742	7,123	6,553	6,029
YoY	1%	1%	-40%	-10%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%
US Sales Partner	0.0	0.0	36.6	233.0	371.2	344.9	158.7	73.0	33.6	15.4	7.1	3.3	1.5
US Profit margin	0%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
US Profit FYB	0.0	0.0	12.8	81.6	129.9	120.7	55.5	25.5	11.7	5.4	2.5	1.1	0.5
ex-US (EUR)													
Total units p.a.	529,477	534,772	540,120	545,521	550,976	556,486	562,051	281,026	140,513	70,256	35,128	17,564	8,782
YoY	1%	1%	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%	-50%
Market share	**0%**	**0%**	**1%**	**7%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**
Units sold Partner	0	0	5,401	38,186	66,117	66,778	67,446	33,723	16,862	8,431	4,215	2,108	1,054
Price per unit (EUR)	5,876	5,935	3,561	3,205	2,948	2,713	2,496	2,296	2,112	1,943	1,788	1,645	1,513
YoY	1%	1%	-40%	-10%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%
ex-US Sales Partner	0.0	0.0	19.2	122.4	194.9	181.1	168.3	77.4	35.6	16.4	7.5	3.5	1.6
ex-US Profit margin	0%	0%	35%	33%	30%	30%	30%	30%	30%	30%	30%	30%	30%
ex-US Profit FYB	0.0	0.0	6.7	40.4	58.5	54.3	50.5	23.2	10.7	4.9	2.3	1.0	0.5
Sum Revenue for FYB	**0.0**	**0.0**	**19.5**	**121.9**	**188.4**	**175.1**	**106.0**	**48.8**	**22.4**	**10.3**	**4.7**	**2.2**	**1.0**

Red boxes indicate expected effective market entry points; Source: Warburg Research

The currently visible competitive landscape includes: Alvotech, Amgen, Celltrion, Meiji Selka Pharma and Samsung Bioepsis.

We expect an effective market entry of FYB202 in the US and ex-US jurisdictions in 2025. Based on the number of competitors, we assume that FYB will be able to reach a market share of 12% in 2027. Based on our royalty rate assumption detailed above, we expect that FYB will be able to receive peak royalties of EUR 188.4m in 2027 from the sales of FYB202.

FYB203

FYB203 – Reference product: Eylea

Eylea, as an aflibercept biosimilar works as a human, recombinant fusion protein that binds to placental growth factor (PLGF) in addition to vascular endothelial growth factor (VEGF-A). Aflibercept thus suppresses the formation of blood vessels in the retina that worsen vision. Like Lucentis, Eylea is injected directly into the vitreous body of the eye. The respective patents will expire in 05/2024 in the US and in 05/2025 in the EU.

Eylea is currently marketed by Regeneron and generated US sales of USD 6.3bn and ex-US sales of USD 3.4bn in 2022.

The project rights lie with Klinge Biopharma and FYB will receive royalties on net sales of the product. The two have signed a commercial partnership with Coherus BioScience for marketing in the US and are currently looking for a commercial partner for ex-US regions. Based on this deal structure, we expect that FYB will receive an effective royalty rate of initially 8% in net sales of FYB203, which will increase to 12% once sales reach certain thresholds.

The currently visible competitive landscape includes: Avlotech, Amgen, Biocon, Celltrion, Samsung Bioepsis, SamChung Dang, Sandoz

FYB203 market forecasts

FYB203 (Eylea)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
US (EUR)													
Total units p.a.	3,419,805	3,454,003	3,488,543	3,523,429	3,558,663	3,594,250	3,630,192	3,666,494	1,833,247	916,624	458,312	229,156	114,578
YoY	1%	1%	1%	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%
Market share	**0%**	**0%**	**1%**	**7%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**
Units sold Partner	0	0	34,885	246,640	427,040	431,310	435,623	439,979	219,990	109,995	54,997	27,499	13,749
Price per unit (EUR)	1,699	1,716	1,029	926	852	784	721	664	611	562	517	475	437
YoY	1%	1%	-40%	-10%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%
US Sales Partner	0.0	0.0	35.9	228.5	364.0	338.2	314.3	292.0	134.3	61.8	28.4	13.1	6.0
US Profit margin	0%	0%	8%	10%	12%	12%	12%	12%	12%	12%	12%	12%	12%
US Profit FYB	0.0	0.0	2.9	22.8	43.7	40.6	37.7	35.0	16.1	7.4	3.4	1.6	0.7
ex-US (EUR)													
Total units p.a.	3,108,116	3,139,198	3,170,590	3,202,296	3,234,318	3,266,662	3,299,328	3,332,322	1,666,161	833,080	416,540	208,270	104,135
YoY	1%	1%	1%	1%	1%	1%	1%	1%	-50%	-50%	-50%	-50%	-50%
Market share	**0%**	**0%**	**0%**	**1%**	**7%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**	**12%**
Units sold Partner	0	0	0	32,023	226,402	391,999	395,919	399,879	199,939	99,970	49,985	24,992	12,496
Price per unit (EUR)	1110	1,121	1,132	679	611	563	518	476	438	403	371	341	314
YoY	1%	1%	1%	-40%	-10%	-8%	-8%	-8%	-8%	-8%	-8%	-8%	-8%
ex-US Sales Partner	0.0	0.0	0.0	21.8	138.4	220.5	204.9	190.4	87.6	40.3	18.5	8.5	3.9
ex-US Profit margin	0%	0%	0%	8%	10%	12%	12%	12%	12%	12%	12%	12%	12%
ex-US Profit FYB	0.0	0.0	0.0	1.7	13.8	26.5	24.6	22.8	10.5	4.8	2.2	1.0	0.5
Sum Revenue for FYB	**0.0**	**0.0**	**2.9**	**24.6**	**57.5**	**67.0**	**62.3**	**57.9**	**26.6**	**12.2**	**5.6**	**2.6**	**1.2**

Red boxes indicate expected effective market entry points; Source: Warburg Research

We expect that FYB203 will enter the market in a significant manner in 2025 in the US and in 2026 in ex-US regions. Looking at the emergent competitive landscape, we assume that FYB and its partners will be able to gain a peak market share of 12% in the US and ex-US regions. Based on our general biosimilar market development model framework, we expect that FYB will be able to receive peak royalties of EUR 67.0m in 2028.

FYB206 – the game-changer

FYB206 – Reference product: Keytruda

Keytruda - scientific name: pembrolizumab - is a humanized monoclonal antibody that belongs to the immune checkpoint inhibitors and is used to treat a variety of tumours. Pembrolizumab binds to the PD-1 receptor and specifically blocks the interaction between PD-1 and its ligand PD-L1. This helps the immune system to activate the body's own cellular anti-tumour immune response and kill melanoma cells, for example. In addition to advanced malignant melanoma (black skin cancer), pembrolizumab can also be used for non-small cell lung cancer and classical Hodgkin's lymphoma (malignant disease of the lymphatic system). Patents are expected to expire in 2029 in the US and 2030 in the EU.

Keytruda is the world's top-selling drug and generated US sales of USD 12.7bn and ex-US sales of USD 8.3bn in 2022. **In line with this success, we see FYB206 as Formycon's most important asset.**

FYB206 has passed the Technical Proof of Similarity stage. FYB206 is currently in the process and manufacturing development phase and Formycon is preparing the drug for the start of clinical phases. Based on average development times of seven years, we expect that FYB206 will reach the US market in 2030 and the ex-US market in 2031, one year after the expiry of the respective patent protections.

Formycon currently has no development or commercialization partner. We expect Formycon to foot the development bill of EUR 200m over the next seven years and in the meantime will look for a commercialization partner that will take over marketing and sales. Based on this strategy, we estimate that FYB will be able to receive peak royalties of 40% once the product has hit the market.

