EDISON

MagForce

Corporate outlook

Accelerating on the US highway

Pharma & biotech

Progress made in the US and clarity around the regulatory requirements for NanoTherm therapy in both GBM and prostate cancer have led to a reduction in our risk-adjustment in this region. Together with incorporation of the US subsidiary and the $15m fundraise, our valuation has thus increased to €236m. With the post-marketing GBM study underway in Europe, MagForce continues to advance towards its goal of driving uptake and acceptance of its NanoTherm nanoparticle-based therapy for cancer.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/12	0.0	(5.7)	(1.2)	0.0	N/A	N/A
12/13	0.0	(6.7)	(0.3)	0.0	N/A	N/A
12/14e	0.4	(7.5)	(0.3)	0.0	N/A	N/A
12/15e	3.6	(7.7)	(0.3)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding intangible amortisation, exceptional items and share-based payments.

US development path established; launch in 2017e

A meeting with the FDA has confirmed NanoTherm therapy as a medical device in the US and has helped to shape the future development strategy for both GBM and prostate cancer. MagForce plans to install a couple of NanoActivators in the US to be used as part of a planned prostate cancer trial, anticipated to start in 2015, in addition to expanding the ongoing European post-marketing study to the US. A smaller NanoActivator is also being developed in parallel. First US launch could be in 2017 with NanoTherm as monotherapy focal treatment for prostate cancer.

Europe advances as planned

MagForce has delivered on its targets of additional NanoActivator installations and the start of the post-marketing GBM study; further installations are still planned. MagForce continues to target initial commercial revenues in Germany during Q414 from patients not eligible for the GBM trial, but who could benefit from treatment.

Progress in the US a key valuation driver

Although NanoTherm therapy is approved in Europe for the treatment of brain cancers, until recently we have had limited visibility on the development path in the US. Following the pre-submission meeting with the FDA in May, this has now improved and as NanoTherm progresses through the key stages (IDE clinical trial approval, start of the IDE trial, successful completion of IDE trial and PMA approval), our potential valuation could increase to nearly €350m.

Valuation: Risk-adjusted NPV increased to €236m

Our valuation has increased to €236m or €9.9/MagForce AG share (from €197m and €8.2/share), which includes an increased probability of success on the US development programmes in both GBM and prostate cancer, following the successful meeting with the FDA and clarity on the US regulatory path. In addition, our valuation now reflects the establishment of the US subsidiary MagForce USA.

9 September 2014

Price	**€6.92**
Market cap	**€165m**
	$1.3/€
Net cash (€m) at end June 2014	5.1
Shares in issue	23.9m
Free float	53%
Code	MF6
Primary exchange	Frankfurt
Secondary exchange	N/A

Share price performance

%	1m	3m	12m
Abs	9.3	18.6	106.2
Rel (local)	0.9	21.4	74.9
52-week high/low		€7.3	€3.1

Business description

MagForce is a German firm with a European approved nanotechnology-based therapy to treat brain tumours. NanoTherm therapy consists of nanoparticle injection into the tumour, activated by an external magnetic field, producing heat and thermally destroying or sensitising the tumour.

Next events

First commercial NanoTherm sales	Q414
US IDE approval and start of prostate/GBM cancer trial	H115
Additional NanoActivator installations in Germany	2015

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Edison profile page

Investment summary

Company description: Advancing on all fronts

MagForce has an approved nanotechnology-based medical device treatment for brain cancers. MagForce's NanoTherm therapy is designed to directly affect the tumour from within, while sparing surrounding healthy tissue. Magnetic nanoparticles are directly injected into a tumour and are then heated in the presence of an external magnetic field generated by specialist equipment (NanoActivator). This can either thermally destroy or sensitise a solid tumour for additional treatment such as chemotherapy or radiotherapy. The product is approved in Europe for the treatment of brain tumours, where management is working to drive uptake and acceptance of this therapy. In addition, management is actively pursuing development in the US, with a clear path to market now established for both recurrent glioblastoma (GBM) and prostate cancer. The latter could launch in 2017 and be a significant contributor to revenues.

Valuation: Risk-adjusted NPV increased to €236m or €9.9/share

We have updated our valuation to reflect a number of changes. This includes progress with NanoTherm in the US, in addition to the establishment of MagForce USA. Our updated valuation is €236m or €9.9/MagForce AG share (increased from €197m and €8.2/share, respectively), which includes €5.1m net cash held in MagForce AG at end June 2014, in addition to recently raised cash in MagForce USA. If MagForce can successfully develop and get NanoTherm approved in the US in GBM and prostate cancer, our potential valuation could increase to nearly €350m or €14.6/MagForce AG share (nearly €310m or €13/share fully diluted if existing warrants are exercised). If MagForce can also expand NanoTherm therapy in Europe and achieve our projected sales forecasts in both GBM and prostate cancer, our valuation could be around €430m or €18/MagForce AG share (around €390m or €16/share fully diluted).

