

Elbit Medical Technologies

Two promising private assets

Elbit Medical Technologies is an Israel-based healthcare investment company traded on the TASE. It is invested in two private companies: InSightec is a commercial-stage medical device company marketing a non-invasive thermal tissue ablation therapy in three indications and Gamida Cell is a cell and immune therapy company developing a universal bone marrow transplant (BMT) product for haematological malignancies. Although their recent offerings of NIS182m of convertible notes lengthen the cash runway it raises the prospect of dilution in 2022. In addition, the parent company Elbit Imaging (~89% owned) has its own challenges. We value Elbit Medical at NIS407m or NIS1.76 per share.

Year end	Revenue (\$m)	PBT* (\$m)	EPS* (\$)	DPS (\$)	P/E (x)	Yield (%)
12/15	1.8	(1.1)	0.0	0.0	N/A	N/A
12/16	0.0	(3.7)	0.0	0.0	N/A	N/A
12/17	0.0	(5.2)	0.0	0.0	N/A	N/A

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

InSightec: A non-invasive operating room

Elbit Medical currently holds a ~22% (~19% fully diluted) stake in InSightec, a commercial-stage medical device company. InSightec's ExAblate uses MRI and high-intensity focused ultrasound to perform precise and incisionless thermal tissue ablation. ExAblate has achieved FDA and CE approval for three distinct indications, with revenues of \$32.1m for FY17. InSightec's latest \$150m preferred Series E funding round led by Koch Group in December 2017 (Elbit Medical did not participate) reflects a pre- and post-money valuation of \$460m and \$610m (fully diluted), respectively.

Gamida Cell: Cord stem cell transplant

Elbit Medical is also invested in Gamida Cell (~18% owned, ~13% fully diluted), which is developing NiCord, a product derived from umbilical cord blood (UCB) stem cells, for the treatment of high-risk haematological malignancies. NiCord is the first BMT alternative to receive FDA breakthrough therapy designation. Enrolment is underway for a Phase III study with enrolment expected to be complete in H219.

A precarious year ahead

The company raised NIS182m in offerings of convertible notes in Q118, primarily to repay its loan to Elbit Imaging, which was repaid in March. Elbit Imaging's own high debt load (~NIS227m) and potential requirement to sell its stake (or a portion of its stake) in Elbit Medical increases the risk of selling pressure over the next year.

Valuation: NIS407m or NIS1.76 per share

We initiate our valuation of Elbit Medical at NIS407m or NIS1.76 per share based on a risk-adjusted NPV analysis of the portfolio companies and Elbit Medical's proportional ownership. We currently value InSightec as the highest value portfolio company (\$110.1m for Elbit Medical's share).

Initiation of coverage

Pharma & biotech

28 June 2018

Price* **NIS1.12**
Market cap **NIS259m**

*Priced as at 26 June 2018

NIS3.64/US\$

Net debt (\$m) at 31 December 2017 42.4

Shares in issue 231.4m

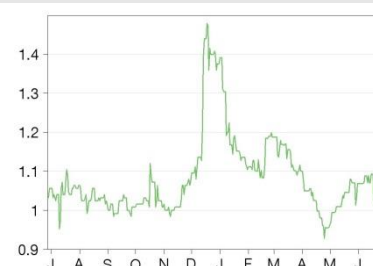
Free float 10.8%

Code EMTC

Primary exchange TASE

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (19.4) 10.2 24.8

Rel (local) (21.6) 3.3 10.4

52-week high/low NIS1.52 NIS0.95

Business description

Elbit Medical Technologies (Elbit Medical), a fully controlled subsidiary of the Elbit Imaging (EMITF), is an Israeli biomedical and healthcare technology group. Its portfolio of two companies is focused on medical devices and therapeutics: InSightec, which develops and markets the ExAblate platform for non-invasive thermal tissue ablation, and Gamida Cell, which is developing a universal bone marrow transplant.

Next events

Gamida Cell NiCord Phase III top-line data readout H120

InSightec Parkinson's disease Phase II/III top-line data 2020

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Investment summary

Company description: Devoted to biomedical venture

Elbit Medical Technologies is an Israel-based healthcare investment company that was incorporated in 1996. As of January 2018, Elbit Medical has contributed NIS460.3m (\$134.7m) to its only two portfolio companies. It is controlled by Elbit Imaging (~89% stake), an Israeli investment company that invests across the real estate sector (ie land plots in India that are designated for sale to residential projects and land plots in central and eastern Europe and Greece, held by the Plaza Centers subsidiary, which are also designated for sale) and medical industries (via Elbit Medical). Elbit Imaging is publicly traded on both the TASE and NASDAQ, with a market capitalisation of ~NIS76m (\$21m), which is lower than that of Elbit Medical due to a significant amount of debt (also, Elbit Imaging may be forced to sell its shares (or a portion of its shares) in Elbit Medical to pay off that debt). Elbit Medical has invested a total of about \$116m in InSightec, a market-stage medical device company developing a non-invasive thermal tissue ablation platform called ExAblate to treat a number of gynaecology, oncology and neurology indications, and about \$18.7m in Gamida Cell, a late-stage biopharmaceutical company predominantly active in the field of BMT, a life-saving treatment for patients with high-risk leukaemia and lymphoma.

Valuation: NIS407m or NIS1.76 per share

Using a risk-adjusted NPV analysis on its two investments, we arrive at a valuation of Elbit Medical Technologies of NIS407m or NIS1.76 per share. Based on our calculations, InSightec is the company's most valuable asset (\$579m total valuation, \$110.1m for Elbit Medical's share, compared to a post-money valuation of \$610m, or \$460m pre-money). The company anticipates a series of potential inflection points over the year, in particular the completion of enrolment for the CordIn Phase I/II in patients with SCD and thalassemia in 2019 and completion of enrolment for the NiCord Phase III trial for haematological malignancies, followed by top-line data in H120.

Financials: NIS182m of notes raised in Q118

Elbit Medical reported a cash position of \$0.03m as of the end of 2017. It is important to note that the nature of the firm is lean at the corporate level and the company is not required to provide additional funding to its investments. Elbit Medical recently completed a raise of NIS182m of convertible notes and has used the majority of the proceeds to repay its NIS154m debt to Elbit Imaging. Moreover, NIS4m were set aside for ongoing operational expenses in addition to NIS18m set aside for interest payments due on the notes for the first two years. The notes lengthen the maturity profile to March 2022 and are secured by a lien on Elbit Medical's holdings in InSightec and Gamida Cell.

Sensitivities: Significant commercialisation risks

Elbit Medical carries specific risks associated with investing in development-stage healthcare companies, such as regulatory hurdles, clinical trial uncertainty, understanding mechanism of action and funding requirements. However, we believe the risk is reduced to some extent due to the range of stages of development. Conversely, the portfolio lacks diversity with only two investees. InSightec is the most commercially advanced company, with three ExAblate products in the early stages of commercialisation. Although first approved by the FDA in 2004, it has yet to turn a profit. Gamida Cell's NiCord is in late-stage development (Phase III) and is the first BMT alternative to receive FDA breakthrough therapy designation. Clinical utilisation will be a significant hurdle for the two investees as acceptance will require comparative data to mainstay treatments that have been in place for decades. Also, due to Elbit Imaging's own high debt load (and potential requirement to sell its stake in Elbit Medical), there is a risk of selling pressure over the next year.