FYB206 market forecasts

FYB206 (Keytruda)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
US (EUR)													
Total units p.a.	2,229,487	2,251,782	2,274,299	2,297,042	2,320,013	2,343,213	2,366,645	2,390,311	2,414,215	2,438,357	2,462,740	2,487,368	1,243,684
YoY	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-50%
Market share	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**2%**	**6%**	**10%**	**10%**	**10%**	**10%**
Units sold Partner	0	0	0	0	0	0	0	47,806	144,853	243,836	246,274	248,737	124,368
Price per unit (EUR)	5,277	5,330	5,383	5,437	5,491	5,546	5,601	3,361	3,025	2,783	2,560	2,355	2,167
YoY	1%	1%	1%	1%	1%	1%	1%	-40%	-10%	-8%	-8%	-8%	-8%
US Sales Partner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	160.7	438.1	678.5	630.5	585.9	269.5
US Profit margin	0%	0%	0%	0%	0%	0%	0%	40%	40%	40%	40%	40%	40%
US Profit FYB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.3	175.3	271.4	252.2	234.3	107.8
ex-US (EUR)													
Total units p.a.	2,547,383	2,572,857	2,598,586	2,624,572	2,650,817	2,677,326	2,704,099	2,731,140	2,758,451	2,786,036	2,813,896	2,842,035	2,870,455
YoY	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Market share	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**2%**	**6%**	**10%**	**10%**	**10%**
Units sold Partner	0	0	0	0	0	0	0	0	55,169	167,162	281,390	284,204	287,046
Price per unit (EUR)	3,004	3,034	3,064	3,095	3,126	3,157	3,189	3,220	1,932	1,739	1,600	1,472	1,354
YoY	1%	1%	1%	1%	1%	1%	1%	1%	-40%	-10%	-8%	-8%	-8%
ex-US Sales Partner	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	106.6	290.7	450.2	418.3	388.7
ex-US Profit margin	0%	0%	0%	0%	0%	0%	0%	0%	40%	40%	40%	40%	40%
ex-US Profit FYB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.6	116.3	180.1	167.3	155.5
Sum Revenue for FYB	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**64.3**	**217.9**	**387.7**	**432.3**	**401.7**	**263.3**

Red boxes indicate expected effective market entry points; Source: Warburg Research

The competitive landscape is currently unknown. We would assume that the usual suspects (Avlotech, Amgen, Biocon, Celltrion, Samsung Bioepsis, SamChung Dang, Sandoz, etc.) will take an interest in developing a biosimilar for Keytruda based on the huge market opportunity alone. We expect that at least nine other players besides FYB will be active in the biosimilar portion of the future Keytruda market. Based on the assumption that Formycon will be an important biosimilar player of considerable importance by 2030, we estimate that FYB will be able to gain up to 10% of the resulting market.

In line with our other models, we further estimate, that Keytruda and its biosimilars will lose oncology market share from 2035 onward – the end of our forecast period - to make way for more effective drugs.

Based on these assumptions, we calculate that FYB will be able to generate peak royalties of EUR 432.3m in 2033.

Revenues from FYB201 will be divided between sales and at-equity income

Summary of revenues

Formycon has disclosed that the company is currently developing FYB206, FYB208 and FYB209. While FYB206 has been revealed to be Keytruda, we only know that FYB208 and FYB209 will biosimilars for diseases in the field of immunology. As we forecast the developmental costs below and include those in our DCF valuation, we decided to assume that FYB208 and FYB209 will be on a similar commercial level as FYB202, Stelara.

In the following table, we have summarized our sales estimates for FYB until 2035. Please note, that revenues from FYB201 are split up into sales (40%) and at-equity income (60%).

In addition to milestone payments from partners, Formycon also receives compensation payments from partners for R&D efforts: FYB develops an improved application pen (syringe) for FYB201 and executes development packages for Klinge Pharma in connection with the market preparation of FYB203.

Sales and at-equity payments overview

Sales overview	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
FYB201	13.4	38.6	61.5	73.7	77.3	56.9	25.6	11.5	5.2	2.3	1.0	0.5	0.2
of which At Equity	*8.0*	*23.2*	*36.9*	*44.2*	*46.4*	*34.1*	*15.4*	*6.9*	*3.1*	*1.4*	*0.6*	*0.3*	*0.1*
FYB202	0.0	0.0	19.5	121.9	188.4	175.1	106.0	48.8	22.4	10.3	4.7	2.2	1.0
FYB203	0.0	0.0	2.9	24.6	57.5	67.0	62.3	57.9	26.6	12.2	5.6	2.6	1.2
FYB206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.3	217.9	387.7	432.3	401.7	263.3
FYB208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.9	63.6	113.5	131.6	122.3
FYB209	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0	70.2	125.7	143.0	132.8
Sum	13.4	38.6	83.9	220.2	323.2	299.0	193.9	182.4	334.0	546.4	683.0	681.5	520.9
Revenue	5.4	15.4	47.0	176.0	276.8	264.8	178.6	175.5	330.9	545.0	682.3	681.2	520.7
At Equity	*8.0*	*23.2*	*36.9*	*44.2*	*46.4*	*34.1*	*15.4*	*6.9*	*3.1*	*1.4*	*0.6*	*0.3*	*0.1*
Milestones	40.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ext. R&D compensation	29.6	15.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales	**75.0**	**45.4**	**77.0**	**176.0**	**276.8**	**264.8**	**178.6**	**175.5**	**330.9**	**545.0**	**682.3**	**681.2**	**520.7**

Source: Warburg Research

Warburg vs. consensus

In comparison to consensus estimates –made up of five brokers (WRe not included) – our top-line expectations are lower than the consensus. As we anticipate a similar cost structure over the near term, our EBIT expectations are consequently below consensus median estimates. In summary, we expect a slower biosimilar market entry than the market.

Warburg vs. consensus estimates (median)

	Consensus			Warburg Research			Deviation (WRe vs. Consensus)		
Year	2023	2024	2025	2023	2024	2025	2023	2024	2025
Sales	80.1	66.7	90.0	75.0	45.4	77.0	-6.3%	-31.9%	-14.4%
Gross profit	33.26	36.70	52.49	20.0	18.7	39.8	-39.9%	-49.1%	-24.2%
margin %	*41.5%*	*55.0%*	*58.3%*	*26.7%*	*41.1%*	*51.7%*			
EBITDA	-10.0	-3.2	28.0	-13.0	-9.6	22.0	30.1%	203.4%	-21.4%
margin %	*-12.5%*	*-4.8%*	*31.1%*	*-17.3%*	*-21.2%*	*28.6%*			
EBIT	-12.4	-5.4	22.2	-15.0	-16.8	3.9	21.4%	210.5%	-82.5%
margin %	*-15.4%*	*-8.1%*	*24.7%*	*-20.0%*	*-36.9%*	*5.0%*			

Source: FactSet, Warburg Research

Valuation

- DCF-based valuation yields a fair value of EUR 1,244m or EUR 96.50 per share, which is the basis of our PT of EUR 97.00
- We utilize a comparatively higher WACC to account for the residual development risk of Formycon's biosimilar portfolio (discount factor: 10.96%)

Overview

To determine the fair value of Formycon, we have chosen a classic DCF-based approach. Some consensus participants have opted to take an rNPV-based approach to value FYB. As the probability of success for Formycon's products is very high once they reach their developmental and cost inflection point (probability of success after Phase I: >90%), we decided to instead apply a higher discount factor to FYB's model to reflect the residual development risk.

Our model implies an EBIT margin of 77.9% in 2035. To calculate the terminal value, we decided to assume a terminal EBIT margin of 67.9% to account for the continued pricing pressure we are expecting for biosimilars in the next years.

Our DCF-derived PT is EUR 97.00 per share

DCF valuation

- We apply a beta of 1.60, reflecting the residual developmental risk of biosimilar projects. In addition, we apply higher factors for liquidity as the average trading volume of the share is still comparably low.
- Assuming a risk-free rate of 2.75% and a market return of 8.25%, we calculate cost of equity at 11.55%.
- For the calculation of WACC, we assume a cost of debt of 8.00% and a target debt ratio of 10.00%, resulting in WACC of 10.96%.

