



## Edison Healthcare Insight

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July 2017

**Maxim Jacobs**


Max joined Edison's healthcare team in December 2014. Prior to this he worked as a senior analyst at Guidepoint Global. Max has also previously worked as a senior analyst at Ridgemark Capital, a sector head at Broadfin Capital and as a senior analyst at Mehta Partners. He is a CFA charter holder.

**Dr Nathaniel Calloway**


Nathaniel Calloway joined the healthcare team in December 2015. Before Edison, he performed healthcare investment research for a fund at Bishop Rosen and for Wainscott Capital Partners. Prior to his role as an analyst he performed molecular neuroscience research at Cornell Medical School and holds a PhD in chemistry from Cornell. He has published eight scientific papers on topics ranging from physical chemistry to immunology, and he has been recognised as an American Heart Association fellow and an American Chemical Society Medicinal Chemistry fellow.

**Pooya Hemami**


Pooya is a licensed optometrist with over five years of experience in life sciences equity research. Prior to joining Edison, he covered the Canadian healthcare sector as a research analyst at Desjardins Capital Markets. He holds a doctor of optometry degree from the University of Montreal, and an MBA (finance concentration) from McGill University. He received his CFA charter in 2011.

**Dr John Savin**


John is an analyst working on biotech, pharma, medical device and diagnostics companies. As founder CEO of Physiomics, he devised the strategy, raised funds and took the company to AIM in 2004. At Greig Middleton, John was director in charge of the pharma and biotech analyst team and worked with corporate finance on fund-raising, IPOs and corporate restructuring. He has an industry background in sales and marketing with GE Healthcare and AstraZeneca and is a co-author on a number of scientific publications.

**Juan Pedro Serrate**


Juan joined Edison's Healthcare team in April 2016. A veterinarian by training, he has held business positions in the healthcare sector over the past 12 years. Juan has collaborated with independent equity research firms, specialising in fundamental analysis and valuations. For more than six years, he co-managed a seed capital fund in Spain that invested in biotech start-ups and projects. Earlier in his career, he was a research fellow at the Yale University School of Medicine. He has a Master's degree in biotechnology, as well as an MBA from IESE Business School.

**Dr Dennis Hulme**


Dennis joined Edison in December 2014. Prior to this he worked as an analyst at BBY Stockbrokers and as a research scientist at CSIRO. Dennis was ranked number two healthcare stock picker in the 2010 StarMine Analyst Awards and has a PhD in veterinary sciences.

**Dr Linda Pomeroy**


Linda joined Edison in early 2016. She has co-founded an orthopaedic company, worked for a number of years as a consultant on various NHS projects, and previously worked at Numis Securities as a life sciences analyst. Linda has a PhD from Imperial College Business School and an MPhil in bioscience enterprise from the University of Cambridge.

**Dr Susie Jana**


Susie joined the team in September 2015 and has 16 years' experience in the healthcare sector. She is a qualified medical doctor, having studied medicine at UCL. She also holds an intercalated BSc in psychology. After a few years working as a junior doctor in the NHS, Susie joined the investment banking industry for six years on the sell-side covering biotechnology stocks, then mid- to large-cap pharmaceuticals at Société Générale. Most recently she worked as a buy-side analyst, covering European biotech, pharma and medtech stocks at F&C Investments for five years.

**Dr Jonas Peciulis**


Jonas joined Edison in November 2015. He is a qualified medical doctor with several years of clinical practice. He then moved into equity research as a healthcare analyst at Norne Securities, focused on Norwegian companies, and received two StarMine awards for stock picking in 2013. Most recently, he worked for a London-based life sciences venture capital company before completing his MBA degree.

**Dr Daniel Wilkinson**


Daniel joined Edison's Healthcare team in January 2016. He spent four years at Imperial College London, where he undertook both a Master's in Chemical Biology of Health & Disease and a PhD in Biosensors and Biotechnology in Diabetes. Before this he worked at eTect, a spin-out company from the University of Leeds that was focused on biosensor technology. He is currently studying for the Investment Management Certificate (IMC).

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Prices at 14 July 2017

Published 20 July 2017

Welcome to the July edition of the Edison Healthcare Insight. In this edition we have profiled 69 of our healthcare companies under coverage.

Readers wishing more detail should visit our website, where reports are freely available for download ([www.edisongroup.com](http://www.edisongroup.com)). All profit and earnings figures shown are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

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We welcome any [comments/suggestions](#) our readers may have.

**Neil Shah & Maxim Jacobs**

**Healthcare Research**

## Company profiles

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Prices at 14 July

*US\$/£ exchange rate: 0.7736*

*€/£ exchange rate: 0.8829*

*C\$/£ exchange rate: 0.6072*

*A\$/£ exchange rate: 0.5970*

*NZ\$/£ exchange rate: 0.5653*

*SEK/£ exchange rate: 0.0924*

*DKK/£ exchange rate: 0.1187*

*NOK/£ exchange rate: 0.0936*

*JPY/£ exchange rate: 0.0068*

*NIS/£ exchange rate: 0.2200*

*CHF/£ exchange rate: 0.8013*

**Sector: Pharma & healthcare**

Price: €4.07  
Market cap: €125m  
Market: FRA

**Share price graph (€)**

**Company description**

4SC is a Munich-based cancer biopharmaceutical company. Resminostat is the lead candidate for cutaneous T-Cell lymphoma (pivotal study started Q416) and partnered with Yakult Honsha for HCC in Japan. It has a second epigenetic compound, 4SC-202 (planned Phase II H217) and a preclinical asset, 4SC-208. It also partners a Phase I oncology asset.

**Price performance**

%	1m	3m	12m
Actual	12.6	72.7	74.2
Relative*	14.2	65.6	38.8

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## 4SC (VSC)

**INVESTMENT SUMMARY**

4SC has recently announced an updated and progressive development plan, which it intends to fund from the recent equity capital raise (€41m gross). It has initiated (late 2016) its pivotal 150-patient Phase II study with epigenetic compound resminostat (HDAC inhibitor) for cutaneous T-cell lymphoma (CTCL). Top-line data is expected by 2019. Resminostat has also been licensed to Yakult Honsha in Japan. 4SC announced in 2016 positive Phase II results from a more detailed analysis of the HCC Yakult trial data, which could lead to further clinical development. Alongside resminostat, 4SC intends to advance 4SC-202 into a first pivotal study (late 2018) and complete formal development of 4SC-208 with the aim of starting Phase I/II clinical testing (early 2019). Other ongoing positives include a partnership with Link Health in China for its oncology Eg5 inhibitor, 4SC-205.

**INDUSTRY OUTLOOK**

Resminostat could become the first HDAC inhibitor to gain EU approval for CTCL (vs four HDACs approved in the US). CTCL has been validated as a target indication for HDACs, with vorinostat (Merck & Co) and romidepsin (Celgene) FDA-approved on Phase II data.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.3	(7.9)	(8.4)	(58.58)	N/A	N/A
2016	2.1	(10.9)	(10.9)	(54.17)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: 52.2p  
Market cap: £112m  
Market: AIM

**Share price graph (p)**

**Company description**

Abzena provides proprietary technologies and complementary services to enable the development and manufacture of biopharmaceutical products.

**Price performance**

%	1m	3m	12m
Actual	24.4	60.8	27.4
Relative*	26.3	59.9	13.8

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## Abzena (ABZA)

**INVESTMENT SUMMARY**

Abzena offers fully integrated research and manufacturing services/technologies that enable safer and more effective biological products. This includes immunogenicity assessment, protein/antibody engineering, bioconjugation, biomanufacturing and chemistry/conjugation. It has a fully integrated offering which has a global operating presence and cross selling opportunities across the group. Recent fundraising of £25m (gross) will enable it to expand its service offering and capacity. Fee-for-services provides stable revenues today (H117 £9.0m), while successful commercialisation of products created using Abzena's technologies offers the prospect of substantial future revenues (small % royalties); 12 such products are now in the clinic, eg Gilead's GS-5745 (Phase III for gastric cancer) and Roche's RG6125 (formerly SDP051). Abzena has recently announced another licensing deal for its ADC linker technology (ThioBridge™), which adds to the previous deals for up to ten ADC products in one case and with Halozyme for up to three ADC targets.

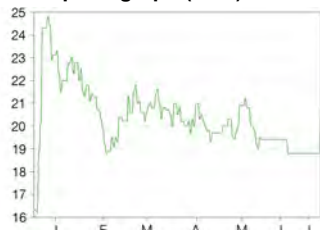
**INDUSTRY OUTLOOK**

The biological services industry is highly competitive but Abzena's deepening portfolio of technologies and services is compelling, while its ADC technology offers safety and efficacy advantages over competitors.

Y/E Mar	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2016	9.9	(6.8)	(7.4)	(5.86)	N/A	N/A
2017	18.7	(7.5)	(8.3)	(5.82)	N/A	N/A
2018e	29.7	(7.2)	(10.1)	(4.52)	N/A	N/A
2019e	41.1	0.1	(2.6)	(1.04)	N/A	N/A

**Sector: Pharma & healthcare**

Price: SEK20.70  
Market cap: SEK477m  
Market NASDAQ OMX First North

**Share price graph (SEK)**

**Company description**

Acarix, a Swedish company, has developed the CE-marked CADScor to enable about half of the patients to be ruled out from further, expensive testing. Pre-reimbursement sales will start in 2017. Full EU sales may start from 2019. US sales might start from 2021.

**Price performance**

%	1m	3m	12m
Actual	(1.9)	5.1	N/A
Relative*	(1.1)	0.6	N/A

\* % Relative to local index

**Analyst**

Dr John Savin

## Acarix (ACARIX)

**INVESTMENT SUMMARY**

Acarix has made its first sale in the crucial German market to a private Berlin cardiology clinic. This follows the first sale in Denmark. Germany has a strong private healthcare insurance sector (about 10% of people covered) which might adopt quickly given that there are stated to be over 1 million hospital cardiac assessments each year, many unnecessary. The Acarix test helps doctors to identify the patients who probably require no further risky invasive clinical testing.

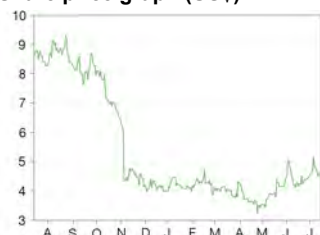
**INDUSTRY OUTLOOK**

Major German and EU sales will need public reimbursement probably from 2019. US marketing will probably require a US clinical study, with sales from 2021 possible. The US has over 3.8 million tests for coronary artery disease per year. Researchers claim that 35% of these tests are potentially harmful and not needed. US healthcare providers might save over \$500m a year if most low-risk patients could be quickly and accurately tested, reassured and sent home. CADScor has won a Danish design award.

Y/E Dec	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	N/A	(15.2)	(15.4)	(114.0)	N/A	N/A
2016	N/A	(26.8)	(26.8)	(183.0)	N/A	N/A
2017e	3.0	(51.8)	(51.4)	(211.0)	N/A	N/A
2018e	3.8	(49.6)	(49.5)	(203.0)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$4.48  
Market cap: US\$613m  
Market NASDAQ

**Share price graph (US\$)**

**Company description**

Achillion is engaged in the discovery and development of treatments for chronic HCV and progressing compounds from its research platform in its novel factor D programme. It is collaborating with J&J to develop and commercialise its HCV franchise, including a triple-regimen treatment, which is potentially best in class.

**Price performance**

%	1m	3m	12m
Actual	5.2	23.8	(48.1)
Relative*	4.3	17.2	(54.4)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Achillion Pharmaceuticals (ACHN)

**INVESTMENT SUMMARY**

Achillion is developing an oral, once-a-day, single pill treatment for HCV more competitive than leader Harvoni. The company recently reported a 100% SVR rate in patients who received just 6-8 weeks of therapy in a Phase IIa study evaluating the combination of AL-335, Odalasvir (ACH-3102), and Simeprevir in genotype 1 HCV. Partner Janssen initiated a Phase IIb trial in November 2016. Achillion is well funded to progress its oral factor-D programme in rare diseases, such as PNH and C3 Glomerulopathy, as well as in larger market opportunities including dry AMD. Patient dosing in a Phase II trial in PNH for its factor-D inhibitor candidate, ACH-4471, has been initiated with interim results expected in Q217.

**INDUSTRY OUTLOOK**

More than 150m people are infected with HCV worldwide. Treatment has been transformed in recent years by the approval of Sovaldi (sofosbuvir) and Gilead's combination product; recent pressure from key healthcare groups has led to a drop in HCV prices.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	66.1	(4.3)	(3.9)	(3.11)	N/A	126.6
2016	15.0	(52.9)	(50.7)	(37.10)	N/A	N/A
2017e	0.0	(85.9)	(85.0)	(59.24)	N/A	N/A
2018e	0.0	(89.2)	(89.2)	(59.18)	N/A	N/A

**Sector: Pharma & healthcare**

Price: NZ\$2.34  
Market cap: NZ\$228m  
Market: NZSX

**Share price graph (NZ\$)**

**Company description**

AFT Pharmaceuticals is a speciality pharmaceutical company that operates primarily in Australasia but has product distribution agreements across the globe. The company's product portfolio includes prescription and over-the-counter drugs to treat a range of conditions and a proprietary nebuliser.

**Price performance**

%	1m	3m	12m
Actual	1.7	1.7	(25.7)
Relative*	(0.3)	(3.3)	(28.4)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## AFT Pharmaceuticals (AFT)

**INVESTMENT SUMMARY**

AFT Pharmaceuticals is a New Zealand-based speciality pharmaceutical company that currently sells 130 prescription speciality generics and OTC products through its own sales force in New Zealand, Australia and South-East Asia and has been expanding its geographic footprint. Maxigesic, its combination acetaminophen/ibuprofen product that is addressing a \$10.4b market, is currently sold and launched in 8 countries and distribution agreements are in place in a total of 112. AFT is targeting between 30-40 launches for Maxigesic in FY18. AFT is also developing a handheld device called SURF Nebuliser, which is able to deliver therapies intranasally, with a main focus on the \$3 billion conscious sedation market, while carrying out a preliminary study in sinusitis in parallel, with the aim of filing in h2 2018.

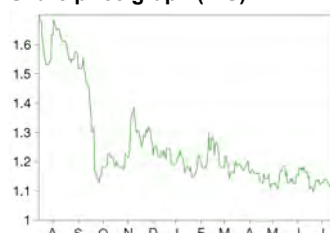
**INDUSTRY OUTLOOK**

AFT is a multi product company targeting pharmacy prescription, OTC and hospital markets. Data for Maxigesic offers them a competitive advantage in a fragmented industry.

Y/E Mar	Revenue (NZ\$m)	EBITDA (NZ\$m)	PBT (NZ\$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2016	64.0	(7.8)	(10.8)	(11.12)	N/A	N/A
2017	69.2	(15.1)	(18.5)	(19.12)	N/A	N/A
2018e	97.7	1.3	(0.6)	(0.61)	N/A	297.8
2019e	124.2	16.5	14.7	15.10	15.5	17.0

**Sector: Pharma & healthcare**

Price: NIS1.11  
Market cap: NIS59m  
Market: TASE

**Share price graph (NIS)**

**Company description**

Allium Medical Solutions is a company focused on developing and marketing minimally invasive devices in various areas: cardiovascular, metabolic, genitourinary and gastrointestinal. The company has three selling product lines: Allium Stents, IBI (EndoFast) and Gardia Medical.

**Price performance**

%	1m	3m	12m
Actual	(3.9)	(2.2)	(34.9)
Relative*	(4.0)	(6.0)	(36.6)

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Allium Medical (ALMD)

**INVESTMENT SUMMARY**

Allium Medical Solutions is a company focused on developing and marketing minimally invasive devices in various areas: cardiovascular, metabolic, genitourinary and gastrointestinal. The company has three selling product lines: Allium Stents, IBI (EndoFast) and Gardia Medical. Peripheral stents and EndoFast urogynecology devices generate the bulk of revenues (70% of NIS7.3m in 2016). Allium has achieved revenue CAGR of 23% in 2011-16. The investment case rests on Allium's ability to execute on its ambitious growth strategy, with revenues expanding at a double-digit rate as the company continues to gain market share in established and new regions. After raising c NIS14m in Q316, cash equivalents and short-term deposits at end 2016 were NIS23.2m.

**INDUSTRY OUTLOOK**

We expect Allium's growth to accelerate in the medium term, driven by new markets, resulting in 2016-20e revenue CAGR of 41%. Allium also has two devices in preclinical development: Allevetix for diabetes and obesity (start a clinical trial in 2017) and TruLeaf, a mitral valve replacement device that will develop until completion of clinical trial.

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2015	5.2	(16.3)	(18.5)	(0.65)	N/A	N/A
2016	7.4	(20.4)	(22.0)	(0.49)	N/A	N/A
2017e	11.2	(14.7)	(15.7)	(0.30)	N/A	N/A
2018e	17.5	(6.3)	(7.1)	(0.13)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 58.5p  
Market cap: £44m  
Market: AIM

**Share price graph (p)**

**Company description**

Angle is a specialist medtech company with a potentially disruptive platform technology. The proprietary Parsortix cell separation platform can harvest circulating tumour cells and other very rare cells from a blood sample for downstream analysis.

**Price performance**

%	1m	3m	12m
Actual	(7.9)	10.4	(7.9)
Relative*	(6.5)	9.8	(17.7)

\* % Relative to local index

**Analyst**

Dr Jonas Peciuslis

## Angle (AGL)

**INVESTMENT SUMMARY**

Angle's proprietary Parsortix cell separation platform is used to detect and harvest circulating tumour cells (CTCs) from blood. Recently the company reported initial results from its two lead clinical trials in the first clinical application for triaging women with ovarian masses into malignant or benign before surgery. Both studies recruited 200 patients each and reported sensitivity was up to 95%, while specificity was much higher than existing tests. Another key catalyst this year is the expected completion of the FDA analytical and clinical studies in breast cancer, which is a part of the approval process in the US. Six US cancer centers will provide patient samples for analysis with Parsortix with MD Anderson being the lead partner. Recently the company indicated that research use sales in FY17 were £0.5m, up from initial sales of £361k in H216, although, clinical use sales represent much larger potential in the future. We are updating our estimates.

**INDUSTRY OUTLOOK**

The precision medicine approach is a key initiative aiming to improve treatment efficacy and outcomes by tailoring the treatment to the patient and their disease. CTCs provide information about the individual's cancer, which can be used for prognostic, diagnostic and treatment stratification purposes.

Y/E Apr	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	0.0	(3.5)	(3.6)	(7.50)	N/A	N/A
2016	0.4	(4.9)	(5.0)	(7.97)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: 204.9p  
Market cap: £197m  
Market: LSE

**Share price graph (p)**

**Company description**

Arix Bioscience is a life sciences portfolio company specialising in therapeutic and diagnostic companies. The portfolio currently includes five direct investments and 16 indirect investments across the life sciences.