Sensitivities: US progress and delivering in Europe

MagForce is subject to the usual risks associated with product development in healthcare, including clinical trial delays or failures, regulatory risks, competitor successes, partnering setbacks, financing and commercial risks. In the near term, defining the exact scope of the trials in the US, obtaining FDA approval for the trial design, and starting trials will be key. We expect updates on this process in coming months, with the pivotal prostate cancer trial anticipated to start in 2015. In addition, progress with the ongoing post-marketing GBM study in Europe and delivering on initial commercial revenues will help to increase confidence in management's targets.

Financials: Recent fundraise to execute on US strategy

MagForce AG reported €5.1m net cash at end-June 2014, which should be sufficient to fund operations through to the end of 2015, assuming initial commercial revenues in Germany from Q414. This includes ongoing funding of the post-marketing GBM study in addition to further NanoActivator installations. In addition, MagForce USA recently raised $15m (1.5m shares at $10/share) in a private placement; the leading investor was Mithril Capital Management. Following this fund raise, MagForce AG owns 76.9% of MagForce USA. This cash should be sufficient to conduct the planned clinical study in prostate cancer. Outstanding warrants of $15m (1.5m shares) held by these investors would dilute MagForce AG's holding in MagForce USA to 62.5% if exercised.

Under the five-year strategic plan established in late 2013, MagForce continues to target annual revenues of €100-150m in 2019. We are slightly more cautious assuming a slower initial NanoTherm sales ramp, and currently project that MagForce can achieve this target one year later.

Outlook: Full steam ahead in the US and Europe

Driving use of NanoTherm therapy in Germany and expansion in other regions and indications, in particular the US, will be key for the future. MagForce has made a number of advances in the last year, with additional NanoActivators installed in Germany and start of the post-marketing GBM European trial. Furthermore, the development path in the US has been clarified with the FDA in order to introduce NanoTherm therapy to this key region. MagForce is now actively pursuing US development with a clear strategy to market. A US subsidiary has been established and funds have been raised to achieve this.

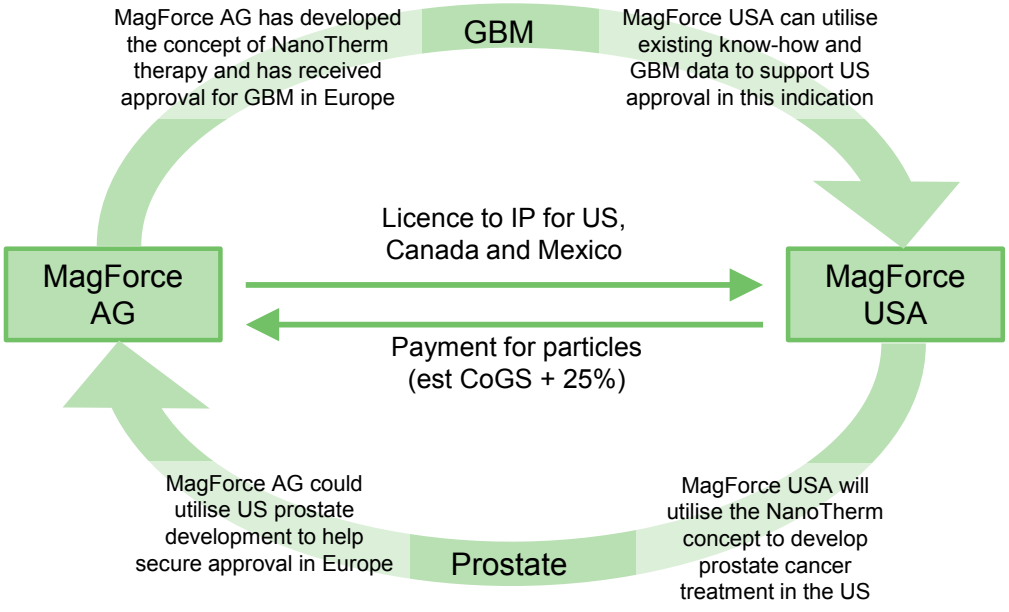
Clarity around the US; medical device status confirmed

MagForce has met with the US FDA to establish the path to market in the US. The meeting confirmed that NanoTherm therapy will be designated as a medical device in the US. MagForce is planning to start a pivotal prostate cancer trial in 2015, which could allow for first approval and sales in 2017. A specific NanoActivator for prostate cancer is being developed in parallel.

MagForce USA Inc, US subsidiary has been established

In order to pursue development in the US a subsidiary, MagForce USA, has been established with the aim of commercialising NanoTherm therapy in the US. MagForce USA will conduct the clinical trials necessary for approval in the US, focusing on both prostate cancer and recurrent GBM. The development path is discussed in more detail in the US section of this report. $15m has been raised to fund development in this region. A summary of the relationship between MagForce AG and MagForce USA is summarised in Exhibit 1, with more details in the Valuation section of this report.

Exhibit 1: Relationship between MagForce AG and MagForce USA



Source: Company data, Edison Investment Research

Europe progressing as planned

Three NanoActivators are now installed in Germany and the post-marketing GBM study has started and is progressing according to plan. MagForce continues to target initial commercial revenues in Q414 from patients not eligible for the GBM study but who could benefit from treatment.

