

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

BUY

Price Target: €2.90

Current Price: 0.71
20/10/2016 / Frankfurt /
Closing Price
Currency: EUR

Key Figures:

ISIN: FR0004032746
WKN: A1CVKR
Ticker symbol: 0LW
Number of shares³: 42.592
Marketcap³: 30.41
EnterpriseValue³: 21.39
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:

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* List of possible conflicts of interest on page 8

Completion / first publication:
21/10/2016 / 24/10/2016

Unternehmensprofil

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	0.02	0.00	5.11	2.66	18.08	128.30	190.54	253.24
EBIT	-11.28	-9.86	-6.37	-11.77	-19.09	-5.48	81.25	124.09	167.06
Net Profit	-4.68	-9.96	-6.47	-11.87	-19.19	-5.58	81.15	123.99	116.84

in €	2015	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e
Earnings per share	-0.15	-0.23	-0.14	-0.26	-0.36	-0.10	1.41	2.15	2.02

Ratios	2015	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e
EV/Sales	18.98	n.def.	n.def.	4.39	8.43	1.24	0.17	0.12	0.09
EV/EBIT	neg.	neg.	neg.	neg.	neg.	neg.	0.28	0.18	0.13
P/E	neg.	neg.	neg.	neg.	neg.	neg.	0.39	0.25	0.27

Financial calendar

**last research by GBC:

Date: publication / target price in EUR / rating

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

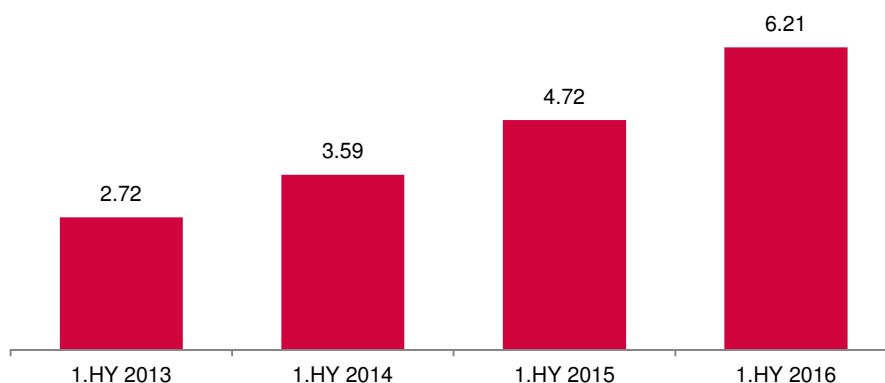
Company Development 1.HY 2016

In €m	1.HY 2014	1.HY 2015	1.HY 2016
Total Sales*	0.06	0.09	0.10
EBIT	-4.52	-5.62	-7.87
EAT	-3.86	-4.87	-6.78

Source: Neovacs S.A.; GBC AG; *incl. earning from research subsidies

The operating activities of Neovacs S.A. continue to be the clinical development of the main product IFN α -Kinoid (interferon alpha kinoid) and the clinical licensing of the most advanced medical indications SLE (systemic lupus erythematosus) and DM (dermatomyositis). The revenues that are still absent are faced with expenses mainly in the R&D sphere, which is why Neovacs S.A. expectedly shows negative results. The rising R&D expenditure reflects the clinical progress of IFN α :

R&D-Expenses on a Half-Year-Basis (in €m)



Source: Neovacs S.A.; GBC AG

In the first half of 2016, the focus was on the further development in particular of the clinical trial phase IIb (IFN-K-002) for the indication SLE. This trial is currently being conducted with a total of 178 patients in 19 countries in Europe, Asia, Latin America and the USA. It is worth mentioning that in the last reporting period, Neovacs was able to extend approval of the phase IIb trial to the USA and South Korea. While the USA has the highest number of SLE cases, SLE may be classified as a rare illness (orphan disease) in South Korea which should facilitate a much quicker market approval.