**Price performance**

%	1m	3m	12m
Actual	(1.3)	9.3	N/A
Relative*	0.2	8.7	N/A

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Arix Bioscience (ARIX)

**INVESTMENT SUMMARY**

Arix is a new transatlantic life sciences portfolio company drawing from managerial expertise at all levels of the pharma industry to engage in opportunities ranging from seed investing to public equity. It draws on a network of deal sources established through agreements with academia, life science accelerators, other funds, and through partnerships with big pharma. The portfolio currently includes a number of direct investments (Depixus, Artios, OptiKira, Autolus, Verona, Iterum, Harpoon, Mitoconix and LogicBio), and Arix is taking an active role in the operations of these companies with board positions in each.

**INDUSTRY OUTLOOK**

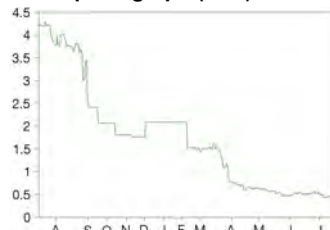
Biopharma venture investing has historically outperformed the broader market, and Arix's permanent capital model allows it to capitalize on these opportunities without being bound to specific exit timing.

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	N/A	N/A	N/A	N/A	N/A	N/A
2016	0.0	(2.2)	(2.2)	(21.52)	N/A	N/A
2017e	5.3	(5.1)	(4.5)	(4.68)	N/A	N/A
2018e	2.1	(6.0)	(0.5)	(0.49)	N/A	N/A



**Sector: Pharma & healthcare**

Price: US\$0.41  
Market cap: US\$3m  
Market: NASDAQ

**Share price graph (US\$)**

**Company description**

Based in Seattle, WA, Atossa Genetics is focused on the development of locally administered pharmaceuticals for the treatment of pre-cancer and early-stage breast cancer. Lead candidate afimoxigene topical gel is expected to start a Phase II study in 2016 in breast hyperplasia or DCIS.

**Price performance**

%	1m	3m	12m
Actual	(18.2)	(35.3)	(90.4)
Relative*	(18.9)	(38.7)	(91.5)

\* % Relative to local index

**Analyst**

Pooya Hemami

## Atossa Genetics (ATOS)

**INVESTMENT SUMMARY**

Atossa is advancing its proprietary intraductal microcatheter (IDMC), intended to selectively introduce drugs to breast ducts, potentially improving drug targeting for chemotherapy. It is combining its IDMC with established cancer drug fulvestrant and opened enrolment for a 30-patient Phase II study in March 2016; it expects to complete recruitment by August 2017. Atossa is also advancing oral endoxifen, a metabolite of tamoxifen, as a potential treatment for breast cancer patients refractory to tamoxifen. About 20-25% of the 1.0m women taking tamoxifen worldwide develop resistance to it (for multiple reasons, including low levels of liver enzyme CYP2D6), and have an increased risk for cancer recurrence.

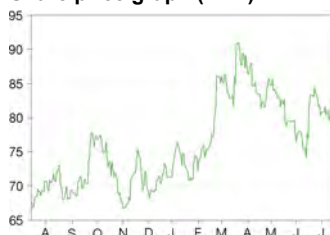
**INDUSTRY OUTLOOK**

IDMC-fulvestrant development may hinge on future FDA guidance on whether the projects can fall under the 505(b)2 development pathway, which would reduce the breadth of clinical data needed to support a marketing application. An endoxifen Phase I study started in April 2017. Atossa had \$1.2 net cash at Q117, not including its recent \$4.4m (gross) raise in an equity offering, which we estimate extends its runway into Q417.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(9.5)	(9.8)	(514.81)	N/A	N/A
2016	0.0	(6.9)	(7.3)	(245.98)	N/A	N/A
2017e	0.0	(9.7)	(9.9)	(210.84)	N/A	N/A
2018e	0.0	(10.9)	(11.2)	(216.54)	N/A	N/A

**Sector: Pharma & healthcare**

Price: CHF82.20  
Market cap: CHF974m  
Market: Swiss Stock Exchange

**Share price graph (CHF)**

**Company description**

Basilea is a Swiss biopharmaceutical company focused on anti-infectives and oncology. Its lead products are Cresemba, an antifungal that is approved in the US and Europe and Zevtera, an anti-MRSA broad-spectrum antibiotic, approved in Europe for pneumonia.

**Price performance**

%	1m	3m	12m
Actual	6.8	(1.4)	21.8
Relative*	4.6	(5.9)	10.2

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Basilea Pharmaceutica (BSLN)

**INVESTMENT SUMMARY**

Basilea focuses on developing novel antimicrobial drugs. It has two approved hospital-based products: Cresemba for severe mold infections and Zevtera for bacterial infections. Zevtera should enter US phase III development in the next 3-6 months following agreement of the SPA with the FDA and the award of a BARDA contract (worth up to \$108m). Basilea's earlier-stage oncology pipeline focuses on drugs that target resistance to current cancer therapies. BAL101553 is being developed as a tumor checkpoint controller and recently presented final phase I/IIa data at ASCO. BAL3833, a panRAF kinase inhibitor, is in Phase I development. Our forecasts are under review following the announcement of the major license agreement with Pfizer for Cresemba commercialisation in Europe (ex Nordics), Russia, Turkey and Israel.

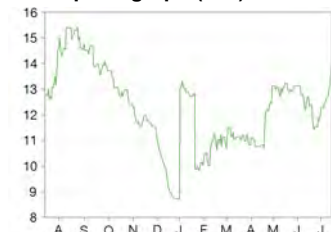
**INDUSTRY OUTLOOK**

There is an increasing need for novel antimicrobial agents with efficacy against resistant strains of bacteria (eg MRSA), and/or improved side effect profiles. Hence the opportunities for Zevtera and Cresemba could be significant.

Y/E Dec	Revenue (CHFm)	EBITDA (CHFm)	PBT (CHFm)	EPS (CHFc)	P/E (x)	P/CF (x)
2015	52.8	(58.9)	(61.3)	(607.22)	N/A	N/A
2016	66.0	(41.6)	(50.9)	(505.74)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: NIS13.94  
Market cap: NIS51m  
Market: TASE

**Share price graph (NIS)**

**Company description**

Based in Israel, BioLight is an emerging ophthalmic company focused on the development and commercialisation of products and product candidates that address ocular conditions. Lead products IOPTiMate and VS-101 are directed towards the treatment of glaucoma.

**Price performance**

%	1m	3m	12m
Actual	9.9	33.2	13.2
Relative*	5.8	23.8	4.0

\* % Relative to local index

**Analyst**

Pooya Hemami

## BioLight Life Sciences (BOLT)

**INVESTMENT SUMMARY**

BioLight Life Sciences is advancing several eyecare products and technologies. It's IOPTiMate subsidiary (of which it holds a 70% stake) markets IOPTiMate, a laser-based surgical device to treat moderate to advanced glaucoma. BioLight is also advancing Eye-D VS-101, an extended-dose latanoprost drug implant in Phase I/IIa trials to treat glaucoma (data expected H217), and TeaRx, a dry eye syndrome diagnostic test. VS-101 can be helpful for the 20-60% of glaucoma patients who do not comply with daily eye drop therapy.

**INDUSTRY OUTLOOK**

IOPTiMate signed a non-binding term sheet in April 2017 for it to be acquired by a Chinese company, Chengdu Kanghong Pharma. While there is uncertainty on whether the deal will proceed, the transaction could potentially provide IOPTiMate shareholders with \$17m (NIS62m) within six months of completion. This amount will be allocated to IOPTiMate shareholders on a pro rata basis according to the preferences assigned to different classes of IOPTiMate shares, and the potential allocation to BioLight has not been disclosed. BioLight in June 2017 completed a rights offering (96% subscribed) that raised NIS11.5m (1.03m shares purchased at NIS11.20 per share).

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2015	1.4	(24.3)	(25.1)	(6.96)	N/A	N/A
2016	2.1	(20.2)	(26.3)	(5.55)	N/A	N/A
2017e	5.4	(23.5)	(24.8)	(9.35)	N/A	N/A
2018e	11.5	(30.9)	(33.6)	(12.00)	N/A	N/A

**Sector: Pharma & healthcare**

Price: NIS0.69  
Market cap: NIS125m  
Market: TASE

**Share price graph (NIS)**

**Company description**

BiondVax is developing a potentially universal influenza vaccine and the lead candidate M-001 could be positioned as a primer for seasonal or pandemic vaccines or as a standalone influenza vaccine. So far M-001 has been tested in two Phase I/II and three Phase II trials and consistently demonstrated immunogenicity to multiple virus strains.

**Price performance**

%	1m	3m	12m
Actual	2.1	9.7	107.5
Relative*	0.3	1.0	93.8

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## BiondVax Pharmaceuticals (BVXV)

**INVESTMENT SUMMARY**

BiondVax with its epitope-based multimeric vaccine candidate M-001 is among the leaders in the development of the universal influenza vaccine worldwide. M-001 has so far been tested in two Phase I/II and three Phase II trials involving 479 participants in total and was shown to be consistently safe, immuno-genic and demonstrated synergy with conventional flu vaccines. The readout from the ongoing European Phase II study is due shortly, while the last Phase IIb is about to start and will be funded by the US National Institutes of Health (NIH). At end-Q117, BiondVax had cash of NIS35m (\$9.6m), however, it was significantly increased after a €20m loan agreement with the European Investment Bank to support the development of M-001.

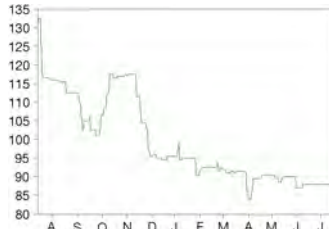
**INDUSTRY OUTLOOK**

Current influenza vaccines are solely strain specific, needs to be updated every year with the effectiveness still lingering around 40%. There is a clear need for a more reliable vaccine that is both more immunoprotective and with coverage against a wider range of flu strains for the entire population and in particular for the elderly.

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2015	0.0	(10.7)	(10.2)	(0.10)	N/A	N/A
2016	0.0	(11.3)	(9.2)	(0.07)	N/A	N/A
2017e	0.0	(14.7)	(15.2)	(0.10)	N/A	N/A
2018e	0.0	(19.0)	(20.1)	(0.12)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 88.0p  
Market cap: £41m  
Market: AIM

**Share price graph (p)**

**Company description**

C4X Discovery is a UK business using its proprietary NMR-based technology to enable rational drug design, aimed at selecting safer and better drugs in a reduced timeframe. An OX1 receptor antagonist is the lead pre-clinical candidate.

**Price performance**

%	1m	3m	12m
Actual	0.0	(1.7)	(33.1)
Relative*	1.5	(2.2)	(40.2)

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## C4X Discovery Holdings (C4XD)

**INVESTMENT SUMMARY**

C4X Discovery's (C4XD) proprietary drug discovery platform aims to become a highly efficient and productive discovery R&D engine. The Orexin programme, a selective OX1 antagonist, is the lead candidate, currently pre-clinical. Recently acquired proprietary human genetic technology platform (Taxonomy3) and Molplex technologies, broadens its drug discovery capabilities to both target identification and lead generation. In September 2016, C4X announced a strategic collaboration with Evotec, building on a previous agreement. The agreement is a risk-shared multi-target programme. This is a positive development and in combination with the recently announced £7m fundraise (before expenses), it enables C4X to progress the outputs from its drug discovery engine and its preclinical pipeline.

**INDUSTRY OUTLOOK**

C4XD's NMR-based technology can be used to solve the 3-D conformations of biomolecules in solution, which the company believes will enable data-driven rational design of superior drug candidates, on a significantly faster timescale than conventional techniques, which should appeal to the global pharma industry. Existing partnerships (Evotec, AstraZeneca and Takeda) and the Structural Genomics Consortium collaboration provide external validation of the technology.

Y/E Jul	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	0.3	(3.8)	(3.8)	(10.75)	N/A	N/A
2016	0.3	(6.7)	(6.7)	(16.66)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: €26.60  
Market cap: €158m  
Market: Alternext Paris

**Share price graph (€)**

**Company description**

Carmat is developing a biocompatible, artificial heart to satisfy the lack of donor hearts available for terminal heart failure patients. The development process combines the expertise of a wide range of technical and medical experts.

**Price performance**

%	1m	3m	12m
Actual	(5.0)	(1.1)	(21.7)
Relative*	(4.7)	(4.7)	(35.1)

\* % Relative to local index

**Analyst**

Pooya Hemami

## Carmat (ALCAR)

**INVESTMENT SUMMARY**

Carmat obtained approval in May 2017 from the French regulatory agency (ANSM) to resume its pivotal trial for the Carmat heart. This follows a favourable review by ANSM of the actions and analyses taken by Carmat following the trial's suspension after the death in Q416 of this trial's first patient six weeks after his implantation. Carmat is now working to expand access in the 20-25-patient study to other European countries, and is preparing a new and more automated production site. Given the firm's year-end 2016 net cash position of €28.0m, we estimate Carmat can finance operations into Q218.

**INDUSTRY OUTLOOK**

The Carmat artificial heart is being developed as a permanent replacement or destination therapy (DT) for chronic heart failure or acute myocardial infarction patients, who do not have access to a human donor heart. Despite the high EU and US prevalence of Stage IV heart failure (c 450,000 patients), the shortfall in donor hearts is such that only about 3,800 human heart transplants were performed in Europe and the US in 2013.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(19.4)	(20.3)	(414.0)	N/A	N/A
2015	0.0	(19.4)	(20.6)	(381.0)	N/A	N/A
2016e	0.0	(22.0)	(21.9)	(335.0)	N/A	N/A
2017e	0.0	(22.0)	(21.8)	(368.0)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €31.76  
Market cap: €302m  
Market: Euronext Brussels

**Share price graph (€)**

**Company description**

Celyad is developing C-Cure, an autologous Phase III stem cell therapy for chronic ischaemic heart disease. An innovative cell cancer CAR T-cell therapy, NKG2D, is in Phase I.

**Price performance**

%	1m	3m	12m
Actual	(24.1)	13.9	38.1
Relative*	(24.1)	10.6	21.0

\* % Relative to local index

**Analyst**

Dr John Savin

## Celyad (CYAD)

**INVESTMENT SUMMARY**

Celyad uses an NK receptor CAR T-cell approach with the US and EU THINK Phase Ib trial underway in five solid tumours (ovarian, triple negative breast, bladder, colorectal and pancreatic) plus AML and MM. The second dose cohort is underway. In the first cohort, two colorectal patients have stable disease after three months and no toxicity. Two further NK-2 studies: SHRINK (NK-2 cells given a few days after chemotherapy) and LINK (direct NK-2 cell tumour injection) in colorectal cancer are planned for Q3 2017. Q1 2017 end cash was €72.4m.

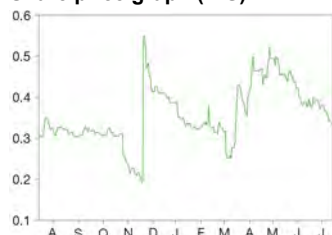
**INDUSTRY OUTLOOK**

The July FDA advisory vote on CD19 CAR T-cell for Novartis shows that CAR can be approved and that manufacturing and process are crucial once clear efficacy is shown. Celyad has a leading position in allogeneic therapy with Novartis taking a non-exclusive licence in a \$96m deal. Celyad is also exploring strategic alternatives for its C-Cure cardiac stem cell therapy. C-Cure has FDA fast track designation which may help a deal to progress.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(28.1)	(27.8)	(320.0)	N/A	N/A
2016	8.5	(24.1)	(22.8)	(209.0)	N/A	N/A
2017e	8.3	(26.7)	(27.2)	(286.0)	N/A	N/A
2018e	9.0	(24.7)	(25.2)	(265.0)	N/A	N/A

**Sector: Pharma & healthcare**

Price: NIS0.34  
Market cap: NIS45m  
Market: TASE

**Share price graph (NIS)**

**Company description**

CollPlant is an Israel-based regenerative medicine company. It is focused on developing and commercialising tissue repair products with its plant-based technology, rhCollagen. It has two products on the market, VergenixSTR and VergenixFG.

**Price performance**

%	1m	3m	12m
Actual	(14.0)	(27.6)	(63.2)
Relative*	(13.1)	(32.0)	(65.1)

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## Collplant Holdings (CLPT)

**INVESTMENT SUMMARY**

CollPlant's investment story is built on the versatility of its plant-based technology, rhCollagen, and its application in regenerative medicine. It has strong potential across various subsectors, initially focusing on orthobiologics, advanced wound care and 3D printing of tissue and organs. Two products have recently been launched: VergenixFG, targeting chronic and acute wounds, and VergenixSTR, targeting tendinopathy. 2016 was an important year for CollPlant as it completed a clinical study and received its CE approval for VergenixSTR, entered into an exclusive distribution agreement with Arthrex to commercialise VergenixSTR in EMEA and launched VergenixFG in Europe. We expect CollPlant to build on this progress in 2017 by increasing its distribution of VergenixFG and orders from Arthrex, alongside developing its earlier-stage rhCollagen technology Biolnk for 3D printing of organs and tissues. We forecast the need for a fund-raising this year. Management indicated recently that it has sufficient funds into Q417 (exercise of warrants).

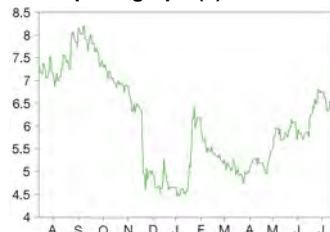
**INDUSTRY OUTLOOK**

Orthobiologics and advanced wound care are substantial growing markets and are estimated to be worth \$6.7bn (according to GlobalData) and \$8.5bn (according to Smith & Nephew) respectively.

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2015	0.0	(18.0)	(18.7)	(22.03)	N/A	N/A
2016	0.3	(27.0)	(27.9)	(27.72)	N/A	N/A
2017e	1.3	(15.5)	(16.3)	(12.72)	N/A	N/A
2018e	2.9	(17.2)	(17.8)	(13.86)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €6.54  
Market cap: €58m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

Crossject develops new therapeutic entities to be administered using its proprietary, needle-free injection system, ZENEO. Crossject has seven products in its development pipeline, including products for rheumatoid arthritis, anaphylactic shock, migraine and Parkinson's.

**Price performance**

%	1m	3m	12m
Actual	13.7	26.0	(9.1)
Relative*	14.1	21.5	(24.6)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Crossject (ALCJ)

**INVESTMENT SUMMARY**

Crossject has developed a deep pipeline of products that are based on its proprietary needle-free injection system, ZENEO, across a variety of indications. The benefits of ZENEO include no need for needles, as well as a simple and quick (~1/10th of a second) delivery of the drug. Its first commercial product, ZENEO Sumatriptan for the acute treatment of migraines, should reach the market in 2019. The next products to reach the market include ZENEO Midazolam and ZENEO Adrenaline for epilepsy and anaphylactic shock, respectively. They should reach the market in 2019/20.