US development clarity should allow for 2017 approval

MagForce has made clear advances in the US, with clarity on the regulatory status and the development pathway needed to get NanoTherm therapy approved in the US. It has established a subsidiary, MagForce USA, to specifically focus on the US market (in addition to Canada and Mexico) and $15m has been raised to achieve this. This should be sufficient to get NanoTherm therapy approved for prostate cancer in the US. Assuming the pivotal trial starts in 2015, first sales in prostate cancer are possible in 2017. MagForce is developing a smaller NanoActivator in parallel, which could help drive future sales. Prostate cancer could be a $300m (€215m) opportunity and GBM around a $140m (€100m) market in the US.

Medical device status eases the regulatory burden

NanoTherm therapy has been confirmed as a medical device in the US and as part of this approval route, MagForce USA had a pre-submission meeting with the FDA in May to obtain feedback and to guide product development plans prior to formal submission of an IDE[1] (investigational device exemption). Following this meeting MagForce is confident that it can start a pivotal trial in prostate cancer in the US in 2015, and that it can expand the European post-marketing GBM study to include centres in the US.

Initial development as focal therapy in prostate cancer

Within prostate cancer, MagForce is initially focusing on NanoTherm as monotherapy focal treatment for localised prostate cancer patients. The advent of PSA (prostate specific antigen) testing has led to earlier identification of prostate cancer. While there are a number of well-established treatments for high-risk localised tumours (including surgical removal of the entire prostate gland, known as radical prostatectomy), these are generally too aggressive, often with significant side effects for low-risk, slow-growing tumours. Instead, these tumours are often monitored (active surveillance) until such a point at which aggressive therapy becomes appropriate. However, for intermediate-risk patients, the choice between no treatment and aggressive treatment presents a dilemma. Focal therapy, which aims to destroy tumours within the prostate rather than the whole prostate, presents an alternative for these intermediate-risk patients.

NanoTherm therapy presents a viable option as a monotherapy focal treatment for intermediate-risk localised prostate cancer; if the cancer progresses post treatment, NanoTherm therapy should not prevent or preclude further aggressive treatments. In addition, it should have fewer unexpected side effects than a potential drug for this indication, given its physical mechanism of action.

Current focal therapy for prostate cancer includes brachytherapy, a form of internal radiotherapy via the implantation of radioactive seeds the size of a grain of rice into the prostate, which is used to treat between 30-50% of localised prostate cancer patients in the US. In addition, techniques such as laser ablation, cryotherapy and HIFU (high intensity focused ultrasound) are under development.

Pivotal trial as focal therapy could start in 2015

MagForce plans to start a pivotal trial in early 2015 in order to gain approval for NanoTherm as a focal therapy. As part of the trial, MagForce will aim to install a small number of the existing NanoActivators in the US (which are currently being adapted to conform to US market standards), which will be used as the basis for the PMA application. The trial design has not yet been disclosed but we imagine if the trial is in 100-150 patients with a measurable endpoint at six months, the trial could take around 12 to 18 months to complete and cost around $8-10m (including the regulatory

[1] An IDE is equivalent in “drug” terms to an IND. This provides FDA authorisation for an investigational, ie not approved, device to be used in a clinical study in support of a premarket approval (PMA) application.

submission), potentially allowing for approval and commercial sales in 2017. We expect formal trial plans to be submitted to the FDA in coming months for feedback and/or approval. For treatment of recurrent prostate cancer, we now assume that MagForce will develop this indication once NanoTherm therapy is approved as focal treatment (rather than concurrently).

Exhibit 2: Prototype concept design of the small NanoActivators

MagForce is developing significantly smaller NanoActivators (ambulatory, for outpatient care), which it will aim to sell (rather than place) in the future. At the AGM, a concept design was presented, with these machines essentially equivalent in size to a dentist chair. This design could then be later approved via the 510k route (with the original NanoActivator for the PMA as the predicate device).

Source: Edison Investment Research, MagForce

Launch in 2017 with peak sales potential of $300m (€215m)

Based on the proposed design of the small NanoActivators, we continue to assume that it should be possible to install five to six per state in the US. Without yet knowing the duration or number of sessions that might be needed in prostate cancer, we conservatively assume each prostate NanoActivator could treat around 150 patients per year (in line with GBM). A smaller quantity of nanoparticles will likely be required in prostate cancer, hence we assume a lower vial price of around a quarter of GBM, ie around $6k per vial. This price would position NanoTherm competitively with brachytherapy. Each prostate NanoActivator could therefore generate revenues of almost $1m per year, leading to a potential opportunity of $300m (€215m).

Expanding GBM to the US

Following the pre-submission meeting with the FDA, MagForce plans to expand the ongoing European post-marketing GBM trial to the US. This essentially means that MagForce will file an IDE for GBM in the US to include the clinical trial sites in Germany. The additional NanoActivators, which MagForce plans to install in the US as part of the prostate cancer development, will also be used for GBM development (as a reminder, the current NanoActivators can be used to treat a tumour anywhere in the body). We expect full data from the European study in 2017 and assume US development will be on a similar timeline, allowing for initial GBM revenues in the US towards the end of 2017.

GBM in the US could have $140m (€100m) potential

In glioblastoma, patients receive six sessions of treatment in the NanoActivator (two times per week for three weeks), with each session lasting an hour. Hence, we estimate that each NanoActivator can treat around 150 patients at peak per year. This assumes that each machine is operated Monday to Friday, for 50 weeks per year (allowing for servicing) and there is some downtime between sessions to allow for equipment and patient preparation.

