

Neovacs S.A. ^{*5a,11}

BUY

Price Target: €3.30

Current Price: 0.93
16/03/2017 / Frankfurt /
Closing Price
Currency: EUR

Key Figures:

ISIN: FR0004032746
WKN: A1CVKR
Ticker symbol: 0LW
Number of shares³: 45.0
Marketcap³: 41.9
EnterpriseValue³: 32.9
³ in millions / EURm
Freefloat: 64 %

Transparency level:
Freiverkehr
Market segment:
Open Market
Accounting standard:
IFRS

Financial year: 31/12

Designated Sponsor:
ICF Bank AG

Analyst:

Cosmin Filker
filker@gbc-ag.de

Matthias Greiffenberger
greiffenberger@gbc-ag.de

* List of possible conflicts of interest on page 7

Completion / first publication:
16/03/2017 / 17/03/2017

Company Profile

Sector: Biotechnology

Focus: Technology for the treatment of autoimmune and inflammatory diseases

Founded in: 1993

Headquarter: Paris

Executive Board: Miguel Sieler (CEO)



Neovacs is a biotechnology company, which specialises in a technology platform called "Kinoid" for active immunotherapy in the area of autoimmune and inflammatory diseases. On the basis of the company's own technology for the introduction of a polyclonal immune response (protected by six patent families until at least 2032). Neovacs focuses its development activities on active immunotherapy with IFN α kinoid, which is being developed for the medical indications SLE (systemic lupus erythematosus) and DM (dermatomyositis). Neovacs also conducts preclinical trials with IFN α kinoid for type 1-Diabetes, VEGF kinoid for age-related macular degeneration (AMD) and solid tumors, and IL-4/IL-13 kinoids to treat allergies. The goal of the Kinoid approach is to give patients access to safe treatments which have a lasting positive impact on these chronic diseases.

P&L in €m	2015	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e
Sales	1.18	0.00	4.00	12.00	8.00	25.55	169.09	209.38	286.85
EBIT	-11.28	-9.88	-3.57	-3.71	-10.87	3.58	110.88	119.04	165.27
Net Profit	-4.68	-9.98	-3.67	-3.81	-10.97	3.48	110.78	118.94	73.41

in €	2015	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e
Earnings per share	-0.15	-0.23	-0.08	-0.08	-0.20	0.05	1.66	1.79	1.10

Ratios	2015	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e
EV/Sales	27.80	n.def.	8.21	2.74	4.10	1.28	0.19	0.16	0.11
EV/EBIT	neg.	neg.	neg.	neg.	neg.	8.55	0.28	0.26	0.19
P/E	neg.	neg.	neg.	neg.	neg.	11.39	0.36	0.33	0.54

Financial calendar

**last research by GBC:

Date: publication / target price in EUR / rating

24/10/2016: RS / 2.90 / BUY

21/6/2016: RS / 2.90 / BUY

** The research studies indicated above may be viewed at www.gbc-ag.de, or requested at GBC AG, Halderstr. 27, D86150 Augsburg

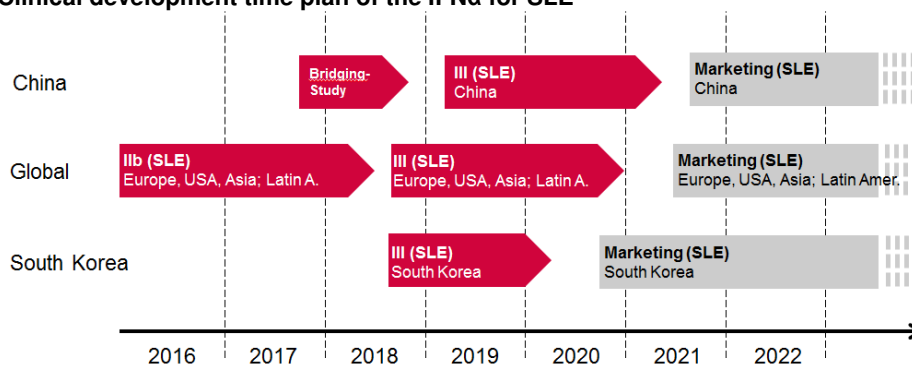
High upfront payments expected through sales partnership for China; “Fast Track” approval obtained from the FDA; Price Target increased to EUR 3.30 (previously: EUR 2.90); BUY rating confirmed

