EDISON

Edison Healthcare Insight

November 2016

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The Edison healthcare team

www.edisongroup.com

Lala Gregorek

Lala joined Edison's healthcare team in January 2010 from Canaccord Adams, where the focus of her coverage as a life sciences analyst was on UK and European biotech stocks. Before graduating with an M.Phil in bioscience enterprise from Cambridge University, she worked in risk management as a credit analyst covering European financial institutions and hedge funds at Dresdner Kleinwort and Lehman Brothers.

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.

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.

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.

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.

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).

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.

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Prices at 11 November 2016

Published 17 November 2016

Welcome to the November edition of the Edison Healthcare Insight. In this edition we have profiled 76 of our healthcare companies under coverage.

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

Edison, the investment intelligence firm, is the future of investor interaction with corporates. Our team of over 100 analysts and investment professionals work with leading companies, fund managers and investment banks worldwide to support their capital markets activity. We provide services to close to 500 retained corporate and investor clients from our offices in London, New York, Frankfurt, Sydney and Wellington. Edison is authorised and regulated by the Financial Conduct Authority. Edison is a registered investment adviser regulated by the state of New York.

We welcome any comments/suggestions our readers may have.

Lala Gregorek & Maxim Jacobs

Healthcare Research

Company profiles

Prices at 11 November

US$/£ exchange rate: 0.8065
€/£ exchange rate: 0.8905
C$/£ exchange rate: 0.6035
A$/£ exchange rate: 0.6221
NZ$/£ exchange rate: 0.5920
SEK/£ exchange rate: 0.0895
DKK/£ exchange rate: 0.1197
NOK/£ exchange rate: 0.0979
JPY/£ exchange rate: 0.0077
NIS/£ exchange rate: 0.2150
CHF/£ exchange rate: 0.8269

Sector: Pharma & healthcare

Price:	€2.44
Market cap:	€46m
Market	FRA

Share price graph (€)

Company description

4SC is a Munich-based cancer R&D company. Epigenetic compound resminostat (HDAC inhibitor) is the lead candidate for CTCL (Phase II planned Q416), partnered with Yakult Honsha and Menarini. 4SC is partnered with Link Health for a Phase I oncology asset.

Price performance

%	1m	3m	12m
Actual	(4.9)	2.7	(2.7)
Relative*	(5.7)	3.4	(0.6)

* % Relative to local index

Analyst

Dr Linda Pomeroy

4SC (VSC)

INVESTMENT SUMMARY

4SC is focused on initiating a potentially pivotal 150-patient Phase II study with epigenetic compound resminostat (HDAC inhibitor) for cutaneous T-cell lymphoma (CTCL). The trial is due to start Q416, with initial data expected by end-2018. Resminostat has been licensed to Yakult Honsha (Japan) and Menarini (rest of Asia-Pacific). Recently announced positive Phase II results from a more detailed analysis of the HCC Yakult trial data, which could lead to further clinical development. Also, recently announced appointment of a new CEO and sale of its immunology portfolio streamlining the focus on its core business. Other positives include a recent partnership with Link Health in China for its oncology Eg5 inhibitor, 4SC-205, promising preclinical data for its epigenetic HDAC/LSD1 inhbitor (4SC-202) and promising preclinical data indicating resminostat could offer therapeutic benefit in combination with cancer immunotherapies. 4SC held €12.3m in cash (gross) at Q216, following a €29m equity issue (7.25m shares at €4.00) in July 2015.

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)
2013	N/A	N/A	N/A	N/A	N/A	N/A
2014	7.1	(8.3)	(8.8)	(87.62)	N/A	N/A
2015e	3.3	(7.9)	(8.4)	(58.58)	N/A	N/A
2016e	3.8	(14.7)	(14.8)	(77.88)	N/A	N/A

Sector: Pharma & healthcare

Price:	33.0p
Market cap:	£45m
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	(21.4)	(23.3)	(50.0)
Relative*	(17.7)	(21.3)	(52.8)

* % Relative to local index

Analyst

Dr Linda Pomeroy

Abzena (ABZA)

INVESTMENT SUMMARY

Abzena offers fully integrated research and manufacturing services/technologies that enable its customers to develop safer and more effective biological products. This includes immunogenicity assessment, protein/antibody engineering, bioconjugation, biomanufacturing (PacificGMP) and chemistry/conjugation (TCRS). Fee-for-services provides stable revenues today (FY16 £9.9m), while successful commercialisation of products created using Abzena's technologies offers the prospect of substantial future revenues (small % royalties); 11 such products are now in the clinic, eg Gilead's GS-5745 (Phase III for gastric cancer) and Roche's RG6125 (formerly SDP051). Also, ADC linker technology (ThioBridge) has recently been validated by a licensing deal with Halozyme for up to three such ADC products. PacificGMP (£5.5m) and TCRS (£10m) acquisitions enable a fully integrated offering which has created a US wide operating presence and cross selling opportunities across the expanded group.

