

MagForce AG*5a,6a,11

BUY

Target Price: 15.80 €

Current price: 6.75

05/03/2018 / XETRA-closing

price

Currency: EUR

Key information:

ISIN: DE000A0HGQF5 WKN: A0HGQF Ticker symbol: MF6 Number of shares³: 26.34 Marketcap³: 177.82 EnterpriseValue³: 159.40

³ in € million

Transparency level: Scale

Market segment: Freiverkehr

Accounting standard:

HGB

Financial year-end: 31/12.

Designated Sponsor: Hauck & Aufhäuser

Analyst:

Cosmin Filker filker@gbc-ag.de

* catalogue of potential conflicts of interests on page 8

Date of completion/publication: 05/03/2018 / 06/03/2018

Company profile

Sector: Medical Technology
Specialty: Cancer Treatment

Employees: 28 Status: 31/12/2016

Founded: 1997

Registered Office: Berlin

Executive Board: Dr. Ben J. Lipps, Prof. Dr. Hoda Tawfik,

Christian von Volkmann



By its own account, MagForce AG, located in Berlin, is a leading company in the field of nanomedicine with a focus on cancer treatment. The NanoTherm® therapy developed by the company is said to be suitable for the local treatment of almost all solid tumours. The treatment is based on heat that is created by the activation of injected super-paramagnetic nanoparticles. The components of this therapy, the medical devices NanoTherm®, NanoPlan®, the thermometric catheter TK01, NanoActivator® with the thermometric unit are certified across the EU for the treatment of brain tumours. The objective of the new cancer treatment is to establish itself as a further pillar of cancer therapy alongside conventional treatment methods such as surgery, radiation and chemotherapy. According to available data, the NanoTherm therapy displays a promising degree of efficacy as well as being well-tolerated.

P&L in EURm	2016	2017e	2018e	2019e	2020e	2021e
Sales	0.47	0.98	2.71	8.58	52.44	104.20
EBITDA	-6.56	-5.38	-7.64	-7.67	-3.64	46.63
EBIT	-7.46	-5.54	-7.81	-7.84	-3.81	46.46
Net profit before minorities	-7.23	-6.01	-8.46	-8.71	-5.06	45.56

Per Share Figures in EUR						
Earnings per share*	-0.28	-0.23	-0.32	-0.33	-0.19	1.73

Key Figures						
EV/Sales	336.28	162.65	58.82	18.58	3.04	1.53
EV/EBITDA	neg.	neg.	neg.	neg.	neg.	3.42
EV/EBIT	neg.	neg.	neg.	neg.	neg.	3.43
P/B before minorities	neg.	neg.	neg.	neg.	neg.	3.90

Financial dates 03/05/2018: Full-year report 2017 August 2018: AGM

24/10/2018: Half-year report 2018

**last	research	published b	y GBC:
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Date: Publication / Target Price in EUR / Rating
24/08/2017: RS / 15.00 / BUY
23/03/2017: RS / 13.90 / BUY
21/10/2016: RS / 14.30 / BUY
12/08/2016: RS / 14.30 / BUY

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Operative development 1st Half-Year 2017

In €m	1st HY 2014	1st HY 2015	1st HY 2016	1st HY 2017
Sales	0.00	1.29	0.59	0.68
EBITDA	7.08	3.69	0.75	1.29
EBIT	3.71	0.36	-3.38	-3.00
Net profit	3.84	0.53	-3.19	-3.02

Source: MagForce AG; GBC AG

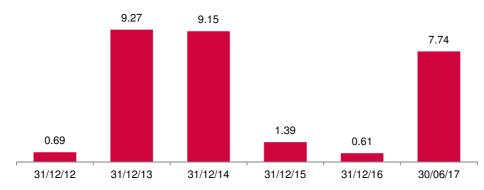
During the first half of 2017, as during the previous periods, MagForce AG focused on expanding commercial treatment of glioblastoma patients in Europe, obtaining approval for NanoTherm therapy for the treatment of prostate cancer in the United States, as well as expanding its financial basis.