Since our last research study (see research study from 24/10/2016), Neovacs S.A. has published a positive newsflow. Of particular importance here is the recently concluded option agreement with BioSense Global LLC for the distribution of Neovacs’ key product IFN α -Kinoid (Interferon Alpha-Kinoid) for the treatment of the autoimmune diseases SLE (systemic lupus erythematosus) and DM (dermatomyositis) in China. The focus here, as we understand, is to treat SLE, for which up-front fees and milestone payments of up to EUR 65 million could be received until the end of the first marketing year. In addition, revenue-based, double-digit royalties are incurred during the marketing of the Neovacs product.

This agreement with BioSense Global LLC is the second regional licensing of the IFN α -Kinoid after a first strategic distribution partnership for the South Korean market with Chong Kun Dang (CKD) was already completed in 2015. Marketing approval should be granted in China, for which the costs are covered by the sales partner, whilst marketing approval for IFN α -Kinoid is currently being sought globally for the treatment of SLE.

Approval for IFN α -Kinoid to treat SLE is being sought within a current ongoing global clinical Phase IIb trial (IFN-K 002). A total of 178 patients in 21 countries in Europe, Asia, Latin America and the USA will be involved in this clinical trial. Approximately 80% of the targeted patients are already recruited by March 2017. The aim of this trial is to prove the biological and clinical efficacy of IFN α -Kinoid. We are expecting the preliminary results in mid-2018, at the end of the trial, which is scheduled to take 18 months (previously: mid-2017). In the meantime, “Fast Track” status has been granted by the American regulatory approval authority, thus giving Neovacs S.A. a privileged communication channel with the FDA and the company should benefit from generally faster processing of the approval documentation.

Clinical development time plan of the IFN α for SLE



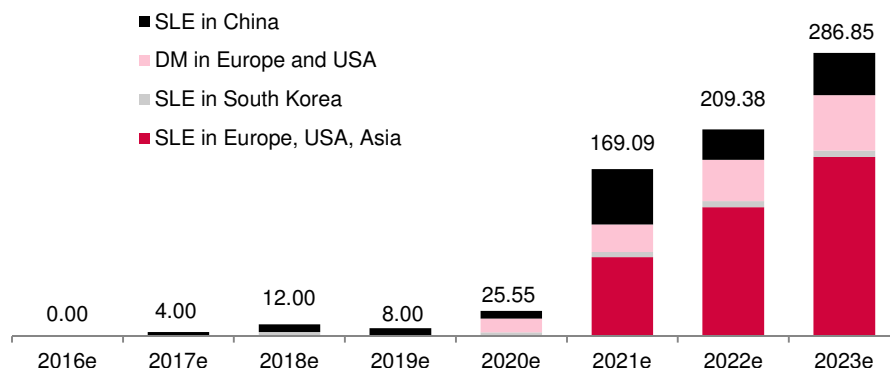
Source: GBC AG

Given the new partnership in China, Neovacs S.A. will, as far as we know, be carrying out a bridging trial on up to 25 patients in order to confirm the safety profile of IFN α -Kinoid in China pursuant to the requirements of the Chinese regulatory approval authorities. Following this “Transition Study”, either the Chinese regulatory authorities may request an independent Phase III trial, or the global Phase III trial will be accepted. Just as for global market approval, we assume marketing will start for both options in 2021.

The fact that the costs of a Chinese Phase III trial would be covered by the marketing partner BioSense Global LLC is of paramount importance here. In addition, Neovacs S.A. will in the years ahead collect up-front fees and milestone payments, which would

cover some of the costs for the global Phase III trial. Our forecasting model shows that Neovacs S.A.’s revenue and earnings performance will be characterised by these up-front fees until marketing of the IFN α -Kinoid key product starts.