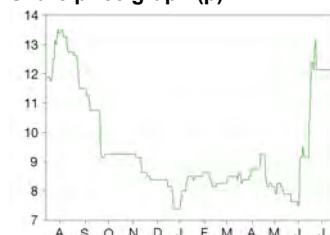
**INDUSTRY OUTLOOK**

Traditional injections have multiple issues with them which inhibit patient acceptance. These often include: lack of convenience, a multi-step injection process, difficulty in performing the injection correctly, and difficulty delivering the injection to the right tissue, particularly for overweight patients.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.7	(4.1)	(5.3)	(65.64)	N/A	N/A
2015	2.4	(5.5)	(6.7)	(85.33)	N/A	N/A
2016e	1.4	(5.6)	(7.3)	(85.19)	N/A	N/A
2017e	2.9	(4.7)	(5.4)	(43.99)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 12.1p  
Market cap: £33m  
Market: AIM

**Share price graph (p)**

**Company description**

e-Therapeutics is a UK-based drug discovery company that has developed a proprietary network pharmacology discovery platform. Its focus is now on commercialisation: securing partners for its discovery and development projects.

**Price performance**

%	1m	3m	12m
Actual	16.9	31.1	2.1
Relative*	18.7	30.4	(8.8)

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## e-Therapeutics (ETX)

**INVESTMENT SUMMARY**

e-Therapeutics (ETX) offers public market investors a unique opportunity to gain exposure to a proprietary, cutting-edge in silico drug discovery platform that has already attracted significant investment and has been fully operational since 2014. This second-generation platform has generated new chemical entities (NCEs) in several different disease areas and, under a new CEO, is on the cusp of commercial validation. The priority for the company is securing deals to provide external validation of this approach. ETX's strength is its discovery capability, particularly in complex disease; it also has six internal discovery projects with the prospect of more to come.

**INDUSTRY OUTLOOK**

Network-driven approaches could potentially revolutionise drug discovery and shorten the path to market by minimising technical risks and drug development costs. ETX is differentiated from its competitors through its expertise in curating, processing and analysing data in the context of mechanistic modelling of disease.

Y/E Jan	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2016	0.0	(11.3)	(11.1)	(3.3)	N/A	N/A
2017	0.0	(13.5)	(13.4)	(3.9)	N/A	N/A
2018e	0.0	(8.9)	(8.9)	(2.6)	N/A	N/A
2019e	0.0	(9.0)	(9.0)	(2.7)	N/A	N/A



**Sector: Pharma & healthcare**

Price: A\$0.07  
Market cap: A\$51m  
Market: ASX

**Share price graph (A\$)**

**Company description**

Factor Therapeutics is an Australian biotechnology company that specialises in the development and manufacture of biologics for advanced wound care applications. Its strategy is to use targeted growth factors to renew the wound environment and promote healing.

**Price performance**

%	1m	3m	12m
Actual	7.7	11.1	89.2
Relative*	8.7	13.4	78.9

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Factor Therapeutics (FTT)

**INVESTMENT SUMMARY**

Factor is developing VF001 as a treatment for moderately severe ulcers that can be used in a community setting, not just in specialty wound clinics. VF001 is a synthetic protein combining an extracellular matrix protein and a growth factor which is being investigated in a randomised Phase IIb trial in a 168 patients with venous leg ulcers. VF001 was safe and well tolerated in an open-label Phase II trial in 53 patients with venous leg ulcers. Factor has revised its development strategy and will seek approval in the US in addition to Europe. US approval will require pivotal Phase III trials, but the current Phase IIb trial should provide sufficient safety data to support a filing in Europe. The company is preparing a Phase II IND submission for VF001 in diabetic foot ulcers. Factor has commenced a preclinical development program to evaluate vitronectin-targeted growth factors in ocular wound care, with a potential PoC readout in July.

**INDUSTRY OUTLOOK**

Chronic wounds impose substantial costs on the healthcare system. The US\$8.5bn global advanced wound care market is expected to grow at 4-5% per year, driven by an ageing population and rising incidence of ailments such as diabetes.

Y/E Jun	Revenue (A\$m)	EBITDA (A\$m)	PBT (A\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.4	(7.1)	(7.1)	(4.03)	N/A	N/A
2016	0.4	(4.1)	(4.1)	(3.04)	N/A	N/A
2017e	2.6	(5.8)	(5.4)	(0.75)	N/A	N/A
2018e	1.8	(4.7)	(4.6)	(0.63)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €1.96  
Market cap: €153m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

Gentel and privately-held company Genkyotex have signed a contribution agreement to form a combined entity focused on the development of NOX inhibitors for fibrosis and other indications. The transaction has been approved by Gentel's shareholders.

**Price performance**

%	1m	3m	12m
Actual	(4.4)	(3.0)	11.4
Relative*	(4.1)	(6.4)	(7.6)

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Genkyotex (GKTX)

**INVESTMENT SUMMARY**

Genkyotex is a biotech company focused on NOX science and the development of small molecule NOX inhibitors for fibrosis and inflammation. Lead product GKT831 is in a Phase II clinical trial in primary biliary cholangitis (PBC) with data in 2018. Second product GKT771 is in advanced preclinical stage and will be Phase I ready by end 2017 and focus on inflammation and angiogenesis. A Phase II investigator-sponsored trial in patients with Type 1 diabetes (T1D) and kidney disease will start in Australia in H217. The company also has a portfolio of early stage NOX inhibitors for oncology, hearing loss and neurology indications. Genkyotex has partnership established by Gentel with the Serum Institute of India Ltd (SIIL) which involves up to \$57m of milestone payments and single-digit royalties on net sales. Net cash was €20.8m at 31 March 2017, sufficient until 2018.

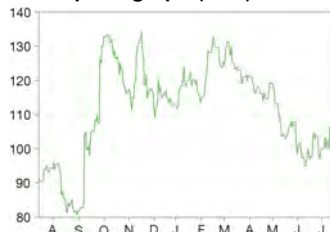
**INDUSTRY OUTLOOK**

The new company is focused on NOX science, an enzyme complex that generates reactive oxygen species (ROS). Increased NOX activity has been linked to various diseases; in particular to metabolic and cardiovascular diseases and neurodegeneration.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	N/A	N/A	N/A	N/A	N/A	N/A
2015	N/A	N/A	N/A	N/A	N/A	N/A
2016e	1.3	(21.7)	(21.7)	(27.8)	N/A	N/A
2017e	0.0	(12.0)	(12.0)	(15.4)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$106.15  
Market cap: US\$2675m  
Market: NASDAQ

**Share price graph (US\$)**

**Company description**

GW is a UK-based speciality pharma company developing cannabinoid medicines. Lead pipeline candidate Epidiolex is undergoing Phase III trials for childhood epilepsy. Sativex is marketed by partners in a number of EU countries for MS spasticity.

**Price performance**

%	1m	3m	12m
Actual	7.4	(9.3)	16.6
Relative*	6.5	(14.1)	2.6

\* % Relative to local index

**Analyst**

Maxim Jacobs

## GW Pharmaceuticals (GWPH)

**INVESTMENT SUMMARY**

GW Pharmaceuticals (GW) is developing an extensive cannabinoid portfolio with potential to treat a broad range of diseases. The lead pipeline asset is Epidiolex, now undergoing a multiple Phase III clinical study program for refractory childhood epilepsies. Initial top-line Phase III data from their one trial in Dravet syndrome and two trials in Lennox-Gastaut syndrome (LGS) were all statistically significant. We expect an NDA filing for both Dravet and LGS mid-2017 and a filing in the EU in H217. They have also commenced Phase III trials in Tuberous Sclerosis Complex (TSC) and infantile spasms (IS).

**INDUSTRY OUTLOOK**

GW is the leading player in cannabinoid medicines. Cannabinoids are diverse chemical compounds that GW extracts from cannabis plant varieties (chemotypes) it has bred. Epidiolex has the potential to treat a broad range of treatment-refractory epilepsy conditions, while the portfolio extends to other orphan indications such as TSC epilepsy and NHIE.

Y/E Sep	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	35.7	(68.2)	(69.7)	(263.60)	N/A	N/A
2016	12.9	(104.9)	(106.1)	(332.18)	N/A	N/A
2017e	12.6	(128.2)	(128.7)	(425.66)	N/A	N/A
2018e	51.2	(99.4)	(100.4)	(330.00)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 3437.5p  
Market cap: £2088m  
Market: AIM, NASDAQ

**Share price graph (p)**

**Company description**

Hutchison China MediTech (HCM) is an innovative China-based biopharma company targeting the global market for novel, highly selective oral oncology and immunology drugs. Its established China Healthcare business is growing ahead of the market. HCM is the healthcare arm of CK Hutchison (c 40% listed on AIM and NASDAQ).

**Price performance**

%	1m	3m	12m
Actual	7.0	9.1	81.6
Relative*	8.7	8.6	62.2

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Hutchison China MediTech (HCM)

**INVESTMENT SUMMARY**

HCM has built a substantial pipeline of potential first-in-class or best-in-class tyrosine kinase inhibitor (TKI) drugs, some of which are in development with strategic partners. HCM have submitted a new drug application (partnered with Eli Lilly) for fruquintinib in CRC to the China FDA (full Phase III CRC data [China] was presented at ASCO 2017), marking a major milestone in the company's life. Separately in collaboration with AstraZeneca, HCM have initiated SAVOIR, a global Phase III trial of savolitinib in PRCC. PBT excludes the earnings contributions from JVs, which in 2016 reported at \$66.2m (as equity in investees, net of tax).

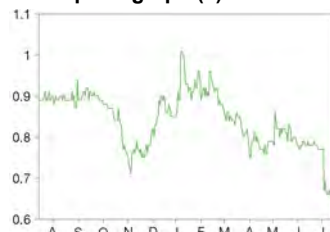
**INDUSTRY OUTLOOK**

HCM's profitable Chinese healthcare business continues to benefit from the fast-growing domestic market, while the clinical, regulatory and technological environments are highly conducive to novel drug development. In the longer term, if the oncology and immunology pipeline comes to fruition, HCM has the potential to become a global oncology and immunology player.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	178.2	(7.8)	(10.5)	14.6	304.4	N/A
2016	216.1	(44.3)	(47.4)	19.6	226.7	N/A
2017e	234.2	(48.6)	(53.8)	(34.9)	N/A	N/A
2018e	262.5	(30.9)	(36.9)	(16.0)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €0.66  
Market cap: €32m  
Market: Alternext Paris

**Share price graph (€)**

**Company description**

Hybrigenics is a French biotech company. It provides protein-protein and small molecule analysis services and is conducting anti-cancer studies on lead drug inecalcitol, primarily in adult leukaemias.

**Price performance**

%	1m	3m	12m
Actual	(12.5)	(11.4)	(23.3)
Relative*	(12.3)	(14.6)	(36.4)

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Hybrigenics (ALHYG)

**INVESTMENT SUMMARY**

Hybrigenics has adopted a development strategy with vitamin D3 derivative inecalcitol, focusing on adult haematological cancers. In addition to chronic lymphocytic leukaemia (CLL) and chronic myeloid leukaemia (CML), Hybrigenics is prioritising acute myeloid leukaemia (AML) given inecalcitol's orphan status in the US and Europe and the scarcity of treatment options in this aggressive and difficult to treat leukaemia. Inecalcitol has the potential to enhance rather than replace approved therapies, particularly with its benign safety profile. The company has refocused exclusively on R&D with the management buy-out of its subsidiary dedicated to proteomic services. Cash at end December 2016 was €8.5m.

**INDUSTRY OUTLOOK**

An international Phase II study in AML has started recruiting patients in France and the US in H2 2016. Encouraging initial data from a Phase II in CML has been presented. At interim, 33% of patients who had completed one year in the study achieved a deep molecular response (DMR) which may allow patients to discontinue treatment (functional cure). Finally, the collaboration with Servier on ubiquitin-specific proteases is ongoing and the company received a milestone payment of €1.5m during H116.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	2.2	(4.4)	(4.5)	(13.2)	N/A	N/A
2016	3.6	(3.8)	(3.9)	(10.8)	N/A	N/A
2017e	3.7	(5.0)	(4.9)	(13.8)	N/A	N/A
2018e	5.6	(3.5)	(3.6)	(9.9)	N/A	N/A

**Sector: Pharma & healthcare**

Price: SEK113.75  
Market cap: SEK1911m  
Market: NASDAQ OMX First North

**Share price graph (SEK)**

**Company description**

Immunovia is a Swedish company, specialised in diagnostics for oncology and autoimmune diseases. Its main product is IMMray PanCan-d, an antibody microarray based on its proprietary IMMray platform. A prospective trial in high-risk patients will start in Q416. The company expects to generate initial out-of-pocket sales in 2018.

**Price performance**

%	1m	3m	12m
Actual	8.9	5.3	29.3
Relative*	9.7	0.8	7.2

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Immunovia (IMMUNOV)

**INVESTMENT SUMMARY**

Immunovia is developing IMMray PanCan-d, a blood-based test for the early detection of pancreatic cancer. Early diagnosis could improve 5-year survival rate to c 50%. On the back of positive retrospective data (PanCan-d discriminated healthy individuals from those with pancreatic cancer with 96% accuracy) Immunovia intends to start a prospective trial in high-risk patients in Q416. The company expects to generate initial out-of-pocket sales in 2018. It has signed a collaboration with the US National Cancer Institute to validate biomarkers in patients over 50 years old with new onset diabetes. Additionally, IMMray biomarker signatures distinguished Systemic Lupus Erythematosus (SLE) from three other autoimmune diseases with 96% accuracy; and Rheumatoid Arthritis (RA) from SLE, Sjögren Syndrome and Systemic Vasculitis, with 89% accuracy. Cash and equivalents at 31 March 2017 were SEK246.4m.

**INDUSTRY OUTLOOK**

Immunovia is targeting a potential opportunity of over SEK36bn. It will first target patients with a family history of pancreatic cancer, or other pancreatic diseases with increased risk of cancer (estimated at 200,000 in the EU/US) followed by patients over 50 years of age diagnosed with type 2 diabetes, (estimated at 3.4 million new patients per year).

Y/E Dec	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	17.0	(7.1)	(7.4)	(65.0)	N/A	N/A
2016	24.5	(14.4)	(14.7)	(98.0)	N/A	N/A
2017e	27.8	(17.8)	(17.6)	(104.0)	N/A	N/A
2018e	43.6	(30.3)	(30.8)	(183.0)	N/A	N/A



**Sector: Pharma & healthcare**

Price: NIS19.43  
Market cap: NIS267m  
Market: TASE

**Share price graph (NIS)**

**Company description**

Intec Pharma is a drug delivery company that has developed the accordion pill, a novel gastroretentive controlled release formulation. The company is currently using this technology to develop AP-CDLD for Parkinson's in Phase III and AP-ZP for insomnia in Phase II.

**Price performance**

%	1m	3m	12m
Actual	0.2	(4.2)	13.2
Relative*	0.0	(9.0)	9.2

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Intec Pharma (NTEC)

**INVESTMENT SUMMARY**

Intec Pharma is a drug delivery company that has developed a novel drug delivery device termed the accordion pill (AP), a folded, multilayer membrane packaged into a normal capsule, which expands to a sheet within the stomach to many times its original size. This property causes the pill to be retained in the stomach for up to 12 hours. This is ideal for drugs with local activity in the stomach or upper digestive tract or with poor solubility. AP-CDLD, a controlled release formulation of carbidopa and levodopa for Parkinson's is in Phase III with enrollment expected to complete by the end of the year with data in mid-2018. They have also initiated a Phase I trial of AP-CBD/THC, their cannabinoid program.

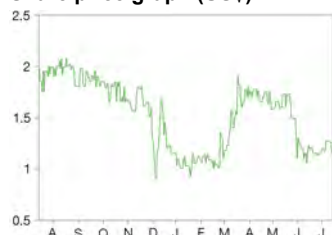
**INDUSTRY OUTLOOK**

Parkinson's disease is a neurodegenerative disease in which the dopamine secreting neurons in the brain are lost, leading to severe motor defects and cognitive impairment. Approximately one million people in the US have Parkinson's.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(8.3)	(7.2)	(92.16)	N/A	N/A
2016	0.0	(14.5)	(13.4)	(116.72)	N/A	N/A
2017e	0.0	(13.8)	(12.8)	(88.60)	N/A	N/A
2018e	0.0	(14.6)	(13.6)	(89.34)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$1.20  
Market cap: US\$5m  
Market: OTCQX

**Share price graph (US\$)**

**Company description**

International Stem Cell is an early-stage biotechnology company developing therapeutic, biomedical and cosmeceutical applications for its proprietary stem form of pluripotent stem cells – human parthenogenetic stem cells (hpSCs). Its lead candidate is a cell therapy treatment for Parkinson's disease.

**Price performance**

%	1m	3m	12m
Actual	(2.4)	(30.6)	(39.3)
Relative*	(3.3)	(34.3)	(46.6)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## International Stem Cell (ISCO)

**INVESTMENT SUMMARY**

International Stem Cell (ISCO) is an early-stage cell therapy company currently in Phase I/IIa clinical trials to treat Parkinson's disease (PD), with preliminary data from the recently completed first cohort expected in Q317. The company is also preparing to initiate a Phase II trial in traumatic brain injury in Q317. With its hpSC technology, ISCO has created 15 stem cell lines, each of which is a different HLA type. From this, it creates different cell types such as liver cells, neural cells and three-dimensional eye structures. In addition, ISCO sells skincare and biomedical supplies to the market, generating \$7.2m in sales and \$1.3m in underlying operating profit in 2016.

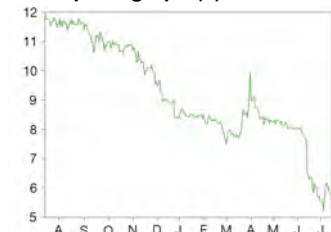
**INDUSTRY OUTLOOK**

ISCO's technology platform is based on human parthenogenetic stem cells (hpSCs). Parthenogenetic stem cells are created from unfertilized human eggs (oocytes) chemically activated to make the cells pluripotent. As hpSCs express fewer parental histocompatibility antigens, they reduce the risk of immune rejection.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	7.6	(5.0)	(4.6)	(129.29)	N/A	N/A
2016	7.2	(5.2)	(4.9)	(33.82)	N/A	N/A
2017e	7.6	(4.6)	(4.9)	(122.16)	N/A	N/A
2018e	8.3	(7.3)	(8.2)	(196.08)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €5.61  
Market cap: €82m  
Market: Euronext Amsterdam

**Share price graph (€)**

**Company description**

Kiadis Pharma is a biotech company focused on cell-based immunotherapies to overcome complications associated with stem cell transplants in blood diseases. ATIR101 for leukaemia is in Phase II and will file for EU approval in Q117. ATIR201 (thalassemia) started a Phase I/II in December 2016.