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	75.0	45.4	77.0	176.0	276.8	264.8	178.6	175.5	330.9	545.0	682.3	681.2	520.7	
Sales change	*76.5 %*	*-39.4 %*	*69.4 %*	*128.6 %*	*57.3 %*	*-4.3 %*	*-32.6 %*	*-1.7 %*	*88.5 %*	*64.7 %*	*25.2 %*	*-0.2 %*	*-23.6 %*	*2.5 %*
EBIT	-15.0	-16.8	3.9	85.4	174.6	158.7	65.8	56.8	213.5	428.4	566.4	565.9	405.9	
EBIT-margin	*-20.0 %*	*-36.9 %*	*5.0 %*	*48.5 %*	*63.1 %*	*59.9 %*	*36.9 %*	*32.4 %*	*64.5 %*	*78.6 %*	*83.0 %*	*83.1 %*	*77.9 %*	
Tax rate (EBT)	*-71.8 %*	*7.8 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	
NOPAT	-25.8	-15.5	2.9	64.1	130.9	119.0	49.4	42.6	160.1	321.3	424.8	424.4	304.4	
Depreciation	2.0	7.1	18.1	36.0	37.2	40.8	47.2	52.9	51.0	49.6	48.2	47.0	45.8	
in % of Sales	*2.7 %*	*15.7 %*	*23.5 %*	*20.4 %*	*13.5 %*	*15.4 %*	*26.4 %*	*30.1 %*	*15.4 %*	*9.1 %*	*7.1 %*	*6.9 %*	*8.8 %*	
Changes in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	7.2	0.4	4.5	20.2	20.6	-2.4	-17.6	-0.6	31.7	43.7	28.0	-0.2	-32.7	
- Capex	25.6	30.6	45.6	55.6	95.6	145.6	140.6	20.6	25.6	25.6	25.6	25.6	25.6	
Capex in % of Sales	*34.1 %*	*67.2 %*	*59.2 %*	*31.6 %*	*34.5 %*	*55.0 %*	*78.7 %*	*11.7 %*	*7.7 %*	*4.7 %*	*3.7 %*	*3.8 %*	*8.8 %*	
- Other	8.0	23.2	36.9	44.2	46.4	34.1	15.4	6.9	3.1	1.4	0.6	0.3	0.1	
Free Cash Flow (WACC Model)	-48.5	-16.1	7.8	68.5	98.4	50.8	-11.1	82.5	157.0	303.0	420.1	446.3	357.5	269
PV of FCF	-47.3	-14.2	6.2	48.9	63.3	29.5	-5.8	38.8	66.6	115.9	144.7	138.6	100.0	892
share of PVs	-3.50 %			46.96 %										56.54 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	10.00 %	Financial Strength	2.00
Cost of debt (after tax)	5.6 %	Liquidity (share)	2.00
Market return	8.25 %	Cyclicality	1.00
Risk free rate	2.75 %	Transparency	1.00
		Others	2.00
WACC	**10.96 %**	**Beta**	**1.60**

Valuation (m)

Present values 2035e	685		
Terminal Value	892		
Financial liabilities	66		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	37	No. of shares (m)	16.0
Equity Value	**1,548**	**Value per share (EUR)**	**96.50**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	1.75 %	2.00 %	2.25 %	**2.50 %**	2.75 %	3.00 %	3.25 %
1.80	12.0 %	78.59	79.62	80.71	81.86	83.07	84.35	85.70
1.70	11.5 %	84.91	86.12	87.40	88.75	90.17	91.68	93.29
1.65	11.2 %	88.34	89.65	91.04	92.51	94.06	95.71	97.46
1.60	11.0 %	91.97	93.40	94.90	**96.50**	98.19	99.99	101.91
1.55	10.7 %	95.82	97.37	99.01	100.75	102.60	104.57	106.68
1.50	10.5 %	99.91	101.59	103.38	105.29	107.31	109.47	111.78
1.40	10.0 %	108.87	110.88	113.02	115.31	117.75	120.37	123.19

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.80	12.0 %	79.65	80.39	81.12	81.86	82.60	83.34	84.07
1.70	11.5 %	86.38	87.17	87.96	88.75	89.54	90.32	91.11
1.65	11.2 %	90.06	90.87	91.69	92.51	93.32	94.14	94.96
1.60	11.0 %	93.96	94.81	95.65	**96.50**	97.35	98.19	99.04
1.55	10.7 %	98.12	99.00	99.87	100.75	101.63	102.51	103.38
1.50	10.5 %	102.55	103.46	104.37	105.29	106.20	107.11	108.02
1.40	10.0 %	112.35	113.34	114.32	115.31	116.29	117.28	118.26

- We assume a terminal EBIT margin of 67.9% to reflect continued price pressure for biosimilars
- Post TPoS, R&D expenses are activated via the company's intangible assets
- Following its balance-sheet activation, R&D expenses are amortized
- Other line includes the At Equity cash flow FYB receives from its BioEq JV (FYB201)

Company & Products

Pipeline

With FYB201, FYB202, FYB203, FYB206, and the as-yet-unpublished FYB208 and FYB209, the business is actively developing a number of biosimilar candidates. A biosimilar candidate for Lucentis called FYB201 is 50%-owned by Formycon. FYB202, a biosimilar candidate for Stelara, FYB206, a biosimilar candidate for Keytruda, and FYB208 and FYB209, the unpublished biosimilar candidates, are all owned entirely by Formycon. FYB203 is a biosimilar candidate for Eylea and in a licensing agreement with Klinge Biopharma GmbH, a subsidiary of Santo Holding (Deutschland) GmbH.

Lucentis – FYB201

FYB201 is a ranibizumab (trade name Lucentis) biosimilar candidate, used for adults to treat eye diseases in which endothelial growth factors cause excessive formation of blood vessels in the retina, resulting in progressive loss of central vision. It plays an especially important role in the treatment of neovascular or wet AMD. The treatment inhibits certain growth factors that are involved in the formation of new vessels. This can slow down or even completely stop the deterioration of vision.

FYB201 was licensed to Santo Holding GmbH (a Strüngmann Family Office similar to Athos KG) in 2013. Polpharma Biologics Group B.V. subsequently acquired a 50% stake in the project. Santo Holding and Polpharma then founded the joint venture BioEq AG. In 2022, Formycon acquired the 50%-stake of Santo Holding GmbH/Athos KG in BioEq AG and thus holds half of the project and commercialization rights to FYB201. In May 2018, the comparable efficacy of FYB201 and the reference drug Lucentis for patients with nAMD was demonstrated in a global Phase III clinical trial. Following approval by the UK Medicines and Healthcare Regulatory Agency (MHRA) on 17 May 2022 for the United Kingdom, the U.S. Food and Drug Administration (FDA) approved FYB201 on 02 August 2022 as the first biosimilar for Lucentis for automatic substitution in the United States. Approval by the European Commission followed on 26 August.

On the market are currently four other ranibizumab biosimilars, referencing Lucentis:

- **Byooviz:** The European Commission and the United Kingdom approved the ranibizumab biosimilar (Byooviz, SB11), referencing Lucentis in August 2021. The EU authorization followed a recommendation on June 24, 2021, for approval from the EMA's Committee for Medicinal Products for Human Use (CHMP). Byooviz was approved for neovascular (wet) age-related macular degeneration, diabetic macular oedema, proliferative diabetic retinopathy, macular oedema secondary to retinal vein occlusion, and choroidal neovascularization. It was developed by Samsung Bioepis and will be commercialized in the EU (on the market in Germany since March 2023) and has been launched on the US market as the first ophthalmology biosimilar and the first biosimilar referencing Lucentis. In the US it was approved by the FDA in September 2021. Additionally, Byooviz was also approved by Health Canada in March 2022. Byooviz is listed in the US for USD 1,130 per single use 0.5mg vial, which is about a 40% discount compared to the list price of Lucentis.
- **Ximluci:** In November 2022 the European Commission granted marketing authorization for Ximluci, a product developed in a partnership between STADA Arzneimittel and Xbrane Biopharma. Ximluci, referencing Lucentis, was approved to treat neovascular age-related macular degeneration (wet AMD), diabetic macular edema, diabetic retinopathy, retinal vein occlusion, and visual impairment due to choroidal neovascularization in adults and was launched, e.g. in Germany, in May 2023. Ximluci is available in Germany as a 2.3 mg/0.23 ml vial for intravitreal injection. In February 2023, the UK's Medicines and Healthcare products Regulatory Agency (MHRA) also granted marketing authorization for Ximluci. All authorizations are for Ximluci 10 mg/mL solution for injection.

- **Ranivisio:** Teva Pharmaceuticals' ranibizumab biosimilar (Ranivisio), referencing Lucentis, was granted marketing authorization by the European Commission in August 2022 and was approved for all five indications: neovascular age-related macular degeneration (AMD), macular edema, diabetic macular edema, proliferative diabetic retinopathy, and choroidal neovascularization. It was already approved in the United Kingdom, where it is marketed under the name Ongavia.
- **Cimerli:** Cimerli, the Coherus biosimilar ranibizumab-eqrn, referencing Lucentis, received FDA approval in August 2022 for the US. The vascular endothelial growth factor (VEGF) inhibitor was designated as an interchangeable biosimilar across all five indications, with 12 months' exclusivity on interchangeability. Cimerli was launched in both 0.3mg and 0.5mg dosages. Retinal indications for which Cimerli is interchangeable are: neovascular (wet) age-related macular degeneration, or AMD; macular edema following retinal vein occlusion, diabetic macular edema, diabetic retinopathy, and myopic choroidal neovascularization.