We continue to believe it is realistic that MagForce could install at least one (large) NanoActivator in each state. Together with our NanoTherm particle pricing assumptions of around $20-25k per vial (compared to €20k in Europe), we estimate GBM in the US could generate sales of around $140m (€100m).

Europe is progressing as planned

MagForce has moved forward with its plans in Europe to drive uptake of NanoTherm therapy. The planned post-marketing GBM study has started as expected and additional NanoActivators have been installed in Germany, bringing the installed base to three; additional installations are anticipated during H214. With NanoTherm approved in Europe for the treatment of brain cancers, patients not eligible for the current trial could receive treatment, and MagForce continues to target commercial revenues this year. GBM in Europe could be around a €100m opportunity if the installed based can be expanded more broadly in Europe in the future.

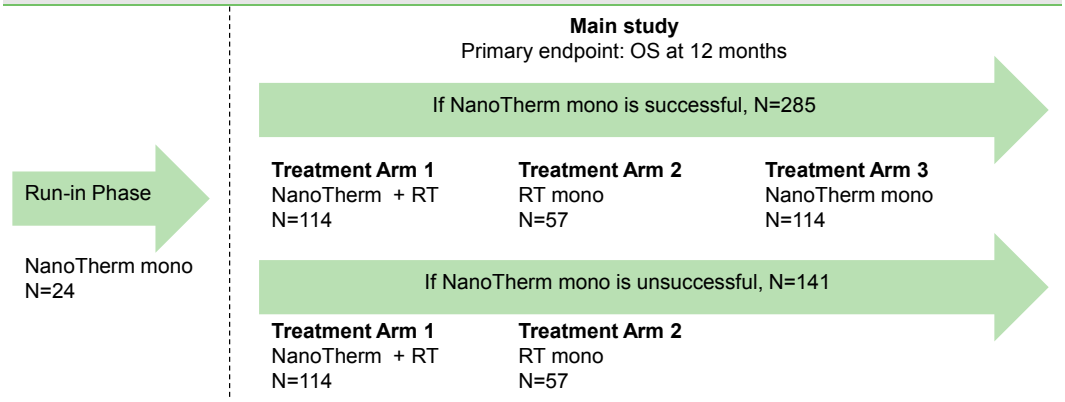
MagForce continues to work towards overcoming previous hurdles that have prevented wider uptake of NanoTherm therapy as a treatment for recurrent glioblastoma (GBM). These have included a lack of physician awareness and acceptance of the therapy. In order to address these issues, the post-marketing GBM trial was designed and the first patient was enrolled in March. This trial has been carefully designed with significant input and involvement from a number of German and European key opinion leaders (KOLs), which has been crucial in designing a trial with clinically relevant outcomes.

Post-marketing GBM study is up and running

The study consists of two parts: (1) a run-in phase assessing the effectiveness of NanoTherm monotherapy, and (2) the main study, which will compare NanoTherm therapy alone and/or in combination with radiotherapy, with radiotherapy alone. The main study will be dependent on the outcome of the run-in phase: if the run-in phase demonstrates that NanoTherm monotherapy is effective (as determined by the proportion of patients with stable disease at three months), a NanoTherm monotherapy arm will be included in the main study. If NanoTherm monotherapy is not effective in the run-in phase, then a monotherapy arm will be excluded from the main study.

The run-in phase is ongoing and, given the open-label nature of the trial, it is possible that data from the first patients could become available during 2015. We do not expect full data from the study to be available until around 2017, allowing around two years for complete recruitment.

Exhibit 3: Post-marketing GBM study design



Source: Edison Investment Research, MagForce. Note: RT = radiotherapy, mono = monotherapy, N = number of patients, OS = overall survival.

Installed base continues to expand in Germany

As part of the trial, there are now three NanoActivators installed in Germany (in Berlin, Munster and Kiel) and MagForce is aiming to install additional activators during H214 and beyond, which could bring the installed base to seven to eight NanoActivators in Germany alone.

Broader European expansion in the future

We expect that MagForce will look to install additional NanoActivators outside of Germany in the future, as physicians gain more experience of the therapy and more data become available. We believe that installing a further 25-30 NanoActivators across the major European countries over the next five to 10 years seems achievable. Each NanoActivator costs around €400k, which we capitalise as a tangible fixed asset, depreciating the cost over 10 years. We assume MagForce is able to recoup this initial outlay via an arrangement with the hospital where each large NanoActivator is placed, either potentially through a pay-per use fee or a standard leasing agreement over around five years; the former is included within our revenue forecasts.

GBM in Europe could be around a €100m opportunity

Our revenue forecasts are based on the number of NanoActivators that MagForce could install in Germany and Europe. Based on similar assumptions to the US in terms of each NanoActivator treating around 150 patients at peak per year and each vial of NanoTherm priced at €20k, this would lead to annual revenues of around €3m per NanoActivator.