INDUSTRY OUTLOOK

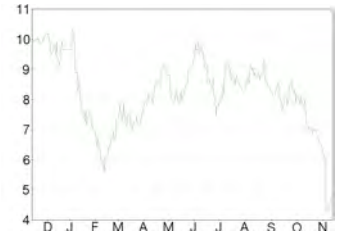
The biological services industry is highly competitive but Abzena's deepening portfolio of technologies and services is compelling, while its ADC technology offers safety and efficacy advantages over competitors.

Y/E Mar	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	5.7	(4.5)	(4.7)	(5.89)	N/A	N/A
2016	9.9	(7.0)	(7.5)	(6.00)	N/A	N/A
2017e	19.1	(5.4)	(6.8)	(4.32)	N/A	N/A
2018e	25.0	(2.9)	(4.2)	(2.63)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$4.67
Market cap:	US$638m
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	(38.0)	(47.2)	(53.8)
Relative*	(38.8)	(46.7)	(55.7)

* % 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. 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. A Phase I trial for its factor-D inhibitor candidate, ACH-4471, is ongoing with interim results expected in H117.

INDUSTRY OUTLOOK

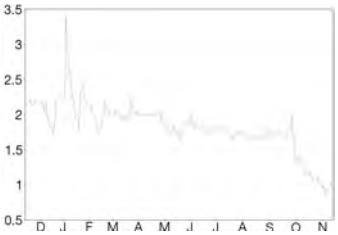
More than 150m people are infected with HCV worldwide. Treatment has been transformed in recent years by the approval of Sovaldi (sofosbuvir) and Gilead's combination product; recent pressure from key healthcare groups has led to a drop in HCV prices.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(61.7)	(61.7)	(62.8)	N/A	N/A
2015	66.1	(4.3)	(3.9)	(3.1)	N/A	132.0
2016e	0.0	(76.1)	(73.3)	(53.5)	N/A	N/A
2017e	0.0	(78.3)	(77.1)	(53.6)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.05
Market cap:	US$59m
Market	NYSE MKT

Share price graph (US$)



Company description

Actinium Pharmaceuticals develops drugs for the treatment of various cancers. Actimab-A is in Phase I/II clinical trials for AML. Iomab-B is used for myeloconditioning for hematopoietic stem cell transplantation.

Price performance

%	1m	3m	12m
Actual	(9.5)	(37.1)	(50.9)
Relative*	(10.6)	(36.5)	(53.0)

* % Relative to local index

Analyst

Maxim Jacobs

Actinium Pharmaceuticals (ATNM)

INVESTMENT SUMMARY

Actinium Pharmaceuticals is actively developing its portfolio of radio-labelled antibodies to treat various cancers. Its lead product, Iomab-B, is in Phase III for use as a conditioning agent before hematopoietic stem cell therapy (HSCT, bone marrow transplantation) in refractory/relapsing acute myeloid leukaemia (AML). Actimab-A has completed the Phase I element of a Phase I/II trial in older patients with newly diagnosed AML and recently initiated the Phase II portion. Our forecasts are under review.

INDUSTRY OUTLOOK

Actinium Pharmaceuticals' targeted radiation therapies (both alpha- and beta-particle based) offer the potential of highly selective tumour cell killing with low damage to the surrounding normal tissue and limited side effects. The company aims to combine the drug delivery capabilities of antibodies with the cell-killing effect of radiation.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(22.4)	(22.5)	(90.2)	N/A	N/A
2015	0.0	(24.8)	(24.8)	(54.2)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.34
Market cap:	A$46m
Market	ASX

Share price graph (A$)

Company description

Adherium is a digital health company developing technologies that address suboptimal medication use and remote patient management in chronic diseases. Clinical evidence shows that its Smartinhaler substantially increases adherence and reduces severe exacerbations in asthma.

Price performance

%	1m	3m	12m
Actual	0.0	(27.7)	(48.9)
Relative*	2.1	(25.6)	(51.4)

* % Relative to local index

Analyst

Dr Dennis Hulme

Adherium (ADR)

INVESTMENT SUMMARY

Adherium has developed the market-leading Smartinhaler platform that monitors usage of inhaled asthma and COPD medications and provides reminders and feedback on medication usage patterns. Independent clinical studies have shown that the Smartinhaler reminders and feedback improve patient adherence and reduce severe exacerbations in asthma patients. AstraZeneca has initiated a US clinical study that aims to confirm that the platform similarly improves adherence in COPD patients. Adherium is positioned for strong revenue growth through an existing commercial relationship with AstraZeneca and strong relationships with other pharma companies and key opinion leaders through sales for clinical trials. With A$32m cash at 30 September 2016, Adherium has the resources to pursue an intensive growth and investment programme.

INDUSTRY OUTLOOK

Adherium has the benefit of 14 years of experience in developing and trialling Smartinhaler devices. Several competitors have entered the field more recently, but none of the competitors can match the independent clinical trials showing the efficacy of the Adherium device in improving adherence and reducing exacerbations.