Dedicated biomedical investment

Elbit Medical Technologies, the biomedical investment division of Elbit Imaging, is invested in the healthcare sector through its holdings in two companies that are developing medical device and therapeutic technologies, which together cover a variety of clinical applications and the full range of development phases. Elbit Medical holds a board seat in both InSightec and Gamida Cell as they are large minority holders. The York Fund (~19%), Koch Disruptive Technologies (~16%), and the GE Group (~4%) are also significant shareholders of InSightec, while Novartis (~17%) and Clal Biotechnology Industries (~14%) have substantial stakes in Gamida Cell, fully diluted. Elbit Medical has indicated that it is focused on its current investments and does not plan to invest in additional companies in the near future.

Exhibit 1: Investment portfolio

Investment	Technology	% held	Founded	Status	Advantages	Targets
InSightec	MRgFUS to treat various indications with thermal tissue ablation	~22% (~19% fully diluted)	1999	ExAblate (Body): FDA and CE approved for uterine fibroids and pain palliation due to bone metastases. ExAblate (Neuro): FDA and CE approved for unilateral thalamotomy in the treatment of essential tremor.	Provides non-invasive alternatives to common standard procedures and improves patient outcomes by minimising recovery time. InSightec's ExAblate system is the only MRgFUS therapy with CE and FDA approval.	Evaluating potential for bilateral thalamotomy in the treatment of essential tremor with ExAblate Neuro device. Enrolment is underway for Phase III study of ExAblate Neuro to treat Parkinson's disease.
Gamida Cell	Cord stem cell transplant for hematologic diseases	~18% (~13% fully diluted)	1998	NiCord: Enrolling Phase III; Cordln: Two ongoing Phase I/II trials; natural killer cells: initiated Phase I.	UCB for transplantation only requires partial matching and nicotinamide technology increases the limited population and quality of stem and progenitor cells. NiCord received FDA breakthrough therapy designation.	Enrolment is underway for a Phase III study of NiCord.

Source: Elbit Medical Technologies. Notes: MRgFUS= magnetic resonance guided focused ultrasound.

One platform for a plethora of indications

InSightec is a commercial-stage medical device company headquartered in Israel with global offices located in the US, Japan and China. Founded in 1999, the company has privately funded the development of ExAblate, which comprises magnetic resonance imaging and high-intensity focused ultrasound (MRgFUS) to perform non-invasive thermal tissue ablation for a range of clinical applications where first-line pharmacotherapies may be inadequate and subsequent conventional therapies include open surgery, chemotherapy and radiotherapy, which are commonly associated with significant morbidity and mortality as well as extended in-patient stays and recovery times. Broadly, InSightec's objective is to increase safety and simplicity of surgical procedures by minimising invasiveness where existing therapies have fallen short.

The ExAblate platform is versatile and, hypothetically, can be used to treat a range of indications. The system can target (using MRI) and thermally ablate or destroy (using high-intensity focused ultrasound sonication) soft tissue without the need for a surgical incision. Independently controlled ultrasound transducers are arranged such that acoustic energy is precisely focused on a small region of interest at adequate temperatures to achieve coagulative necrosis of tissue. MRI is used to guide treatment in real time, while magnetic resonance (MR) thermometry feedback allows the physician to monitor patient safety and to adjust system parameters for optimal results. The ExAblate platform comprises three main components: a patient table, which carries the ultrasound transducer via interchangeable cradles for a variety of clinical applications, an operating console, which is a computer installed with ExAblate software that provides the operator with a graphical user interface (GUI) to control the system, and an equipment cabinet, which houses the required electronics and amplifiers to power the system as well as the water cooling system. InSightec's

ExAblate technology is covered by 168 patents worldwide, with the most recent patent providing protection through to 2029. Nonetheless InSightec's patent portfolio does not entirely preserve its market.

InSightec has developed the ExAblate 2100 V1 (Body) and ExAblate 4000 (Neuro) systems as MRgFUS non-invasive alternative therapies for a variety of gynaecology, oncology and neurology indications. The location of the focused ultrasound (FUS) transducer is unique to each ExAblate system. The 2100 system includes a conformal bone FUS transducer with a built-in water cooling system, which allows for adaptable patient positioning and access to additional treatment sites, as well as an endorectal FUS transducer designed to treat prostate cancer. The two FUS transducers can be attached to the patient table with a robotic arm. Finally, the ExAblate 4000 FUS transducer is integrated into a hemispherical positioning system fixed to the MR patient table and is specifically designed for neurology indications.

By way of full clinical validation under the pre-market approval (PMA) route, the company has achieved FDA approval and CE markings for the ExAblate 2000 (and 2100) systems for the treatment of symptomatic uterine fibroids and pain palliation caused by bone metastases and for its ExAblate 4000 system for the treatment of medication-refractory essential tremor. Moreover, the company has received CE markings for the treatment of prostate cancer, tremor-dominant Parkinson's disease and neuropathic pain, and is investigating these further in clinical trials in an effort to achieve FDA approval (see Exhibit 2 for a brief summary of InSightec's pipeline). The future success of the ExAblate platform is highly dependent on the company's ability to achieve the following critical requirements: scientific acceptance (positive clinical trial data indicating efficacy and safety), adoption (revenues growing) and reimbursement.

Exhibit 2: InSightec's pipeline

Product	Indication	Status	Description	Notes
ExAblate 2100 (Body)	Uterine fibroids, pain alleviation for bone metastases	FDA, CE and int'l approvals	Non-invasive MRgFUS to perform precise thermal tumour ablation.	Focus on physician adoption and reimbursement. Uterine fibroids: received CE mark and FDA approval in 2002 and 2004, respectively. Bone metastases: received CE mark and FDA approval in 2007 and 2012, respectively.
ExAblate 4000 (Neuro)	Essential tremor	FDA, CE, and int'l approvals	Non-invasive tcMRgFUS to perform precise unilateral thermal ablation to the VIM nucleus of the thalamus (thalamotomy).	Focus on physician adoption, and reimbursement. Received CE mark and FDA approval in 2012 and 2016, respectively. Compatibility programme with Siemens MRI scanners expected completion in December 2018.
ExAblate 2100 (Body)	Prostate cancer	CE approved, int'l approvals, Phase I (US)	Minimally invasive MRgFUS. Endorectal ultrasound transducer arm attached to MR patient table. MR guides ultrasound to perform precise tumour ablation to treat locally confined prostate cancer.	Phase I clinical trial investigating the safety and efficacy of ExAblate Prostate in 100 patients with localised intermediate risk of prostate cancer is expected to complete enrolment by year-end 2018 with top-line data expected in 2020. Received CE mark in 2016.
ExAblate 4000 (Neuro)	Parkinson's disease	CE and int'l approvals, Phase II/III	Non-invasive tcMRgFUS to perform precise unilateral thermal ablation of the globus pallidus (pallidotomy).	tcMRgFUS unilateral pallidotomy safety and efficacy trial to manage dyskinesia or motor fluctuations in patients with medication-refractory, advanced idiopathic Parkinson's disease is expected to complete enrolment in 2019 in the US and 2020 in Japan. Trial expected to conclude in 2020. Received CE mark in 2012.
ExAblate 4000 (Neuro)	Neuropathic pain	CE and int'l approvals, Phase I (US)	Non-invasive tcMRgFUS to perform precise bilateral medial thermal lesions in the thalamic nuclei (thalamotomy) to reduce pain.	Phase I randomised, feasibility study at the University of Virginia in 10 patients with treatment-refractory chronic trigeminal neuropathic pain is expected to be complete in 2020. Received CE mark in 2012. No plans for FDA approval at this time.