In terms of glioblastoma treatment in Europe, the company has expanded local partner-ships and thereby significantly increased the number of requests. Furthermore, the first preparatory measures were taken for the European rollout of the NanoActivator[®] devices required for treatment. So far, European demand was being covered by treatment centres in Germany. The plan for the future is to establish additional treatment centres, which is expected to come with a higher number of treatments due to the cost and time advantages for patients. In addition to Germany, MagForce AG has identified Poland, Italy, Spain, the Netherlands and Switzerland as target countries.

In terms of the second clinical pathway, the treatment of prostate cancer in the United States, all requirements of the FDA have been applied and fulfilled. In the meantime, MagForce AG has received approval for the clinical study (Investigational Device Exemption, IDE) and thereby reached a significant milestone towards approval in the United States. (see forecast and model assumptions).

Furthermore, MagForce AG has considerably expanded its financial foundation for implementing the above strategic measures. During the first half of 2017, liquidity was increased by a total of €10 million by means of a convertible bond issuance (March 2017) and a capital increase (June 2017). In addition, the company signed a financing agreement with the European Investment Bank (EIB) after the first half of 2017, according to which debt capital amounting up to €35.0 million can be used in the next three years. According to company information, this credit volume retrievable via several tranches is sufficient to fully finance the approval and commercialisation strategy. At the same time, this step significantly reduces financing risks while increasing operational flexibility.

Development of liquid assets (in €m)



Source: MagForce AG; GBC AG



More flexible and expanded liquidity is extremely important, especially in light of the fact that the company has not yet achieved the operational break-even point. The cash balance on 30 June 2017 was €7.74 million (31 December 2016: €0.61 million) and was significantly increased despite the negative result for the period of €-3.02 million. The means from the capital increase in June and the new EIB debt capital have not yet been included, so that we can expect another increase in liquidity by the due date 31 December 2017.

Forecasts and model assumptions

in €m	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e
Sales	0.98	2.71	8.58	52.44	104.20	121.20	135.40	155.60
EBITDA	-5.38	-7.64	-7.67	-3.64	46.63	54.29	60.72	69.78
EBIT	-5.54	-7.81	-7.84	-3.81	46.46	54.12	60.55	69.61
Net profit before minorities	-6.01	-8.46	-8.71	-5.06	45.56	38.17	42.38	48.73

Source: GBC AG

On 10 February 2018, MagForce AG made public the FDA's approval for a clinical study (Investigational Device Exemption, IDE) on focal tumour ablation for the treatment of intermediate risk prostate cancer. This is a major milestone for the development of the company, especially due to the fact that the American approval authorities now define MagForce technology as a medical device. Compared to the approval of medication, the approval for medical devices can be achieved at significantly lower cost over a shorter period of time.

120 male patients are to be included in the registration study. Due to the relatively high number of cases in this indication area (230,000 new prostate cancer cases in the United States every year), MagForce AG expects it will be able to recruit the required number of patients very quickly. We expect the treatment phase to be completed by the fourth quarter of the current financial year. After the subsequent evaluation period, the FDA should grant approval during the fourth quarter of 2019, approximately one year later than we had anticipated. We assume that in addition to the existing treatment centres in San Antonio and Seattle, MagForce AG will include at least one more centre in the study. During the subsequent evaluation stage, additional NanoActivator[®] devices (NanoActivator[®] devices for prostate treatment are much smaller and more cost-effective than for the treatment of glioblastoma) should be installed to enable comprehensive treatment. With a unit price of approx. €50,000 per device, the required investments should remain manageable, making a quick rollout possible. Our forecasts include the first noteworthy treatment proceeds of this indication area starting in 2020.