Y/E Mar / Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.1	(1.1)	(1.3)	(1.92)	N/A	22168.0
2016	2.9	(6.5)	(6.4)	(5.39)	N/A	N/A
2017e	5.7	(11.0)	(10.5)	(6.59)	N/A	N/A
2018e	18.7	(4.6)	(4.6)	(2.73)	N/A	N/A

Sector: Pharma & healthcare

Price:	NZ$3.15
Market cap:	NZ$305m
Market	NZSX

Share price graph (NZ$)

Company description

AFT Pharmaceuticals is a specialty 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	(1.6)	0.0	N/A
Relative*	4.8	11.5	N/A

* % 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. AFT has agreements in 109 countries to distribute Maxigesic, its combination acetaminophen/ibuprofen product, which is addressing a $10.4b market. Maxigesic sales momentum has increased dramatically due to recent launches, with more to come. 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 (though initially it is targeting the smaller sinusitis surgery market).

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)
2015	56.2	(9.7)	(11.4)	(1099.7)	N/A	N/A
2016	64.0	(7.8)	(10.8)	(48.5)	N/A	N/A
2017e	77.4	(9.2)	(11.1)	(40.2)	N/A	N/A
2018e	105.4	4.3	2.5	6.4	49.2	279.5

Sector: Pharma & healthcare

Price:	US$8.51
Market cap:	US$100m
Market	NASDAQ

Share price graph (US$)

Company description

Akari Therapeutics is a biopharmaceutical company developing Coversin, a complement system inhibitor for the treatment of paroxysmal nocturnal hemoglobinuria (PNH), atypical hemolytic uremic syndrome (aHUS), and other immune disorders without a standard of care.

Price performance

%	1m	3m	12m
Actual	0.8	(12.7)	(55.3)
Relative*	(0.5)	(11.9)	(57.1)

* % Relative to local index

Analyst

Maxim Jacobs

Akari Therapeutics (AKTX)

INVESTMENT SUMMARY

Akari is biopharmaceutical company advancing the clinical development of Coversin, a complement inhibitor derived from the saliva of a species of tick. Coversin shares a mechanism of action with the $2.59bn drug Soliris (Alexion, 2015 sales), and the company will be seeking approval for the same ultra-rare autoimmune hemolytic disorders as Soliris, as well as two other immune disorders without current treatments. The company recently announced positive interim data from a Phase Ib study where complete complement inhibition was achieved with once daily maintenance dosing. Data from a Phase II in PNH patients is expected by year end.

INDUSTRY OUTLOOK

Akari is targeting a $2.59 billion market with their tick derived complement inhibitor. A main advantage over the competition is that Coversin can be given subcutaneously at home while competitors generally need to be given via infusion at an infusion center.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	N/A	N/A	N/A	N/A	N/A	N/A
2015	0.0	(11.3)	(49.0)	(573.33)	N/A	N/A
2016e	0.0	(22.8)	(20.9)	(170.71)	N/A	N/A
2017e	0.0	(47.3)	(48.1)	(370.69)	N/A	N/A

Sector: Pharma & healthcare

Price:	NIS1.30
Market cap:	NIS69m
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	7.4	(19.1)	(23.9)
Relative*	8.8	(17.3)	(18.8)

* % 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 (95% of NIS5.2m in 2015). Allium has achieved revenue CAGR of 19% in 2011-15. 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.

INDUSTRY OUTLOOK

We expect Allium's growth to accelerate in the medium term, driven by new markets, resulting in 2015-20e revenue CAGR of 41%. Allium also has two devices in preclinical development: Allevetix for diabetes and obesity (start a clinical trial in 2017) and BMV, 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)
2014	4.9	(19.1)	(20.1)	(1.09)	N/A	N/A
2015	5.2	(16.3)	(18.5)	(0.65)	N/A	N/A
2016e	7.4	(16.9)	(18.1)	(0.40)	N/A	N/A
2017e	11.2	(14.2)	(15.0)	(0.28)	N/A	N/A

Sector: Pharma & healthcare

Price:	59.0p
Market cap:	£44m
Market	AIM

Share price graph (p)

Company description

Angle is a pure-play specialist diagnostics company. The proprietary Parsortix cell separation platform can be used to detect and harvest very rare cells from a blood sample, including circulating tumour cells.

Price performance

%	1m	3m	12m
Actual	(14.5)	(6.4)	(23.4)
Relative*	(10.4)	(4.0)	(27.7)

* % Relative to local index

Analyst

Dr Jonas Peciulis

Angle (AGL)

INVESTMENT SUMMARY

Angle's proprietary Parsortix cell separation platform can be used to detect and harvest circulating tumour cells (CTCs) from blood. FY16 results showed that the first research use sales were £361k. In May, the company announced that Cancer Research UK Manchester Institute is adopting Parsortix for routine research use, which will provide recurring sales. Recently, Angle has announced results from two clinical studies carried out by their KOL partners. The initial data show that Parsortix performs as well as or better than current standard of care in detecting early-stage prostate cancer and assessing its severity and could potentially replace invasive tissue biopsy in metastatic breast cancer. Parsortix's potential third application is for triaging women with ovarian masses before surgery, with the clinical trials ongoing in the US and Europe.

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	1.1	(7.4)	(7.7)	(10.26)	N/A	N/A
2018e	3.6	(4.9)	(5.3)	(6.70)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.70
Market cap:	US$145m
Market	NASDAQ

Share price graph (US$)

Company description

Athersys is a US biotech company developing MultiStem (allogeneic, bone marrow-derived stem cells). A Phase II trial with MultiStem in ischaemic stroke is complete, while further studies in AMI (Phase II) and ARDS (Phase IIa) are planned.