Source: InSightec notes, Elbit Medical notes. Note: int'l = International; MRgFUS = magnetic resonance guided focused ultrasound; tcMRgFUS = transcranial magnetic resonance guided focused ultrasound; VIM = ventral intermediate.

Established safety and efficacy in three indications fall within range of standard surgical procedures

InSightec's ExAblate device is approved for the treatment of uterine fibroids (leiomyomas or myomas), which are benign tumours of uterine muscle that affect 70% of women on reaching the menopause. While the majority of uterine fibroids are asymptomatic, only 25% of women experience symptoms (ie heavy menstrual bleeding, which can lead to anaemia, painful periods,

abdominal protrusion, bowel dysfunction) severe enough to require treatment.¹ The ExAblate procedure for symptomatic uterine fibroids, coined Curawave, uses MRI to direct FUS acoustic waves to target the volume of a fibroid, which penetrates tissue at a focal point at temperatures between 65-85°C, causing protein denaturation resulting in cell death, coagulative necrosis and irreversible cell damage.² In a Phase III safety and efficacy trial, 70.6% of the 109 patients reached the primary endpoint, which was a 10-point improvement in the transformed symptom severity scale of the Uterine Fibroid Symptoms Quality-of-Life (UFS-QOL) questionnaire six months before treatment. Although small, a mean tumour volume reduction of 13.5% was also noted. This is modest compared with typical myomectomy results, which is the surgical removal of individual fibroids either abdominally, vaginally or laparoscopically that also preserves the uterus.³ Additionally, a 12-month, follow-up extension revealed that of 82 evaluable ExAblate patients, 23 women underwent either hysterectomy, myomectomy or uterine artery embolization,⁴ which is comparable to the estimated 25% of myomectomy patients who reportedly undergo hysterectomy after treatment.⁵ Although hysterectomy results in infertility, the procedure remains the most effective treatment option as the surgical removal of the entire uterus and cervix eliminates the risk of fibroid recurrence.⁶ One analysis comparing quality-adjusted life years (QALY) of uterine artery embolization (17.39), myomectomy (17.31) and hysterectomy (17.18) for uterine fibroids (UF) in premenopausal women demonstrated that the use of MRgFUS (17.36) falls within the range of currently accepted standards for cost-effectiveness,⁷ and is therefore a viable first-line treatment, particularly for women in their childbearing years, as it preserves the uterus.

ExAblate is also approved for pain palliation of bone metastases. Metastatic bone disease (MBD) is the spread of cancer from another organ to the skeleton, most commonly originating from the prostate, breast, lungs, thyroid and kidney. According to the American Academy of Orthopaedic Surgeons, approximately 50% of the 1.2 million new cancer diagnoses made annually can metastasize to the skeleton. Bone pain is the most common symptom of MBD and is described as aching or burning sensations with periods of debilitating discomfort.⁸ ExAblate for pain relief in cancer patients with bone metastases uses MRgFUS to target the volume of a tumour and penetrate the tissue at a focal point at temperatures between 65-85°C to cause thermal coagulation to the periosteal membrane that contains pain-sensitive nerve fibres.⁹ The safety and efficacy of MRgFUS for pain palliation of MBD was evaluated in a randomized Phase III trial in 147 patients with persistent pain following radiation therapy. Three months post-treatment, 72 of the 112 patients who received MRgFUS experienced a decrease from baseline in worst numerical rating scale pain score (0-10, with higher scores indicating more severe pain) and 23.2% patients experienced a complete response (a pain score of zero), while seven of the 35 patients who received a “sham procedure” (placebo) experienced a change from baseline with 5.7% reporting a complete

¹ Stewart, E., et al. (2017). Epidemiology of uterine fibroids: a systematic review. *BJOG: An International Journal of Obstetrics & Gynaecology*, 124(10), 1501-1512.

² Stewart, E. A., et al. (2006). Clinical outcomes of focused ultrasound surgery for the treatment of uterine fibroids. *Fertility and Sterility*, 85(1), 22-29.

³ ACOG Practice Bulletin No. 96: Alternatives to Hysterectomy in the Management of Leiomyomas. (2008). *Obstetrics & Gynecology*, 112(2, Part 1), 387-400.

⁴ Stewart, E. A., et al. (2006).

⁵ ACOG Practice Bulletin No. 96: Alternatives to Hysterectomy in the Management of Leiomyomas. (2008). *Obstetrics & Gynecology*, 112(2, Part 1), 387-400.

⁶ Stewart, E., Cookson, C., Gandolfo, R., & Schulze-Rath, R. (2017).

⁷ O'Sullivan, A. K., et al. (2009). Cost-effectiveness of magnetic resonance guided focused ultrasound for the treatment of uterine fibroids. *International Journal of Technology Assessment in Health Care*, 25(1), 14-25.

⁸ Coleman, R. (2001). Metastatic bone disease: clinical features, pathophysiology and treatment strategies. *Cancer Treatment Reviews*, 27(3), 165-176.

⁹ Gianfelice, D., et al. (2008). Palliative Treatment of Painful Bone Metastases with MR Imaging-guided Focused Ultrasound. *Radiology*, 249(1), 355-363.

response.¹⁰ In addition, 47% of patients who received MRgFUS therapy either reduced or entirely stopped their morphine-equivalent daily dose intake.¹¹ Correspondingly, external beam radiation therapy, which is a widely accepted approach for localised MBD pain management, provides between 60-80% of patients with effective pain control and approximately 25-30% with complete response.¹² With regard to adverse events, MRgFUS recipients reported sonication and post-procedure pain and, notably, there were reports of third-degree skin burn, fractures and neuropathy.¹³ Risk of fracture is also associated with radiation therapy and MBD pathology.¹⁴ Alternative surgical procedures involve tumour excision, filling defects with bone cement and stabilisation with orthopaedic fixation devices to provide additional support. However, routine surgical risks are higher for patients with MBD due to weakened overall health. Ideal treatment for pain palliation of bone metastases should be safe, effective, somewhat quick and tolerable for the patient.