Stelara – FYB202

FYB202 is a ustekinumab (trade name Stelara) biosimilar candidate, which is a human monoclonal antibody that targets the cytokines interleukin-12 and interleukin-23 and is used to treat various severe inflammatory diseases such as moderate to severe psoriasis. In 2016, the indication was expanded for the treatment of Crohn's disease and in 2019 for the treatment of ulcerative colitis, both chronic inflammatory bowel diseases. In addition, the preparation is also used for psoriatic arthritis. Additionally, the development of an efficient manufacturing process for the biosimilar candidate, and the treatment of the last patient in the Phase III clinical trial (VESPUCCI trial) was successfully completed (last-patient-out). The sponsor of the clinical trial and responsible for the design and operational implementation is BioEq GmbH. At the beginning of February 2023, Formycon, as the exclusive holder of the worldwide marketing rights, concluded a licence agreement with Fresenius Kabi AG for the global commercialization of FYB202. Secondary marketing rights for Germany as well as for parts of the MENA region (Middle East and North Africa) and Latin America remain with Formycon. However, FYB202 has not yet been approved by one of the international regulation authorities.

Since the patents on Stelara will expire in the US in September 2023 and in Europe in January 2024, doors open up for other players in the market for ustekinumab biosimilars:

- Formycon & Fresenius Kabi have entered into a settement agreement with J&J and agreed on a launch no later than April 2025 in the US.
- The European Union is currently reviewing an application for an ustekinimab biosimilar developed ina partnership between Alvotech and STADA Arzneimittel. In January 2023, the FDA accepted a biologics licence application for the same product.
- Samsung Bioepis recently published results from a Phase I study that demonstrated comparable pharmacokinetics and safety of its ustekinumab candidate (**SB17**) with the originator.
- In January 2023, Dong-A ST announced that results of a Phase III therapeutic equivalence study demonstrated that its ustekinumab biosimilar (**DMB-3115**) has similar safety and efficacy to Stelara. The study was conducted in 2021 in the United States and nine other countries, including Poland, Estonia, and Latvia. The study included 605 participants with moderate to severe chronic plaque psoriasis and evaluated the safety, efficacy, and immunogenicity of DMB-3115 over 52 weeks.
- Rani Therapeutics, a clinical stage biotherapeutics company based in California, announced that it has started the preclinical development process for **RT-111**, a RaniPill GO capsule using an ustekinumab biosimilar.

- Bio-Thera Solutions received approval in Brazil for **BAT2206** as a monotherapy or along with methotrexate to treat active psoriatic arthritis in adults.
- Cellotrion Healthcare filed a marketing authorization application with the European Medicines Agency for its **CT-P43**.
- NeuClone and the Serum Institute of India completed the Phase I trial for **NeuLara** in April 2020. The early analysis of the data suggests a safe and tolerable effect of the product.

Eylea – FYB203

FYB203 is an aflibercept (trade name Eylea) biosimilar candidate that binds to placental growth factor (PLGF) in addition to vascular endothelial growth factor (VEGF-A). Aflibercept thus suppresses the formation of blood vessels in the retina that worsen vision. Like Lucentis, Eylea is injected directly into the vitreous body of the eye. The completed preclinical study with FYB203 in an alternative formulation was able to show comparable intraocular pharmacokinetics to the reference product. In addition, the development of an efficient manufacturing process has already been completed. As with FYB201, work is also underway on a proprietary delivery system for the drug. Formycon published positive interim results from the Phase III study in February 2023. In the FDA-specific interim analysis of the randomised, double-blind, multicentre Phase III study, the primary endpoint was met, demonstrating the comparable efficacy of FYB203 and the reference drug Eylea in patients with neovascular age-related macular degeneration (nAMD). In May 2015, FYB 203 was out-licensed to Santo Holding (Deutschland) GmbH, which has since transferred the worldwide marketing rights for FYB203 within the Santo Group to Klinge Biopharma GmbH. Within the framework of this participation model, Formycon will participate in future product sales by receiving corresponding royalties.

The number of players in the market for aflibercept biosimilar candidates is increasing, raising the competitiveness in the field:

- **ALT-L9:** Altegon and Kissei begin the Phase III study of their Eylea biosimilar and are planning to receive approval by 2025
- **ABP 938:** In H1 2023, as expected, Amgen finished the final analysis of the Phase III study evaluating the efficacy and safety of ABP 938, an investigational biosimilar to Eylea (aflibercept), compared with EYLEA in patients with neovascular age-related macular degeneration.
- **CHS-2020:** Coherus started a projected Phase II clinical trial initiation in 2021 and is planning to launch the finished product in 2025, if approval is received by then.
- **SB15:** Samsung Bioepis presented the final 56-week results from the Phase III study for SB15 compared with reference aflibercept in neovascular age-related macular degeneration in April 2023.

Keytruda - FYB206

The active substance pembrolizumab, Keytruda is a humanised monoclonal antibody that belongs to the immune checkpoint inhibitors and is used to treat a variety of tumours. Pembrolizumab binds to the PD-1 receptor and specifically blocks the interaction between PD-1 and its ligand PD-L1. This helps the immune system to activate the body's own cellular anti-tumour immune response and kill melanoma cells, for example. In addition to advanced malignant melanoma (black skin cancer), pembrolizumab can also be used for non-small cell lung cancer and classical Hodgkin's lymphoma (malignant disease of the lymphatic system). The FYB206 project has reached important stages in the process development and preclinical phases. After convincing results from the analytical characterisation of the developed molecule and significant progress in the development of the manufacturing process, a comprehensive data package is currently being compiled in

order to coordinate the further programme steps in scientific advice meetings with EMA and FDA in the second half of 2023.

Since Keytruda is in the beginning development status there are no other players which are further in their development or approval status. However, a number of competitors have announced a similar pembrolizumab biosimilar candidate in their pipelines. These include BioXpress Therapeutics, DM Bio and PlantForm/PlantPraxis Biotecnologia/ Bio-Manguinhos/ Fiocruz (ANVISA, Brazilian Health Regulatory Agency). NeuClone together with the Serum Institute of India have agreed to co-develop 10 biosimilar monoclonal antibodies, which are currently in the preclinical phase.

Company History

Formycon AG has its origins in the extensive development know-how in the field of biopharmaceutical drugs and emerged from Boehringer Mannheim and the former Scil Group. In 1999, the Scil Group was founded by former senior managers of Boehringer Mannheim, and its name was changed to Formycon AG in 2012. Throughout its history, Formycon underwent the following stages of development and reached the following milestones:

- **1999:** Founding of the Scil Group by former senior managers of Boehringer Mannheim.
- **2012:** Change of company name to Formycon AG
- **2013:** Successful completion of three capital increases totalling EUR 17.4m. Formycon starts the development of two products and licensed the first biosimilar from its own product pipeline to Santo Holding GmbH.
- **2014:** Formycon starts the development of the third biosimilar and wins the leading Eastern-European pharmaceutical manufacturer Polpharma as a joint-venture partner for the FYB201 development project.
- **2015:** Formycon and BioEq start the pivotal Phase III clinical trial for the Lucentis-Biosimilar FYB201, enter into a license agreement for a second biosimilar with Santo Holding, execute a capital increase of EUR 11.1m and pass a successful GMP inspection.
- **2016:** Formycon adds a fourth biosimilar candidate (FYB203) to its product pipeline, unveils the development of an Eylea biosimilar (details of FYB203) and enrols the first patient in the pivotal Phase III study of the Lucentis biosimilar FYB201.
- **2017:** Formycon and Aristo Pharma establish a joint venture for FYB202, a biosimilar candidate for Stelara. In addition, Formycon moves to the new SME stock-exchange segment "Scale".
- **2018:** Formycon's biosimilar candidate FYB201 shows comparable efficiency to the reference product in a Phase III study, while ranking 7th on the Financial Times list of Europe's 1000 fastest-growing companies.
- **2019:** BioEq AG grants exclusive commercialization rights for FYB201 to Coherus BioSciences, while Formycon announces the start of the Phase I clinical trial with its Ustekinumab-Biosimilar candidate FYB202. In addition, Formycon successfully places a cash capital increase of EUR 17.3m with an institutional investor.
- **2020:** Formycon achieves complete cell infection prevention with an innovative SARS-CoV-2 blocker and announces the start of Phase III clinical trials for biosimilar candidates FYB202 (ustekinumab) and FYB203 (aflibercept). At the same time, the company successfully places a cash capital increase of EUR 25.8m with a strategic investor.
- **2021:** Formycon and BioEq announce File Acceptance for FYB201. Teva Pharmaceutical will be the strategic partner for commercialization in Europe, Canada, Israel and New Zealand, while MS Pharma will be the exclusive commercialization partner in the MENA region. In addition, Formycon receives a EUR 12.7m grant for further development of FYB207 and partners with SCG Cell Therapy in a licensing agreement for FYB207.
- **2022:** FYB201 receives approval in the EU, the US and the UK as the first automatically substitutable biosimilar for Lucentis. Formycon's FYB 202 shows comparable efficacy to Stelara in Phase III study. In addition, the acquisition was announced of the FYB 201 and FYB 202 biosimilar assets and BioEq AG by Formycon and Athos KG in a long-term strategic partnership.