As part of the new glioblastoma study, a total of eight NanoActivators are expected to be installed in Germany. Hence, future revenues from Germany alone could reach around €25m. We also assume MagForce will be able to install additional NanoActivators across Europe as physicians gain more experience of the therapy and data become available, and we assume a further 25-30 NanoActivators across Europe over the next five to 10 years. If MagForce can install these additional NanoActivators across Europe this could generate revenues of around €75-90m. MagForce also has partnerships in the broader European market, which could drive additional sales.

These estimates suggest NanoTherm therapy would be treating fewer than 5,000 GBM patients in Europe in the future per year. There are around 25k new cases of brain cancer in the EU5 (United Kingdom, France, Germany, Italy and Spain) per year. GBM is the most common and the most aggressive, with a five-year survival rate of <5%.

Prostate cancer development is a more distinct possibility

With prostate development now advancing in the US, this indication could also be developed in Europe, utilising data from the US to help secure approval. The smaller NanoActivators currently under development by MagForce USA could potentially be sold in Europe in the future, helping to drive this market.

At this early stage, we conservatively assume that there will be fewer patients treated in Europe than in the US; this is to try and reflect the more fragmented nature of the market in Europe. We assume that pricing of the nanoparticles will be below the US and that it will remain flat in the future. Based on this, we arrive at indicative prostate cancer sales in Europe of €65m. We assume that this could launch in 2019, two years after initial launch in the US.

First commercial revenues expected in 2014

MagForce continues to target first commercial revenues in Europe during Q414. These could come from patients not eligible for the GBM study but who could benefit from treatment. We include €0.4m revenues in our financial forecasts, based on treating around 20 patients this year.

Valuation

We have updated our valuation to reflect a number of changes. This includes progress in the US, in addition to the establishment of MagForce USA. Our valuation continues to be centred on NanoTherm therapy in various regions and indications, risk-adjusted to reflect the current development status. Within each indication, our valuation includes our revenue forecasts and estimates for costs, including R&D and S&M.

Our updated valuation is €236m or €9.9/MagForce AG share (increased from €197m and €8.2/share, respectively) based on a risk-adjusted NPV analysis. This includes €5.1m net cash held in MagForce AG at end June 2014, in addition to recently raised cash in MagForce USA. The breakdown of our rNPV valuation, which uses a 12.5% discount rate, is shown in Exhibit 4. The key changes to our valuation are summarised below.

Exhibit 4: MagForce AG risk-adjusted NPV valuation

Product	Indication	Launch	Peak sales (€m)	Peak sales ($m)	NPV (€m)	Probability	MagForce AG beneficial interest	rNPV (€m)	NPV/share (€/share)
NanoTherm EU	GBM - Germany	2014	25	35	42.2	100%	100%	42.2	1.8
	GBM - Broader Use	2015	80	112	100.5	65%	100%	65.2	2.7
	Prostate Cancer	2019	65	91	39.5	20%	100%	6.2	0.3
NanoTherm EU - partners	Solid tumours	2015	20	28	16.4	10%	100%	1.6	0.1
NanoTherm US	GBM	2017	100	139	99.2	50%	77%	36.5	1.5
	Prostate Cancer	2017	215	300	173.2	50%	77%	65.3	2.7
Licence agreement cash flows					10.0	50%	100%	5.0	0.2
Net cash (AG)					5.1	100%	100%	5.1	0.2
Net cash (US)					11.3	100%	77%	8.7	0.4
Valuation					**497.3**			**235.9**	**9.9**

Source: Edison Investment Research

Impact of the US subsidiary

MagForce USA was established as a wholly-owned subsidiary towards the end of 2013 with the aim of commercialising NanoTherm therapy in the US. Following a private placement that raised $15m (€11.3m), MagForce AG's ownership has been diluted to 76.9% of MagForce USA. We have adjusted the US-based NPVs and cash to reflect this beneficial ownership. Outstanding warrants of $15m (1.5m shares) would dilute this further to 62.5% and our current valuation to €215m or €9.0/MagForce AG share. The key terms of the relationships between MagForce AG and MagForce USA include the following:

- MagForce AG has granted MagForce USA rights for the development and commercialisation of NanoTherm therapy for brain and prostate cancers in the US, Mexico and Canada. We only include the US within our valuation; Canada and Mexico could potentially represent about 10% of the US market if successfully developed.
- MagForce AG will supply NanoTherm particles to MagForce USA at an agreed transfer price (we estimate CoGS plus 25%) for both GBM and prostate cancer. We have reflected this margin that MagForce AG will make on the NanoTherm particles in the "licence agreement cash flows", which we risk-adjust at the same probability as for the US projects.
- If MagForce AG develops NanoTherm therapy for prostate cancer in the future in regions not covered by the licence (ie ex US, Canada and Mexico) then MagForce AG will pay MagForce USA a royalty on prostate cancer sales. We now include prostate cancer in Europe (which we previously did not), simplistically assuming a market around 50% of the US. This is heavily risk-adjusted with only a 20% probability of success and we incorporate the royalty payment to MagForce USA within this valuation.