Most recently, ExAblate Neuro was approved for the treatment of medication-refractory essential tremor (ET). ET is a neurological disorder that is characterised by uncontrollable rhythmic oscillatory movement of the limbs, primarily of the hands and arms, as well as in other forms affecting the head and vocal cords.¹⁵ Although ET does not shorten life expectancy, it significantly debilitates an estimated seven million people in the US.¹⁶ At this time, treatment options merely target symptom relief. First-line pharmacotherapies such as propranolol (a beta-blocker), primidone (an antiepileptic) and a variety of drugs that increase gamma-aminobutyric acid neurotransmission have limited efficacy.¹⁷ Neurosurgery (ie thalamotomy and deep brain stimulation [DBS]) is a viable, yet historically invasive option, for the estimated 50% of ET patients refractory to medication.^{18 19} The ExAblate Neuro procedure, coined Neuravive, targets and sonicates a precise volume of the ventral intermediate (VIM) nucleus of the thalamus (ie thalamotomy) non-invasively at temperatures between 55-60°C, creating a thermal lesion to disrupt brain activity causing the tremor. The safety and efficacy of ExAblate Neuro was evaluated in a double-blind Phase III trial in 76 patients with moderate to severe tremor of the hand. The primary endpoint was change in hand tremor score based on the clinical rating scale for tremor (ranging from 0 to 32, with higher scores indicating more severe tremor) in the contralateral MRgFUS thalamotomy group (56 patients) compared to the “sham procedure” group (20 patients) from baseline to three months post-treatment. Three months after treatment, the average tremor score of the MRgFUS thalamotomy group improved by 47% compared to an average 0.1% in the placebo group. Tremor score of the MRgFUS group 12 months post-treatment maintained an average 40% improvement.²⁰ Documented adverse events

¹⁰ Hurwitz, M. D., et al. (2014). Magnetic Resonance–Guided Focused Ultrasound for Patients With Painful Bone Metastases: Phase III Trial Results. *JNCI: Journal of the National Cancer Institute*, 106(5).

¹¹ Hurwitz, M. D., et al. (2014).

¹² Johnstone, C., & Lutz, S. T. (2013). External Beam Radiotherapy and Bone Metastases. *Bone Metastases Cancer Metastasis - Biology and Treatment*, 175-185.

¹³ Hurwitz, M. D., et al. (2014).

¹⁴ Johnstone, C., & Lutz, S. T. (2013).

¹⁵ Benito-León, J., & Louis, E. D. (2007). Clinical update: diagnosis and treatment of essential tremor. *The Lancet*, 369(9568), 1152-1154.

¹⁶ Louis, E. D., & Ottman, R. (2014). How Many People in the USA Have Essential Tremor? Deriving a Population Estimate Based on Epidemiological Data. *Tremor and Other Hyperkinetic Movements*, 4, 259.

¹⁷ Louis, E. D., Rios, E., & Henchcliffe, C. (2010). How are we doing with the treatment of essential tremor (ET)? *European Journal of Neurology*, 17(6), 882-884.

¹⁸ Thanvi, B., Lo, N., & Robinson, T. (2006). Essential tremor—the most common movement disorder in older people. *Age and Ageing*, 35(4), 344-349.

¹⁹ Louis, E. D. (2016). Treatment of Medically Refractory Essential Tremor. *New England Journal of Medicine*, 375(8), 792-793.

²⁰ Elias, W. J., et al. (2016). A Randomized Trial of Focused Ultrasound Thalamotomy for Essential Tremor. *New England Journal of Medicine*, 375(8), 730-739.

include gait disturbance, ataxia and numbness of the face and hand. These events were expected as they are similar to alternative neurosurgical procedures involving the thalamus.²¹ While considerably less invasive, the MRgFUS thalamotomy tremor score improvement reported here is modest in comparison to contralateral radiofrequency thalamotomy (which requires an open craniotomy to create a small lesion on the VIM thalamic nucleus) and gamma knife thalamotomy (a minimally invasive procedure in which a single dose of radiation is used to destroy neurons at the VIM thalamic nucleus), which correspondingly result in 60–90% tremor reduction.²² Bilateral thalamotomies are associated with higher rates of haemorrhage and infection as well as disabling side effects including intellectual or cognitive impairment.²³ DBS is an alternative approach that involves the surgical placement of electrodes in the thalamus wired under the skin to an implanted impulse generator in the chest, which stimulates the thalamus to interfere with tremor-producing activity. Although DBS is associated with risks such as infection, haemorrhage and hardware malfunction, it is reversible and often the preferred surgical method to treat ET.²⁴

Interestingly, a cost-effectiveness analysis comparing MRgFUS to radiosurgery and DBS demonstrated that unilateral thalamotomy for ET with MRgFUS was in fact more cost-effective than both alternatives based on average expected costs (Medicare reimbursement) and utilities gained from treatment.²⁵ It is important to note several limitations of this comparative study. Firstly, this is a decision analysis comparing clinical outcomes of existing trials (literature search) for the three procedures and not a randomized control trial. Also, Medicare reimbursement for MRgFUS was not determined before the publication of this study, although estimates were made comprising codes for intraoperative mapping, MRI, and stereotactic radiosurgery planning, consultation and use.²⁶

Commercial strategy

InSightec generates revenue through the sale of ExAblate systems and corresponding annual service contract costs and consumables. The marketing strategy (sales and marketing FY17 expenditure: \$17m) is to target distribution to private and/or public hospital systems in developed markets via direct and indirect global salesforce (ie distribution agreements in Korea, Slovakia, Lithuania, India, Australia, and Sydney, thus far). However, the terms of these agreements have not been disclosed.

The company is tackling reimbursement on both a national and regional level in the US and EU. Medical centres are also working with health insurance companies to achieve this (ie Amper Kliniken medical centre in Dachau, Germany collaborated with the Techniker Krankenkasse health insurance company to achieve reimbursement for uterine fibroids in Germany). According to the company, an estimated [99.8 million](#) people in the US can receive coverage for MRgFUS for pain palliation of bone metastases. As of January 2018, the Centres for Medicare & Medicaid Services (CMS) cover beneficiaries with \$17,500.50 for the Neuravive procedure (ExAblate Neuro for ET). Prior to this reimbursement win, according to the company, 94 ExAblate Neuro commercial procedures were performed worldwide in Q217. In June, InSightec announced that Medicare coverage is available to patients in 10 US states for the treatment of ET and, as of 1 July 2018, six additional states will also provide coverage. Further, InSightec has received positive Draft Local

²¹ Chang, W. S., et al. (2014). Unilateral magnetic resonance guided focused ultrasound thalamotomy for essential tremor: practices and clinicoradiological outcomes. *Journal of Neurology, Neurosurgery & Psychiatry*, 86(3), 257-264.

²² Witjas, T., et al. (2016). Essential tremor: Update of therapeutic strategies (medical treatment and gamma knife thalamotomy). *Revue Neurologique*, 172(8-9), 408-415.

²³ Louis, E. D. (2016).

²⁴ Louis, E. D. (2016).

²⁵ Ravikumar, V. K., et al. (2017). Cost-effectiveness of focused ultrasound, radiosurgery, and DBS for essential tremor. *Movement Disorders*, 32(8), 1165-1173.

²⁶ Ravikumar, V. K., et al. (2017).

Coverage Determination from local Medicare administrative contractors (from an additional 22 states), which may expand Medicare coverage for the treatment of ET to a total of 38 US states. To our knowledge, Medicare does not have national coverage determination for MRgFUS for uterine fibroids, however, local coverage determinations may exist. In late June, InSightec received [positive guidance](#) from the National Institute for Health and Care Excellence (NICE) of the UK's Department of Health for unilateral treatment of ET with ExAblate Neuro. Additionally, St. Mary's Hospital in London, which is the first and only site in the UK with ExAblate Neuro technology, has launched its MRgFUS service for the treatment of ET and has treated 16 patients to date.