**Price performance**

%	1m	3m	12m
Actual	(12.2)	(33.3)	(52.9)
Relative*	(12.1)	(34.0)	(59.5)

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Kiadis Pharma (KDS)

**INVESTMENT SUMMARY**

Kiadis Pharma is developing T cell-based therapies to address the issues associated with haematopoietic stem cell transplantation (HSCT). The company uses its Theralux technology to develop ATIR101 and ATIR201 as adjunct therapies to HSCT in leukaemia and thalassemia, respectively. On the back of Phase II data, Kiadis filed a Marketing Authorisation Application (MAA) of ATIR101 with the European Medicines Agency (EMA) in April 2017. A Phase III trial started in February 2017. ATIR201 is undergoing a Phase I/II trial with data expected in H217. Cash at end 2016 was €14.6m. Kiadis raised €5m in a private placement in June 2017.

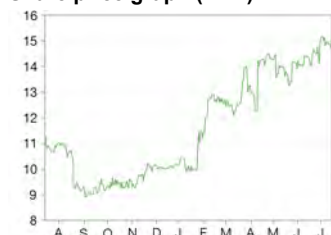
**INDUSTRY OUTLOOK**

Kiadis's Theralux platform allows the infusion of lymphocytes from a partially matching (haploidentical) family member to the donor as it eliminates cells that could react against the host's immune cells and cause complications such as Graft vs Host Disease (GVHD). Positive one year data (Event-Free Survival and Overall Survival) from Phase II clinical trial with ATIR101 was presented at the ASH 58th Annual Meeting in San Diego, USA. Overall survival was 61% for the ATIR101 arm vs 20% of a historic control group receiving HSCT only. GFRS was 57% for HSCT+ATIR101 vs 20% for the control group.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(6.0)	(7.2)	(74.62)	N/A	N/A
2015	0.0	(15.9)	(17.4)	(136.50)	N/A	N/A
2016e	0.0	(8.6)	(10.0)	(71.58)	N/A	N/A
2017e	0.0	(11.9)	(13.5)	(96.42)	N/A	N/A

**Sector: Pharma & healthcare**

Price: CHF15.20  
Market cap: CHF281m  
Market: Swiss Stock Exchange

**Share price graph (CHF)**

**Company description**

LifeWatch, headquartered in Switzerland and listed on SIX, specialises in advanced digital health systems and wireless remote diagnostic patient monitoring services (eg mobile cardiac telemetry, MCT). Its primary operations are in the US, but LifeWatch is working on expanding to new geographies and has established a JV in Turkey.

**Price performance**

%	1m	3m	12m
Actual	5.9	6.7	35.1
Relative*	3.8	1.9	22.2

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## LifeWatch (LIFE)

**INVESTMENT SUMMARY**

LifeWatch specialises in ECG-based remote cardiac monitoring services and is one of the leading companies in this space in the US, with around four million patients monitored to date. On 9 April, the US-based BioTelemetry launched a competing takeover bid after existing LifeWatch's shareholder Aegis Victoria had launched its bid in January. The board of LifeWatch recommended the transaction with BioTelemetry, which valued the company at around CHF260m and, according to an update on 4 July, BioTelemetry confirmed success rate of 96.67%.

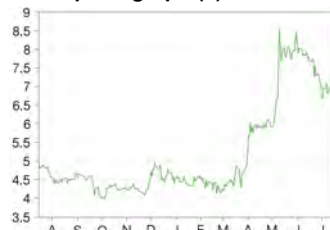
**INDUSTRY OUTLOOK**

Against the background of increasing prevalence of chronic diseases and rising healthcare costs, there is a compelling need for third-party remote service providers, which allow hospitals to outsource ambulatory cardiac monitoring. LifeWatch's competitive advantages include technology know-how, existing wide reimbursement coverage and live data centres.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	88.6	(3.6)	(11.7)	(59.59)	N/A	21.2
2016	113.8	2.1	(0.9)	(33.11)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: €7.35  
Market cap: €194m  
Market Scale

**Share price graph (€)**

**Company description**

MagForce has a European approved nanotechnology-based therapy to treat brain cancer. Nanoparticles are injected into the tumour and activated by an external magnetic field, producing heat and thermally destroying or sensitising the tumour.

**Price performance**

%	1m	3m	12m
Actual	(7.0)	23.1	52.4
Relative*	(5.7)	18.0	21.5

\* % Relative to local index

**Analyst**

Dr Daniel Wilkinson

## MagForce (MF6)

**INVESTMENT SUMMARY**

MagForce is moving forward with its strategy to drive uptake and acceptance (in the US and Europe) of its NanoTherm nanoparticle-based therapy for cancer. In Germany, Magforce has six centres commercially capable (three utilised, c50 patients to date) of treating glioblastoma (GBM) patients. To accelerate uptake of NanoTherm treatment in Europe, we expect Magforce to look to expand from Germany into other countries. In the US, its subsidiary Magforce USA is in talks with the FDA to initiate a planned clinical trial in prostate cancer patients (potential launch in 2018). The company expects the trial to initiate in H217; data are expected 12 months later.

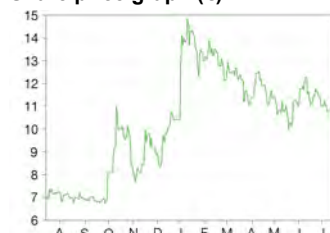
**INDUSTRY OUTLOOK**

MagForce's NanoTherm therapy has been designed to directly affect tumours 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 destroy or sensitise the tumour for additional treatment.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	2.6	(4.4)	(4.5)	(17.73)	N/A	N/A
2016	0.5	(6.6)	(7.2)	(27.81)	N/A	N/A
2017e	3.5	(3.8)	(4.1)	(15.63)	N/A	N/A
2018e	6.5	(4.3)	(4.6)	(17.58)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €11.01  
Market cap: €243m  
Market FRA

**Share price graph (€)**

**Company description**

Medigene is a German biotech company with a core business in cancer immunotherapy. Dendritic cell (DC) vaccines are in Phase I/II clinical studies, while a T-cell receptor (TCR) candidate should enter the clinic in 2017.

**Price performance**

%	1m	3m	12m
Actual	(2.8)	(7.6)	56.1
Relative*	(1.5)	(11.4)	24.4

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## Medigene (MDG1)

**INVESTMENT SUMMARY**

Medigene is focused on the rapid development of its cancer immunotherapy technology platforms: dendritic cell (DC) cancer vaccines, adoptive T-cell therapy (TCR) and T-cell specific antibodies (TAB). Phase I/II studies are ongoing with DC vaccines for prostate cancer and acute myeloid leukaemia (investigator-sponsored) and acute myeloid leukaemia (Medigene). For TCRs, Medigene plans to start up to three clinical trials; the first in 2017 (investigator-led) and company-led late 2017 and 2018. Important recent progress includes an alliance with bluebird bio, a prominent T-cell immunology company, to utilise its TCR technology platform to identify four therapeutic candidates against four targets. This is positive as it validates its TCR technology and offers potential upside from any development. Medigene is well-funded (€67.7m proforma) to execute its clinical programme, particularly following a recent fund-raising (€20.7m gross).

**INDUSTRY OUTLOOK**

Cancer immunotherapy is attracting huge biotech investor interest. Medigene's DC vaccine technology is a new generation, with multiple potential efficacy and manufacturing benefits over the forerunners, eg Provenge. The TCR programme has similarities to CAR-T products, but with potentially significant efficacy and safety advantages.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	6.8	(9.4)	(12.8)	(73.55)	N/A	N/A
2016	9.7	(10.2)	(11.3)	(55.51)	N/A	N/A
2017e	9.0	(17.6)	(18.6)	(88.63)	N/A	N/A
2018e	9.3	(19.5)	(20.2)	(91.11)	N/A	N/A

**Sector: Pharma & healthcare**

Price: A\$1.99  
Market cap: A\$862m  
Market: ASX

**Share price graph (A\$)**

**Company description**

Mesoblast is developing adult stem cell therapies based on its proprietary MPC and culture-expanded MSC platforms. It has six late-stage clinical trials across four areas.

**Price performance**

%	1m	3m	12m
Actual	(2.7)	(30.4)	76.4
Relative*	(1.8)	(28.9)	66.8

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Mesoblast (MSB)

**INVESTMENT SUMMARY**

Mesoblast cleared an interim futility analysis of the Phase III trial of its MPC-150-IM regenerative therapy in heart failure patients in April - over half of the target of 600 patients have been enrolled. In December Mesoblast granted Mallinckrodt Pharmaceuticals up to 9 months to exclusively negotiate commercial and development agreements for MPC-06-ID in chronic low back pain (CLBP) and MSC-100-IV in graft vs host disease (GvHD). Both of these products are in pivotal studies: MSC-100-IV has been granted Fast Track designation by the FDA and is due to report results from a Phase III in children with GvHD in Q417; a 360-patient Phase III of MPC-06-ID in CLBP is underway. Partner JCR Pharmaceuticals is marketing Mesoblast's GvHD therapy in Japan following approval in 2015. Cash balance at 31 March totalled US\$69m. Mesoblast also has access to a US\$90m equity finance facility to extend its funding runway.

**INDUSTRY OUTLOOK**

Mesoblast is the leading mesenchymal stem cell development company, with two platforms (MPCs, MSCs) and nine clinical candidates in Phase II and III. Alliances with JCR and Lonza underpin the key programmes.

Y/E Jun	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2015	32.4	(98.0)	(96.2)	(29.99)	N/A	N/A
2016	44.2	(86.3)	(87.4)	(0.20)	N/A	N/A
2017e	5.8	(81.3)	(82.0)	(20.59)	N/A	N/A
2018e	9.0	(80.3)	(81.0)	(18.92)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €3.67  
Market cap: €126m  
Market: FRA

**Share price graph (€)**

**Company description**

Mologen is a German biotech company developing cancer immunotherapies. The lead product is lefitolimod (MGN1703) for metastatic colorectal cancer maintenance, SCLC and HIV. Development of MGN1601, a therapeutic renal cell vaccine, would be reinstituted on successful out-licensing of lefitolimod.

**Price performance**

%	1m	3m	12m
Actual	(8.3)	33.1	104.1
Relative*	(7.0)	27.6	62.7

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Mologen (MGN)

**INVESTMENT SUMMARY**

Mologen is developing novel immunotherapies for use in the post-chemo maintenance setting in cancer and for the treatment of infectious diseases. Mologen's efforts are focused on its lead product candidate lefitolimod, which is in four clinical trials. IMPALA is a 540-pt pivotal study in metastatic colorectal cancer (mCRC) maintenance; recently completed full enrollment. Topline data has been published (full data expected at upcoming conference) for the 100-patient Phase II trial (IMPULSE) in small-cell lung cancer (SCLC). Final results in the Phase I TEACH study to treat HIV (the first non-cancer study for MGN1703) are now expected mid-2017. A 60-patient Phase I combination study of lefitolimod with Yervoy in solid tumours is now being conducted by MD Anderson, enrollment has started. Cash of €19.4m as of Q117 (FY16:€20.5m) should be sufficient to fund Mologen into early 2018.

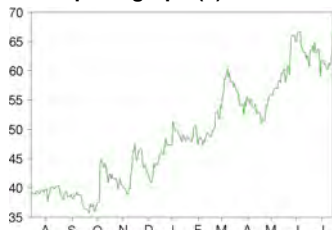
**INDUSTRY OUTLOOK**

Results for IMPALA are expected in 2018/19. Final overall survival (OS) data from IMPACT (Phase II in mCRC), and data from IMPULSE may offer fresh financing/partnering opportunities for lefitolimod before then.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(20.4)	(20.5)	(0.99)	N/A	N/A
2016	0.1	(20.6)	(20.8)	(0.91)	N/A	N/A
2017e	0.0	(21.0)	(21.4)	(0.63)	N/A	N/A
2018e	0.0	(15.5)	(15.9)	(0.47)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €66.90  
Market cap: €1962m  
Market: FRA

**Share price graph (€)**

**Company description**

MorphoSys is a German biotechnology company that uses its proprietary antibody platforms to produce human antibodies for therapeutic use across a range of indications for partners and to develop its own pipeline.

**Price performance**

%	1m	3m	12m
Actual	8.2	26.8	70.2
Relative*	9.7	21.6	35.6

\* % Relative to local index

**Analyst**

Maxim Jacobs

## MorphoSys (MOR)

**INVESTMENT SUMMARY**

MorphoSys has a broad portfolio with 114 programmes, 29 of those in clinical development, including the proprietary programmes for MOR208, MOR202 and MOR209. MOR208 is an Fc-enhanced antibody targeting CD19, which is being developed for DLBCL and CLL, while MOR202 is an anti-CD38 antibody in Phase I/IIa for multiple myeloma. MOR209, an anti-PSMA/CD3 antibody, is in Phase I trials for prostate cancer. Among the partnered programmes, J&J announced in July the FDA approval of Guselkumab, an anti-IL-23 antibody, for psoriasis. It is the first antibody generated from their proprietary HuCAL antibody technology to receive marketing approval.

**INDUSTRY OUTLOOK**

The pharmaceutical industry is out-licensing more drug discovery and developing more biological products, both trends that should benefit MorphoSys. Also, there is increasing demand for novel therapies, such as those in MorphoSys's proprietary pipeline.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	106.2	20.7	22.6	64.8	103.2	N/A
2016	49.7	(56.2)	(57.8)	(220.5)	N/A	N/A
2017e	61.5	(63.0)	(62.2)	(146.9)	N/A	N/A
2018e	29.5	(85.8)	(85.1)	(201.7)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €19.86  
Market cap: €349m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

Nanobiotix is a French nanomedicine company developing radiotherapy enhancers for the treatment of cancer. Lead product NBTXR3 is in pivotal clinical development in STS in Europe and is partnered with PharmaEngine in Asia-Pacific.

**Price performance**

%	1m	3m	12m
Actual	(2.6)	15.9	18.0
Relative*	(2.3)	11.7	(2.1)

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## Nanobiotix (NANO)

**INVESTMENT SUMMARY**

Nanobiotix has made progress with NBTXR3 as a standalone agent to enhance radiation therapy and now has clinical data from three cancers demonstrating consistent safety, feasibility and transferability of effect across different indications. Nanobiotix has also released first human data demonstrating NBTXR3's ability to enhance the immunogenicity of various cancers, which is the cornerstone idea behind the immuno-oncology (IO) products, i.e. NBTXR3 could efficiently prime an adaptive antitumour immune response, turning "cold" tumors to "hot" tumors. Currently NBTXR3 is being investigated for a total of six indications in seven clinical trials. On 7 April, Nanobiotix completed a private placement totaling to 9.99% of the outstanding prior to the offering and bringing in €25m in addition to cash of €21.1m reported at end-FY16. We are updating our estimates.

**INDUSTRY OUTLOOK**

Radiotherapy is a cornerstone cancer treatment used in around 60% of all cancer patients. NBTXR3 with its purely physical mechanism of action is being developed to improve the benefits of current radiotherapy without increasing the risks to surrounding healthy tissues.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	4.0	(16.7)	(17.0)	(120.18)	N/A	N/A
2016	5.4	(21.5)	(21.9)	(146.78)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A



**Sector: Pcare & household prd**

Price: 48.5p  
Market cap: £33m  
Market: AIM

**Share price graph (p)**

**Company description**

NetScientific is a transatlantic biomedical and healthcare technology group. Its portfolio of five core investments and one material investment is focused on three main sectors: digital health (Wanda), diagnostics (Vortex, ProAxis, Glycotest) and therapeutics (PDS Biotech).

**Price performance**

%	1m	3m	12m
Actual	(4.0)	(11.0)	(31.7)
Relative*	(2.5)	(11.5)	(39.0)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## NetScientific (NSCI)

**INVESTMENT SUMMARY**

NetScientific has a focused portfolio of potentially disruptive biomedical and healthcare technology investments. The last couple of years saw significant strategic changes, including senior management restructuring, bringing a new highly experienced CEO on board, rationalisation of the portfolio and new funding. The current focus is on digital health, diagnostics and therapeutics with the portfolio consisting of four core investments in which it has controlling stakes (Vortex, Wanda, ProAxis and Glycotest) and one material investment (PDS). The aim is to bring these to commercialisation over the next two years, with the ultimate goal of an exit, realising value for investors.

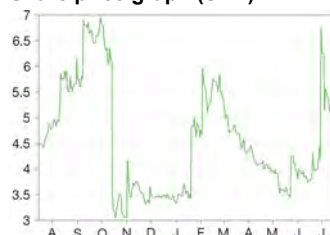
**INDUSTRY OUTLOOK**

NetScientific remains focused on sourcing, funding and building early- to mid-stage US and UK companies that are developing potentially breakthrough technologies in growing markets with unmet needs.

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	0.1	(11.5)	(11.3)	(24.0)	N/A	N/A
2016	0.5	(12.6)	(12.3)	(21.0)	N/A	N/A
2017e	2.7	(13.9)	(14.3)	(22.0)	N/A	N/A
2018e	11.6	(10.1)	(12.4)	(19.0)	N/A	N/A

**Sector: Pharma & healthcare**

Price: SEK5.15  
Market cap: SEK255m  
Market: NASDAQ OTCQX

**Share price graph (SEK)**

**Company description**

NeuroVive Pharmaceutical is a Swedish biopharmaceutical company with deep expertise in mitochondrial medicine. It has a diversified portfolio in terms of indications and employs a dual strategy: it develops a core portfolio of assets for orphan diseases and seeks to out-license proprietary products for non-orphan indications.

**Price performance**

%	1m	3m	12m
Actual	37.0	25.6	15.5
Relative*	38.1	20.3	(4.3)

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## NeuroVive Pharmaceutical (NVP)

**INVESTMENT SUMMARY**

NeuroVive Pharmaceutical is a mitochondrial medicine specialist with a diversified asset portfolio. NeuroVive's core portfolio, which the company aims to develop internally, targets orphan indications: traumatic brain injury (TBI) with NeuroSTAT, various genetic mitochondrial diseases with KL1333 and NVP015, and mitochondrial myopathy with NVP025. Recent R&D news regarding the positive outcome in a Phase IIa study with NeuroSTAT means that the drug candidate is ready for a proof-of-concept study. The second most advanced product KL1333 was in-licensed from Yungjin Pharm in May 2017 and currently is in Phase I. Product portfolio for out-licensing includes NV556 and NVP022 for non-alcoholic steatohepatitis (NASH) and NVP024 for hepatocellular carcinoma (HCC).

**INDUSTRY OUTLOOK**

NeuroVive has a rather diversified portfolio in terms of indications; however, all the assets are based on improving mitochondrial metabolism and function. This puts NeuroVive among the very few experts in mitochondrial medicine in the industry, in our view. Central to NeuroVive's strategy is maintaining a network of KOLs, academic institutions and research organisations, which help to run innovative design and cost-effective studies.