Management

Dr. Stefan Glombitza (CEO)

Dr. Stefan Glombitza was appointed CEO of Formycon in July 2022, after serving as COO since 2016. He has more than 20 years of experience in the pharmaceutical industry and held senior positions at Hexal and Sandoz/Novartis. His positions included establishing project management at Hexal and heading global project management at Sandoz. Dr. Glombitza was also head of Sandoz's global development centre in Austria. Before his professional career he studied pharmacy at the University of Regensburg followed by a doctorate. He began his professional career in 1995.

Nicola Mikulcik (CBO)

Nicola Mikulcik, Formycon's Chief Business Officer (CBO), has more than 20 years of experience in the pharmaceutical industry. She has held senior management positions at Hexal and Sandoz International and has outstanding expertise in product development, business development and commercial affairs. In addition, she is Managing Director of BioEq GmbH.

Dr. Andreas Seidl (CSO)

Dr. Andreas Seidl was elected Chief Scientific Officer in July 2022, after serving as COO of Leukocare AG between 2019 and 2022. He brings with him over 20 years of experience in analytical and pharmaceutical development. His impressive expertise in biosimilars is reflected in eight approvals in the US and EU, including the approval of the first complex biosimilar in 2006. Dr. Seidl has held senior positions at Hexal and Sandoz/Novartis and studied chemistry with a focus on biochemistry, followed by a doctorate in the field of protein analysis at the University of Konstanz.

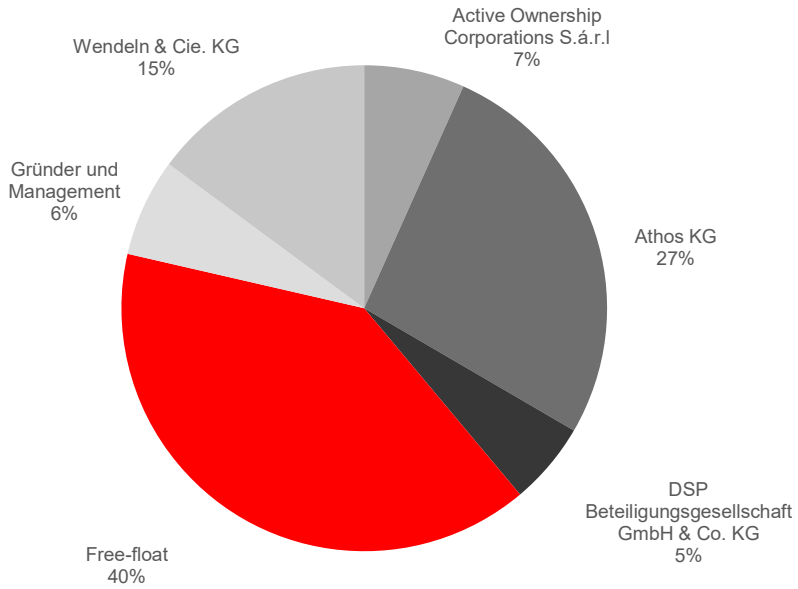
Enno Spillner (CFO)

Enno Spillner, CFO since April 2023, brings with him impressive experience having worked in the biotechnology industry for more than 24 years. As former CFO of Evotec SE, he has achieved a successful capital market positioning with MDAX, TecDAX and NASDAQ listings. His extensive expertise in finance and M&A transactions supports transformations and dynamic growth in the industry. Previously, Spillner worked at the publicly listed 4SC AG, an innovative biopharmaceutical company. There, he held the position of CFO and later CEO. Additionally, he currently holds supervisory board mandates at Nanobiotix SA, Paris, and Leon-Nanodrugs GmbH, Munich.

Shareholder structure

Formycon's shares are listed in the Scale segment of the Frankfurt Stock Exchange. The share capital consists of 16,038,775 shares with the ISIN: DE000A1EWVY8. Strategic shareholder Athos KG is the biggest shareholder with 27% of the shares. As several other institutional investors also hold meaningful stakes in the company, the free-float is consequently relatively low at around 40%.

Formycon shareholder structure



Source: Formycon, Warburg Research

Athos KG

The family office of Andreas and Thomas Strüngmann, founders of Hexal, located in Holzkirchen, Germany, was also an early investor in BioNTech SE and has a strong footprint in healthcare and life sciences. The vehicle mainly invests in teams with exceptional scientific expertise, and technology-driven companies with an entrepreneurial and value-based approach.

Wendeln & Cie. KG

Family office of anchor investor Peter Wendeln, located in Garrel, Germany.

Active Ownership Corporations S.á.r.l

An independent, partner-managed investment firm. Its team seeks investments with an opportunity for sustainable value creation and takes on the role of an active strategic partner and shareholder.

DSP Beteiligungsgesellschaft GmbH & Co. KG

An investment firm managed by Detlef Spruth, located in Nachrodt-Wiblingwerde, Germany.

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	75.0	45.4	77.0	176.0	276.8	264.8	178.6	175.5	330.9	545.0	682.3	681.2	520.7	
Sales change	*76.5 %*	*-39.4 %*	*69.4 %*	*128.6 %*	*57.3 %*	*-4.3 %*	*-32.6 %*	*-1.7 %*	*88.5 %*	*64.7 %*	*25.2 %*	*-0.2 %*	*-23.6 %*	*2.5 %*
EBIT	-15.0	-16.8	3.9	85.4	174.6	158.7	65.8	56.8	213.5	428.4	566.4	565.9	405.9	
EBIT-margin	*-20.0 %*	*-36.9 %*	*5.0 %*	*48.5 %*	*63.1 %*	*59.9 %*	*36.9 %*	*32.4 %*	*64.5 %*	*78.6 %*	*83.0 %*	*83.1 %*	*77.9 %*	
Tax rate (EBT)	*-71.8 %*	*7.8 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	*25.0 %*	
NOPAT	-25.8	-15.5	2.9	64.1	130.9	119.0	49.4	42.6	160.1	321.3	424.8	424.4	304.4	
Depreciation	2.0	7.1	18.1	36.0	37.2	40.8	47.2	52.9	51.0	49.6	48.2	47.0	45.8	
in % of Sales	*2.7 %*	*15.7 %*	*23.5 %*	*20.4 %*	*13.5 %*	*15.4 %*	*26.4 %*	*30.1 %*	*15.4 %*	*9.1 %*	*7.1 %*	*6.9 %*	*8.8 %*	
Changes in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	7.2	0.4	4.5	20.2	20.6	-2.4	-17.6	-0.6	31.7	43.7	28.0	-0.2	-32.7	
- Capex	25.6	30.6	45.6	55.6	95.6	145.6	140.6	20.6	25.6	25.6	25.6	25.6	25.6	
Capex in % of Sales	*34.1 %*	*67.2 %*	*59.2 %*	*31.6 %*	*34.5 %*	*55.0 %*	*78.7 %*	*11.7 %*	*7.7 %*	*4.7 %*	*3.7 %*	*3.8 %*	*8.8 %*	
- Other	8.0	23.2	36.9	44.2	46.4	34.1	15.4	6.9	3.1	1.4	0.6	0.3	0.1	
Free Cash Flow (WACC Model)	-48.5	-16.1	7.8	68.5	98.4	50.8	-11.1	82.5	157.0	303.0	420.1	446.3	357.5	269
PV of FCF	-47.3	-14.2	6.2	48.9	63.3	29.5	-5.8	38.8	66.6	115.9	144.7	138.6	100.0	892
share of PVs	-3.50 %			46.96 %										56.54 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	10.00 %	Financial Strength	2.00
Cost of debt (after tax)	5.6 %	Liquidity (share)	2.00
Market return	8.25 %	Cyclicality	1.00
Risk free rate	2.75 %	Transparency	1.00
		Others	2.00
WACC	**10.96 %**	**Beta**	**1.60**

Valuation (m)