InSightec's ExAblate systems are presently deployed in 120 medical centres worldwide. We estimate the systems cost on average \$1.2m in addition to corresponding annual service fees and consumables. InSightec reported revenues of \$32.1m for FY17 (Q217 revenue: \$6.8m, which includes three Neuro systems (\$4.2m), one neuro upgrade (\$0.5m), one body upgrade (\$0.2m) and service fees of \$1.9m). Although the company's first product was approved in 2004, it has yet to make a profit and COGS account for approximately 50% of its current revenue. We expect sales to grow together with the publication of long-term cost-effectiveness studies, reimbursement and the approval of new indications.

Market and competitive environment

Although a significant monetary investment for hospitals, MRgFUS therapy can potentially have a substantial impact on reducing healthcare costs by minimising the risk of infection, reducing hospitalisation time and recovery time. In addition to positive safety and efficacy trial results, we believe that cost-effectiveness and long-term studies comparing ExAblate to mainstay treatments for each approved indication, such as the UF and ET cost-effectiveness trials noted previously, will be critical to adoption and reimbursement. However, we are not aware of InSightec's future plans for conducting additional longer-term cost-effectiveness studies at this time.

The clinical presence of the platform is limited by the number of compatible MRI systems installed in hospital settings. According to the Organisation for Economic Co-operation and development (OECD), as of 2016 there were more than 5,400 MRI units active in US hospitals (roughly 16.67 per one million of the US population).²⁷ This numeric excludes MRI units installed in outpatient imaging centres as we assume MRgFUS procedures will require the presence of a specialized surgeon. According to EvaluateMedTech, the diagnostic medical imaging market is led by Siemens Healthineers, GE Healthcare and Philips with 26%, 21%, and 19% of the market share in 2016, respectively. At this time, all of the ExAblate systems are exclusively compatible with GE Healthcare's 1.5 and 3.0 Tesla MR scanners (GE Healthcare is also a minority shareholder in InSightec). Going forward, we expect the number of active ExAblate units to increase as the company achieves FDA approvals for prostate cancer, Parkinson's disease and epilepsy, etc. We therefore assume a penetration of about 2% of the global medical imaging market share by 2028 for each indication (see Exhibit 3). Furthermore, in 2016 InSightec announced a collaboration with Siemens Healthineers to develop compatibility between ExAblate Neuro with the Magnetom Aera 1.5T and Skyra 3T clinical MR scanners, which we expect will provide InSightec with the opportunity to expand its presence in the global MR market. The project is expected to conclude in December 2018.

²⁷ OECD (2018), Magnetic resonance imaging (MRI) units (indicator).

Exhibit 3: Assumptions snapshot

Value driver	Key assumptions
ExAblate Neuro - US (movement disorders)	14% diagnosed with medication-refractory movement disorders. 16.67 MRI units available per one million of US population (in hospitals in 2016) and ExAblate is currently only compatible with GE Healthcare scanners (21.4% market share). We assume 10% peak penetration into GE Healthcare's share, and therefore ~2% penetration into US MR market for movement disorders by 2028.
ExAblate Body – EU-28 (women's health: uterine fibroids, adenomyosis)	50% women, 25% diagnosed with symptomatic UF, 20.9% diagnosed with adenomyosis. 10.6 MRI units available per one million of the EU population (in hospitals in 2016) and ExAblate is currently only compatible with GE healthcare scanners (21.4% market share). We assume 10% peak penetration into GE Healthcare's share, and therefore ~2% peak penetration into EU-28 MR market for women's health in the EU by 2028.

Source: Edison Investment Research. Note: This is only a snapshot of our assumptions for two value drivers.

Focused ultrasound (FUS) is an early-stage therapeutic technology with far-reaching implications. According to the Focused Ultrasound Foundation, there are over 50 companies worldwide developing high-intensity FUS for a variety of indications from pain management to neurological disorders covering a full range of clinical stages from preclinical to post-market. Similar to ExAblate, select technologies are also pairing FUS with imaging modalities to guide and monitor treatment (see Exhibit 4 for a selection of FUS therapies in clinical use). Image guidance via ultrasound or MR is vital to FUS surgery to provide anatomical and real-time treatment feedback. Although an ultrasound imaging system may be smaller and significantly less expensive than bulky MRI systems, ultrasound guidance systems are suboptimal for determining temperature changes and are also restricted by depth and for spatial resolution of treated tissue.²⁸ ExAblate is the only FDA- and CE-approved system that incorporates MR and high-intensity FUS.

Exhibit 4: Clinical ultrasound therapeutic technology

Product (company)	Indication	Status	Notes
TULSA-PRO (Profound Medical)	Prostate cancer	CE, Phase II (US)	MRI-guided positioning of transurethral, directional high-intensity ultrasound device to perform complete organ prostate ablation. Received CE mark in April 2016. Ongoing 110-patient Phase II safety and efficacy trial with data expected in H218.
Sonallev (Profound Medical)	UF and pain alleviation for bone metastases	CE	Developed by Royal Philips, acquired by Profound Medical in July 2017. MRI-guided HIFU energy integrated into a table that slides over Philips' MRI table. Provides real-time feedback, thermometry, and direct skin cooling.
FEP-BY02 (China Medical Technologies)	Benign and malignant liver, kidney, breast, pancreatic, and bone tumours, UF	China	Ultrasound imaging to guide and monitor thermal tumour ablation with HIFU.
Ablatherm (EDAP Technomed)	Prostate cancer	FDA, CE	Endorectal probe containing ultrasound imaging system (to guide and monitor procedure) and HIFU transducer.
Sonablate 500 (SonaCare Medical)	Prostate cancer	FDA	Endorectal probe containing ultrasound imaging system (to guide and monitor procedure) and HIFU transducer. Pre-annotated MRI images for reference.
Sonatherm (SonaCare Medical)	Soft tissue ablation	FDA	Laparoscopic probe containing ultrasound imaging system (to guide and monitor procedure) and HIFU transducer.
Haifu Model JC (Haifu Medical Technology)	UF, breast fibroadenoma, adenomyosis, and cancerous pancreatic, liver, breast, soft tissue, kidney tumours.	CE, China, Korea, Russia	Ultrasound imaging to guide and monitor thermal tumour ablation with HIFU. Combines CT/MRI images with ultrasound images for precision.

Source: Edison Investment Research. Notes: HIFU= high-intensity focused ultrasound. UF= uterine fibroids.

InSightec's most recent \$150m Series E financing (in which Elbit Medical did not participate) led by Koch Disruptive Technologies, marking the first investment of Koch Industries' new venture capital arm, will likely support the development of future applications in oncology (liver, pancreas and breast cancers) and neurosurgery (targeted drug delivery for Alzheimer's, brain tumours and obsessive compulsive disorder) based on the ExAblate technology and we expect to update our valuation and estimates with the release of more detail on these programmes.

Improving engraftment for blood diseases

Gamida Cell is developing cell and immune therapies to treat haematological cancers and orphan genetic diseases (Exhibit 5). Gamida Cell is predominantly active in the field of BMT, a life-saving

²⁸ Schlesinger, D., Benedict, S., et al. (2013). MR-guided focused ultrasound surgery, present and future. *Medical Physics*, 40(8), 080901.

treatment for patients with high-risk leukaemia and lymphoma. Julian Adams, PhD, was named chairman and CEO in November 2017. As a biotechnology industry pioneer, he has held senior leadership roles at a number of biotechnology companies and, most notably, is known for playing a key role in the discovery and development of Velcade (bortezomib) for multiple myeloma.