Y/E Dec	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	2.5	(89.1)	(89.6)	(300.43)	N/A	N/A
2016	0.0	(69.9)	(70.7)	(172.27)	N/A	N/A
2017e	0.0	(62.1)	(62.0)	(139.43)	N/A	N/A
2018e	0.0	(51.3)	(51.4)	(112.07)	N/A	N/A

**Sector: Pharma & healthcare**

Price: CHF20.40  
Market cap: CHF323m  
Market: Swiss Stock Exchange

**Share price graph (CHF)**

**Company description**

Newron is a CNS-focused biotech. Xadago (partnered with Zambon, US WorldMeds, Meiji Seika, Sequirus) for PD has been launched in Europe. Other pipeline assets include Sarizotan (Phase III for Rett syndrome) and Evenamide (Phase II for schizophrenia).

**Price performance**

%	1m	3m	12m
Actual	(0.7)	(9.9)	22.9
Relative*	(2.8)	(14.0)	11.2

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Newron Pharmaceuticals (NWRN)

**INVESTMENT SUMMARY**

Newron's lead product, Xadago (safinamide) for Parkinson's disease (PD) has been launched in 12 European countries and is generating sales through commercial partner Zambon (ex-Japan/Asia). Additionally, Xadago was recently approved in the US and will be distributed by US WorldMeds. Other pipeline assets include sarizotan for Rett syndrome, the pivotal trial STARS (placebo-controlled Phase II/III trial) to investigate breathing disorders associated with RS has initiated. Full data from the Phase II study of evenamide as an add-on to atypical antipsychotics, published in March 2017, demonstrated efficacy in terms of improvement on the symptoms of schizophrenia assessed by the Positive and Negative Syndrome Scale (PANSS). Newron raised CHF26.1m in 2016 in a private placement that it expects will help fund operations through 2018.

**INDUSTRY OUTLOOK**

Parkinson's disease is a growing market. Xadago could have a unique position, with once-a-day dosing and a clean safety profile.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	2.4	(17.6)	(18.3)	(117.21)	N/A	N/A
2016	6.7	(15.3)	(15.2)	(103.69)	N/A	N/A
2017e	15.3	(7.6)	(7.2)	(45.77)	N/A	N/A
2018e	15.6	(4.5)	(3.9)	(24.42)	N/A	N/A

**Sector: Pharma & healthcare**

Price: A\$0.04  
Market cap: A\$21m  
Market: ASX

**Share price graph (A\$)**

**Company description**

Novogen's two main drug technology platforms are super-benzopyrans and anti-tropomyosins. SBP compounds show potent activity against cancer stem cells with potential application in degenerative diseases; ATMS show synergy with anti-mitotics in cancer.

**Price performance**

%	1m	3m	12m
Actual	(18.9)	(23.2)	(55.7)
Relative*	(18.1)	(21.7)	(58.1)

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Novogen (NRT)

**INVESTMENT SUMMARY**

Novogen is developing two groups of anti-cancer compounds, including GDC-0084, a phase II-ready PI3K inhibitor licensed from Genentech that is intended for glioblastoma. The company has transferred the IND from Genentech and is finalising design for a Phase II study expected to start in H217. Its super-benzopyran drugs include Cantrixil and Trilexium, which are potent against cancer stem cells that are resistant to standard chemotherapy drugs, both in vitro and in vivo. A 60-patient Phase I trial of Cantrixil in ovarian cancer commenced in December 2016 - while the primary aim is to assess safety and tolerability, radiological responses and biomarkers will be assessed for indications of efficacy. Novogen has terminated development of its preclinical anti-tropomyosin drug Anisina, but has initiated a next-generation anti-tropomyosin drug discovery program supported by an A\$3m government grant. The company had A\$18.6m cash at December 2016.

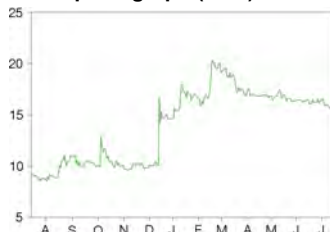
**INDUSTRY OUTLOOK**

Novogen is a biotechnology company listed on the ASX and NASDAQ. Its two main drug technology platforms are super-benzopyrans (SBP) and a PI3K inhibitor. SBP compounds show potent activity against cancer stem cells.

Y/E Jun	Revenue (A\$m)	EBITDA (A\$m)	PBT (A\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	1.6	(7.6)	(8.4)	(2.99)	N/A	N/A
2016	3.7	(11.3)	(11.6)	(2.84)	N/A	N/A
2017e	4.4	(12.5)	(12.3)	(2.70)	N/A	N/A
2018e	9.5	(17.4)	(19.0)	(3.93)	N/A	N/A

**Sector: Pharma & healthcare**

Price: SEK15.70  
Market cap: SEK673m  
Market NASDAQ OMX First North

**Share price graph (SEK)**

**Company description**

Nuevolution is a Copenhagen-based biopharmaceutical company. Its patent protected Chemetics drug discovery platform enables the selection of drugs to an array of tough-to-drug disease targets. To date it has entered into 17 agreements with major pharmaceutical companies.

**Price performance**

%	1m	3m	12m
Actual	(4.3)	(6.6)	69.7
Relative*	(3.5)	(10.5)	40.7

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Nuevolution (NUE)

**INVESTMENT SUMMARY**

Nuevolution's proprietary Chemetics DNA-encoded screening platform technology enables fast and accurate small molecule drug discovery. The technology has received powerful external validation, including three recent collaborations (Amgen, Almirall and Janssen) that could generate significant value in the coming years. In addition, we expect Nuevolution to progress at least one internally generated asset into clinical development in the near future. Net cash of SEK196.2m (\$23.5m) (31 March 2017) suggests a cash runway into FY19.

**INDUSTRY OUTLOOK**

Significant promise is seen in DNA-encoded libraries due to the potential to rapidly develop small molecule drugs to 'tough-to-drug' targets. We continue to see major investment in the space from an array of companies, notably GSK, Roche and Novartis.

Y/E Jun	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	N/A	N/A	N/A	N/A	N/A	N/A
2016	21.3	N/A	(151.9)	(397.00)	N/A	N/A
2017e	139.4	N/A	15.1	4.00	392.5	N/A
2018e	186.0	N/A	56.4	86.00	18.3	N/A

**Sector: Pharma & healthcare**

Price: €4.01  
Market cap: €203m  
Market Euronext Paris

**Share price graph (€)**

**Company description**

Onxeo is focused on orphan cancer and has three late-stage orphan oncology assets it could commercialise alone in Europe (Livatag, Beleodaq and Valitive). Royalty-earning Beleodaq (belinostat) is launched in the US, along with two non-core, partnered, specialty products.

**Price performance**

%	1m	3m	12m
Actual	(21.4)	52.5	23.4
Relative*	(21.1)	47.0	2.3

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## Onxeo (ONXEO)

**INVESTMENT SUMMARY**

Recently, Onxeo announced its first preclinical proof-of-concept data with AsiDNA demonstrating the potential to be administered intravenously. AsiDNA, a first-in-class DNA repair inhibitor, has already been tested in a Phase I trial with melanoma patients and showed promising results in terms of safety and initial signs of efficacy administered via local injection. Onxeo indicated that it aims to file the investigational new drug application by end-2017 and will also explore AsiDNA's potential when administered together with PARP inhibitors. A major near term milestone is the preliminary efficacy data from the 390-patient Phase III trial with the lead asset Livatag for hepatocellular carcinoma are expected shortly. Onxeo's third lead product, Beleodaq, is already launched in the US with partner Spectrum for relapsed/refractory peripheral T-cell lymphoma (r/r PTCL), generating royalty income for Onxeo.

**INDUSTRY OUTLOOK**

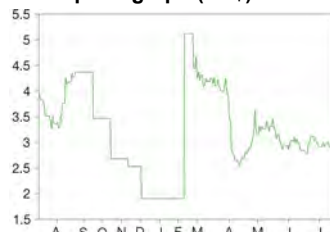
The patent expiry of blockbuster drugs and increased competition from generics has shifted the focus of the pharmaceutical industry to orphan drugs. Government incentives for drug development, as well as support from the regulatory bodies provide incentives for orphan drug developers.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.5	(20.4)	(20.0)	(43.53)	N/A	N/A
2016	4.4	(21.2)	(20.4)	(48.04)	N/A	N/A
2017e	7.9	(21.7)	(21.7)	(46.33)	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A



**Sector: Pharma & healthcare**

Price: US\$2.88  
Market cap: US\$44m  
Market: NASDAQ OTCQX

**Share price graph (US\$)**

**Company description**

Orexigen is a biopharmaceutical company focusing on obesity treatments. It will sell its sole product, Contrave, through its own salesforce in the US after taking back the rights from partner, Takeda. Contrave was launched in the US in Oct 2014 and approved in the EU in March 2015 under the trade name Mysimba.

**Price performance**

%	1m	3m	12m
Actual	1.4	10.3	(26.9)
Relative*	0.5	4.5	(35.7)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Orexigen Therapeutics (OREX)

**INVESTMENT SUMMARY**

Orexigen's obesity drug, Contrave, is an extended-release oral combination of long-marketed bupropion (Wellbutrin for depression) and Naltrexone (Revia for addiction). Now the leading branded obesity treatment in the US, Orexigen announced the acquisition of US rights to Contrave in the US from partner Takeda in mid-March 2016. The company is now marketing the drug with a new dedicated salesforce of 160 reps with a focus on the consumer. Contrave is approved under the brand Mysimba in most international markets. It has now launched in 14 countries, including South Korea, Spain and Poland. Launches in the UK and Ireland are expected shortly.

**INDUSTRY OUTLOOK**

Orexigen is a biopharmaceutical company focusing on obesity treatments. Contrave was launched in the US in October 2014 and approved in the EU in March 2015, under the trade name Mysimba.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	24.5	(60.3)	(67.3)	(523.81)	N/A	N/A
2016	33.7	(134.6)	(138.1)	(972.82)	N/A	N/A
2017e	87.3	(135.2)	(139.2)	(823.44)	N/A	N/A
2018e	160.3	(70.9)	(75.5)	(485.89)	N/A	N/A

**Sector: Pharma & healthcare**

Price: SEK29.20  
Market cap: SEK1009m  
Market: NASDAQ OMX Mid Cap

**Share price graph (SEK)**

**Company description**

Orexo is a Swedish speciality pharma company, with expertise in drug delivery/reformulation technologies (in particular sublingual formulations) and a US commercial infrastructure for opioid dependence therapy Zubsolv (also filed in Europe). Orexo also has two clinical assets and three preclinical programmes.

**Price performance**

%	1m	3m	12m
Actual	5.8	3.9	(41.0)
Relative*	6.6	(0.5)	(51.1)

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Orexo (ORX)

**INVESTMENT SUMMARY**

Strong Q217 US Zubsolv sales (SEK124.1m +10% vs Q216) and ongoing cost control underpinned a seventh consecutive quarter of positive operating cash flow and a stronger balance sheet (SEK45.7m net debt). FY17 guidance altered slightly, OPEX has now been guided to SEK 475m (previously SEK500m-510m), however, guidance for positive EBITDA and Zubsolv US YOY net revenue growth remained unchanged. IP infringement litigation remains an overhang. The court ruling on the '996 Zubsolv patent precludes Actavis generic launch before September 2019; Orexo has filed a separate '996 US IP infringement suit against Actavis for their Suboxone/Subutex generics. Zubsolv's IP portfolio includes patents extending to 2032 ('900 and '421) which with an appeal outcome on the invalidity of '330 expected around end-2017, represent significant hurdles ahead of generic launch. FY17 news flow includes potential EMA Zubsolv approval (Q417) and new product opportunities (pipeline project(s) and commercial product for promotion).

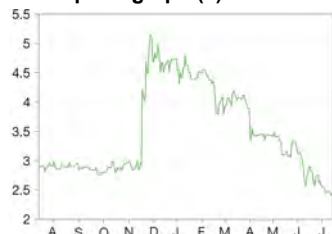
**INDUSTRY OUTLOOK**

Opioid dependence diagnosis/treatment rates are low due to social stigma, limited access to therapy in parts of the US and affordability. Competition includes Suboxone film (Indivior), Bunavail (BDSI) and six generic bup/nal tablets.

Y/E Dec	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	646.2	(99.9)	(203.6)	(607.0)	N/A	N/A
2016	705.9	76.7	35.6	84.0	34.8	5.5
2017e	696.5	71.3	29.3	39.0	74.9	6.7
2018e	750.1	107.7	82.8	192.0	15.2	7.3

**Sector: Pharma & healthcare**

Price: €2.45  
Market cap: €84m  
Market Madrid Stock Exchange

**Share price graph (€)**

**Company description**

Oryzon is a Spanish biotechnology company focused on developing novel epigenetic compounds. Lead compound ORY-1001 is partnered with Roche and is undergoing a Phase I/IIa study for acute leukaemia. ORY-2001 has potential for Alzheimer's disease and has been approved to enter Phase I.

**Price performance**

%	1m	3m	12m
Actual	(15.4)	(28.9)	(15.4)
Relative*	(14.4)	(31.1)	(32.1)

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## Oryzon Genomics (ORY)

**INVESTMENT SUMMARY**

Oryzon's expertise lies in developing small molecule inhibitors for epigenetic targets. The lead product ORY-1001 is a first-in-class inhibitor of lysine specific demethylase 1 (LSD1) partnered with Roche, which took over further development after Oryzon delivered positive data from the Phase I/IIa in acute leukemia in December 2016. Roche has also initiated a Phase I trial with ORY-1001 in small cell lung cancer. Oryzon's second product, ORY-2001, targets Alzheimer's disease (AD) and reported supportive Phase I data in early April. Preclinical data also support its use in multiple sclerosis and other neurodegenerative indications. ORY-3001 has been recently revealed as the third product to enter pre-clinical development in non-oncological indications. In March, Oryzon raised €18m (20% new shares issued), while cash position was €29.8m at end Q117 (before fund raise).

**INDUSTRY OUTLOOK**

Epigenetics is a relatively young field in terms of drug development. HDACs were among the first epigenetic therapeutics brought to market, and although effective, they have side effects. Oryzon is among the leading clinical stage drug developers with a second generation of epigenetic therapeutics, which have greater selectivity and are expected to show a favourable safety/efficacy profile.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	7.2	0.7	(0.1)	(0.57)	N/A	56.2
2016	5.0	(3.7)	(4.7)	(17.02)	N/A	N/A
2017e	4.2	(4.7)	(6.1)	(19.53)	N/A	N/A
2018e	4.5	(5.5)	(6.8)	(20.04)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 8.4p  
Market cap: £261m  
Market LSE

**Share price graph (p)**

**Company description**

Oxford BioMedica is a leader in gene and cell therapy. The lentivector technology is wide ranging, covering in vivo and ex vivo vector products. The technology underpins the proprietary clinical development pipeline in addition to third party manufacturing contracts which add validation to the platform.

**Price performance**

%	1m	3m	12m
Actual	57.1	68.0	89.9
Relative*	59.5	67.1	69.6

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Oxford BioMedica (OXB)

**INVESTMENT SUMMARY**

We expect OXB's strategic vision to come to further fruition through 2017/18 with both the potential approval of Novartis's CTL019 in the US by year end (FDA advisory committee unanimously voted in favour of approval), and the possible spin-out/out-licensing of its priority development pipeline assets (OXB-102, OXB-202, and OXB-302). FDA have accepted Novartis' Biologics License Application (BLA) and granted priority review for CTL019; OXB should start earning royalties and substantial manufacturing fees upon CTL019 launch. Our forecasts are currently under review.

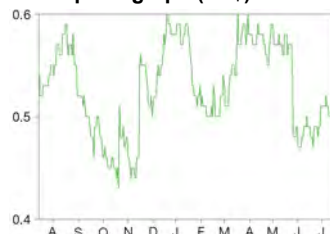
**INDUSTRY OUTLOOK**

Cell- and gene-therapy is the focus of much industry attention as it can dramatically alter the outcomes of many diseases. The proprietary lentivector platform is a flexible and efficient system that is promising in many indications.

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	15.9	(12.5)	(16.6)	(0.49)	N/A	N/A
2016	27.8	(7.6)	(20.0)	(0.59)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: NZ\$0.51  
Market cap: NZ\$204m  
Market: NZSX

**Share price graph (NZ\$)**

**Company description**

Pacific Edge develops and sells a portfolio of molecular diagnostic tests based on biomarkers for the early detection and management of cancer. Tests utilising its Cxbladder technology for detecting and monitoring bladder cancer are sold in the US, New Zealand and Australia.

**Price performance**

%	1m	3m	12m
Actual	5.2	(12.1)	(5.6)
Relative*	3.0	(16.4)	(9.0)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Pacific Edge (PEB)

**INVESTMENT SUMMARY**

Pacific Edge develops and sells a portfolio of molecular diagnostic tests based on biomarkers for the early detection and management of cancer. Tests utilising its Cxbladder technology for detecting and monitoring bladder cancer are sold in the US, New Zealand and Australia. The company announced the signing of a Federal Supply Schedule to the Veterans Administration, allowing the marketing of Cxbladder tests within the organization - the largest integrated healthcare system in the US. The company has also signed an agreement recently with Tricare, which handles the healthcare for all uniformed service members and their families. The company also announced positive data from a user programme with Kaiser Permanente Southern California, which could lead to a commercial agreement with that group.

**INDUSTRY OUTLOOK**

Molecular diagnostics is a growing, but increasingly competitive field. Lead time from the initiation of user programmes to payment can be long.

Y/E Mar	Revenue (NZ\$m)	EBITDA (NZ\$m)	PBT (NZ\$m)	EPS (c)	P/E (x)	P/CF (x)
2016	6.4	(14.9)	(15.5)	(4.1)	N/A	N/A
2017	9.3	(19.6)	(20.8)	(5.4)	N/A	N/A
2018e	18.5	(8.2)	(9.2)	(2.3)	N/A	N/A
2019e	41.8	12.3	11.2	1.9	26.8	14.4

**Sector: Pharma & healthcare**

Price: €2.98  
Market cap: €173m  
Market: FRA

**Share price graph (€)**

**Company description**

PAION is an emerging specialty pharma company developing anaesthesia products. Its lead product, remimazolam, is partnered with Yichang in China, Hana Pharma in S Korea, Cosmo in the US, Pendopharm in Canada and R-Pharm in CIS, Turkey and MENA.

**Price performance**

%	1m	3m	12m
Actual	10.4	19.3	41.4
Relative*	11.9	14.3	12.7

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Paion (PA8)

**INVESTMENT SUMMARY**

Paion announced positive top-line results from the confirmatory Phase III trial of remimazolam for procedural sedation in bronchoscopy in June, adding to the positive results of a Phase III colonoscopy trial. It is currently conducting Phase I studies to assess abuse potential as the final step of its US clinical development program. In the bronchoscopy pivotal trial 82.5% of patients on remimazolam achieved the primary outcome vs 3.4% on placebo and 34.8% on midazolam. While replacing midazolam is the primary target, planned changes in the US reimbursement of day procedures favouring less supervision by anaesthetists could further incentivise uptake of remimazolam. €28.7m cash at 31 March is sufficient to complete ongoing development and to file for procedural sedation in the US (filing by partner Cosmo expected mid-2018), as well as a Japanese filing for remimazolam in general anaesthesia by Paion (expected by mid-2018). Paion has outlined a €20-25m programme that could see it restart Phase III studies in GA in Europe.