The clinical development of IFN α should also be extended in the current financial year of 2016 to the indication dermatomyositis. In this respect, the preparatory measures have been taken for the start of a clinical trial phase IIa in Europe. In this trial, 30 DM patients in France, Italy, Germany, the UK and Switzerland are to be treated with the Neovacs product.

Neovacs was also able to integrate future production of IFN α within its own business, thereby increasing future value added. In this respect, a joint venture agreement was concluded with the US company Stellar Biotechnologies, Inc. and a new production company (Neostell SAS) was founded. Stellar is the world's leading manufacturer of the keyhole limpet hemocyanin (KLH), the carrier protein for IFN α -K. The production of IFN α -K is to be covered within the framework of this joint-venture. This means that the company will be able to generate additional production revenue even in the case of out-licensing (see licence agreement CKD).

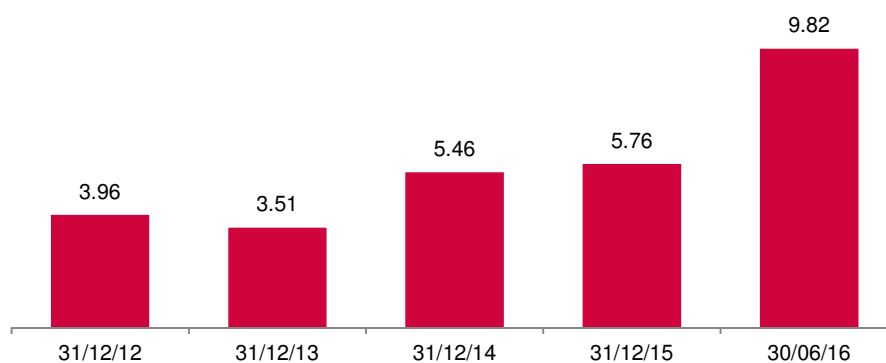
Historical development of the balance figures

in €m	31/12/2014	31/12/2015	30/06/2016
Shareholders Capital (Equity Ratio)	5.87 (62.7%)	6.37 (55.1 %)	7.76 (55.2%)
Losses carried forward	-56.57	-64.08	-68.77
Liquid Assets & Financial Assets	5.46	5.76	9.82
Capital increase	9.79	8.28	8.17
Operating Cashflow	-8.05	-7.69	-4.61
Investment Cashflow	0.00	-0.12	-0.53
Financing Cashflow	9.67	8.28	8.23

Source: Neovacs S.A.; GBC AG

In order to cover the financial requirements for the clinical development of IFN α Kinoid in the absence of operational liquidity inflows, Neovacs S.A. has carried out a series of capital measures in the past financial years and also has received government investment grants. In the last reporting period, too, the company acquired net issue proceeds amounting to €8.17 million from a fully placed capital increase (issue of 9.46 million shares at a price of €0.85). It was thus possible to more than offset the typical operational liquidity consumption for biotech companies carrying out research (free cash flow: €-5.14 million) and consequently achieve a substantial increase in the liquid funds (including financial assets) to €9.82 million (31.12.15: €5.76 million).

Short term liquidity (in €m)



Source: Neovacs S.A.; GBC AG

The liquidity of the company can therefore now be classified as adequate. By including grants and the "Investments for the future" program (€5 million), the up-front fees from the CKD partnership (€1 million) and the capital accord with Kepler Cheuvreux (up to €13 million), we have calculated a cash reach of 2.5 years on the basis of the current cash burn.

Approval schedule und forecasts

In Mio. €	FY 2016e	FY 2017e	FY 2018e	FY 2019e	FY 2020e	FY 2021e	FY 2022e	FY 2023e
Sales	0.02	0.00	5.11	2.66	18.08	128.30	190.54	253.24
EBIT	-9.86	-6.37	-11.77	-19.09	-5.48	81.25	124.09	167.06
Net Income	-9.96	-6.47	-11.87	-19.19	-5.58	81.15	123.99	116.84
EPS	-0.23	-0.14	-0.26	-0.36	-0.10	1.41	2.15	2.02