Present values 2035e	685		
Terminal Value	892		
Financial liabilities	66		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	37	No. of shares (m)	16.0
Equity Value	**1,548**	**Value per share (EUR)**	**96.50**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	1.75 %	2.00 %	2.25 %	**2.50 %**	2.75 %	3.00 %	3.25 %
1.80	12.0 %	78.59	79.62	80.71	81.86	83.07	84.35	85.70
1.70	11.5 %	84.91	86.12	87.40	88.75	90.17	91.68	93.29
1.65	11.2 %	88.34	89.65	91.04	92.51	94.06	95.71	97.46
1.60	11.0 %	91.97	93.40	94.90	**96.50**	98.19	99.99	101.91
1.55	10.7 %	95.82	97.37	99.01	100.75	102.60	104.57	106.68
1.50	10.5 %	99.91	101.59	103.38	105.29	107.31	109.47	111.78
1.40	10.0 %	108.87	110.88	113.02	115.31	117.75	120.37	123.19

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.80	12.0 %	79.65	80.39	81.12	81.86	82.60	83.34	84.07
1.70	11.5 %	86.38	87.17	87.96	88.75	89.54	90.32	91.11
1.65	11.2 %	90.06	90.87	91.69	92.51	93.32	94.14	94.96
1.60	11.0 %	93.96	94.81	95.65	**96.50**	97.35	98.19	99.04
1.55	10.7 %	98.12	99.00	99.87	100.75	101.63	102.51	103.38
1.50	10.5 %	102.55	103.46	104.37	105.29	106.20	107.11	108.02
1.40	10.0 %	112.35	113.34	114.32	115.31	116.29	117.28	118.26

- We assume a terminal EBIT margin of 67.9% to reflect continued price pressure for biosimilars
- Post TPoS, R&D expenses are activated via the company's intangible assets
- Following its balance-sheet activation, R&D expenses are amortized
- Other line includes the At Equity cash flow FYB receives from its BioEq JV (FYB201)

Valuation

	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	6.4 x	4.4 x	11.4 x	2.7 x	0.1 x	0.1 x	0.1 x
Book value per share ex intangibles	47.58	66.62	55.16	-176.39	-158.09	-177.06	-175.28
EV / Sales	8.7 x	7.5 x	17.0 x	23.6 x	1.5 x	2.9 x	1.7 x
EV / EBITDA	22.8 x	n.a.	n.a.	n.a.	n.a.	n.a.	6.0 x
EV / EBIT	24.6 x	n.a.	n.a.	n.a.	n.a.	n.a.	33.9 x
EV / EBIT adj.*	24.6 x	n.a.	n.a.	n.a.	n.a.	n.a.	33.9 x
P / FCF	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
P / E	26.5 x	n.a.	n.a.	26.4 x	n.a.	157.3 x	30.2 x
P / E adj.*	26.5 x	n.a.	n.a.	26.4 x	n.a.	157.3 x	30.2 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	-0.5 %	-2.0 %	-1.8 %	-1.6 %	-21.0 %	-7.8 %	9.0 %

*Adjustments made for: -

Consolidated profit and loss

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	**33.2**	**34.3**	**36.6**	**42.5**	**75.0**	**45.4**	**77.0**
Change Sales yoy	231.6 %	3.4 %	6.8 %	16.1 %	76.5 %	-39.4 %	69.4 %
COGS	21.4	26.4	26.5	30.4	55.0	26.8	37.2
Gross profit	**11.7**	**7.9**	**10.1**	**12.1**	**20.0**	**18.7**	**39.8**
Gross margin	*35.4 %*	*23.1 %*	*27.6 %*	*28.4 %*	*26.7 %*	*41.1 %*	*51.7 %*
Research and development	0.0	8.5	16.8	16.9	20.0	20.0	20.0
Sales and marketing	0.0	0.7	0.6	1.4	3.0	3.1	3.2
Administration expenses	0.0	5.2	6.5	11.4	12.0	12.4	12.7
Other operating expenses	0.0	0.3	0.2	0.3	0.3	1.0	1.0
Other operating income	0.0	0.3	0.1	0.3	0.3	1.0	1.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	**12.6**	**-5.0**	**-12.4**	**-15.9**	**-13.0**	**-9.6**	**22.0**
Margin	*38.1 %*	*-14.7 %*	*-33.8 %*	*-37.3 %*	*-17.3 %*	*-21.2 %*	*28.6 %*
Depreciation of fixed assets	0.9	1.5	1.6	1.9	2.0	2.0	2.0
EBITA	**11.7**	**-6.5**	**-14.0**	**-17.7**	**-15.0**	**-11.6**	**20.0**
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	5.1	16.1
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	**11.7**	**-6.5**	**-14.0**	**-17.7**	**-15.0**	**-16.8**	**3.9**
Margin	*35.4 %*	*-19.1 %*	*-38.2 %*	*-41.7 %*	*-20.0 %*	*-36.9 %*	*5.0 %*
EBIT adj.	**11.7**	**-6.5**	**-14.0**	**-17.7**	**-15.0**	**-16.8**	**3.9**
Interest income	0.1	0.1	0.0	0.4	0.4	0.5	0.5
Interest expenses	0.0	0.2	0.2	23.0	0.0	0.5	0.5
Other financial income (loss)	0.0	0.0	0.0	76.8	4.0	23.2	36.9
EBT	**11.8**	**-6.6**	**-14.2**	**36.6**	**-14.6**	**6.4**	**40.7**
Margin	*35.7 %*	*-19.4 %*	*-38.8 %*	*86.1 %*	*-19.5 %*	*14.1 %*	*52.9 %*
Total taxes	0.1	0.1	-0.9	0.6	10.5	0.5	10.2
Net income from continuing operations	**11.7**	**-6.7**	**-13.3**	**36.0**	**-25.1**	**5.9**	**30.6**
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	**11.7**	**-6.7**	**-13.3**	**36.0**	**-25.1**	**5.9**	**30.6**
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	**11.7**	**-6.7**	**-13.3**	**36.0**	**-25.1**	**5.9**	**30.6**
Margin	*35.4 %*	*-19.6 %*	*-36.3 %*	*84.7 %*	*-33.5 %*	*13.0 %*	*39.7 %*
Number of shares, average	10.0	10.2	11.0	13.7	15.8	15.8	15.8
EPS	**1.17**	**-0.66**	**-1.20**	**2.62**	**-1.59**	**0.37**	**1.93**
EPS adj.	1.17	-0.66	-1.20	2.62	-1.59	0.37	1.93

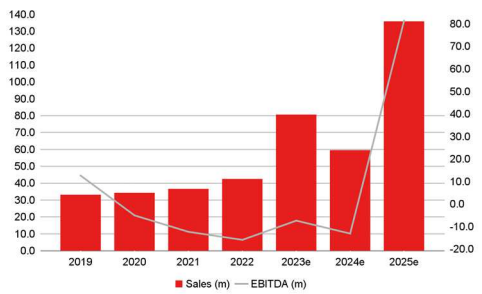
*Adjustments made for:

Guidance: Sales: EUR 75 to 85m; EBITDA EUR -15 to -5m

Financial Ratios

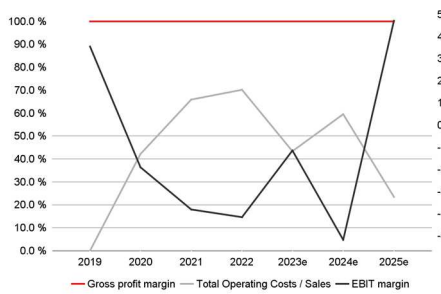
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	0.0 %	42.2 %	65.9 %	70.1 %	46.7 %	78.0 %	46.6 %
Operating Leverage	0.1 x	n.a.	16.9 x	1.7 x	-0.2 x	-0.3 x	n.a.
EBITDA / Interest expenses	n.a.	n.m.	n.m.	n.m.	n.a.	n.m.	44.0 x
Tax rate (EBT)	0.7 %	-1.3 %	6.5 %	1.7 %	-71.8 %	7.8 %	25.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.	n.a.	n.a.	184,770	n.a.	n.a.	n.a.