According to the US Department of Health and Human Services, approximately 17,500 people in the US are diagnosed with hematologic diseases annually, where the primary course of treatment is allogeneic BMT, in which stem cells are collected from a matching donor and transplanted into the patient. Preferably, a donor should “match” 10 out of 10 human leukocyte antigen (HLA) markers and only 30% of patients match with a relative. This leaves the remaining 70% in need of an unrelated donor. Patients are matched with eligible donors by HLA typing and it can take several weeks or longer to identify an appropriate donor. According to one study, the average time from donor centre-initiated HLA typing to donation is 125.4 days.²⁹

Exhibit 5: Gamida Cell pipeline

Product	Indication	Status	Description	Notes
NiCord	High-risk haematological malignancies	Phase III	Expanded cell graft derived from umbilical cord stem cells.	Enrolment is underway for confirmatory study of NiCord
CordIn	Rare genetic disease	Phase I/II	Expanded cell graft derived from umbilical cord stem cells.	Two studies into use of CordIn for SCD and thalassemia and for aplastic anaemia
Natural killer cells	Refractory B-cell lymphoma and multiple myeloma	Phase I	Donor-derived expanded NK cells	Enrolment underway for multiple myeloma and lymphomas

Source: Gamida Cell. Notes: SCD = sickle cell disease. NK = natural killer.

UCB has been utilised in clinical practice as an alternative graft source to peripheral blood for c 30 years.³⁰ UCB for transplantation only requires partial matching (a minimum requirement of four out of six HLA biomarkers) and has lower rates of graft-versus-host disease (GvHD).³¹ However, the use of UCB for BMT is limited by the minimal number of stem and progenitor cells. Low cell dose is associated with delayed engraftment and a longer neutropenic period, which is related to higher morbidity and transplant-related mortality.

The company's proprietary technology uses the small molecule nicotinamide (NAM), which is a form of vitamin B-3, to inhibit differentiation while the cells proliferate in culture, which increases the limited population and quality of stem and progenitor cells (CD34+/CD38-/Lin- cells) and also enhances cell functionality, ie migration, homing, engraftment.³²

Gamida Cell's leading product, NiCord, expands UCB cell graft ex vivo and enriches the specific subpopulation of stem and progenitor cells to treat haematological malignancies such as leukaemia and lymphoma. Essentially, CD133+ cells selected from a single unit of UCB are cultured for 21 days in nicotinamide resulting in a c 100-fold expansion of stem and progenitor cells, which are then cryopreserved until transplanted into patients. This expansion is a substantial advantage over a single UCB graft.

In Phase I/II data in 35 evaluable patients with acute leukaemia, myelodysplastic syndrome (MDS) and lymphoid malignancies presented at the [American Society of Haematology](#) (ASH) in December 2017, NiCord demonstrated a median time to neutrophil engraftment of 11 days and a median time to platelet engraftment of 34 days. According to matched data from the Center for International

²⁹ Schmidt AH, Solloch UV, Baier D, Grathwohl A, Hofmann J, et al. (2011) Support of Unrelated Stem Cell Donor Searches by Donor Center-Initiated HLA Typing of Potentially Matching Donors. *PLoS ONE* 6(5): e20268.

³⁰ Ballen, K. K., et al. (2013). Umbilical cord blood transplantation: the first 25 years and beyond. *Blood*, 122(4), 491-498.

³¹ Macmillan, M. L., et al. (2008). Acute graft-versus-host disease after unrelated donor umbilical cord blood transplantation: analysis of risk factors. *Blood*, 113(11), 2410-2415.

³² Peled, T., et al., (2012). Nicotinamide, a SIRT1 inhibitor, inhibits differentiation and facilitates expansion of hematopoietic progenitor cells with enhanced bone marrow homing and engraftment. *Experimental Hematology*, 40(4).

Blood and Marrow Transplant Research, standard UCB treatment results in a median time to neutrophil engraftment of 21 days and a median time to platelet engraftment of 46 days. These data indicate that NiCord has the potential to be the graft of choice for patients without a matched donor.

NiCord is the first BMT alternative to receive FDA breakthrough therapy designation, and was also granted FDA and EMA orphan drug designation. Enrolment is underway for a 120-patient Phase III study of NiCord, which will take place worldwide. This trial is investigating the ability of NiCord to provide a graft with an ample amount of cells that have fast and vigorous in vivo neutrophil and platelet producing potential to improve transplantation outcomes (as low cell dose is associated with delayed engraftment and poor outcomes). The primary endpoint for the trial is time to neutrophil engraftment following transplantation (on or before the 42nd day post-transplant) compared to a non-manipulated cord blood unit. The company intends to utilise the funds from its recent \$40m fund-raising to progress its Phase III trial, which is expected to complete enrolment in H219 with top-line data expected in 2020.

Cord blood is currently used for the treatment of certain cancers (acute lymphoblastic leukaemia, acute myeloid leukaemia, Hodgkin's lymphoma), blood disorders (sickle cell anaemia, thalassemia) and bone marrow failure syndromes (severe aplastic anaemia, severe autoimmune neutropenia), as well as metabolic disorders and immunodeficiencies. Using NAM technology and UCB, Gamida Cell is developing CordIn to treat aplastic anaemia (AA), sickle cell disease (SCD) and thalassemia, whereas BMT is the mainstay treatment. AA is a blood disorder with variable worldwide incidence. A review compared annual national incidences of AA in China with 7.4 per million, four per million in the US and 2.34 per million reported in the EU.³³

Likewise, SCD is a common genetic blood disorder that affects approximately 100,000 Americans, the majority of whom are African American, and millions of people worldwide.³⁴ Individuals with SCD in the US contribute to up to \$1.6bn in healthcare utilisation.³⁵ Gamida Cell recently presented the results from its 13-patient trial of CordIn in 13 patients with sickle-cell disease (SCD) who were in need of allogeneic bone marrow transplant (BMT) at the 2018 BMT Tandem Meetings (Salt Lake City). Engraftment was observed after a median of seven days post-treatment in all 13 patients. In the nine patients with long-term follow up, transfusion independence with a normal haemoglobin profile was achieved. However, two patient deaths were reported, one due to secondary graft failure and the other due to severe graft versus host disease (a common complication from BMT). The company plans to continue development although we do not yet include this programme in our valuation as it is still relatively early and timelines are unclear. The company expects to conclude patient enrolment for the CordIn Phase I/II in patients with SCD and thalassemia in 2019. An additional Phase I/II in patients with AA was recently initiated and is expected to complete patient enrolment by the end of 2019.

Furthermore, Gamida Cell is developing donor-derived natural killer (NK) cells for blood and solid cancers such as B-cell lymphoma and multiple myeloma. The market for multiple myeloma treatments is significant as there are approximately 30,000 new cases per year in the US alone.³⁶ Revlimid, a leading treatment for multiple myeloma in addition to myelodysplastic syndromes, marketed by Celgene, had \$6.97bn in sales in 2016. NK cells are a type of lymphocyte, or white blood cell, that play a central role in lysing infected or transformed cells and therefore offer an

³³ Young, N. S., & Kaufman, D. W. (2008). The epidemiology of acquired aplastic anemia. *Haematologica*, 93(4), 489-492.