Price performance

%	1m	3m	12m
Actual	(19.8)	(13.3)	60.4
Relative*	(20.8)	(12.4)	53.7

* % Relative to local index

Analyst

Maxim Jacobs

Athersys (ATHX)

INVESTMENT SUMMARY

Athersys is developing MultiStem, an allogeneic, bone marrow-derived stem cell product. Results from a 140-patient Phase II study in ischaemic stroke revealed a potential benefit when dosed <36 hours post stroke (vs 3-5 hours with tPA), although the primary/secondary endpoints were not met on an intent-to-treat basis. Athersys recently signed a partnership agreement with Healios in Japan for stroke and other indications. The company has reached an agreement with both the FDA (through an SPA) and the PMDA on the design of the pivotal trials necessary for approval in those regions (a 300-pt trial in the US and a ~200 pt. trial in Japan).

INDUSTRY OUTLOOK

MultiStem is an allogeneic (off-the-shelf) product that allows it to be used in both acute and chronic treatment settings, and holds potential to be used across a range of indications. Regenerative medicine is gaining traction and recognition by global regulators (eg accelerated approval pathway in Japan).

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.6	(29.3)	(28.9)	(37.26)	N/A	N/A
2015	11.9	(17.5)	(17.2)	(20.93)	N/A	N/A
2016e	17.2	(15.6)	(15.3)	(17.86)	N/A	N/A
2017e	0.0	(34.5)	(33.8)	(38.92)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.76
Market cap:	US$7m
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	(9.7)	(53.6)	(82.2)
Relative*	(10.9)	(53.1)	(82.9)

* % 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 plans to combine its IDMC with established cancer drug fulvestrant and opened enrolment for a 30-patient Phase II study in March 2016. Atossa is also advancing oral endoxifen, a metabolite of tamoxifen, as a potential treatment for breast cancer patients refractory to tamoxifen. About 20-30% of the 1.0m women taking tamoxifen worldwide develop resistance to it (for multiple reasons, including low levels of liver enzyme CYPD26), 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. Atossa filed endoxifen patent applications and contracted for the initial drug supply; it plans to start an endoxifen human study in 2017. Atossa raised $2.9m in an equity offering in Q316.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	0.0	(6.9)	(7.3)	(30.5)	N/A	N/A
2015	0.0	(9.5)	(9.8)	(34.3)	N/A	N/A
2016e	0.0	(10.1)	(10.4)	(28.6)	N/A	N/A
2017e	0.0	(14.1)	(14.6)	(35.8)	N/A	N/A

Sector: Pharma & healthcare

Price:	CHF71.75
Market cap:	CHF847m
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, 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	(6.0)	1.6	(31.3)
Relative*	(3.0)	7.0	(22.6)

* % Relative to local index

Analyst

Dr Susie Jana

Basilea Pharmaceutica (BSLN)

INVESTMENT SUMMARY

Basilea is one of the few standalone European companies focused 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 H1 2017 following discussions with FDA on PIII (seeking SPA) and the award of a BARDA (division of US Dept. of Health & Human Services Office) contract up to $100m for its phase III development. 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 kinease inhibitor, is in Phase I development.

INDUSTRY OUTLOOK

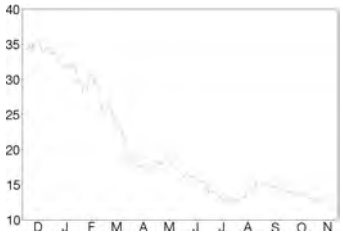
There is an increasing need for novel antimicrobial agents with efficacy against resistant strains of bacteria (eg MRSA), and/or improved side effect profiles. Hence the opportunities for Zevtera and Cresemba could be significant.

Y/E Dec	Revenue (CHFm)	EBITDA (CHFm)	PBT (CHFm)	EPS (fd) (CHFc)	P/E (x)	P/CF (x)
2014	42.6	(39.2)	(41.2)	(414.46)	N/A	N/A
2015	52.8	(58.9)	(61.3)	(607.22)	N/A	N/A
2016e	61.2	(46.8)	(54.1)	(496.01)	N/A	N/A
2017e	88.6	(28.7)	(35.6)	(319.87)	N/A	N/A

Sector: Pharma & healthcare

Price:	NIS11.74
Market cap:	NIS31m
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	(10.1)	(23.7)	(66.3)
Relative*	(10.2)	(22.9)	(64.1)

* % Relative to local index

Analyst

Pooya Hemami

Bio-Light Life Sciences (BOLT)

INVESTMENT SUMMARY

BioLight Life Sciences is advancing several eyecare products and technologies. IOPtiMate is a laser-based surgical device to treat moderate to advanced glaucoma, and Eye-D VS-101 is an extended-dose latanoprost drug implant in Phase I/IIa trials to treat glaucoma. IOPtiMate was launched mainly in the EU and China in late 2014 and a US strategy will be determined in H216. BioLight is also advancing TeaRx as a diagnostic product for dry eye syndrome (DES), which could potentially receive US clearance in 2017.