Changes to our underlying product valuations

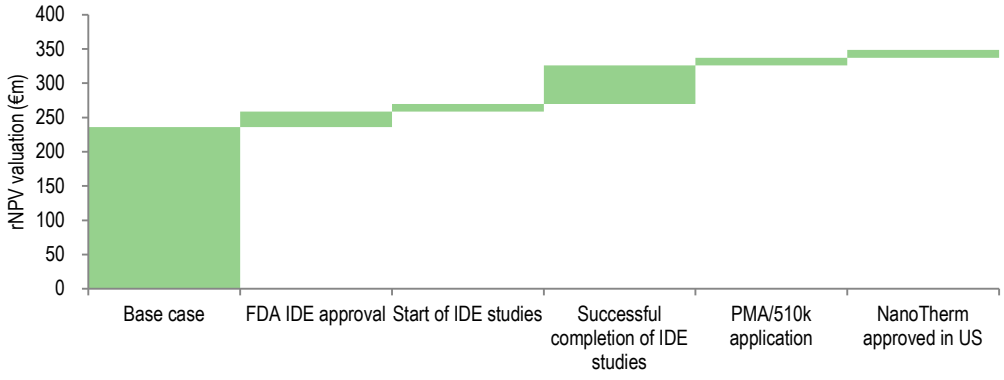
Our product NPVs have all increased owing to rolling our valuation forward in time. In addition, the main changes we have made to our underlying product NPV assumptions include:

- **US prostate cancer:** With the initial focus on NanoTherm therapy as a focal treatment, we have reduced near-term R&D spend, delaying the cost of clinical trials for recurrent prostate cancer until later when the first indication is approved. In addition, we have reduced the initial S&M spend ramp, assuming around 60-70 reps in the US beyond 2020, with a gradual build-out to this from launch (we previously had more aggressive S&M forecasts).
- **US GBM launch in H217:** We now have US GBM launch in H217 (from 2016) with launch likely dictated by the speed of the ongoing postmarking GBM trial. Data from this are expected in 2017.
- **Increased US probabilities following FDA meeting:** With clarity around the development pathway required for US approval in both prostate cancer and GBM, we have increased the probability of success for each indication in this region to 50% (from 40% previously when the precise status of NanoTherm therapy was unsure).

Potential future valuation drivers

In both the near and longer term there are a number of potential valuation drivers. In the near term, FDA approval and start of the IDE clinical studies in the US could lead us to increase our probability of success in this region to 60-65%. This is in line with a typical probability of success for a Phase III drug product, as the IDE pivotal studies are essentially equivalent to this last stage of drug development. If the clinical trials are successful, then our US probabilities could increase to around 90%, with 100% when the product is approved in each indication. The key steps to US approval and their impact on our valuation are shown in Exhibit 5, with our potential valuation increasing to nearly €350m or €14.6/MagForce AG share (nearly €310m or €13/share fully diluted if existing warrants are exercised) if NanoTherm therapy is approved in the US for both prostate cancer and GBM.

Exhibit 5: Impact of regulatory progress in the US on our rNPV valuation



Source: Edison Investment Research

If MagForce can also expand NanoTherm therapy in Europe and achieve our projected sales forecasts in both GBM and prostate cancer, our valuation could be around €430m or €18/MagForce AG share (around €390m or €16/share fully diluted if existing warrants are exercised).

Sensitivities

MagForce is subject to the usual risks associated with product development in healthcare, including clinical trial delays or failures, regulatory risks, competitor successes, partnering setbacks, financing and commercial risks.

With the European post-marketing GBM study underway, defining the exact scope of the trials in the US, obtaining FDA approval for the trial designing and starting trials will be key. We expect updates on this process in coming months, with the pivotal prostate cancer trial anticipated to start in 2015. MagForce currently has sufficient resources to fund this planned trial in addition to the ongoing GBM trial.

In the longer term, expansion in the US to additional indications, including recurrent prostate cancer, will likely require further clinical trial development for which current resources will not be sufficient. However, MagForce believes it can start generating commercial revenues in Germany starting in Q414 and is not planning to start further trials in prostate cancer in the US until initial revenues have been generated in this region.

Achieving our peak sales will depend to an extent on NanoActivator placement and usage, in addition to driving physician uptake and acceptance of the technology. The latter is being addressed via ongoing and planned clinical trials. However, accurately estimating future NanoActivator installations is not straightforward.

Financials

MagForce AG reported €5.1m net cash at end-June 2014, which should be sufficient to fund operations through to the end of 2015, assuming initial commercial revenues in Germany from Q414. This includes ongoing funding of the post-marketing GBM study in addition to further NanoActivator installations. In addition, the $15m (€11.3m) raised in the US should be sufficient to conduct the planned clinical study in prostate cancer. This removes the financing need we previously modelled in 2015.

No revenues were reported in 2013 or H114, although an accounting income (non-cash) was recorded both in 2013 (€5.1m) and during H114 (€6.9m) to reflect the transfer of rights to MagForce USA in GBM and prostate cancer, respectively. In 2013 this non-cash income reduced the 2013 operating and net loss versus our last published forecasts; excluding this, underlying 2013 financials were broadly in line with our forecasts (Exhibit 6).