Sales, EBITDA
in EUR m



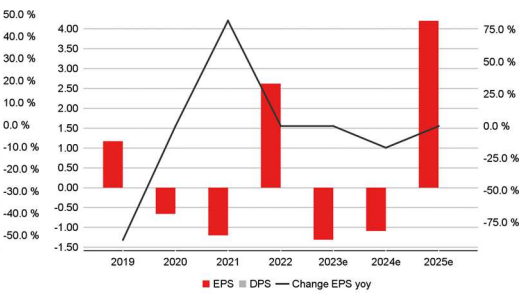
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

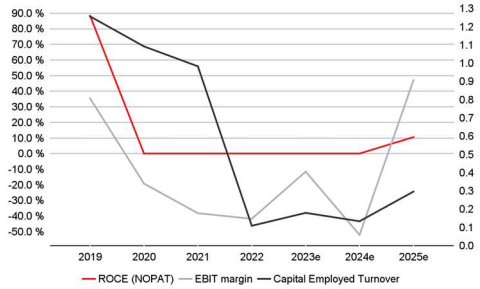
Consolidated balance sheet

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	0.6	0.3	0.7	533.0	558.0	582.8	611.7
thereof other intangible assets	0.2	0.3	0.7	1.0	1.0	1.0	1.0
thereof Goodwill	0.4	0.0	0.0	44.5	44.5	44.5	44.5
Property, plant and equipment	3.7	3.0	2.7	2.6	1.2	-0.3	-1.7
Financial assets	20.7	20.6	23.6	278.7	276.7	276.7	276.7
Other long-term assets	0.0	6.3	5.7	8.9	8.9	8.9	8.9
Fixed assets	**25.0**	**30.1**	**32.8**	**823.2**	**844.7**	**868.2**	**895.6**
Inventories	0.4	0.1	0.2	0.6	1.0	0.9	1.9
Accounts receivable	4.9	7.0	10.9	14.3	29.8	22.4	34.3
Liquid assets	22.4	42.0	25.0	9.8	12.1	14.2	12.8
Other short-term assets	0.9	1.4	1.8	5.8	20.0	20.0	20.0
Current assets	**28.5**	**50.4**	**37.9**	**30.5**	**62.9**	**57.5**	**69.0**
Total Assets	**53.6**	**80.6**	**70.7**	**853.7**	**907.6**	**925.6**	**964.6**
Liabilities and shareholders' equity							
Subscribed capital	10.0	11.0	11.1	15.1	16.0	16.0	16.0
Capital reserve	52.2	80.6	82.8	343.4	411.5	411.5	411.5
Retained earnings	-14.0	-17.9	-24.7	-38.0	-24.4	-18.5	12.1
Other equity components	0.0	-6.7	-13.3	36.0	-3.3	-3.3	-3.2
Shareholders' equity	48.2	66.9	55.9	356.6	399.9	405.8	436.4
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	**48.2**	**66.9**	**55.9**	**356.6**	**399.9**	**405.8**	**436.4**
Provisions	1.9	0.0	0.0	0.0	0.0	0.0	0.0
thereof provisions for pensions and similar obligations	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	0.0	6.5	6.3	65.9	65.9	85.9	85.9
Short-term financial liabilities	0.0	1.5	1.9	38.3	38.3	58.3	58.3
Accounts payable	0.0	5.3	7.6	11.3	20.0	12.1	20.5
Other liabilities	3.5	1.9	0.9	419.9	421.8	421.8	421.8
Liabilities	**5.3**	**13.7**	**14.8**	**497.1**	**507.7**	**519.8**	**528.2**
Total liabilities and shareholders' equity	**53.6**	**80.6**	**70.7**	**853.7**	**907.6**	**925.6**	**964.6**

Financial Ratios

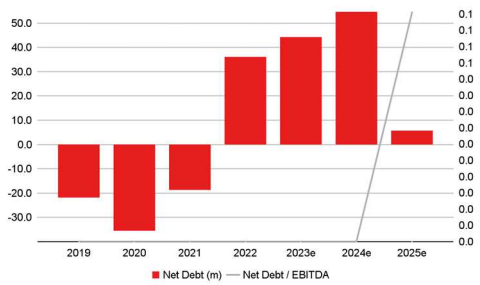
	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	4.9 x	7.2 x	5.9 x	6.9 x	6.3 x	4.2 x	5.5 x
Capital Employed Turnover	1.3 x	1.1 x	1.0 x	0.1 x	0.2 x	0.1 x	0.2 x
ROA	47.0 %	-22.3 %	-40.5 %	4.4 %	-3.0 %	0.7 %	3.4 %
Return on Capital							
ROCE (NOPAT)	88.3 %	n.a.	n.a.	n.a.	n.a.	n.a.	0.6 %
ROE	48.7 %	-11.7 %	-21.6 %	17.5 %	-6.6 %	1.5 %	7.3 %
Adj. ROE	48.7 %	-11.7 %	-21.6 %	17.5 %	-6.6 %	1.5 %	7.3 %
Balance sheet quality							
Net Debt	-21.8	-35.5	-18.7	56.1	53.8	71.7	73.1
Net Financial Debt	-22.4	-35.5	-18.7	56.1	53.8	71.7	73.1
Net Gearing	-45.3 %	-53.1 %	-33.4 %	15.7 %	13.5 %	17.7 %	16.8 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	332.4 %
Book Value / Share	48.2	66.9	55.9	356.6	399.9	405.8	436.4
Book value per share ex intangibles	47.6	66.6	55.2	-176.4	-158.1	-177.1	-175.3

ROCE Development



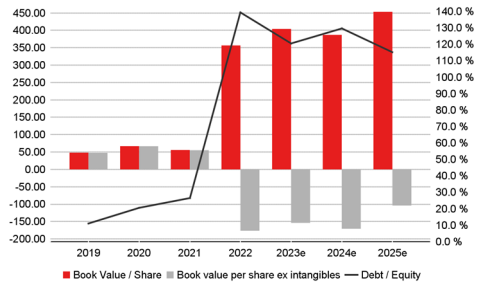
Source: Warburg Research

Net debt
in EUR m



Source: Warburg Research

Book Value per Share
in EUR



Source: Warburg Research

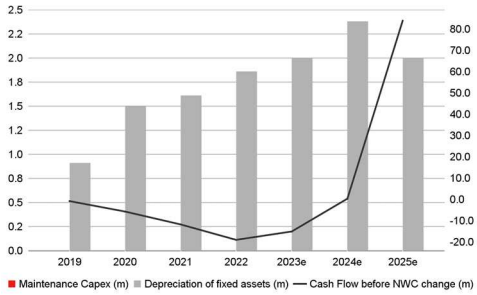
Consolidated cash flow statement

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	-2.3	-6.7	-13.3	36.0	-25.1	5.9	30.6
Depreciation of fixed assets	0.9	1.5	1.6	1.9	2.0	2.0	2.0
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	5.1	16.1
Increase/decrease in long-term provisions	0.5	-0.5	0.0	0.0	0.0	0.0	0.0
Other non-cash income and expenses	0.0	0.0	0.0	-56.7	10.0	0.0	0.0
Cash Flow before NWC change	**-0.8**	**-5.7**	**-11.7**	**-18.9**	**-13.1**	**13.0**	**48.7**
Increase / decrease in inventory	-0.4	0.3	-0.1	-0.4	-0.4	0.1	-1.0
Increase / decrease in accounts receivable	-4.9	-2.0	-4.0	-3.4	-15.5	7.4	-11.9
Increase / decrease in accounts payable	2.2	3.1	2.3	3.7	8.7	-7.9	8.4
Increase / decrease in other working capital positions	2.6	0.2	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	-0.5	1.5	-1.7	-0.1	-7.2	-0.4	-4.5
Net cash provided by operating activities [1]	**-1.3**	**-4.2**	**-13.4**	**-18.9**	**-20.4**	**12.6**	**44.2**
Investments in intangible assets	-0.1	0.0	-0.5	-26.2	-25.0	-30.0	-45.0
Investments in property, plant and equipment	-0.9	-0.9	-0.4	-0.6	-0.6	-0.6	-0.6
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	-4.7	0.5	-3.0	-10.3	0.0	0.0	0.0
Income from asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	**-5.7**	**-0.4**	**-3.9**	**-37.1**	**-25.6**	**-30.6**	**-45.6**
Change in financial liabilities	0.0	-0.5	-0.2	59.6	-20.2	20.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	17.3	25.8	1.5	1.8	68.3	0.0	0.0
Other	-0.1	-0.7	-1.0	-0.5	0.0	0.0	0.0
Net cash provided by financing activities [3]	**17.2**	**24.6**	**0.3**	**60.8**	**48.2**	**20.0**	**0.0**
Change in liquid funds [1]+[2]+[3]	**10.1**	**19.9**	**-16.9**	**4.8**	**2.3**	**2.1**	**-1.4**
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	22.4	42.0	25.1	29.9	12.1	14.2	12.8