INDUSTRY OUTLOOK

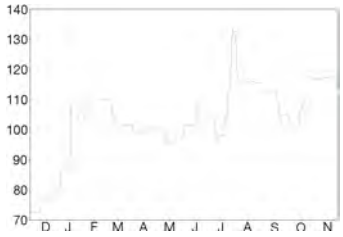
There is unmet need for improved glaucoma treatments at both more advanced disease stages and at earlier stages. For the former, the firm's IOPtiMate studies show that it can reduce intraocular pressure by 45%, a level comparable to more invasive filtration surgery, which has well-known adverse event risks. VS-101 can be helpful for the 20-60% of glaucoma patients do not comply with daily eye drop therapy. TeaRx provides measures of three separate DES biomarkers, and can potentially better differentiate underlying causes than existing diagnostics.

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2014	0.9	(26.7)	(30.1)	(8.91)	N/A	N/A
2015	1.4	(24.3)	(25.1)	(6.96)	N/A	N/A
2016e	1.7	(23.1)	(23.4)	(6.40)	N/A	N/A
2017e	6.6	(32.2)	(33.8)	(11.82)	N/A	N/A

Sector: Pharma & healthcare

Price:	111.5p
Market cap:	£36m
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	(5.1)	(3.5)	51.7
Relative*	(0.6)	(1.0)	43.1

* % 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, with Phase I anticipated by mid-2017. Recently acquired proprietary human genetic technology platform (Taxonomy3) and Molplex technologies, broadens its drug discovery capabilities to both target identification and lead generation. Also, C4X recently 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 builds on the recent fundraising of £5m (before expenses) as it enables outputs from its drug discovery engine and its preclinical pipeline to progress.

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 (fd) (p)	P/E (x)	P/CF (x)
2014	0.6	(1.2)	(1.3)	N/A	N/A	N/A
2015	0.3	(3.8)	(3.8)	(10.75)	N/A	N/A
2016e	0.3	(7.1)	(7.0)	(17.77)	N/A	N/A
2017e	0.2	(8.2)	(8.3)	(20.33)	N/A	N/A

Sector: Pharma & healthcare

Price:	€36.90
Market cap:	€219m
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	(2.6)	4.4	(27.6)
Relative*	(2.6)	5.2	(20.8)

* % Relative to local index

Analyst

Pooya Hemami

Carmat (ALCAR)

INVESTMENT SUMMARY

As part of the feasibility stage of the CE-mark approval process, Carmat's bioprosthetic heart was implanted in the required four patients. A CE-mark enabling pivotal study was cleared by regulators in July 2016, and the first patient implant for this trial took place in late August 2016. The trial could be completed by 2018, potentially leading to CE-mark awarding and EU market entry in H218. In the US, Carmat's options for attaining regulatory approval include a humanitarian use device (HUD) approval or a broader pre-market approval (PMA) process, providing an addressable market of up to 50,000 US patients. Carmat raised €50m in equity in February 2016, which we estimate can finance operations into H118.

INDUSTRY OUTLOOK

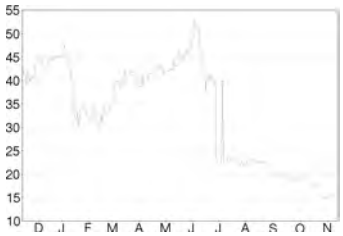
The Carmat artificial heart is being developed as a permanent replacement or destination therapy (DT) for chronic heart failure or acute myocardial infarction patients, who do not have access to a human donor heart. Despite the high worldwide prevalence of heart failure (c 100,000 patients), the shortfall 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:	€16.56
Market cap:	€154m
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	(10.5)	(26.1)	(62.8)
Relative*	(9.1)	(25.2)	(61.1)

* % Relative to local index

Analyst

Dr John Savin

Celyad (CYAD)

INVESTMENT SUMMARY

Celyad has completed the Phase I CAR dose ranging study up to 30m cells. Safety data will be presented at ASH in December. A set of trials that will include solid tumors is being designed. The CEO noted that Celyad was "positively surprised at reports of unexpected clinical benefit". The Japanese pharmaceutical company ONO has licensed its Celyad's allogeneic preclinical NKR-T cancer cell therapy for Japan, Korea and Taiwan. A ONO paid €11.25m cash with €270.75m possible in milestones plus royalties. H116 accounts showed cash of €86m ($97m).

INDUSTRY OUTLOOK

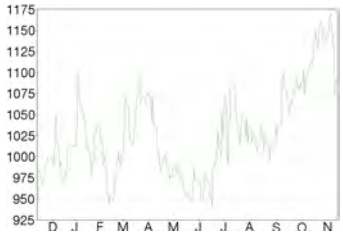
Celyad's Phase III CHART-1 study in cardiac regeneration missed its primary endpoint, but a clinically defined EDV subgroup with 60% of patients saw a positive outcome, p=0.015. The US Chart-2 trial with a new endpoint and EDV focus will only run if partnered. Celyad has also noted that a US patent on allogeneic CAR T-cell therapy, granted in 2015, remain in force but with Claim 1 only being re-examined at the request of a third party.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.1	(18.2)	(18.5)	(273.41)	N/A	N/A
2015	0.0	(28.6)	(28.4)	(326.28)	N/A	N/A
2016e	11.3	(14.5)	(14.3)	(153.56)	N/A	N/A
2017e	0.0	(57.7)	(57.7)	(619.87)	N/A	N/A

Sector: Pharma & healthcare

Price:	1085.5p
Market cap:	£534m
Market	LSE

Share price graph (p)



Company description

Consort Medical is an international medical devices business. Having acquired Aesica Pharmaceuticals for £230m in 2014, it now consists of Bespak's operations (inhalation, injection and other drug delivery technologies) and Aesica's CDMO businesses.