For the purposes of our future financial projections, we assume that MagForce USA will be fully consolidated within the financial accounts, as even if the existing warrants are exercised, MagForce AG would still retain a >50% holding in this subsidiary. For 2014, we have made some adjustments to our financial forecasts. We now include the €6.9m non-cash income (as other operating income), which reduces our operating and net loss forecasts. Adjusting for the non-cash item, our underlying operating and net loss are both increased owing to reduced commercial NanoTherm revenues in 2014 as we now assume MagForce can treat <20 patients by YE14, reduced from around 70 patients in our previous forecasts. In addition, our operating expenses projections have increased slightly, with a decrease in personnel expenses more than offset by an increase in other operating expenses. The main changes to our forecasts are summarised in Exhibit 6.

Under the five-year strategic plan established in late 2013, MagForce continues to target annual revenues of €100-150m in 2019. We are slightly more cautious assuming a slower initial NanoTherm sales ramp, and currently project that MagForce can achieve this target one year later.

Exhibit 6: Summary of 2013 financials and key changes to our future forecasts

€m	2013 Forecast	2013 Actual	2013 Underlying	% Change	2014 Old	2014 New	2014 Underlying	% Change	2015 Old	2015 New	% Change
Revenue	0.000	0.000		N/A	1.610	0.414		-74%	3.634	3.634	+0%
Personnel expenses	(2.659)	(2.102)		-21%	(2.880)	(2.530)		-12%	(4.462)	(3.520)	-21%
Other operating expenses	(3.975)	(4.219)		+6%	(4.306)	(5.076)		+18%	(6.671)	(7.064)	+6%
EBITDA	(5.891)	(1.452)	(6.552)	-75%	(4.856)	(0.581)	(7.481)	-88%	(7.089)	(7.585)	+7%
Operating profit (reported)	(6.488)	(1.580)	(6.680)	-76%	(5.660)	(0.748)	(7.648)	-87%	(8.175)	(7.822)	-4%
Profit before tax (reported)	(6.729)	(1.626)	(6.726)	-76%	(5.560)	(0.583)	(7.483)	-90%	(8.175)	(7.701)	-6%
Profit after tax (reported)	(6.729)	(1.628)	(6.728)	-76%	(5.560)	(0.583)	(7.483)	-90%	(8.175)	(7.701)	-6%

Source: Edison Investment Research. Note: 2013 and 2014 underlying financials exclude the non-cash licence agreement income.

Exhibit 7: Financial summary

€000s	2008	2009	2010	2011	2012	2013	2014e	2015e
Year end December	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS								
Revenue	0	0	0	41	0	0	414	3,634
Cost of Sales	(559)	(370)	(315)	(292)	(193)	(573)	(688)	(1,004)
Gross Profit	(559)	(370)	(315)	(251)	(193)	(573)	(274)	2,630
EBITDA	(3,417)	(2,754)	(5,901)	(6,498)	(4,606)	(6,552)	(7,481)	(7,585)
Operating Profit (before amort. and except.)	(3,669)	(3,043)	(6,291)	(6,750)	(4,873)	(6,674)	(7,638)	(7,808)
Intangible Amortisation	(6)	(5)	(7)	(18)	(19)	(5)	(10)	(14)
Exceptionals	0	0	0	0	0	5,100	6,900	0
Other	(172)	(349)	(369)	(947)	0	(28)	0	0
Operating Profit	(3,847)	(3,398)	(6,666)	(7,714)	(4,891)	(1,607)	(748)	(7,822)
Net Interest	(346)	(670)	(863)	(872)	(826)	(19)	165	121
Profit Before Tax (norm)	(4,014)	(3,714)	(7,154)	(7,621)	(5,698)	(6,693)	(7,474)	(7,687)
Profit Before Tax (FRS 3)	(4,192)	(4,068)	(7,530)	(8,586)	(5,717)	(1,626)	(583)	(7,701)
Tax	(5)	(5)	83	(2)	(1)	(1)	0	0
Profit After Tax (norm)	(4,191)	(4,068)	(7,440)	(8,570)	(5,699)	(6,722)	(7,474)	(7,687)
Profit After Tax (FRS 3)	(4,197)	(4,073)	(7,447)	(8,588)	(5,718)	(1,628)	(583)	(7,701)
Average Number of Shares Outstanding (m)	3.8	3.8	3.8	4.0	4.9	19.9	23.9	23.9
EPS - normalised (€)	(1.1)	(1.1)	(1.9)	(2.1)	(1.2)	(0.3)	(0.3)	(0.3)
EPS - normalised and fully diluted (€)	(1.1)	(1.1)	(1.9)	(2.1)	(1.2)	(0.3)	(0.3)	(0.3)
EPS - (IFRS) (€)	(1.1)	(1.1)	(1.9)	(2.1)	(1.2)	(0.1)	(0.0)	(0.3)
Dividend per share (€)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)	N/A	N/A	N/A	(611)	N/A	N/A	(66)	72
EBITDA Margin (%)	N/A	N/A	N/A	(15,849)	N/A	N/A	(1,807)	(209)
Operating Margin (before GW and except.) (%)	N/A	N/A	N/A	(16,463)	N/A	N/A	(1,845)	(215)
BALANCE SHEET								
Fixed Assets	1,557	1,853	2,032	2,190	1,610	7,443	15,406	17,797
Intangible Assets	10	7	14	36	4	16	24	28
Tangible Assets	1,519	1,819	1,990	2,126	1,579	2,302	3,357	5,743
Investments	28	28	28	28	28	5,125	12,025	12,025
Current Assets	843	1,416	1,650	694	1,353	10,284	13,971	6,560
Stocks	0	0	39	0	0	0	57	83
Debtors	0	0	0	25	0	0	227	1,991
Cash	461	836	993	14	689	9,271	12,676	3,474
Other	382	580	618	654	664	1,012	1,012	1,012
Current Liabilities	(680)	(639)	(1,129)	(3,090)	(19,393)	(2,253)	(1,152)	(2,034)
Creditors	(680)	(639)	(1,129)	(3,090)	(3,312)	(2,253)	(1,152)	(2,034)
Short term borrowings	0	0	0	0	(16,081)	0	0	0
Long Term Liabilities	(7,185)	(12,169)	(14,490)	(16,158)	(198)	(237)	(237)	(237)
Long term borrowings	(6,976)	(11,850)	(14,229)	(15,930)	0	0	0	0
Other long term liabilities	(209)	(320)	(261)	(228)	(198)	(237)	(237)	(237)
Net Assets	(5,465)	(9,538)	(11,937)	(16,365)	(16,628)	15,236	27,989	22,086
CASH FLOW								
Operating Cash Flow	(3,322)	(2,935)	(5,454)	(4,537)	(5,473)	(6,792)	(7,069)	(6,696)
Net Interest	0	0	0	0	0	0	165	121
Tax	0	0	0	0	0	0	0	0
Capex	(650)	(589)	(562)	(392)	(39)	(852)	(1,212)	(2,609)
Acquisitions/disposals	0	0	0	0	0	0	0	0
Financing	(516)	0	4,903	3,951	4,266	33,492	11,538	0
Dividends	0	0	0	0	0	0	0	0
Net Cash Flow	(4,488)	(3,523)	(1,114)	(978)	(1,246)	25,848	3,422	(9,184)
Opening net debt/(cash)	2,027	6,515	11,014	13,236	15,916	15,392	(9,271)	(12,676)
HP finance leases initiated	0	0	0	0	0	0	0	0
Other	0	(976)	(1,108)	(1,701)	1,770	(1,184)	(18)	(18)
Closing net debt/(cash)	6,515	11,014	13,236	15,916	15,392	(9,271)	(12,676)	(3,474)