³⁴ Lanzkron S, Carroll CP, Haywood C. Mortality Rates and Age at Death from Sickle Cell Disease: U.S., 1979–2005. *Public Health Reports*. 2013;128(2):110-116.

³⁵ Arnold, S.D. et al. (2015). Allogeneic hematopoietic cell transplantation for children with sickle cell disease is beneficial and cost-effective: A single-center analysis. *Biology of Blood Marrow and Transplantation*, 21(7), 1258-1265.

³⁶ NCI

innovative approach to cancer treatment. Advances in cell processing and engineering, and improved methods of characterisation, purification and expansion, have led to increased interest in using NK cells for cancer immunotherapy.³⁷ Companies such as NantKwest, Affimed and Celgene are working to develop NK cells for cancer immunotherapy. In a mouse model, NK cells expanded with NAM demonstrated higher retention in bone marrow, spleen and peripheral blood than untreated NK cells. The results were presented at [ASH](#) in December 2017 and, based on these preclinical findings, the company has initiated a Phase I trial with the University of Minnesota in 24 adult patients with multiple myeloma and lymphomas. Gamida Cell provided an [update](#) on the first two patients treated with NAM-NK at the Inaugural American Association for Cancer Research (AACR) in June 2018 from the ongoing study. A favourable safety profile was demonstrated in the two patients with no severe adverse events (grade 3 or 4) and no dose-limiting toxicities. However, the patients did experience short-term neutropenia and thrombocytopenia although this was expected. The dose escalation portion of the trial is underway and enrolment is ongoing (Exhibit 6).

Exhibit 6: NAM-NK TNC dose levels			
Dose cohort	Dose 1, day 0 (per kg)	Dose 2, day 2+ (per kg)	Total (per kg)
1	1×10^7	1×10^7	2×10^7
2	5×10^7	5×10^7	10×10^7
3	1×10^8	1×10^8	2×10^8

Source: Gamida Cell. Notes: TNC= total nucleated cell dose.

Gamida Cell also presented preliminary efficacy data from one patient with follicular lymphoma treated with NAM-NK at dose level 1 in March 2018. The patient had evidence of donor NK cell expansion in peripheral blood and biopsy of the residual mass revealed no evidence of lymphoma. We cannot draw any conclusions from the initial safety and efficacy data at this time based on the limited number of patients. The primary endpoint of the trial is the safe maximum tolerated dose of NAM-NK cells and the study is expected to read out preliminary data in 2019. The company has stated that NAM-NK cells can be manufactured cost-effectively and can potentially be distributed as an off-the-shelf product. If validated, this offers a significant opportunity for the company because, historically, NK cell expansion into a clinically significant quantity has presented challenges as NK cells only represent a minor portion of peripheral blood mononuclear cells.³⁸

Sensitivities

Elbit Medical's investment in development-stage healthcare companies carries the inherent risk associated with the ability of the investees to not only develop products but also source additional funding. However, the current portfolio certainly lacks diversity, with only two investments. InSightec is the most commercially advanced company with three ExAblate products on the market with FDA and CE approvals for three distinct indications in gynaecology, oncology and neurology. Although its first product reached the market in 2004, the company has yet to turn a profit and MRgFUS carries the stigma of an expensive experimental technology. Gamida Cell is the higher-risk asset, although in late-stage development for NiCord as it carries the associated risks of drug development such as high R&D costs, regulatory risk, etc. Although the collection of cord blood has raised resource and ethical issues, the commercial storing of UCB has been implemented since 1996 and is relatively uncontroversial at this point in time.

³⁷ Shook, D. R., and D. Campana. Natural killer cell engineering for cellular therapy of cancer. *Tissue Antigens*, vol. 78, no. 6, 2011, pp. 409–415.

³⁸ Fujisaki, H., et al. (2009) Expansion of highly cytotoxic human natural killer cells for cancer cell therapy. *Cancer Research*, 69(9), 4010-4017.

Elbit Imaging

The current balance sheets of both the company and its parent indicate significant dilution risk. As mentioned previously, Elbit Medical recently completed NIS182m in offerings of convertible notes and has used the majority (NIS152m) of the proceeds to repay its debt of NIS154m to Elbit Imaging. Although the offering lengthens the maturity profile, Elbit Medical shareholders face significant dilution risk if the notes convert to equity in 2022. Elbit Imaging itself is highly indebted, with NIS227m due on 30 November 2019 (as of 1 June 2018). As of 1 June 2018, Elbit Imaging reported NIS63m in cash. Based on the company's projections, it is dependent on its own ability to sell a portion (if not all) of its Elbit Medical equity stake to stay solvent through 2019. Elbit Medical shareholders therefore face additional selling pressure risk if Elbit Imaging is forced to sell its approximate 89% stake on the open market. However, this may be mitigated if the company is able to find strategic buyers.

Valuation

We arrive at a valuation for Elbit Medical Technologies of NIS407m or NIS1.76 per share based on a risk-adjusted NPV analysis of each of the portfolio companies. These valuations are contingent on a series of assumptions about the individual companies regarding market potential costs and probability of success (see Exhibit 7 and Exhibit 8). We are able to assess probability of success in the range of 50–100% due to the advanced stages of development of the associates. We may adjust these probabilities with the publication of supporting data or with the advancement of the programmes to the clinic.

We assign our highest probability of success to InSightec at 100% as it is already on the market. By our measure, InSightec is the highest value portfolio company (\$579m total valuation, \$110.1m for Elbit Medical's share, compared to a current post-money valuation of \$610m), due to a number of factors including near-term revenue generation, growing clinical acceptance, as well as continuous clinical development for a number new indications. We expect the company to require additional clinical development to achieve FDA approvals for new indications (Parkinson's disease, drug delivery for oncology etc) in which we estimate the company will spend an average of \$17m per year on R&D through 2022. It should be noted that the global medical imaging market is mature, at this point, with an expected CAGR of 4.95% through 2021.³⁹

Elbit Medical anticipates a series of potential inflection points over the next 12-18 months: the completion of enrolment for the CordIn Phase I/II in patients with SCD and thalassemia is in 2019 and completion of enrolment for the NiCord Phase III trial for haematological malignancies, followed by top-line data in H120. We are not including the issuance of NIS182m completed in Q118 in our valuation at this time. The offering lengthens the maturity profile to March 2022 and introduces significant dilution risk for Elbit Medical shareholders as the notes are secured by a lien on the company's stakes in its associates. We also expect to update our valuation with the announcement of new deals and as the portfolio companies advance through the clinical pipeline.

³⁹ Reuters.