Sales forecast 2016-2023 (in €m)

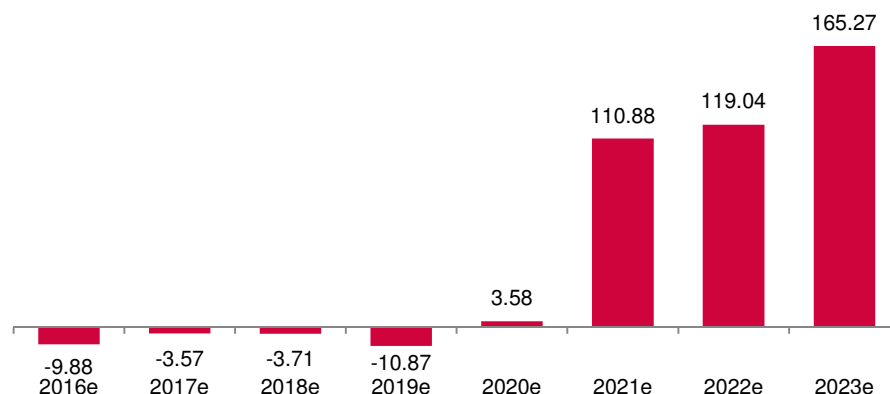


Source: GBC AG

As an additional earnings factor, we have included potential production revenues in our forecasts. In this context the newly established production company Neostell SAS, as a joint venture between Neovacs S.A. and Stellar Biotechnologies Inc., has a particular importance. Stellar is the global leading manufacturer of the keyhole limpet protein which is required for the production of IFN α -K. In addition, Neovacs S.A. has entered into an agreement to acquire the IFN α manufacturer’s licence from the Argentinian company AMEGABIOTECH, so that the control of the entire manufacturing process of the Neovacs product has therefore already been obtained at an early stage.

The cost situation for Neovacs S.A. is initially dominated by expenses in connection with clinical product development until the time of market approval for IFN-K. The EBIT is therefore still negative due to lower revenues. We anticipate reaching the break-even point in the 2020 fiscal year, based on the up-front fees from the recently agreed sales partnership with BioSense Global LLC.

EBIT-forecast 2016 – 2023 (in €m)



Source: GBC AG

Valuation

Model assumptions

We rated Neovacs S.A. using a two-stage DCF model. Starting with the specific consolidated estimates for the years 2016-2023 in the first phase, a residual value is determined in the second phase by means of a perpetual annuity. As the final value, we assume a growth rate of 3.0 % and we have set 60.0 % as the target EBITDA margin.

Determining the capital costs

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

The risk-free interest rate is derived from the current structured interest rate curves for risk-free bonds in accordance with the recommendations from the “Fachausschuss für Unternehmensbewertung und Betriebswirtschaft” (FAUB, Special Committee for Business Valuation and Business Management) of the “Institut der Wirtschaftsprüfer in Deutschland e.V.” (Institute of Public Auditors in Germany). This is based on the zero bond interest rate calculated using the Svensson Method published by the German Bundesbank. In order to compensate for short-term market fluctuations, the average returns for the previous three months are used and the result is rounded up to the nearest 0.25 basis points. The value currently used for the risk-free interest rate is 1.25 % (until now: 1.00 %).

We set the historical market premium of 5.50 % as a reasonable expectation of the market premium. This is supported by historical analyses of equity market returns. The market premium reflects in a percentage the improved return expected from equity markets relative to low-risk government bonds.

According to GBC estimates, a beta of 2.04 is currently determined.

Using the premises provided, the equity cost is calculated at 12.45 % (beta multiplied by risk premium plus risk-free interest rate). As we assume a sustainable weighting of the equity cost of 100 %, the result is a weighted average cost of capital (WACC) of 12.45 % (until now: 12.20 %).

