

## 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 shares<sup>3</sup>: 45.0 Marketcap<sup>3</sup>: 41.9 EnterpriseValue<sup>3</sup>: 32.9 <sup>3</sup> in millions / EURm Freefloat: 64 %

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

Financial year: 31/12

Designated Sponsor: ICF Bank AG

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\* List of possible conflicts of interest on page 7

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#### **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 $\alpha$  kinoid, which is being developed for the medical indications SLE (systemic lupus erythematosus) and DM (dermatomyositis). Neovacs also conducts preclinical trials with IFN $\alpha$  kinoid for type 1-Diabetes, VEGF kinoid for agerelated 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 €									
Earnings per share	-0.15	-0.23	-0.08	-0.08	-0.20	0.05	1.66	1.79	1.10
Ratios									
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

<sup>\*\*</sup> 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 $\alpha$ -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 $\alpha$ -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 $\alpha$ -Kinoid is currently being sought globally for the treatment of SLE.

Approval for IFN $\alpha$ -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 $\alpha$ -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.



Source: GBC AG

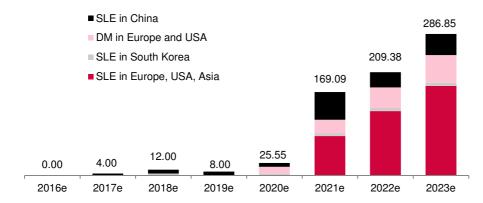
Given the new partnership in China, Neovacs S.A. will, as far as we know, be carrying out a bridging trial on up to 25 patients in order to confirm the safety profile of IFNα-Kinoid in China pursuant to the requirements of the Chinese regulatory approval authorities. Following this "Transition Study", 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 upfront fees until marketing of the IFNα-Kinoid key product starts.

#### Sales forecast 2016-2023 (in €m)

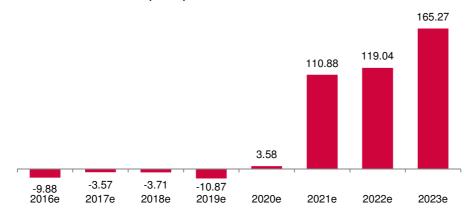


Source: GBC AG

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 $\alpha$ -K. In addition, Neovacs S.A. has entered into an agreement to acquire the IFN $\alpha$  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-forcast 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%

phase in €m Revenue	estimate FY 16e 0.02	FY 17e							
in €m	FY 16e	FY 17e							final
		1 1 170	FY 18e	FY 19e	FY 20e	FY 21e	FY 22e	FY 23e	value
	0.02	4.00	12.00	8.00	25.55	169.09	209.38	286.85	value
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	0.070
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	
Capital employed	1,00	0.85	1.20	2.90	8.67	65.73	102.81	141.06	
EBITDA	-9.81	-3.51	-3.64	-10.87	3.58	110.88	119.04	165.27	
Taxes on EBITA	0,00	0.00	0.00	0.00	0.00	0.00	0.00	-49.58	1
Total investment	-0,21	0.09	-0.42	-1.71	-5.80	-57.12	-37.99	-40.64	1
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

<u>-</u>		WACC					
capital		10.4%	11.4%	12.4%	13.4%	14.4%	
Ca	58%	3.40	2.93	2.56	2.28	2.04	
o	68%	3.92	3.36	2.93	2.59	2.31	
	78%	4.44	3.79	3.30	2.90	2.59	
etc	88%	4.95	4.23	3.66	3.22	2.86	
Œ	98%	5.47	4.66	4.03	3.53	3.13	
Return	88%	4.95	4.23	3.66	3.22	2.8	

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%



#### **ANNEX**

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Manuel Hölzle, Dipl. Kaufmann, Head of Resarch

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