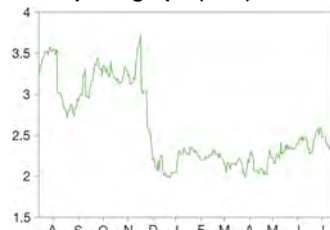
**INDUSTRY OUTLOOK**

Remimazolam has important advantages over competing products, including fast onset and offset of action with lower risk of cardiopulmonary events than the standard of care midazolam and propofol, and a reversal agent exists if there is over sedation.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.1	(34.1)	(34.0)	(55.7)	N/A	N/A
2016	4.3	(24.3)	(24.3)	(36.4)	N/A	N/A
2017e	5.9	(16.4)	(16.4)	(23.2)	N/A	N/A
2018e	3.5	(13.0)	(12.9)	(18.6)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$2.44  
Market cap: US\$393m  
Market: NASDAQ

**Share price graph (US\$)**

**Company description**

PDL has reinvented itself through a three-pronged strategy: investing in royalty streams of marketed and development-stage therapeutics and providing high-yield debt financing to device & diagnostic companies with near-term product launches.

**Price performance**

%	1m	3m	12m
Actual	4.3	19.6	(25.4)
Relative*	3.4	13.3	(34.3)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## PDL BioPharma (PDLI)

**INVESTMENT SUMMARY**

PDL BioPharma is reinventing itself as a healthcare-focused finance company through a three-pronged strategy: investing in royalty streams, providing high-yield financing to life science companies with near-term product launches as well as through the purchase of approved drugs to be sold by Noden Pharma (which is currently a wholly owned subsidiary) on a high margin basis. This strategy allows investors to gain exposure in healthcare through a relatively low-risk, diversified vehicle.

**INDUSTRY OUTLOOK**

PDL BioPharma is one of the only companies that will give broad exposure to diverse royalty streams as well as corporate debt and high margin approved products.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	590.4	550.4	530.1	203.69	1.2	1.3
2016	244.3	193.1	175.5	77.72	3.1	3.9
2017e	182.1	97.5	78.5	34.42	7.1	5.6
2018e	142.2	57.1	39.6	20.21	12.1	17.0

**Sector: Pharma & healthcare**

Price: €3.92  
Market cap: €872m  
Market: Madrid Stock Exchange

**Share price graph (€)**

**Company description**

PharmaMar is a Spanish biopharmaceutical group with a core focus on the development of marine-based drugs for cancer. Yondelis is approved in the EU and US, and partnered with Janssen (J&J) in the US and Taiho in Japan.

**Price performance**

%	1m	3m	12m
Actual	(0.4)	16.3	74.8
Relative*	0.7	12.7	40.3

\* % Relative to local index

**Analyst**

Maxim Jacobs

## PharmaMar (PHM)

**INVESTMENT SUMMARY**

PharmaMar has built a pipeline of first-in-class cancer drugs for development with strategic partners. Royalty income from Yondelis for soft tissue sarcoma in Japan and the US should drive strong profit growth from 2017. Aplidin could potentially be approved for multiple myeloma in Europe in H217; a pivotal study is underway for Aplidin in angioimmunoblastic T-cell lymphoma, the lead US indication. Top-line data from the lurbinectedin (PM1183) Phase III in platinum-resistant ovarian cancer is due in H217. A second pivotal study is evaluating lurbinectedin in combination with doxorubicin in patients with small cell lung cancer. A Phase II in BRCA 1/2 breast cancer achieved a 41% ORR including 61% in BRCA2 patients; a Phase III in BRCA2-mutated breast cancer is planned for 2017, and pivotal studies in endometrial cancer have been flagged following a 44% response rate in Phase I. In December 2016 PharmaMar licenced Japan rights for lurbinectedin to Chugai for €30m upfront, over €70m in potential milestones, plus double-digit royalties.

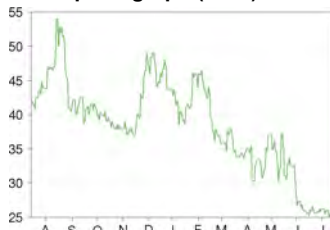
**INDUSTRY OUTLOOK**

PharmaMar's oncology portfolio has been validated through multiple global partnerships, eg J&J in the US and Taiho in Japan (for Yondelis) and Chugai in certain EU countries (for Aplidin).

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	162.0	17.6	5.9	3.0	130.7	85.4
2016	164.0	(11.5)	(24.7)	(10.8)	N/A	N/A
2017e	174.0	15.7	3.6	1.6	245.0	50.8
2018e	192.7	17.7	5.5	2.5	156.8	246.9

**Sector: Pharma & healthcare**

Price: NOK25.90  
Market cap: NOK558m  
Market: Oslo

**Share price graph (NOK)**

**Company description**

Photocure specialises in photodynamic therapy. Its bladder cancer imaging product is sold as Hexvix in Europe and Cysview in the US. Photocure handles the marketing in Nordic countries and the US, while Ipsen is its marketing partner in the EU.

**Price performance**

%	1m	3m	12m
Actual	1.6	(22.5)	(38.3)
Relative*	(0.2)	(23.2)	(44.6)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Photocure (PHO)

**INVESTMENT SUMMARY**

Photocure specialises in photodynamic therapy. Its bladder cancer imaging product (known as Hexvix in Europe and Cysview in the US) improves detection rates and helps prolong recurrence-free survival. The company recently announced positive Phase III data in the surveillance setting which may vastly increase their addressable market size. Cevira is a Phase III-ready product for HPV-related diseases of the cervix and Visonac is a Phase III-ready product for acne. Photocure recently announced that the seek for partners for Cevira and Visonac is expanded to include outright sale of those products, possible spinoffs or other strategic alternatives.

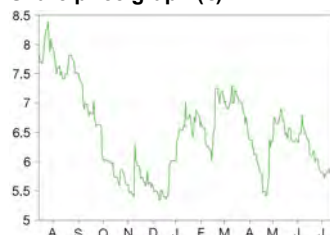
**INDUSTRY OUTLOOK**

Photocure is a photodynamic therapy company focused on bladder cancer imaging, HPV-related diseases and acne. As its products typically are a combination of a drug and a device, hurdles for generics are typically higher than with other therapeutics.

Y/E Dec	Revenue (NOKm)	EBITDA (NOKm)	PBT (NOKm)	EPS (öre)	P/E (x)	P/CF (x)
2015	134.7	(18.1)	(17.4)	(82.0)	N/A	N/A
2016	143.6	(8.0)	12.8	59.0	43.9	29.0
2017e	145.5	(42.1)	(48.9)	(226.0)	N/A	N/A
2018e	242.5	9.8	5.8	26.0	99.6	N/A

**Sector: Pharma & healthcare**

Price: €5.85  
Market cap: €77m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

Pixium Vision develops retinal implants for patients with severe vision loss. Its lead product Iris is an epi-retinal implant, which received CE mark approval in 2016; a sub-retinal implant (Prima) is expected to start a human study in 2017.

**Price performance**

%	1m	3m	12m
Actual	(8.0)	0.9	(25.1)
Relative*	(7.7)	(2.8)	(37.9)

\* % Relative to local index

**Analyst**

Pooya Hemami

## Pixium Vision (PIX)

**INVESTMENT SUMMARY**

Pixium Vision is developing two different retinal implant systems that transform images into electrical signals to elicit visual perception in patients with severe retinal disease. The devices consist of an implant and a pair of glasses with an embedded camera, and handheld control. Pixium received CE Mark approval for the Iris II epiretinal implant in July 2016. It is also conducting EU clinical trials with Iris II (10th and final implantation of the study completed in early 2017). Interim study data should assist reimbursement applications in EU markets. Positive pre-clinical data with Prima, a subretinal implant potentially providing better visual acuity than Iris II, should support first human testing in H217. Pixium held €12.9m in net cash at 31 December 2016 and in H216 secured up to €11m in additional debt financing.

**INDUSTRY OUTLOOK**

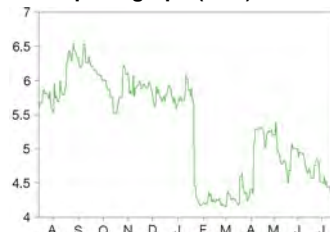
Second Sight (EYES) is commercialising an epiretinal implant (Argus II) in the US and EU. The Iris II offers 150 electrodes (vs 60 on Argus II), potentially offering better vision, while also being the first potentially explantable (and upgradable) epiretinal implant. Prima is less surgically invasive and could potentially be a viable treatment option for macular degeneration patients.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.3	(14.6)	(15.6)	(123.0)	N/A	N/A
2016	2.5	(11.4)	(12.4)	(98.0)	N/A	N/A
2017e	4.9	(9.2)	(10.8)	(85.0)	N/A	N/A
2018e	14.9	(13.0)	(17.3)	(135.0)	N/A	N/A



**Sector: Pharma & healthcare**

Price: US\$4.33  
Market cap: US\$418m  
Market: NASDAQ, TASE

**Share price graph (US\$)**

**Company description**

Pluristem is a biotech company, headquartered in Israel, focused on the development of cell-based therapeutics derived from placenta. The company is advancing PLX-PAD for critical limb ischemia (CLI) with a Phase III study on hip fracture. PLX-R18 is being advanced for acute radiation syndrome and hematopoietic cell transplant.

**Price performance**

%	1m	3m	12m
Actual	(8.0)	(18.1)	(22.5)
Relative*	(8.8)	(22.6)	(28.0)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Pluristem Therapeutics (PSTI)

**INVESTMENT SUMMARY**

Pluristem Therapeutics is developing allogenic cell therapies derived from donated placental tissue. The lead program, PLX-PAD, is for critical limb ischemia (CLI), with a Phase III expected to start in H117. Based on feedback from both the FDA and EMA, a single pivotal 250-patient study will be required for approval. The company also recently reported data from its pilot study of PLX-R18 for the treatment of acute radiation syndrome (ARS) in which the product compared favorably to Neupogen and showed a benign safety profile.

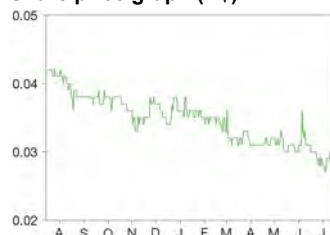
**INDUSTRY OUTLOOK**

Pluristem has been investigating the potential therapeutic benefit of cells derived from the placenta which offers a rich supply of cells of multiple lineages from tissue that would otherwise be medical waste. Although these cells are not stem cells and lack the immortality and pluripotency to meet that definition, they secrete a wide array of cytokines and growth factors and can exert a potent influence on the function of other cells in the body.

Y/E Jun	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.4	(27.3)	(24.7)	(35.11)	N/A	N/A
2016	2.8	(25.5)	(23.2)	(29.22)	N/A	N/A
2017e	0.0	(31.5)	(28.9)	(33.10)	N/A	N/A
2018e	0.0	(41.2)	(41.5)	(41.79)	N/A	N/A

**Sector: Pharma & healthcare**

Price: A\$0.03  
Market cap: A\$61m  
Market: ASX

**Share price graph (A\$)**

**Company description**

Prima's pipeline is based on three products using a LAG-3 immune control system: IMP321 for cancer chemo-immunotherapy and partnered products IMP731 (GSK) and IMP701 (Novartis). Ph II asset CVac is an autologous dendritic cell vaccine.

**Price performance**

%	1m	3m	12m
Actual	(16.1)	(16.1)	(38.1)
Relative*	(15.4)	(14.4)	(41.5)

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Prima BioMed Ltd (PRR)

**INVESTMENT SUMMARY**

Prima BioMed has three promising clinical assets based on a versatile immunotherapy target Lymphocyte activation gene-3, LAG-3 (one partnered with GSK and a second partnered with Novartis). The lead in-house LAG-3 product, IMP321, is being developed initially in metastatic breast cancer in combination with chemotherapy (recruitment underway in 226-patient randomised Phase IIb, a 47% response rate was reported from the 15-patient dose-escalation phase) and in melanoma in combination with the anti-PD1 checkpoint inhibitor Keytruda (Phase I currently recruiting 3rd cohort, expected to fully recruit mid-year). Novartis and GSK are progressing clinical trials of partnered LAG-3 programmes, providing additional validation for the technology. Prima has expanded its pipeline with the addition of IMP761, a first-in-class LAG-3 agonist antibody in preclinical development which could potentially help treat autoimmune diseases.

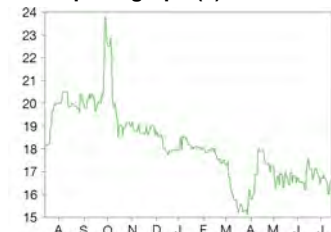
**INDUSTRY OUTLOOK**

Immunotherapies are among the most promising class of products for cancer and autoimmune diseases. The LAG-3 products are potentially first-in-class, each with distinct mechanisms and applications.

Y/E Jun	Revenue (A\$m)	EBITDA (A\$m)	PBT (A\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	1.3	(13.3)	(12.9)	(0.9)	N/A	N/A
2016	1.9	(12.1)	(13.7)	(0.6)	N/A	N/A
2017e	1.3	(13.1)	(12.7)	(0.6)	N/A	N/A
2018e	10.6	(4.3)	(4.0)	(0.2)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €16.65  
Market cap: €136m  
Market Euronext Amsterdam

**Share price graph (€)**

**Company description**

Probiobdrug is a biopharma company developing its clinical pipeline for the treatment of Alzheimer's. Lead product candidate, PQ912, has entered Ph IIa. PQ912 is a small molecule inhibitor of QC, which is essential for the formation of pGlu-Abeta. Two further products are in preclinical stages.

**Price performance**

%	1m	3m	12m
Actual	(5.2)	(7.1)	(8.3)
Relative*	(5.1)	(8.1)	(21.1)

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## Probiobdrug (PBD)

**INVESTMENT SUMMARY**

Probiobdrug is developing a clinical pipeline focusing on the novel target of pGlu-Abeta, a toxic variant of amyloid-beta (Abeta) that has been implicated in the initiation and sustainment of the pathological cascade that leads to Alzheimer's disease (AD). Lead candidate PQ912 is an inhibitor of the enzyme glutamyl cyclase, which is essential for the formation of pGlu-Abeta. Initial results from the Phase IIa study, SAPHIR, study were reported on 12 June. While primarily safety/tolerability study, several secondary endpoints especially piqued our interest, with CSF biomarker, EEG and a couple of cognitive tests pointing to a positive overall picture of the dataset. Recently new preclinical data also showed that PQ912 demonstrated efficacy in Huntington's disease in an animal model. Subject to further preclinical work, PQ912 could be fast-tracked to the clinic, which would diversify Probiobdrug's R&D pipeline with a new indication.

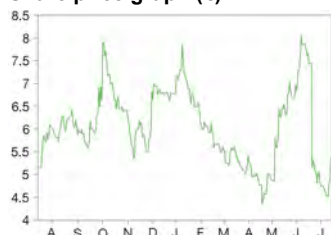
**INDUSTRY OUTLOOK**

There are 44m dementia sufferers worldwide, 60% of whom have AD. The lack of disease-modifying therapies leaves a vast unmet clinical need. This, combined with increasing understanding of the disease process and the development of biomarkers, has led to increased optimism that a disease-modifying therapy may be found.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(13.3)	(13.5)	(196.10)	N/A	N/A
2016	0.0	(13.7)	(13.8)	(181.30)	N/A	N/A
2017e	0.0	(10.5)	(10.5)	(128.47)	N/A	N/A
2018e	0.0	(8.6)	(8.7)	(105.76)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €5.35  
Market cap: €47m  
Market Alternext Paris

**Share price graph (€)**

**Company description**

Quantum Genomics is a biopharmaceutical company developing QGC001, a brain aminopeptidase A inhibitor for the treatment of hypertension and heart failure. Its mechanism is implicated in the 25% of patients resistant to treatment. In-human efficacy data are expected in June 2017.

**Price performance**

%	1m	3m	12m
Actual	(30.2)	12.2	3.7
Relative*	(29.9)	8.1	(14.0)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Quantum Genomics (ALQGC)

**INVESTMENT SUMMARY**

Quantum Genomics is a biopharmaceutical company investigating brain aminopeptidase A inhibitors, a new class of drug, for the treatment of hypertension and heart failure. They recently announced the results from their 34-patient Phase IIa study of QGC001 for the treatment of mild to moderate arterial hypertension. It showed a 2.7 mmHg placebo-adjusted reduction in ambulatory systolic blood pressure (SBP) and a 4.7 mmHg reduction in in-office SBP. A Phase IIb trial is expected to begin in H217. Data in heart failure is expected in H118.

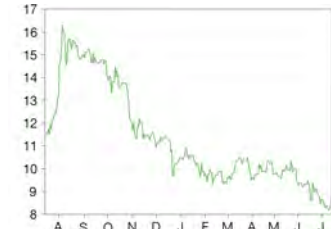
**INDUSTRY OUTLOOK**

The angiotensin pathway is one of the primary methods of modulating blood pressure and it is the target of some of the most successful anti-hypertensive drugs: angiotensin converting enzyme (ACE) inhibitors, and angiotensin receptor blockers (ARBs). However, there is a parallel pathway in the brain responsible for the secretion of vasopressin and heart rate that is unaddressed by these classes of drug and that is being targeted by Quantum Genomics.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.1	(4.3)	(4.5)	(54.70)	N/A	N/A
2016	0.0	(6.2)	(6.2)	(59.79)	N/A	N/A
2017e	0.0	(7.2)	(7.2)	(68.62)	N/A	N/A
2018e	0.0	(10.9)	(12.5)	(115.39)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$8.81  
Market cap: US\$150m  
Market: NASDAQ, TASE

**Share price graph (US\$)**

**Company description**

RedHill Biopharma is a specialty pharma company with a broad R&D pipeline focusing on gastrointestinal and inflammatory diseases and also promotes two GI products in the US. The most advanced programs are TALICIA (RHB-105) for H. pylori infection, RHB-104 for Crohn's disease and multiple sclerosis and Bekinda for gastroenteritis and IBS-D.