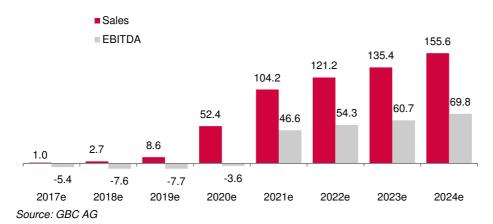
At the same time, the company is continuing the rollout stage for the treatment of brain tumours (glioblastoma) in Europe. The MagForce technology has already been approved in Europe and the opening of further treatment centres will bring it closer to patients, particularly in Poland, Italy and Spain. With the means from the financing measures taken in 2017, the company has sufficient financial power to open new treatment centres in Europe and to install the required NanoActivator® devices. Another important aspect of the future development of the company is its obtaining of cost reimbursement by insurance companies, as this relatively costly treatment is currently still being financed privately. For this purpose, MagForce AG was able to bring in an experienced manager from the medical technology sector in Dr. Lutz Helmke. In his role as Executive Vice President and Managing Director Europe, he will further develop cost reimbursement in Europe in particular. He gained his expertise in this area in long-term management positions, in which he was responsible for the implementation of accounting systems and cost reimbursements.



For the coming financial years, MagForce AG will continue to report low levels of revenue. We expect approval in the United States to be granted in late 2019, pushing the first noteworthy proceeds from the treatment of prostate patients into 2020. The glioblastoma treatment in Europe will continue to be dominated by the planned rollout in Poland, Spain and Italy. Besides the installation of NanoActivator® devices in these countries, the company will carry out reimbursement studies with up to 20 patients. In addition, marketing activities will be ramped up in order to raise the profile of MagForce technology and thereby create a foundation for increased demand.

We have set significantly lower revenue forecasts, at least until the year 2020. Starting in 2020, after the European rollout and the anticipated approval for prostate treatment in the United States, we expect a significant increase in revenue:

Forecast sales and EBITDA (in €m)



Alongside low revenue levels, we also forecast even lower financial results for MagForce AG, which should only considerably increase from 2021 onwards. Until the 2021 financial year, the cost situation of the company will most likely continue to be dominated by the expenses associated with the FDA approval, the reimbursement studies in Europe and especially by the installation of the required number of devices for a high number of treatments. MagForce AG will also have significant marketing expenses.

Financing until the anticipated break-even in 2021 should be well secured due to the expansion of the financial foundation (see EIB financing) during the previous financial year.



Valuation

Model assumptions

We rated MagForce AG using a DCF model. Based on the company's commercialisation plan for the years 2017 to 2024, we have created concrete sales and profit estimates. Due to the accumulated losses carried forward, we have only taken into account a tax rate of 30% from the 2022e financial year. Additionally, a residual value is determined in the third phase by using the perpetual annuity by the end of the forecast horizon. As the final value, we assume a sales growth rate of 3.5%.

Determining of capital costs

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

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

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

According to GBC estimates, a beta of 1.77 (until now: 2.04) is currently determined.

Using the assumptions implied, cost of equity is calculated to amount to 10.97 % (until now: 12.45%) (Beta multiplied by the risk premium plus the risk-free interest rate). Since we assume a sustainable weighting of the equity costs of 85% (until now: 85%), the resulting weighted average costs of capital (WACC) amount to 9.76% (until now: 11.01%).

Bewertungsergebnis

The discounting of future cash flows is based on the entity approach. The resulting fair value per share at the end of the 2018 financial year corresponds to the stock price target of €15.80 (previously: € 15.00). We previously reported a forecast reduction for the next three financial years but consider the approval risk in the United States to be significantly lower due to the FDA approval of the clinical study. To account for this situation, we reduced the beta to 1.77 (previously: 2.04) and thereby the discounting rate to 9.76% (previously: 11.01%). This had over-compensated our forecast reduction until the year 2020.