Exhibit 7: Valuation assumptions

Company	Assumptions
InSightec	ExAblate Body and Neuro systems are currently on the market with three FDA- and CE-approved indications (uterine fibroids, pain palliation of bone metastases, and essential tremor) and several indications are in development. Clinical presence of the ExAblate platform is limited by the number of compatible MRI systems (GE only at this time) installed in hospital settings (approximately 5,400 and 4,600 units in the US and EU, respectively). We therefore assume a global penetration of 10% of GE's medical imaging market share for each indication by 2028 (21.40% in 2016), provided that the company continues to advance through the clinical pipeline and achieves FDA and CE approvals for additional indications (as previously noted). This leads to worldwide peak sales of \$263m and \$321m for ExAblate Neuro priced at \$1.4m and ExAblate Body priced at \$1.0m, respectively, including annual service fees and consumables. This is based on our current estimate of the systems' prices as discussed on page 8. Also see Exhibit 3 for more details on our underlying assumptions.
Gamida Cell	NiCord market launch in 2020 in the US and EU with a 10% market share in the US and 7% in the EU of BMTs for leukaemia (AML, ALL, CML, CLL) and with a 50% probability of success. This leads to peak sales of \$437m, priced at \$100k. Data exclusivity protection should run through 2031 in the US and 2029 in the EU.

Source: Edison Investment Research

Exhibit 8: Elbit Medical valuation table

Product	Setting	Status	Launch	Peak sales (\$m)	Probability of success	Royalty rate	rNPV (\$m)	% owned by Elbit Medical (fully diluted)	Elbit Medical rNPV (\$m)
InSightec	MRgFUS (for gynaecology, oncology, neurology indications)	Market	Market	583	100%	100%	579	19%	110.1
Gamida cell	Leukaemia (AML, ALL, CML, CLL)	Phase III	2020	437	50%	100%	374	13%	48.6
Portfolio total (\$m)									158.7
Less: net debt (as of 31 December 2017) (\$m)									42.4
Overall valuation									116.3
Shekel/Dollar Conversion rate									3.5
Overall valuation in Shekels (NISm)									407.1
Shares outstanding (m)									231.4
Per share (NIS)									1.76

Source: Edison Investment Research

Financials

Elbit Medical's 2017 post-tax loss was \$10.7m (FY16: \$18.7m), which reflects ongoing investment into a portfolio of currently loss-making companies. In general, the company does not typically generate revenue. However, a capital gain of \$1.75m was booked in FY15. General and admin costs in 2017 were \$0.68m (NIS2.4m), which include payroll and related expenses and management fees. The company had cash on the balance sheet of \$0.03m (NIS0.11m) at 31 December 2017. Elbit Medical completed an NIS180m offering of convertible notes (NIS1.47 par value in notes convertible to one Elbit Medical ordinary share) on the TASE in February 2018, as well as an NIS2m offering of Series C convertible notes (NIS2.1 par value of notes convertible to Elbit Imaging) in March 2018, which lengthens the maturity profile to March 2022. The company used the majority of the proceeds to repay its NIS154m debt to Elbit Imaging earlier this year, while NIS4m were set aside for ongoing operational expenses in addition to NIS18m set aside for interest payments due on the notes for the first two years. The notes are secured by a lien on the company's holdings in InSightec and Gamida Cell, which therefore introduces significant dilution risk to Elbit Medical shareholders.

We outline historical financials in Exhibit 9. However, we are not providing forecasts at this time.

Exhibit 9: Financial summary

	US\$'000s	2015	2016	2017
Year end 31 December		IFRS	IFRS	IFRS
PROFIT & LOSS				
Revenue		1,752	0	0
Cost of Sales		0	0	0
Gross Profit		1,752	0	0
R&D expenses		0	0	0
SG&A expenses		(578)	(553)	(677)
EBITDA		1,174	(553)	(677)
Operating Profit (before GW and except)		1,174	(553)	(677)
Intangible Amortisation		0	0	0
Exceptionals		(14,428)	(15,000)	(5,518)
Operating Profit		(13,254)	(15,553)	(6,195)
Other		(2,270)	(3,101)	(4,557)
Net Interest		0	0	0
Profit Before Tax (norm)		(1,096)	(3,654)	(5,234)
Profit Before Tax (FRS 3)		(15,524)	(18,654)	(10,752)
Tax		0	0	0
Profit After Tax (norm)		(1,096)	(3,654)	(5,234)
Profit After Tax (FRS 3)		(15,524)	(18,654)	(10,752)
Average Number of Shares Outstanding (m)		1,850.0	1,850.0	1,851.9
EPS - normalised (US\$)		(0.00)	(0.00)	(0.00)
EPS - FRS 3 (US\$)		(0.01)	(0.01)	(0.01)
Dividend per share (US\$)		0.0	0.0	0.0
BALANCE SHEET				
Fixed Assets		20,520	5,518	50
Intangible Assets		0	0	0
Tangible Assets		0	0	0
Other		20,520	5,518	50
Current Assets		103	30	40
Stocks		0	0	0
Debtors		6	15	8
Cash		97	15	32
Other		0	0	0
Current Liabilities		(131)	(57)	(60)
Creditors		(131)	(57)	(60)
Short term borrowings		0	0	0
Short term leases		0	0	0
Other		0	0	0
Long Term Liabilities		(33,873)	(37,126)	(42,415)
Long term borrowings		(33,873)	(37,126)	(42,415)
Long term leases		0	0	0
Other long term liabilities		0	0	0
Net Assets		(13,381)	(31,635)	(42,385)
CASH FLOW				
Operating Cash Flow		(2,531)	(3,394)	(4,858)
Tax		0	0	0
Capex		0	0	0
Acquisitions/disposals		0	0	0
Financing		0	0	0
Dividends		0	0	0
Other		3	0	0
Net Cash Flow		(2,528)	(3,394)	(4,858)
Opening net debt/(cash)		31,248	33,776	37,111
HP finance leases initiated		0	0	0
Other		0	59	(414)
Closing net debt/(cash)		33,776	37,111	42,383

Source: Elbit Medical Technologies accounts, Edison Investment Research

Contact details	Revenue by geography
Olympia C Tower 7 Mota Gur Petach Tikva 4900102 +972 3 608 6000 www.elbitimaging.com	N/A

Management team	
CEO: Yael Naftali	CFO: Tsipi Siani
Ms Naftali has served as CEO since 1 January 2018. Prior to her appointment to this role, she served as CFO since 2016 and FD since 2014. She holds a BA in accounting and economics from the Hebrew University of Jerusalem and is a certified chartered accountant.	Ms Siani has served as CFO of Elbit Medical since 1 January 2018. Prior to this role, she served as controller and financial director for both Elbit Imaging and Elbit Medical since 2001 and 2011, respectively. She holds a BA in accounting and economics from Bar-Ilan University and is a certified chartered accountant.

Chairman: Ron Hadassi	
Mr Hadassi has served as chairman of the board of Elbit Imaging and Elbit Medical since April 2014. Unrelated to Elbit, he serves on the board of directors at Carmel Winery and Netzz Hotels. Previously, he served as director at the Bronfman-Fisher Group. Mr Hadassi holds a BA in economics and political science, and an LLB and MBA, both from Tel Aviv University.	

Principal shareholders	(%)
Elbit Imaging	89.2

Companies named in this report

Affirmed (AFMD), Celgene (CELG), China Medical Technologies, EDAP-Technomed, General Electric Company (GE), Haifu Medical Technologies, Koninklijke Philips (PHG), Profound Medical (PRFMF), Siemens Healthineers, SonaCare Medical, NantKwest (NK)

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