Price performance

%	1m	3m	12m
Actual	(2.2)	7.2	18.4
Relative*	2.5	9.9	11.7

* % Relative to local index

Analyst

Lala Gregorek

Consort Medical (CSRT)

INVESTMENT SUMMARY

Consort Medical is a full-service contract development and manufacturing operation (CDMO) that operates across most areas of the pharmaceutical supply chain. Bespak's strength in high-margin disposable drug delivery devices - with particular strength in respiratory and injectables - is complemented by Aesica's services from drug manufacture to finished product packaging. Consort Medical capitalises on the growing trend for drug majors to outsource more of their non-core activities to specialist providers, as it addresses more of the development and manufacturing functions while also striving to build operational scale. Interim results report on December 6.

INDUSTRY OUTLOOK

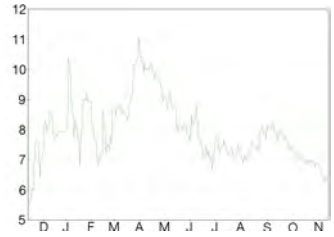
Management has positioned Consort Medical to generate sustainable revenue and profit growth, with the latter targeted at a double-digit rate. Improvements in operating efficiencies, coupled with investment in innovation and development capabilities, has laid the foundation for establishing a broader range of contract services.

Y/E Apr	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	184.8	33.2	22.7	47.8	22.7	20.0
2016	276.9	47.6	32.3	57.6	18.8	11.3
2017e	281.5	50.1	33.5	55.8	19.5	11.1
2018e	298.7	54.3	36.3	60.5	17.9	10.3

Sector: Pharma & healthcare

Price:	€6.44
Market cap:	€45m
Market	Euronext Paris

Share price graph (€)



Company description

Crossject develops new therapeutic entities (supergeneric) 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	(8.5)	(11.3)	15.4
Relative*	(8.5)	(10.6)	26.2

* % 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 Methotrexate for rheumatoid arthritis, should reach the market in 2017. The next product to reach the market will likely be ZENEO Sumatriptan for the acute treatment of migraine, which is expected to be commercialised in H118. Crossject also recently announced that their program dubbed L15 is actually a needle free version of Hydrocortisone for acute adrenal insufficiency. Launch is expected in H118.

INDUSTRY OUTLOOK

Traditional injections have multiple issues with them which inhibit patient acceptance. These often include: a multi-step injection process, difficulty in performing the injection correctly and convenience.

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	3.1	(5.0)	(5.4)	(61.57)	N/A	N/A
2017e	3.0	(8.5)	(9.7)	(104.51)	N/A	N/A

Sector: Pharma & healthcare

Price:	8.6p
Market cap:	£23m
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	(6.8)	(32.4)	(69.7)
Relative*	(2.3)	(30.6)	(71.5)

* % Relative to local index

Analyst

Lala Gregorek

e-Therapeutics (ETX)

INVESTMENT SUMMARY

e-Therapeutics' (ETX's) strategic review has concentrated its near- to mid-term focus on deriving value from its proprietary network pharmacology discovery platform. Preclinical data on ETX's five core discovery assets over the next 12 months will be central to generating interest from external partners or collaborators. Potential deals from late 2017 would provide validation for both the platform and the company, driving value and wider recognition. ETX's portfolio rationalisation secures its funding runway into early 2019; deal flow would extend this further. Deals and data – and the confirmation of a new CEO – represent the next major catalysts.

INDUSTRY OUTLOOK

Network pharmacology could potentially revolutionise drug discovery and shorten the path to market by minimising technical risks and drug development costs. e-Therapeutics is well positioned, with limited direct competition and growing industry interest in systems biology-based multi-target approaches to drug discovery.

Y/E Jan	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	0.0	(10.0)	(9.7)	(2.9)	N/A	N/A
2016	0.0	(11.3)	(11.1)	(3.2)	N/A	N/A
2017e	0.0	(12.8)	(12.6)	(3.7)	N/A	N/A
2018e	0.0	(8.9)	(8.9)	(2.7)	N/A	N/A

Sector: Pharma & healthcare

Price:	€5.42
Market cap:	€721m
Market	FRA

Share price graph (€)

Company description

Evotec is a drug discovery alliance and development partnership company that provides outsourcing solutions to pharmaceutical companies, among others, Bayer, CHDI, Janssen, Pfizer and Sanofi. It has operations in Germany, France, the UK and the US.