Evaluation results

The discounting of future cash flows is based on the entity approach. In our calculation, the result for the corresponding weighted average cost of capital (WACC) is 12.45 %. The resulting fair value per share at the end of the 2017 fiscal year corresponds to the stock price target of EUR 3.30. In the DCF model, we have assumed a 22.8% marketing feasibility based on the currently ongoing Phase II trial (Source: Journal of Health Economics; The price of innovation: new estimates of drug development costs). The corporate value indicated by the DCF valuation model (EUR 664.10 million) is weighted with this probability, resulting in a fair value of EUR 151.41 million (EUR 3.30 per share). If the clinical approval process continues to be successful, the probability of occurrence, and therefore the fair corporate value, will increase.

Neovacs S.A. - Discounted Cashflow (DCF) model scenario

Value driver of the DCF - model after the estimate phase:

final - phase	
Eternal growth rate	3.0%
Eternal EBITA - margin	57.4%
Effective tax rate in final phase	35.0%

two phases DCF - model:

phase in €m	estimate									final value
	FY 16e	FY 17e	FY 18e	FY 19e	FY 20e	FY 21e	FY 22e	FY 23e		
Revenue	0.02	4.00	12.00	8.00	25.55	169.09	209.38	286.85		
Revenue change	-	-	-	-33.3%	219.4%	561.7%	23.8%	37.0%		3.0%
EBITDA	-9.81	-3.51	-3.64	-10.87	3.58	110.88	119.04	165.27		
EBITDA-Margin	neg.	neg.	neg.	neg.	neg.	65.6%	56.9%	57.6%		
EBITA	-9.86	-3.57	-3.71	-10.87	3.58	110.88	119.04	165.27		
EBITA-Margin	neg.	neg.	neg.	neg.	neg.	65.6%	56.9%	57.6%		57.4%
Taxes on EBITA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-49.58		
Taxes to EBITA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.0%		35.0%
EBI (NOPLAT)	-9.86	-3.57	-3.71	-10.87	3.58	110.88	119.04	115.69		
Return on capital	neg.	neg.	neg.	neg.	neg.	1279.5%	181.1%	112.5%		78.2%
Working Capital (WC)	0.90	0.70	1.00	2.40	7.67	50.73	62.81	86.06		
WC to revenue	n.def.	n.def.	8.3%	30.0%	30.0%	30.0%	30.0%	30.0%		
Investment in WC	-0.12	0.20	-0.30	-1.40	-5.27	-43.06	-12.09	-23.24		
Operating fixed assets (OAV)	0.10	0.15	0.20	0.50	1.00	15.00	40.00	55.00		
Depreciation on OAV	-0.05	-0.06	-0.07	-0.01	-0.03	-0.06	-0.90	-2.40		
Depreciation to OAV	50.0%	40.0%	35.0%	6.0%	6.0%	6.0%	6.0%	6.0%		
Investment in OAV	-0.09	-0.11	-0.12	-0.31	-0.53	-14.06	-25.90	-17.40		
Investment in WC	-0.12	0.20	-0.30	-1.40	-5.27	-43.06	-12.09	-23.24		
Investment in Goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Free cashflows	-10.02	-3.42	-4.06	-12.58	-2.22	53.76	81.05	75.04		1122.77

Value operating business (due date)	580.46	656.13
Net present value explicit free Cash-flows	86.52	100.72
Net present value of terminal value	493.94	555.41
Net debt	-3.07	-7.97
Value of equity	583.53	664.10
Probability of marketing	22.8%	22.8%
Value of share capital	133.04	151.41
Outstanding shares in m	42.59	45.92
Fair value per share in €	3.12	3.30

Cost of capital:

Risk free rate	1.3%
Market risk premium	5.5%
Beta	2.04
Cost of equity	12.4%
Target weight	100.0%
Cost of debt	4.5%
Target weight	0.0%
Taxshield	28.7%
WACC	12.4%

Return on capital	WACC				
	10.4%	11.4%	12.4%	13.4%	14.4%
58%	3.40	2.93	2.56	2.28	2.04
68%	3.92	3.36	2.93	2.59	2.31
78%	4.44	3.79	3.30	2.90	2.59
88%	4.95	4.23	3.66	3.22	2.86
98%	5.47	4.66	4.03	3.53	3.13

ANNEX

Section 1 Disclaimer and exclusion of liability

This document is intended solely for information purposes. All data and information in this study come from sources that GBC regards as reliable. In addition, the authors have taken every care to ensure that the facts and opinions presented here are appropriate and accurate. Nevertheless, no guarantee or liability can be accepted for their correctness – whether explicitly or implicitly. In addition, all information may be incomplete or summarised. Neither GBC nor the individual authors accept liability for any damage which may arise as the result of using this document or its contents, or in any other way in this connection.