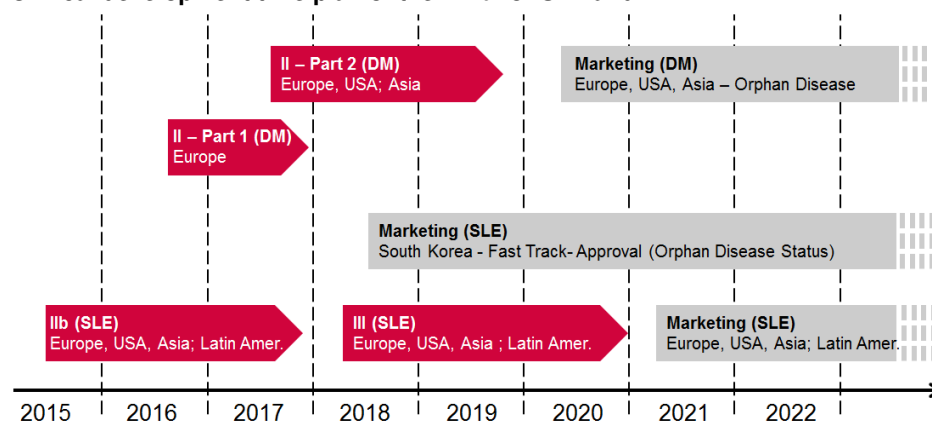
Source: GBC AG

The commercial approval schedule of the IFN α Kinoid for the treatment of the currently most developed indication SLE and DM represents the basis of our sales forecasts.

An important factor here is the phase IIb trial currently running in Europe, USA, Asia and Latin America for the indication SLE, the preliminary results of which we expect at the end of the 2017 financial year. We continue to expect market approval here for IFN-K for the treatment of SLE from mid-2021. However, Neovacs is expected to generate initial sales revenues from the 2018 financial year onwards. They are associated with the intended market approval in South Korea because SLE can be classified as a rare illness here (< 20,000 patients). Consequently, a market launch is possible without first carrying out the time and cost-intensive trial phase III. Neovacs has already concluded an exclusive licensing agreement with Chong Kun Dang (CKD) Pharmaceutical Corp in Seoul for marketing in South Korea.

In the indication DM (dermatomyositis), on account of its substantially lower prevalence, the orphan disease status should be acquired, the overall result of which is a quicker and less cost-intensive clinical approval. Here, we expect approval to begin with in Europe, the USA and Asia, for which our forecasts are conservative - we only consider Europe and the USA as approval regions. We expect marketing to start in 2020.

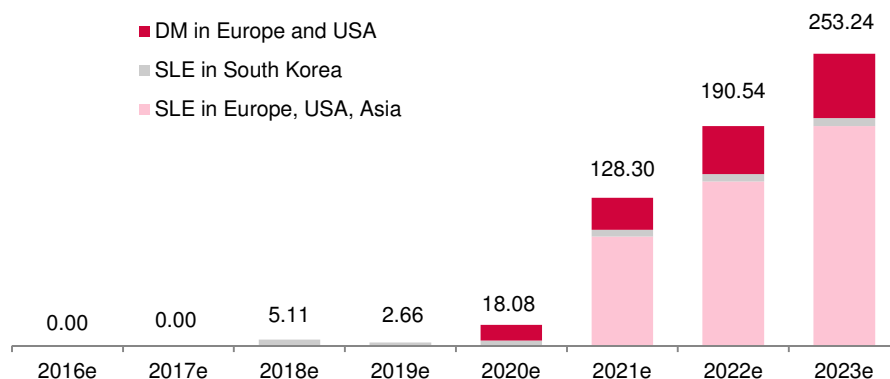
Clinical development time plan of the IFN α for SLE and DM



Source: GBC AG

For our sales forecasts, we have used the marketing schedule and made estimates concerning the relevant regional case numbers, the potential Neovacs market share as well as treatment costs. Along the same lines of the expected progress in clinical approval we do not expect the initial sales until the 2018 financial year (SLE in South Korea). However, substantial proceeds are not expected to come until the 2020 financial year onwards when the marketing of IFN-K is expected to start for the treatment of DM in Europe, the USA and Asia. Approval for the treatment of SLE should bring about a substantial increase in sales:

Sales forecast 2016-2023 (in €m)

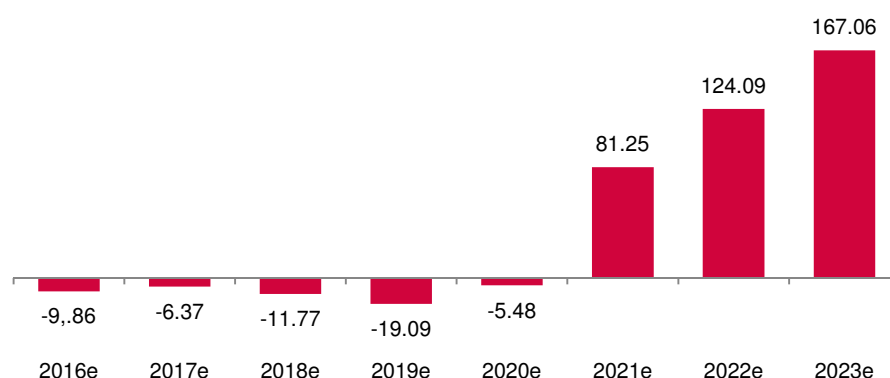


Source: GBC AG

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. Due to the absence of revenues, the operating result will continue to be negative. We only expect to achieve the EBIT break-even point when substantial sales are generated in the 2021 financial year.

Compared to our previous research report (see initial coverage from 21.06.16), we have observed a displacement effect with the costs of trial phase IIb (SLE). Although we have so far assumed that costs will be distributed across the period of the trial, in fact the greater part of the trial expenditure may already be emerging beforehand in the current financial year of 2016. Hence we have been adjusting the EBIT forecast for 2016 downwards to €-9.86 million (previously: €-7.26 million) and at the same time increasing the EBIT forecast for 2017 to -€6.37 (previously: -€8.57 million).

EBIT-forecast 2016 – 2023 (in €m)



Source: GBC AG

As an additional earnings factor, we have included potential production revenues in our forecasts. It is important in this context that the newly established production company Neostell SAS, as a joint venture between Neovacs S.A. and Stellar Biotechnologies Inc. Ptellar, is the global leading manufacturer of the protein which is required for the production of IFN α -K. We expect a typical gross profit for pharmaceutical companies amounting to 70%.

Important note: On 12/10/2016, Neovacs S.A. announced it would be collaborating with the research laboratory for diabetes immunology of the renowned Cochin Hospital in Paris. Under the management of Dr. Fgnès Lehuen and Professor Christian Boitard, the

proof of concepts is to be produced with the use of IFN-K for the treatment of type 1 diabetes.

According to scientific discoveries, the cytokine IFN α is also a factor in the development of the autoimmune disease type I diabetes. As in the treatment of SLE and DM, evidence must be provided here that the use of the IFN Kinoid and the resulting production of the polyclonal antibodies do lead to suppression of type 1 diabetes. According to the company, this evidence should be provided first in the animal model and subsequently by a clinical trial (phase I/IIa).

Even though we have not included this new potential trial route in our forecasts, a positive result of this research collaboration could be an important milestone for Neovacs S.A. Unlike SLE and DM, type 1 diabetes is an illness with massive case numbers and therefore immense market potential. According to estimates by the IDF (International Diabetes Federation), there are currently around 415 million people suffering from diabetes, which equates to approximately every 11th adult worldwide. Type 1 diabetes accounts for approximately 10% of all diabetes cases.

We have not initially taken into account the additional potential from expansion of the indication. At present, only the indications systemic lupus erythematosus and dermatomyositis therefore serve as the basis for our valuation model. Our target price calculated within the framework of the DCF model, taking into account an unchanged marketing probability with phase II products amounting to 22.8% (source: Journal of Health Economics; The price of innovation: new estimates of drug development costs), remains unchanged at €2.90 per share. We can therefore confirm our current target price and continue to issue the BUY rating.

ANNEX

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