**Price performance**

%	1m	3m	12m
Actual	(5.5)	(10.6)	(23.7)
Relative*	(6.3)	(15.4)	(32.9)

\* % Relative to local index

**Analyst**

Dr Jonas Peculis

## RedHill Biopharma (RDHL)

**INVESTMENT SUMMARY**

In line with its "multiple shots on goal" strategy, RedHill has a broad R&D pipeline, but is mainly focusing on GI and inflammatory diseases. The most advanced assets are TALICIA (RHB-105) for H. pylori infection (confirmatory Phase III study ongoing); RHB-104 for both Crohn's disease (second DSMB review of the first Phase III trial expected in late July 2017 and will include an option for early termination) and r/r multiple sclerosis (promising Phase IIa data in Q416); and Bekinda for both gastroenteritis (successful top-line Phase III results announced in June 2017) and diarrhoea-predominant irritable bowel syndrome (top line Phase II results expected in September 2017). Following the decision to diversify and build a commercial business, RedHill acquired rights and recently has initiated promotion of two GI specialty products Donnatal and EnteraGam in the US.

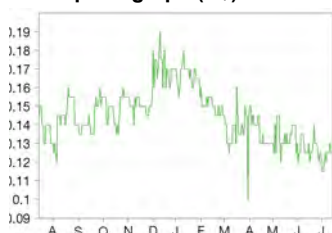
**INDUSTRY OUTLOOK**

RedHill's main focus on GI and inflammation include a range of conditions, which although can be treated with a variety of innovative and established products, there is still an unmet need in each of the diseases. In our view, carefully positioned, innovative solutions for the patients will always attract attention.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(21.9)	(21.1)	(19.03)	N/A	N/A
2016	0.1	(30.5)	(29.4)	(22.85)	N/A	N/A
2017e	0.1	(39.8)	(39.8)	(23.46)	N/A	N/A
2018e	0.8	(36.5)	(36.6)	(21.06)	N/A	N/A

**Sector: Pharma & healthcare**

Price: A\$0.12  
Market cap: A\$26m  
Market: ASX

**Share price graph (A\$)**

**Company description**

Regeneus is a clinical-stage regenerative medicine company developing innovative cell-based therapies for the human & animal health markets.

**Price performance**

%	1m	3m	12m
Actual	(3.8)	(3.8)	(13.8)
Relative*	(3.0)	(1.9)	(18.5)

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Regeneus (RGS)

**INVESTMENT SUMMARY**

Regeneus is developing its mesenchymal stem cell technology for musculoskeletal conditions in humans (Progenza) and animals (CryoShot). In December 2016 Regeneus entered a US\$16.5m collaboration with AGC Asahi Glass (AGC) for manufacture of Progenza cells for the Japanese market. Regeneus and AGC have formed a 50:50 JV for clinical development and commercialisation of Progenza in Japan – we expect the JV to sub-license one or more partners to undertake clinical trials in a number of indications in Japan. Recent Japanese legislation offers an accelerated path to market for regenerative medicines. Progenza therapy resulted in meaningful reductions in osteoarthritis knee pain in Phase I. Regeneus holds global rights to autologous cancer vaccine technologies for human (RGSH4K - Phase I began in Q215) and veterinary (Kvax) applications. It is undertaking preclinical studies for its Sygenus topical secretions technology.

**INDUSTRY OUTLOOK**

Regeneus' strategy is to focus on early-stage product development, then partner. In addition to the AGC deal for Progenza in Japan, it has partnered with a top-5 global animal health company for development of CryoShot Canine. It will seek to identify wider applications of Progenza, beyond the initial development for osteoarthritis.

Y/E Jun	Revenue (A\$m)	EBITDA (A\$m)	PBT (A\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	1.9	(9.8)	(6.6)	(3.15)	N/A	N/A
2016	1.7	(6.1)	(3.6)	(1.70)	N/A	N/A
2017e	10.2	2.1	4.6	2.19	5.5	5.9
2018e	8.4	(0.8)	1.9	0.90	13.3	13.8



**Sector: Pharma & healthcare**

Price: 1.8p  
Market cap: £55m  
Market: LSE

**Share price graph (p)**

**Company description**

ReNeuron is a UK biotech company developing allogeneic cell therapies: CTX neural stem cell products for stroke disability (Phase IIa) and critical limb ischaemia (Phase I); and human retinal progenitor cells for retinitis pigmentosa (Phase I/II).

**Price performance**

%	1m	3m	12m
Actual	(4.1)	(26.3)	(39.1)
Relative*	(2.6)	(26.7)	(45.6)

\* % Relative to local index

**Analyst**

Dr Linda Pomeroy

## ReNeuron Group (RENE)

**INVESTMENT SUMMARY**

ReNeuron is funded (£60m H117) to undertake pivotal studies with two cell therapy-based programmes. This includes the CTX neural stem cell programme (recently announced a positive end of Phase II meeting with the FDA and intends to go for SPA/RMAT designation for stroke at Phase III) and hRPC (human retinal progenitor cells) programme for retinitis pigmentosa (currently in Phase I/II). ReNeuron has indicated it will also be commencing a Phase II trial in cone-rod dystrophy. ReNeuron also has promising early data for its exosome nanomedicine platform in oncology. The company is constructing a GMP cell manufacturing and research facility and is in receipt of a £1.8m grant from Innovate UK to further fund key process development activities.

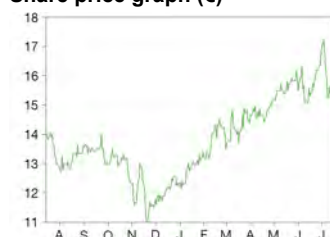
**INDUSTRY OUTLOOK**

Limited drug development has targeted chronic stroke to date, which is the area in which ReNeuron is attempting to demonstrate a meaningful reduction in disability. If shown, it would offer a compelling case for further development and/or partnering. Initial three month follow-up data from its Phase IIa stroke study was sufficiently strong to progress to a pivotal controlled Phase III clinical study in early 2018. The hRPC programme has Orphan (EU/US) and Fast Track (US) designation with a potentially pivotal Phase II/III study in 2018.

Y/E Mar	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2016	0.0	(13.6)	(12.8)	(0.44)	N/A	N/A
2017	0.0	(19.7)	(18.2)	(0.49)	N/A	N/A
2018e	0.0	(32.6)	(32.3)	(0.96)	N/A	N/A
2019e	0.0	(34.0)	(34.5)	(1.03)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €15.56  
Market cap: €778m  
Market: Madrid Stock Exchange

**Share price graph (€)**

**Company description**

Laboratorios Farmacéuticos ROVI is a fully integrated Spanish speciality pharmaceutical company involved in the development, in-licensing, manufacture and marketing of small molecule and speciality biologic drugs with a particular expertise in low molecular weight heparin (LMWH).

**Price performance**

%	1m	3m	12m
Actual	(0.1)	6.4	11.1
Relative*	1.1	3.1	(10.8)

\* % Relative to local index

**Analyst**

Dr Susie Jana

## ROVI Laboratorios Farmaceuticos (ROVI)

**INVESTMENT SUMMARY**

ROVI, a profitable, speciality healthcare company, markets ~30 proprietary and in-licensed products across nine core franchises mainly in its domestic Spanish market. ROVI is at a major inflection point; its internally developed biosimilar enoxaparin could be first to launch in key European markets (launch expected end 2017), transforming the sales growth and operating margins of the business. Other top-line drivers include further product in-licensing and the potential launch (2021) of Risperidone-ISM (schizophrenia).

**INDUSTRY OUTLOOK**

ROVI has a strong presence in the Spanish heparin market (and select international markets through partners), where it has been manufacturing and marketing its flagship product Hibor (second-generation LMWH) since 1998.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	246.0	31.8	20.9	43.99	35.4	33.5
2016	265.2	39.3	27.9	58.11	26.8	26.3
2017e	277.3	28.7	16.4	36.87	42.2	16.9
2018e	305.4	40.7	27.3	58.16	26.8	33.8

**Sector: Pharma & healthcare**

Price: 55.70PLN  
Market cap: PLN767m  
Market: Warsaw Stock Exchange

**Share price graph (PLN)**

**Company description**

Selvita is an R&D and drug discovery services company. It employs 352 staff (30% PhDs) and operates two main business units: Innovations Platform (internal NME pipeline) and Research Services (medicinal chemistry/biology, biochemistry).

**Price performance**

%	1m	3m	12m
Actual	(16.9)	1.4	159.0
Relative*	(18.8)	(3.7)	92.3

\* % Relative to local index

**Analyst**

Dr Jonas Peciulis

## Selvita (SLV)

**INVESTMENT SUMMARY**

Selvita is an R&D and drug discovery services company. In 2016 sales grew a solid 19% y-o-y and the momentum continued into Q117 with an impressive 99% revenue growth y-o-y. SEL24's out-licensing to Menarini Group in March 2017 was the first deal for a proprietary clinical-stage asset and the total potential value of the deal was €89.1m. SEL24 is dual PIM/FLT3 inhibitor in Phase I/II for AML and the first such compound to progress to Phase I/II, to our knowledge. Selvita's second lead product SEL120 is a CDK8 inhibitor potentially for colon cancer and other malignancies and is undergoing IND-enabling studies. Multiple collaborations signed with partners such as Merck KGaA, H3 Biomedicine (Eisai) and joint venture with Epidarex Capital to form Nodthera validate Selvita's research capabilities. Cash position was PLN43m as of end of 25 May 2017. We are updating our estimates.

**INDUSTRY OUTLOOK**

The profiles of SEL24 and SEL120 are potentially unique when compared to existing clinical-stage competitors and both candidates may offer efficacy and safety advantages. Contract research is a fiercely competitive, but still rapidly growing market and we believe Selvita's geographical location and lower cost benefits make it well placed to compete.

Y/E Dec	Revenue (PLNm)	EBITDA (PLNm)	PBT (PLNm)	EPS (gr)	P/E (x)	P/CF (x)
2015	56.1	10.2	7.6	83.58	66.6	N/A
2016	66.7	8.3	4.6	64.22	86.7	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$2.59  
Market cap: US\$56m  
Market: NASDAQ

**Share price graph (US\$)**

**Company description**

Sunesis Pharmaceuticals is a pharmaceutical company focused on oncology. The lead asset is Qinprezo, a chemotherapy for AML in the approval process in the EU. The company has also developed SNS-062, a BTK inhibitor for CLL for Imbruvica refractory patients currently in Phase I.

**Price performance**

%	1m	3m	12m
Actual	(12.5)	(30.0)	(13.8)
Relative*	(13.3)	(33.7)	(24.2)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Sunesis Pharmaceuticals (SNSS)

**INVESTMENT SUMMARY**

Sunesis is a pharmaceutical company developing small molecule oncology drugs. Its lead program is SNS-062, a novel non-covalent, oral BTK inhibitor that may work in Imbruvica relapsed and refractory patients. Data from a Phase Ia study in healthy volunteers was recently presented and indicated an attractive PK/PD profile with twice a day dosing. The drug is entering a Phase Ib/II dose escalation/expansion trial starting in Q217 targeting completion by September 2018. The trial will enroll up to seven dose cohorts and up to 124 patients with confirmed Imbruvica resistance mutations.

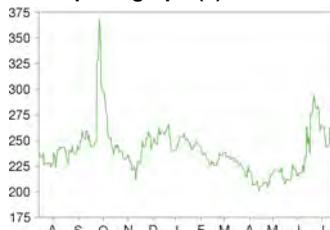
**INDUSTRY OUTLOOK**

Sunesis is an oncology company with an early stage asset with a validated target targeting patients that are in B-cell malignancies.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.1	(35.8)	(36.7)	(301.72)	N/A	N/A
2016	2.5	(36.3)	(38.0)	(242.37)	N/A	N/A
2017e	0.7	(29.2)	(30.9)	(144.39)	N/A	N/A
2018e	0.0	(29.5)	(32.5)	(145.13)	N/A	N/A

**Sector: Pharma & healthcare**

Price: ¥254.00  
Market cap: ¥12442m  
Market: Tokyo

**Share price graph (¥)**

**Company description**

SymBio is a Japanese specialty pharma company with a focus on oncology, haematology and pain management. Treakisym was in-licensed from Astellas in 2005. Rigoserib was in-licensed from Onconova and IONSYS was in-licensed from The Medicines Company.

**Price performance**

%	1m	3m	12m
Actual	0.8	23.9	7.2
Relative*	(1.3)	11.2	(13.6)

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## SymBio Pharmaceuticals (4582)

**INVESTMENT SUMMARY**

SymBio is well on the way to becoming a key speciality pharma partner for Asia-Pacific markets. The company has in-licensing deals for two orphan blood cancer products and a pain management device (IONSYS). Treakisym is approved for r/r low grade NHL/MCL and during 2016 received approvals in CLL and first-line low grade NHL/MCL; these recent approvals could more than double current sales (JPY4.7bn in 2016). Intravenous Rigoserib is in development for myelodysplastic syndromes (MDS) and has started a pivotal Phase III global study; SymBio is enrolling patients in Japan and interim data are expected during H217. SymBio has initiated a Phase I study of high-dose oral rigoserib and intends to participate in a planned global trial in untreated higher-risk MDS patients.

**INDUSTRY OUTLOOK**

SymBio is focused on in-licensing niche opportunities in hard-to-treat indications often overlooked by big pharma. Building its own commercial infrastructure in the future could help establish SymBio more firmly as a partner of choice in Asia-Pacific. An in-house screening process to select additional pipeline candidates for development and commercialisation will be key to driving operating leverage.

Y/E Dec	Revenue (¥m)	EBITDA (¥m)	PBT (¥m)	EPS (fd) (¥)	P/E (x)	P/CF (x)
2015	1933.0	(2527.0)	(2630.0)	(81.3)	N/A	N/A
2016	2368.0	(2101.0)	(2317.0)	(59.0)	N/A	N/A
2017e	2902.0	(3161.0)	(3261.0)	(69.1)	N/A	N/A
2018e	3820.0	(2272.0)	(2284.0)	(47.7)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$6.83  
Market cap: US\$7m  
Market: NASDAQ, TASE

**Share price graph (US\$)**

**Company description**

Therapix Biosciences is an Israeli pharmaceutical company developing two cannabinoids to treat Tourette syndrome and mild cognitive impairment. It is currently in Phase IIa and soon to begin Phase I, respectively, and owns or licenses several IPs for cannabinoid nasal and sublingual administration.

**Price performance**

%	1m	3m	12m
Actual	11.2	(8.9)	(14.8)
Relative*	10.3	(13.8)	(25.1)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## Therapix Biosciences (TRPX)

**INVESTMENT SUMMARY**

Therapix is investigating the potential of new formulations of cannabinoids to address underserved diseases of the brain. It recently listed on NASDAQ in the US 2.3m ADS (worth \$13.8m). The lead clinical program, THX-TS01, is currently in Phase II trials testing its potential for treating Tourette's in adults and THX-ULD01 is scheduled to begin Phase I trials for the treatment of mild cognitive impairment (MCI) in mid-2017. Both programs should qualify for a 505(b)(2) pathway to streamline approval.

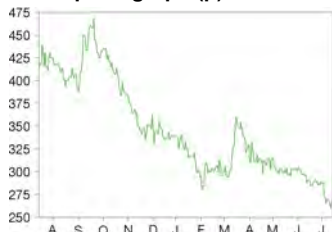
**INDUSTRY OUTLOOK**

Diseases of the brain are a major unmet medical need with few effective or approved therapies for a host of diseases. Cannabinoids have had promising data in many indications in the area and is a class that has received a lot of interest.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	N/A	N/A	N/A	N/A	N/A	N/A
2016	0.0	(1.7)	(1.7)	(180.01)	N/A	N/A
2017e	0.0	(2.2)	(2.2)	(61.21)	N/A	N/A
2018e	0.0	(5.6)	(5.6)	(144.36)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 272.0p  
Market cap: £438m  
Market: LSE

**Share price graph (p)**

**Company description**

Touchstone Innovations is a technology transfer, incubation and venture investment company. It invests in ventures from Imperial College London, Cambridge and Oxford Universities and UCL. The majority of its investments are bio/med tech.

**Price performance**

%	1m	3m	12m
Actual	(6.2)	(12.8)	(34.5)
Relative*	(4.7)	(13.3)	(41.5)

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Touchstone Innovations (IVO)

**INVESTMENT SUMMARY**

Touchstone Innovations' (IVO) board has unanimously rejected a c£500m all share takeover approach by IP Group. IP Group and IVO share three major shareholders (Woodford, Invesco and Lansdowne) who own c75% of IVO. The Board's rationale was based on valuation and lack of clarity on joint strategy. IVO's portfolio continues to grow and mature, with investee companies approaching multiple infection points and attracting interest from large pharma. IVO is a people-based business, with intangible value associated with employee expertise and knowledge and in its relationships with academia, industry and investors in the Golden Triangle. As of 30th June 2017 portfolio value was £440.3m (vs £335.1m in 2016), primarily as a result of fair value gains in the unquoted portfolio. £142.9m remains available for investment (2016:£198.3m). Net investments from 1st August 2016 to 30th June 2017 was £41.7m. Forecasts are withdrawn while we await clarity in relation to the IP Group offer.

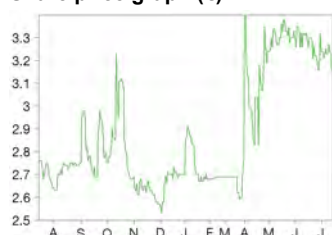
**INDUSTRY OUTLOOK**

The investment case rests on hidden portfolio value and success of investments in maturing companies. There is potential for significant value creation if 'exits' (IPO/M&A/licensing) are achieved at valuations exceeding the typically modest carrying values.

Y/E Jul	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	5.1	(8.2)	(7.4)	(5.4)	N/A	N/A
2016	4.3	(9.8)	(9.8)	(6.7)	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A
2018e	N/A	N/A	N/A	N/A	N/A	N/A

**Sector: Pharma & healthcare**

Price: €3.15  
Market cap: €178m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

Transgene is a French company developing immunotherapy agents for cancer and infectious diseases. Oncolytic virus Pexa-Vec (Phase III for HCC) and cancer vaccine TG4010 (Phase II for NSCLC) are the lead clinical candidates.

**Price performance**

%	1m	3m	12m
Actual	(4.3)	3.6	16.6
Relative*	(4.0)	(0.1)	(3.3)

\* % Relative to local index

**Analyst**

Juan Pedro Serrate

## Transgene (TNG)

**INVESTMENT SUMMARY**

Transgene is focused on the development of its cancer immunotherapy products (oncolytic virus Pexa-Vec, MUC1 cancer vaccine TG4010) and infectious disease programs (TG1050 for HBV and TG4001 for HPV) in combination with immune checkpoint inhibitors (ICIs). Two combination clinical trials have started: TG4010+Opdivo in the 2nd-line treatment of NSCLC and Pexa-Vec+Yervoy in 1L liver cancer/other solid tumours. An additional 5 trials will start before YE17. Transgene and partner Sillajen are running a global 600-patient Phase III study in liver cancer. TG1050 for HBV is advancing through Phase I/II testing. It has an agreement with Merck and Pfizer to evaluate TG4001 with Avelumab in HPV+ Head & Neck Cancer patients in a Phase I/II study. The Phase II portion of METROmaJX study (Pexa-Vec + cyclophosphamide) in advanced solid tumours has started. Transgene also has a collaboration with BMS to test TG4010 in combination with Opdivo and chemotherapy in 1L NSCLC. Cash at 31 March 2017 was €50.7m, sufficient into end 2018.