MagForce AG - Discounted Cashflow (DCF) Valuation

Value driver of DCF-model after the estimate phase:

consistency - Phase	
EBITDA-margin	44.8%
Working Capital to sales	35.0%

final - Phase	
Perpetual growth rate	3.5%
Perpetual EBITA margin	43.7%
Taxe rate terminal value	30.0%

Three phases DCF - Model:									
Phase	estima	to.							Termina
in €m	FY17e	FY18e	FY19e	FY20e	FY21e	FY22e	FY23e	FY24e	value
Sales	0.97	2.71	8.58	52.44	104.20	121.20	135.40	155.60	value
Sales change	105,7%	177.8%	217.1%	510.9%	98.7%	16.3%	11.7%	14.9%	3.59
EBITDA	-5.38	-7.39	-7.67	-3.64	46.63	54.29	60.72	69.78	
EBITDA-margin	neg.	neg.	-89.4%	-6.9%	44.8%	44.8%	44.8%	44.8%	İ
EBITA	-5.54	-7.56	-7.84	-3.81	46.46	54.12	60.55	69.61	ĺ
EBITA-margin	neg.	neg.	-91.4%	-7.3%	44.6%	44.7%	44.7%	44.7%	43.79
Taxes on EBITA	0,00	0.00	0.00	0.00	0.00	-16.24	-18.16	-20.88	
Taxes to EBITA	0,0%	0.0%	0.0%	0.0%	0.0%	30.0%	30.0%	30.0%	30.09
EBI (NOPLAT)	-5,54	-7.56	-7.84	-3.81	46.46	37.89	42.38	48.73	
Return on capital	neg.	neg.	neg.	neg.	335.1%	73.6%	70.8%	72.9%	64.19
Working Capital (WC)	-1.50	0.00	2.50	7.87	36.47	42.42	47.39	54.46	
WC to sales	neg.	0.0%	29.1%	15.0%	35.0%	35.0%	35.0%	35.0%	1
Investment in WC	-0,97	-1.50	-2.50	-5.37	-28.60	-5.95	-4.97	-7.07	Î
Operating fixed assets (OFA)	3,50	4.50	5.50	6.00	15.00	17.45	19.49	22.40	1
Depreciation on OFA	-0,16	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	1
Depreciation to OFA	4,6%	3.8%	3.1%	2.8%	1.1%	1.0%	0.9%	0.8%	ĺ
Investment in OFA	0,05	-1.17	-1.17	-0.67	-9.17	-2.62	-2.21	-3.08	1
Capital employed	2,00	4.50	8.00	13.87	51.47	59.87	66.88	76.86	
EBITDA	-5.38	-7.39	-7.67	-3.64	46.63	54.29	60.72	69.78	
Taxes on EBITA	0.00	0.00	0.00	0.00	0.00	-16.24	-18.16	-20.88	1
Total investment	-0,92	-2.67	-3.67	-6.04	-37.77	-8.57	-7.18	-10.15	1
Investment in OFA	0,05	-1.17	-1.17	-0.67	-9.17	-2.62	-2.21	-3.08	1
Investment in WC	-0,97	-1.50	-2.50	-5.37	-28.60	-5.95	-4.97	-7.07	1
Investment in Goodwill	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1
Free Cashflow	-6.30	-10.06	-11.34	-9.67	8.86	29.49	35.37	38.75	744.5

Value operating business (due date)	427.22	478.96
Net present value explicit free CF	39.15	53.04
Net present value of terminal value	388.07	425.92
Net debt	-12.57	-1,86
Value of equity	439.79	480.82
Minority interests	-59.18	-64.70
Value of share capital	380.61	416.12
Outstanding shares in m	26.34	26.34
Fair value per share in €	14.45	15.80

a				WACC		
capital		7.8%	8.8%	9.8%	10.8%	11.8%
g	62.1%	24.01	18.82	15.33	12.85	11.00
ē	63.1%	24.39	19.11	15.57	13.04	11.16
Ξ	64.1%	24.77	19.40	15.80	13.23	11.32
Return	65.1%	25.15	19.69	16.03	13.42	11.47
Œ	66.1%	25.53	19.98	16.26	13.61	11.63

Cost of capital:	
Risk free rate	1.3%
Market risk premium	5.5%
Beta	1.77
Cost of equity	11.0%
Target weight	85.0%
Cost of debt	4.0%
Target weight	15.0%
Taxshield	28.7%
WACC	9.8%



ANNEX

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The analysts responsible for this analysis are:

Cosmin Filker, Dipl. Betriebswirt (FH), Deputy Head of research

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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

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