We would also point out that this document does not constitute an invitation to subscribe to nor to purchase any securities and must not be interpreted in this way. Nor may it nor any part of it be used as the basis for a binding contract of any kind whatsoever, or be cited as a reliable source in this context. Any decision relating to the probable offer for sale of securities for the company or companies discussed in this publication should be taken solely on the basis of information in the prospectuses or offer documents which are issued in relation to any such offer.

GBC does not provide any guarantee that the indicated returns or stated target prices will be achieved. Changes to the relevant assumptions on which this document is based can have a material impact on the targeted returns. Income from investments is subject to fluctuations. Investment decisions should always be made with the assistance of an investment advisor. This document cannot replace the role of an advisor.

Sale outside the Federal Republic of Germany:

This publication, if sold in the UK, may only be made available to those persons who, in the meaning of the Financial Services Act 1986 are authorised and exempt, or persons as defined in section 9 (3) of the Financial Services Act 1986 (Investment Advertisement) (Exemptions) Decree 1988 (amended version) and must not be transmitted directly or indirectly to other persons or groups of persons.

Neither this document nor any copy of it may be taken into, transferred to or distributed within the United States of America or its territories and possessions. The distribution of this document in Canada, Japan or other jurisdictions may be restricted by law, and persons who come into possession of this publication should find out about any such restrictions and respect them. Any failure to respect these restrictions may represent a breach of the US, Canadian or Japanese securities laws or laws governing another jurisdiction.

By accepting this document you accept all disclaimers of liability and the restrictions cited above.

You can find the details of this disclaimer/exclusion of liability at:

<http://www.gbc-ag.de/de/Disclaimer.htm>

Legal information and disclosures as required by section 34b para. 1 of Securities Trading Act (WpHG) and Financial Analysis Directive (FinAnV)

This information can also be found on the internet at the following address:

<http://www.gbc-ag.de/de/Offenlegung.htm>

Section 2 (I) Updates

A detailed update of the present analysis/analyses at any fixed date has not been planned at the current time. GBC AG reserves the right to update the analysis without prior notice.

Section 2 (II) Recommendation/ Classifications/ Rating

Since 1/7/2006 GBC AG has used a 3-level absolute share rating system. Since 1/7/2007 these ratings relate to a time horizon of a minimum of 6 to a maximum of 18 months. Previously the ratings related to a time horizon of up to 12 months. When the analysis is published, the investment recommendations are defined based on the categories described below, including reference to the expected returns. Temporary price fluctuations outside of these ranges do not automatically lead to a change in classification, but can result in a revision of the original recommendation.

The recommendations/ classifications/ ratings are linked to the following expectations:

BUY	The expected return, based on the derived target price, incl. dividend payments within the rel 10%.
HOLD	The expected return, based on the derived target price, incl. dividend payments within the rel 10% and < + 10%.
SELL	The expected return, based on the calculated target price, incl. dividend payments within the <= - 10%.

GBC AG's target prices are determined using the fair value per share, derived using generally recognised and widely used methods of fundamental analysis, such as the DCF process, peer-group benchmarking and/or the sum-of-the-parts process. This is done by including fundamental factors such as e.g. share splits, capital reductions, capital increases, M&A activities, share buybacks, etc.

Section 2 (III) Past recommendations

Past recommendations by GBC on the current analysis/analyses can be found on the internet at the following address:

<http://www.gbc-ag.de/de/Offenlegung.htm>

Section 2 (IV) Information basis

For the creation of the present analysis/analyses publicly available information was used about the issuer(s) (where available, the last three published annual and quarterly reports, ad hoc announcements, press releases, share prospectuses, company presentations, etc.) which GBC believes to be reliable. In addition, discussions were held with the management of the company/companies involved, for the creation of this analysis/these analyses, in order to review in more detail the information relating to business trends.