Source: MagForce AG, Edison Investment Research. Note: We include the €5.1m and €6.9m non-cash licence agreement income in 2013 and 2014, respectively as an exceptional item in the P&L, hence it is excluded from normalised operating, pre-tax and net loss.

Contact details	Revenue by geography
Max-Planck-Strasse 3 12489 Berlin Germany +49 (0)30 3083 800 www.magforce.de	N/A

CAGR metrics		Profitability metrics		Balance sheet metrics		Sensitivities evaluation	
EPS 2011-15e	N/A	ROCE 2014e	N/A	Gearing 2014e	N/A	Litigation/regulatory	◖
EPS 2013-15e	N/A	Avg ROCE 2011-15e	N/A	Interest cover 2014e	N/A	Pensions	○
EBITDA 2011-15e	N/A	ROE 2014e	N/A	CA/CL 2014e	N/A	Currency	◖
EBITDA 2013-15e	N/A	Gross margin 2014e	N/A	Stock days 2014e	N/A	Stock overhang	◖
Sales 2011-15e	207%	Operating margin 2014e	N/A	Debtor days 2014e	N/A	Interest rates	○
Sales 2013-15e	N/A	Gr mgn / Op mgn 2014e	N/A	Creditor days 2014e	N/A	Oil/commodity prices	○

Management team

Chairman and CEO: Ben Lipps

Dr Lipps joined MagForce in September 2013, having previously been chair and CEO of Fresenius Medical Care since 1999. Dr Lipps led the research team that developed the first commercial hollow fibre artificial kidney at the end of the 1960s. Before joining Fresenius Group in 1985, Dr Lipps held several research management positions in various companies, among them Dow Chemical. He earned his master's and doctoral degrees at the Massachusetts Institute of Technology in chemical engineering.

CFO: Christian von Volkmann

Christian von Volkmann joined MagForce as CFO in May 2012. He was previously at Jerini, successfully contributing to the IPO in 2005 and was promoted to CFO in 2008 during the subsequent acquisition by Shire. Mr von Volkmann has more than 14 years of corporate finance and capital market transaction experience. He studied business administration at the Julius Maximilian University and is also a licensed certified public accountant in the US.

COO: Hoda Tawfik

Prof Dr Hoda Tawfik has been at MagForce since May 2011. She has over 20 years' experience in the field of clinical development and medical affairs within the pharma/biotech industry. Before joining MagForce she worked at Medigene AG as head of global clinical operations department and medical affairs for nine years. Dr Tawfik completed her pharmacy studies at the University of Cairo, and obtained a PhD in pharmacology and toxicology from the University of Düsseldorf.

Principal shareholders	(%)
Avalon Capital One GmbH	34.45
Nanostart AG	3.01
Management	1.15

Companies named in this report

N/A