Price performance

%	1m	3m	12m
Actual	5.7	28.7	31.6
Relative*	4.8	29.6	34.5

* % Relative to local index

Analyst

Dr Jonas Peciulis

Evotec (EVT)

INVESTMENT SUMMARY

Evotec posted better than expected 9M16 results with 37% total and 30% base revenue (excluding milestones, upfronts and licences) increases year-on-year underpinned by the continued growth of the company's core drug discovery services business. 2016 guidance was reiterated with double-digit base revenue growth of >15% and adjusted EBITDA to more than double. In October, Evotec announced the proposed acquisition of UK listed ADME-Tox specialist Cyprotex with expected cash outlay of GBP55.4m (shares and repayment of debt; deal subject to approval by >75% of shareholders). Cyprotex H116 sales were GBP8.7m and Evotec expects the deal to be accretive to EBITDA in 2017. In November, the company announced a partnership LAB282 with Oxford University and Oxford Sciences Innovation, which will leverage the biomedical research from Oxford. In October, Evotec contributed $6m to Carrick Therapeutics' $95m funding round making it a second equity investment after it had spun out Topas Therapeutics in March.

INDUSTRY OUTLOOK

Evotec is a healthcare company that provides high-quality drug discovery services to the pharmaceutical industry and has collaborations with academic institutions to create novel drug discovery programmes.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	89.5	7.7	(0.7)	(1.96)	N/A	N/A
2015	127.7	8.7	1.2	(1.11)	N/A	43.7
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.08
Market cap:	A$59m
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	19.1	58.8	110.0
Relative*	21.6	63.3	99.8

* % Relative to local index

Analyst

Dr Dennis Hulme

Factor Therapeutics (FTT)

INVESTMENT SUMMARY

Factor is developing VF-001 as a treatment for moderately severe ulcers that can be used in a community setting, not just in patients treated in specialty wound clinics. VF-001 is a synthetic protein combining an extracellular matrix protein and a growth factor. It was shown to be safe and well tolerated in an open-label Phase II trial in 53 patients with non-healing venous leg ulcers. It is about to commence a randomised Phase IIb trial targeting venous leg ulcers, with top-line results anticipated in Q417. Factor has revised its development strategy and is now seeking approval in the US in addition to Europe. The US will require a randomised Phase IIb trial and pivotal Phase III trials. Factor had previously sought European CE mark approval based on an open label trial, but withdrew the application in 2015 when additional safety and preclinical data was requested. The Phase IIb trial should provide sufficient safety data to support a new application for approval in Europe.

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:	62.5p
Market cap:	£12m
Market	AIM

Share price graph (p)

Company description

Genedrive has a profitable contract services business and an emerging clinical biomarker technology.

Price performance

%	1m	3m	12m
Actual	0.0	(24.2)	(53.7)
Relative*	4.8	(22.3)	(56.3)

* % Relative to local index

Analyst

Dr John Savin

Genedrive (GDR)

INVESTMENT SUMMARY

Genedrive plc, previously Epistem, sells via its sole Indian distributor, Xcelris Labs, the Genedrive unit and molecular tuberculosis diagnostic test targeting 5,000 private Indian laboratories. The Contract Research business is being divested. It made £2.01m sales in FY2016; profit of £51k. The Pharmacogenomics business had sales of £1.15; loss of £175k. The Genedrive division had revenues of £1.92m from a US defense research contract; loss of £2.88m. Administration was £2.42m. Genedrive made an overall loss of £5.43m. Cash on 30 June 2016 was £1.11m before a net £6.05m placing in July. Our forecasts are under review.

INDUSTRY OUTLOOK

Genedrive believes its Genedrive DNA-based point-of-care diagnostic system will enable accurate low cost testing for TB. Sales development has been minimal since the April 2016 launch with no new orders gained but an improved sales strategy and some technical improvements are being developed. A hepatitis C test also targeted at the Indian market is in late development.

Y/E Jun	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	5.8	(1.6)	(2.3)	(17.4)	N/A	N/A
2015	4.5	(3.7)	(3.4)	(30.2)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	€1.43
Market cap:	€22m
Market	Euronext Paris

Share price graph (€)

Company description

Genticel is developing a therapeutic vaccine, GTL001, to treat early-stage HPV 16 and 18 infections. The Phase II trial missed the primary endpoint but more data is due in mid 2016. A multivalent therapeutic vaccine, GTL002 is in preclinical.

Price performance

%	1m	3m	12m
Actual	(7.1)	(1.4)	(79.2)
Relative*	(7.1)	(0.6)	(77.3)

* % Relative to local index

Analyst

Juan Pedro Serrate

Genticel (GTCL)

INVESTMENT SUMMARY

Following 12 and 18-month data from the Phase II trial of the GTL001 vaccine to treat early-stage human papillomavirus 16 and 18 infections (HPV16/18), Genticel has decided not to pursue further development of GTL001 and GTL002 as the product showed no statistically significant difference in any subgroup. Additionally, it has engaged corporate specialist Eumedix to advise on business development activities. The company has an ongoing collaboration with the Serum Institute of India Ltd (SIIL) in which Genticel granted SIIL a license to use its technology platform Vaxiclase as an antigen. Under this license Genticel could receive up to $57m in upfront payments and milestone payments on development and sales, as well royalties on net sales. Cash is €14.7m in June 2016, sufficient until 2018.