Financial Ratios

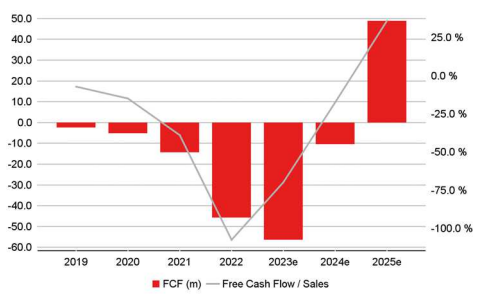
	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	-2.4	-5.1	-14.3	-45.7	-45.9	-17.9	-1.4
Free Cash Flow / Sales	-7.1 %	-15.0 %	-39.0 %	-107.5 %	-61.2 %	-39.4 %	-1.8 %
Free Cash Flow Potential	-1.4	-5.1	-11.5	-16.5	-23.5	-10.1	11.8
Free Cash Flow / Net Profit	-20.1 %	76.3 %	107.6 %	-126.9 %	182.7 %	-303.6 %	-4.5 %
Interest Received / Avg. Cash	0.9 %	0.2 %	0.1 %	2.5 %	3.5 %	3.8 %	3.7 %
Interest Paid / Avg. Debt	n.a.	5.3 %	3.8 %	63.5 %	0.0 %	0.7 %	0.6 %
Management of Funds							
Investment ratio	3.1 %	2.7 %	2.4 %	62.9 %	34.1 %	67.2 %	59.2 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	112.2 %	61.2 %	55.5 %	1436.7 %	1277.6 %	428.8 %	251.4 %
Avg. Working Capital / Sales	4.7 %	7.1 %	7.2 %	8.3 %	9.6 %	24.2 %	17.5 %
Trade Debtors / Trade Creditors	n.a.	132.3 %	143.5 %	126.5 %	149.0 %	185.1 %	167.3 %
Inventory Turnover	52.8 x	292.9 x	126.8 x	53.3 x	55.0 x	29.7 x	19.6 x
Receivables collection period (days)	54	74	109	123	145	180	163
Payables payment period (days)	0	73	105	136	133	165	201
Cash conversion cycle (Days)	23	2	7	-6	19	27	-20

CAPEX and Cash Flow
in EUR m



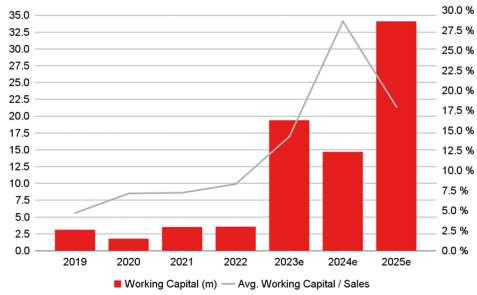
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

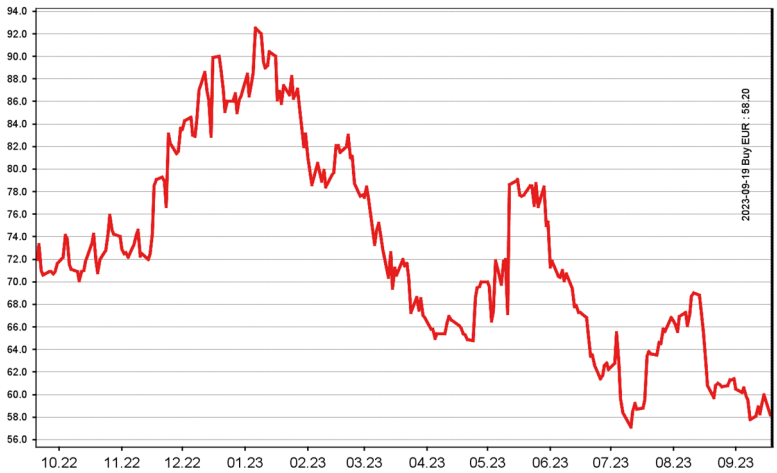
Rating	Number of stocks	% of Universe
Buy	156	75
Hold	44	21
Sell	6	3
Rating suspended	3	1
Total	**209**	**100**

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING …

… taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	44	86
Hold	5	10
Sell	0	0
Rating suspended	2	4
Total	**51**	**100**

PRICE AND RATING HISTORY FORMYCON AS OF 19.09.2023



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

EQUITIES

Matthias Rode +49 40 3282-2678
Head of Equities mrode@mmwarburg.com

RESEARCH

Michael Heider +49 40 309537-280
Head of Research mheider@warburg-research.com

Henner Rüschmeier +49 40 309537-270
Head of Research hrueschmeier@warburg-research.com

Stefan Augustin +49 40 309537-168
Cap. Goods, Engineering saugustin@warburg-research.com

Jan Bauer +49 40 309537-155
Renewables jbauer@warburg-research.com

Christian Cohrs +49 40 309537-175
Industrials & Transportation ccohrs@warburg-research.com

Dr. Christian Ehmann +49 40 309537-167
BioTech, Life Science cehmann@warburg-research.com

Felix Ellmann +49 40 309537-120
Software, IT fellmann@warburg-research.com

Jörg Philipp Frey +49 40 309537-258
Retail, Consumer Goods jfrey@warburg-research.com

Marius Fuhrberg +49 40 309537-185
Financial Services mfuhrberg@warburg-research.com

Fabio Hölscher +49 40 309537-240
Automobiles, Car Suppliers fhoelscher@warburg-research.com

Philipp Kaiser +49 40 309537-260
Real Estate, Construction pkaiser@warburg-research.com

Thilo Kleibauer +49 40 309537-257
Retail, Consumer Goods tkleibauer@warburg-research.com

Hannes Müller +49 40 309537-255
Software, IT hmueller@warburg-research.com

Andreas Pläsier +49 40 309537-246
Banks, Financial Services aplaesier@warburg-research.com

Malte Schaumann +49 40 309537-170
Technology mschaumann@warburg-research.com

Oliver Schwarz +49 40 309537-250
Chemicals, Agriculture oschwarz@warburg-research.com

Simon Stippig +49 40 309537-265
Real Estate, Telco sstippig@warburg-research.com

Cansu Tatar +49 40 309537-248
Cap. Goods, Engineering ctatar@warburg-research.com

Marc-René Tonn +49 40 309537-259
Automobiles, Car Suppliers mtonn@warburg-research.com

Robert-Jan van der Horst +49 40 309537-290
Technology rvanderhorst@warburg-research.com

Andreas Wolf +49 40 309537-140
Software, IT awolf@warburg-research.com

INSTITUTIONAL EQUITY SALES

Marc Niemann +49 40 3282-2660
Head of Equity Sales, Germany mniemann@mmwarburg.com

Tim Beckmann +49 40 3282-2665
United Kingdom tbeckmann@mmwarburg.com

Lea Bogdanova +49 69 5050-7411
United Kingdom, Ireland lbogdanova@mmwarburg.com

Jens Buchmüller +49 69 5050-7415
Scandinavia, Austria jbuchmueller@mmwarburg.com

Matthias Fritsch +49 40 3282-2696
United Kingdom mfritsch@mmwarburg.com

Maximilian Martin +49 69 5050-7413
Austria, Poland mmartin@mmwarburg.com

Rudolf Alexander Michaelis +49 40 3282-2649
Germany rmichaelis@mmwarburg.com

Roman Alexander Niklas +49 69 5050-7412
Switzerland rniklas@mmwarburg.com

Charlotte Wernicke +49 40 3282-2669
Roadshow/Marketing cwernicke@mmwarburg.com

Juliane Niemann +49 40 3282-2694
Roadshow/Marketing jniemann@mmwarburg.com

SALES TRADING

Oliver Merckel +49 40 3282-2634
Head of Sales Trading omerckel@mmwarburg.com

Rico Müller +49 40 3282-2685
Sales Trading rmueller@mmwarburg.com

Bastian Quast +49 40 3282-2701
Sales Trading bquast@mmwarburg.com

DESIGNATED SPONSORING

Marcel Magiera +49 40 3282-2662
Designated Sponsoring mmagiera@mmwarburg.com

Sebastian Schulz +49 40 3282-2631
Designated Sponsoring sschulz@mmwarburg.com

Jörg Treptow +49 40 3282-2658
Designated Sponsoring jtreptow@mmwarburg.com

MACRO RESEARCH

Carsten Klude +49 40 3282-2572
Macro Research cklude@mmwarburg.com

Dr. Christian Jasperneite +49 40 3282-2439
Investment Strategy cjasperneite@mmwarburg.com

Our research can be found under:

Warburg Research	research.mmwarburg.com/en/index.html	Refinitiv	www.refinitiv.com
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FactSet	www.factset.com		

For access please contact:

Andrea Schaper +49 40 3282-2632
Sales Assistance aschaper@mmwarburg.com

Kerstin Muthig +49 40 3282-2703
Sales Assistance kmuthig@mmwarburg.com