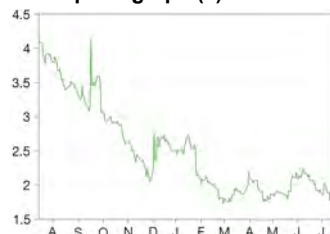
**INDUSTRY OUTLOOK**

Immunotherapies are among the most promising class of products for cancer. Increased attention is now being paid to the use of combination therapy approaches to improve cancer response rates further.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	9.9	(25.7)	(28.9)	(78.08)	N/A	N/A
2016	10.3	(20.4)	(23.1)	(42.90)	N/A	N/A
2017e	8.3	(32.0)	(35.0)	(62.11)	N/A	N/A
2018e	8.6	(33.6)	(36.8)	(65.19)	N/A	N/A

**Sector: Pharma & healthcare**

Price: €1.83  
Market cap: €36m  
Market: Euronext Paris

**Share price graph (€)**

**Company description**

TxCell is developing regulatory T-cell therapies against autoimmune and inflammatory disorders. It is now focused on a novel CAR Treg technology platform. A clinical trial in transplantation may start in 2018. Ovasave for Crohn's disease is at clinical stage but is on hold.

**Price performance**

%	1m	3m	12m
Actual	(14.9)	(4.2)	(52.8)
Relative*	(14.6)	(7.6)	(60.8)

\* % Relative to local index

**Analyst**

Dr John Savin

## TxCell (TXCL)

**INVESTMENT SUMMARY**

TxCell has agreed an important manufacturing supply contract with Lentigen, a German-US producer of the critical lentivirus reagent essential for modifying T-cells. This is a core element for the development of CAR-modified regulatory T-cells (CAR Treg). Production of any modified T-cell therapy is complex and companies need to be able to scale up production and keep costs and prices under control. In 2018, warrants could bring a further €10.8m in cash covering costs until the IND is filed for the first ever CAR Treg clinical trial.

**INDUSTRY OUTLOOK**

Celgene's \$300m acquisition of Delinia, a preclinical Treg company, gives a benchmark on Treg deals. TxCell is developing two platform technologies: ENTrIA and ASTRiA. ENTrIA uses chimeric antigen receptor (CAR) technology. A granted European patent offers broad protection. CAR Treg development is ongoing in transplant, lupus nephritis, Bullbous pemphigoid (skin) and multiple sclerosis. A collaboration with INSERM on MS and transplant was announced in May.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.9	(10.8)	(10.8)	(87.7)	N/A	N/A
2016	0.0	(11.9)	(12.7)	(97.6)	N/A	N/A
2017e	0.0	(11.1)	(11.3)	(55.5)	N/A	N/A
2018e	0.0	(11.0)	(11.0)	(31.4)	N/A	N/A

**Sector: Pharma & healthcare**

Price: 18.4p  
Market cap: £97m  
Market: AIM

**Share price graph (p)**

**Company description**

Vernalis is a UK speciality pharma company with an FDA-approved, prescription-only cough cold treatment, Tuzistra XR; an FDA approved amoxicillin, Moxatag; and a late-stage US cough cold pipeline of four products.

**Price performance**

%	1m	3m	12m
Actual	0.7	(26.5)	(61.1)
Relative*	2.2	(26.9)	(65.3)

\* % Relative to local index

**Analyst**

Dr Susie Jana

## Vernalis (VER)

**INVESTMENT SUMMARY**

Investment into addressing barriers to higher Tuzistra XR prescribing is starting to translate into higher prescription (Rx) rates. Mid-way through the second season post launch, both Rx and sales showed positive trends and gathering momentum. Ongoing focus on improved salesforce effectiveness means the post-season update should better inform the future potential of Vernalis's extended release Rx-only cough cold franchise. This should also provide a solid foundation for potential future launches of CCP-07 and CCP-08. The FDA has issued a Complete Response Letter for the CCP-07 NDA highlighting undisclosed outstanding questions (unrelated to formulation and pharmacokinetics), while CCP-08 is pending an approval decision (4 August PDUFA date).

**INDUSTRY OUTLOOK**

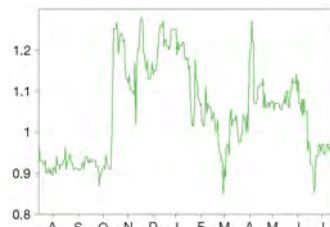
Generic IR liquid products dominate the US Rx cough cold market, reflecting difficulties in formulating ER liquids that satisfy current FDA regulations; Tuzistra XR meets these standards. Favourable pricing and reimbursement of the five cough cold products in development by Vernalis would value the addressable market at up to \$3.5bn.

Y/E Jun	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	19.9	(8.9)	(6.9)	(1.0)	N/A	N/A
2016	12.0	(23.9)	(16.2)	(3.4)	N/A	N/A
2017e	17.5	(29.4)	(24.9)	(4.4)	N/A	N/A
2018e	25.8	(32.4)	(32.4)	(6.0)	N/A	N/A



**Sector: Pharma & healthcare**

Price: A\$0.97  
Market cap: A\$235m  
Market: ASX, OTC QX

**Share price graph (A\$)**

**Company description**

Viralytics is a biopharmaceutical company developing Cavatak oncolytic virotherapy to target late-stage melanoma and other solid tumour types. It is trialling Cavatak as a monotherapy and in combination with checkpoint inhibitors.

**Price performance**

%	1m	3m	12m
Actual	0.0	(12.6)	1.6
Relative*	0.9	(10.8)	(4.0)

\* % Relative to local index

**Analyst**

Dr Dennis Hulme

## Viralytics (VLA)

**INVESTMENT SUMMARY**

Viralytics presented data at the American Association for Cancer Research (AACR) in April showing a 50% response rate (11/22) in patients with advanced melanoma treated with its Cavatak virotherapy in combination with Yervoy in the Phase Ib MITCI trial. An update at ASCO showed a 23% response rate (3/13) in the subset of patients who had failed PD1/L1 checkpoint inhibitor therapy; the trial has been expanded to recruit an extra 44 patients who had failed prior PD1/L1 therapy. The CAPRA trial of Cavatak plus Keytruda has been expanded to enrol up to 50 late-stage melanoma patients following a 60% response rate in the first 15 patients. Other ongoing trials include the Phase I/II CANON trial in superficial bladder cancer; and Keynote 200 (STORM Part B), a Phase Ib trial of IV Cavatak and Keytruda in advanced lung and bladder cancer. Cash at 31 March was A\$39m.

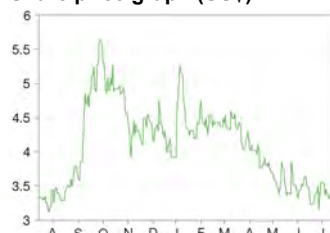
**INDUSTRY OUTLOOK**

The FDA approval of Amgen's Imlygic has made oncolytic virotherapy a commercial reality. The December 2016 licence deal between Bristol-Myers Squibb and PsiOxus for its preclinical oncolytic virus NG-348 highlights the potential value of oncolytic virotherapy products; terms included US\$50m upfront and up to US\$886m in milestones.

Y/E Jun	Revenue (A\$m)	EBITDA (A\$m)	PBT (A\$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2015	2.5	(6.0)	(5.5)	(3.0)	N/A	N/A
2016	4.7	(8.5)	(8.0)	(3.8)	N/A	N/A
2017e	4.3	(12.2)	(11.7)	(4.9)	N/A	N/A
2018e	4.8	(11.7)	(11.4)	(4.7)	N/A	N/A

**Sector: Pharma & healthcare**

Price: US\$3.27  
Market cap: US\$86m  
Market: NYSE MKT

**Share price graph (US\$)**

**Company description**

VolitionRx is a Belgium-based diagnostics company focused on developing blood-based cancer diagnostics based on its proprietary Nu.Q™ technology. Its lead program is in colorectal cancer, which entered the European market in 2017.

**Price performance**

%	1m	3m	12m
Actual	(5.5)	(17.6)	(1.8)
Relative*	(6.4)	(22.0)	(13.6)

\* % Relative to local index

**Analyst**

Maxim Jacobs

## VolitionRx (VNRX)

**INVESTMENT SUMMARY**

VolitionRx's proprietary Nu.Q™ technology detects the level and structure of nucleosomes in the blood using one drop of blood serum. It is currently focused on colorectal cancer (CRC), a very large opportunity with around 225 million people eligible for screening (US/EU). The company recently announced its first product, the Nu.Q™ Colorectal Cancer Screening Triage Test received a CE Mark and may be included in the Danish national screening program. Also, the company presented the final data from its 8,000-person clinical validation study of the Nu.Q™ Colorectal Cancer Screening Triage Test. Patients screened with this product would have required 24.5% fewer colonoscopies. VolitionRx is currently working on the design for a 10,000 undiagnosed person trial in the US.

**INDUSTRY OUTLOOK**

The blood-based cancer screening market is in its nascent stages with great potential and serves an unmet medical need. Currently there are few, if any, non-invasive screening methods for the vast majority of cancers.

Y/E Dec	Revenue (US\$m)	EBITDA (US\$m)	PBT (US\$m)	EPS (c)	P/E (x)	P/CF (x)
2015	0.0	(10.0)	(9.7)	(54.49)	N/A	N/A
2016	0.0	(12.3)	(12.3)	(53.22)	N/A	N/A
2017e	0.7	(14.1)	(14.1)	(52.90)	N/A	N/A
2018e	2.5	(17.6)	(18.7)	(67.63)	N/A	N/A

## Sector: Pharma & healthcare

Price: SEK34.70  
Market cap: SEK206m  
Market: NASDAQ OMX First North

### Share price graph (SEK)



### Company description

Xbrane Biopharma is a Swedish developer of biosimilars using a patented, more efficient manufacturing system. The lead product is Xlucane, a Lucentis biosimilar. Xbrane's first product will be a triptorelin generic, Spherotide, for prostate cancer. First sales will be to Iran in 2017. European approval is possible in 2019.

### Price performance

%	1m	3m	12m
Actual	2.1	(2.3)	3.6
Relative*	2.9	(6.4)	(14.1)

\* % Relative to local index

### Analyst

Dr John Savin

# Xbrane Biopharma (XBRANE)

## INVESTMENT SUMMARY

Xbrane has an approved GMP Italian facility and can supply one month Spherotide to Iran. A Chinese deal worth SEK17m upfront, \$8m total is proposed. European partnering and launches are possible from 2019 after clinical trials. Xbrane (or a partner) may sell Xlucane, its low-cost biosimilar of Lucentis (2015 sales \$3.6bn), in the US after 2021 and from 2022 in Europe. A pilot scale study showed high biosimilarity, giving a GMP basis for scale up. Year end cash was SEK31.3m. Fresh cash of 20 MSEK was raised in May.

## INDUSTRY OUTLOOK

Triptorelin treats advanced prostate cancer, endometriosis and uterine fibroids. Sales in 2015 for these were \$380m. Xbrane is developing a biosimilar of Lucentis (ranibizumab, Roche/Novartis; 2015 sales: \$3.6bn) to treat wet age-related macular degeneration (wAMD). In 2015, Lucentis sales fell by 15% due to competition with Eylea (Regeneron/Bayer; 2015 sales: \$4bn). Xbrane has a patented production method that claims to lower material costs by 85%.

Y/E Dec	Revenue (SEKm)	EBITDA (SEKm)	PBT (SEKm)	EPS (fd) (öre)	P/E (x)	P/CF (x)
2015	0.4	(10.7)	(11.0)	(254.4)	N/A	N/A
2016	2.5	(26.9)	(29.5)	(585.5)	N/A	N/A
2017e	24.0	(13.6)	(16.9)	(363.1)	N/A	N/A
2018e	22.1	(92.2)	(95.5)	(2008.6)	N/A	N/A

## Company coverage

Company	Note	Date published
<a href="#">4SC</a>	Update; Update	30/03/2017; 17/05/2017
<a href="#">Abzena</a>	Update; Update	1 1/07/2017; 19/07/2017
<a href="#">Acarix</a>	Update; Update	15/05/2017; 13/07/2017
<a href="#">Achillion Pharmaceuticals</a>	Update; Update	28/09/2016; 08/05/2017
<a href="#">AFT Pharmaceuticals</a>	Update; Update	03/03/2017; 31/05/2017
<a href="#">Allium Medical</a>	Update; Update	23/11/2016; 16/03/2017
<a href="#">Angle</a>	Flash; Flash	16/06/2017; 05/07/2017
<a href="#">Arix Bioscience</a>	Initiation	20/04/2017
<a href="#">Atossa Genetics</a>	Flash; Update	30/03/2017; 30/05/2017
<a href="#">Basilea Pharmaceuticals</a>	Update; Update	07/03/2017; 11/07/2017
<a href="#">Bio-Light Life Sciences</a>	Update; Update	02/05/2017; 19/06/2017
<a href="#">Biondvax Pharmaceuticals</a>	Update; Update	15/05/2017; 13/07/2017
<a href="#">C4X Discovery</a>	Flash; Flash	06/09/2016; 29/09/2016
<a href="#">Carmat</a>	Flash; Flash	02/12/2016; 05/05/2017
<a href="#">Celyad</a>	Update; Update	03/04/2017; 04/05/2017
<a href="#">Coliplant Holdings</a>	Update; Update	04/04/2017; 05/06/2017
<a href="#">Crossject</a>	Update; Update	09/12/2016; 07/04/2017
<a href="#">e-Therapeutics</a>	Update; Outlook	16/01/2017; 05/05/2017
<a href="#">Factor Therapeutics</a>	Update; Update	23/02/2017; 17/05/2017
<a href="#">Genkyotex</a>	Outlook; Update	30/05/2017; 06/07/2017
<a href="#">GW Pharmaceuticals</a>	Update; Outlook	08/06/2016; 05/04/2017
<a href="#">Hutchison China Meditech</a>	Outlook; Update	11/05/2017; 13/06/2017
<a href="#">Hybrigenics</a>	Update; Outlook	17/02/2017; 12/05/2017
<a href="#">Immunovia</a>	Update; Update	20/12/2016; 30/03/2017
<a href="#">Intec Pharma</a>	Update; Update	09/05/2017; 22/05/2017
<a href="#">International Stem Cell</a>	Update; Update	27/04/2017; 24/05/2017
<a href="#">Kiadis Pharma</a>	Update; Update	08/12/2016; 06/01/2017
<a href="#">Lifewatch</a>	Initiation	09/01/2017
<a href="#">MagForce</a>	Initiation; Update	17/05/2017; 13/07/2017
<a href="#">Medigene</a>	Update; Update	12/05/2017; 11/07/2017
<a href="#">Mesoblast</a>	Update; Update	05/04/2017; 07/06/2017
<a href="#">Mologen</a>	Update; Update	14/11/2016; 16/05/2017
<a href="#">MorphoSys</a>	Outlook	17/05/2016
<a href="#">Nanobiotix</a>	Outlook; Outlook	31/05/2016; 02/02/2017
<a href="#">NetScientific</a>	Update; Update	05/05/2017; 13/07/2017
<a href="#">NeuroVive Pharmaceutical</a>	Initiation	29/06/2017
<a href="#">Newron Pharmaceuticals</a>	Update; Flash	13/03/2017; 22/03/2017
<a href="#">Novogen</a>	Update; Outlook	31/10/2016; 22/05/2017
<a href="#">Nuevolution</a>	QuickView; Initiation	04/01/2017; 16/02/2017
<a href="#">Onxeo</a>	Outlook; Flash	06/01/2017; 06/07/2017
<a href="#">Orexigen Therapeutics</a>	Update; Outlook	19/04/2017; 16/06/2017
<a href="#">Orexo</a>	Outlook; Update	21/02/2017; 09/06/2017
<a href="#">Oryzon Genomics</a>	Outlook; Update	02/05/2017; 22/05/2017
<a href="#">Oxford BioMedica</a>	Update; Flash	05/04/2017; 06/07/2017
<a href="#">Pacific Edge</a>	Update; Update	13/02/2017; 01/06/2017
<a href="#">Paion</a>	Update; Update	12/05/2017; 07/07/2017



<a href="#">PDL BioPharma</a>	Outlook; Update	28/03/2017; 10/05/2017
<a href="#">PharmaMar</a>	Update; Update	03/05/2017; 19/07/2017
<a href="#">Photocure</a>	Update; Update	18/05/2017; 06/06/2017
<a href="#">Pixium Vision</a>	Outlook; Flash	30/03/2017; 26/05/2017
<a href="#">Pluristem Therapeutics</a>	Update; Update	28/02/2017; 20/06/2017
<a href="#">Prima BioMed</a>	Update; Update	22/03/2017; 23/06/2017
<a href="#">Probiodrug</a>	Update; Update	12/04/2017; 16/06/2017
<a href="#">Quantum Genomics</a>	Update; Update	04/04/2017; 27/06/2017
<a href="#">Redhill Biopharma</a>	Update; Update	24/05/2017; 17/07/2017
<a href="#">Regeneus</a>	Outlook; Update	30/01/2017; 31/05/2017
<a href="#">ReNeuron Group</a>	Update; Update	02/05/2017; 06/07/2017
<a href="#">ROVI Laboratorios Farmaceuticos</a>	Initiation	12/07/2017
<a href="#">Selvita</a>	Outlook; Flash	20/03/2017; 28/03/2017
<a href="#">Sunesis Pharmaceuticals</a>	Update; Update	15/03/2017; 10/05/2017
<a href="#">SymBio Pharmaceuticals</a>	Outlook; ADR Outlook	27/02/2017; 27/02/2017
<a href="#">Therapix Biosciences</a>	Initiation	29/06/2017
<a href="#">Touchstone Innovations</a>	Update; Update	06/01/2017; 04/04/2017
<a href="#">Transgene</a>	Update; Outlook	24/03/2017; 18/07/2017
<a href="#">TxCell</a>	Update; Update	14/03/2017; 11/07/2017
<a href="#">Vernalis</a>	Update; Update	15/03/2017; 24/04/2017
<a href="#">Viralytics</a>	Update; Outlook	09/03/2017; 19/04/2017
<a href="#">VolitionRx</a>	Update; Update	20/03/2017; 16/05/2017
<a href="#">Xbrane Biopharma</a>	Initiation; Update	10/02/2017; 01/03/2017

**Investment companies**

<a href="#">BB Biotech AG</a>	Investment trust review	09/02/2016; 27/02/2017
<a href="#">Biotech Growth Trust (The)</a>	Investment trust review	20/07/2016; 21/02/2017
<a href="#">International Biotechnology Trust</a>	Investment trust review	03/03/2015; 11/12/2015

**QuickViews**

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