Section 2 (V) 1. Conflicts of interest as defined in section 34b para. 1 of the Securities Trading Act (WpHG) and Financial Analysis Directive (FinAnV)

GBC AG and the analysts concerned hereby declare that the following potential conflicts of interest exist for the company/companies described. at the time of this publication, and in so doing meet the requirements of section 34b of the Securities Trading Act (WpHG). A detailed explanation of potential conflicts of interest is also listed in the catalogue of potential conflicts of interest under section 2 (V) 2.

In relation to the security or financial instrument discussed in this analysis the following possible conflict of interest exists: (5a,11)
section 2 (V) 2. Catalogue of potential conflicts of interest

- (1) GBC AG or a legal person connected to them holds shares or other financial instruments of this company at the time of publication.
- (2) This company holds over 3% of the shares in GBC AG or a legal person connected to them.
- (3) GBC AG or a legal person connected to them is a market maker or designated sponsor for the financial instruments of this company.
- (4) GBC AG or a legal person connected to them has, over the previous 12 months, organised or played a leading role in the public issue of financial instruments for this company.
- (5) a) GBC AG or a legal person connected to them has over the last 12 months agreed to create research reports for this company in return for payment. As part of this agreement the issuer was shown the draft of this analysis (excluding the evaluation section) prior to publication.
- (5) b) After receiving valid amendments by the analysed company, the draft of this analysis was changed.
- (6) a) GBC AG or a legal person connected to them has over the last 12 months agreed with a third party to create research reports about this company in return for payment. As part of this agreement the issuer was shown the draft of this analysis (excluding the evaluation section) prior to publication.
- (6) b) After receiving valid amendments by the third party, the draft of this analysis was changed.
- (7) The analyst responsible for this report holds shares or other financial instruments of this company at the time of publication.
- (8) The analyst responsible for this company is a member of the company's Executive Board or Supervisory Board.
- (9) The analyst responsible for this report received or purchased shares in the company analysed by said analyst, prior to the time of publication.
- (10) GBC or a related legal party has closed an agreement with the underlying company regarding consulting services during the previous 12 months.
- (11) GBC or a related legal party has a significant financial interest in the analysed company, for example to get mandated by the analysed company or to provide any kind of services (such as the organization of fairs, roundtables, road shows, etc.).

Section 2 (V) 3. Compliance

GBC has defined internal regulatory measures in order to prevent potential conflicts of interest arising or, where they do exist, to declare them publicly. Responsibility for the enforcement of these regulations rests with the current Compliance Officer: Kristina Bauer. Email: bauer@gbc-ag.de

Section 2 (VI) Responsibility for report

The company responsible for the creation of this/these analysis/analyses is GBC AG, with registered office in Augsburg, which is registered as a research institute with the responsible supervisory authority (Federal Financial Supervisory Authority or BaFin, Lurgiallee 12, 60439 Frankfurt, Germany).

GBC AG is currently represented by its board members Manuel Hölzle (Chairman) and Jörg Grunwald.

The analysts responsible for this analysis are:

Cosmin Filker, Dipl. Betriebswirt (FH), Financial Analyst
Matthias Greiffenberger, M.Sc., M.A., Financial Analyst

Other person involved:

Manuel Hölzle, Dipl. Kaufmann, Head of Resarch

Section 3 Copyright

This document is protected by copyright. It is made available to you solely for your information and may not be reproduced or distributed to any other person. Any use of this document outside the limits of copyright law shall, in principle, require the consent of GBC or of the relevant company, should the rights of usage and publication have been transferred.

GBC AG
Halderstraße 27
D 86150 Augsburg
Tel.: 0821/24 11 33-0
Fax.: 0821/24 11 33-30
Internet: <http://www.gbc-ag.de>

E-Mail: compliance@gbc-ag.de