INDUSTRY OUTLOOK

Genticel will continue its collaboration with Serum Institute of India and expects to update on the results of its partnering activities in Q4 2016.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(10.9)	(10.8)	(78.1)	N/A	N/A
2015	0.2	(11.4)	(11.2)	(72.1)	N/A	N/A
2016e	0.0	(8.8)	(8.7)	(55.8)	N/A	N/A
2017e	0.0	(8.3)	(8.3)	(53.4)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$130.97
Market cap:	US$1937m
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	0.9	49.6	57.9
Relative*	(0.4)	51.1	51.3

* % Relative to local index

Analyst

Maxim Jacobs

GW Pharmaceuticals (GWP)

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 early next year. They have also recently commenced a Phase III in Tuberous Sclerosis Complex (TSC) and expect to commence a Phase III in infantile spasms in Q416.

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 (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	30.0	(17.0)	(18.3)	(6.4)	N/A	N/A
2015	28.5	(54.6)	(55.8)	(17.6)	N/A	N/A
2016e	8.8	(94.4)	(95.2)	(29.9)	N/A	N/A
2017e	11.4	(84.0)	(85.0)	(25.6)	N/A	N/A

Sector: Pharma & healthcare

Price:	1887.5p
Market cap:	£1145m
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	3.6	0.4	(27.5)
Relative*	8.5	3.0	(31.7)

* % 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. We expect progress of the mid- to late-stage pipeline during 2016-17 (including US and China regulatory filings) to catapult the company into the international spotlight. The pipeline is progressing well, material clinical results are expected during the coming year. The company has successfully raised net proceeds of approximately US$95.9m via a secondary listing of ADRs on the NASDAQ exchange. PBT excludes the earnings contributions from JVs, which in 2015 reported at $22.57m (as equity in investees, net of tax). Cash as of June 30th 2016 is $197.5m. The amended AstraZeneca agreement announced at the interim results is currently not reflected in our forecasts.

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)
2014	87.3	(17.0)	(20.0)	(17.8)	N/A	147.3
2015	178.2	(7.8)	(10.5)	14.6	160.3	N/A
2016e	180.4	(43.3)	(48.1)	(0.5)	N/A	N/A
2017e	226.0	(20.5)	(26.7)	6.0	390.1	N/A

Sector: Pharma & healthcare

Price:	€0.77
Market cap:	€28m
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	(11.5)	(13.5)	(36.4)
Relative*	(11.5)	(12.8)	(30.4)

* % Relative to local index

Analyst

Juan Pedro Serrate

Hybrigenics (ALHYG)

INVESTMENT SUMMARY

Hybrigenics has adopted a development strategy with vitamin D3 derivative inecalcitol, first 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. The investment case rests on inecalcitol's potential to enhance rather than replace approved therapies, particularly with inecalcitol's benign safety profile. Our peak sales estimate is US$769m. Cash at end June 2016 stood at €8.4m.

INDUSTRY OUTLOOK

An international Phase II study in AML has started recruiting patients in France in September 2016. Interim Phase II data are expected in 2016 in CML. The collaboration with Servier on ubiquitin-specific proteases is ongoing and the company received a milestone payment of €1.5m during H116. Hybrigenics will present new in vitro results on inecalcitol in multiple myeloma and acute myeloid leukemia on 4th December at the annual ASH meeting in San Diego, USA.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	6.8	(2.1)	(2.2)	(8.5)	N/A	N/A
2015	6.5	(3.6)	(3.6)	(10.6)	N/A	N/A
2016e	6.1	(6.0)	(5.9)	(16.6)	N/A	N/A
2017e	6.3	(6.4)	(6.5)	(18.1)	N/A	N/A

Sector: Pharma & healthcare

Price: SEK92.75
Market cap: SEK1559m
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	3.6	(20.4)	N/A
Relative*	6.1	(20.3)	N/A

* % 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. Pancreatic cancer is rare and difficult to treat, with a five-year survival rate of c 5%; early diagnosis could improve this 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. Cash at June 2016 was SEK59.7m cash plus SEK28m from Horizon 2020. The company raised SEK218.6m in September-October 2016.

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 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)
2014	0.4	(8.7)	(8.9)	(80.0)	N/A	N/A
2015	0.2	(7.1)	(7.4)	(65.0)	N/A	N/A
2016e	0.2	(10.4)	(10.2)	(69.0)	N/A	N/A
2017e	0.2	(10.8)	(10.7)	(64.0)	N/A	N/A

Sector: Pharma & healthcare

Price: 349.8p
Market cap: £564m
Market LSE

Share price graph (p)

Company description

Imperial 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	(16.6)	(15.4)	(28.1)
Relative*	(12.7)	(13.3)	(32.2)

* % Relative to local index

Analyst

Lala Gregorek

Imperial Innovations (IVO)

INVESTMENT SUMMARY

Imperial Innovations (IVO) has c £198.3m available for portfolio investment (end-July cash of £148.3m and a £50m EIB loan facility). IVO invested £66.9m across 33 portfolio companies in FY16 (FY15: £60.8m across 30), including in seven new accelerated growth companies. Net fair value loss for full year was £56.2m: an unquoted £10.7m net fair value gain and a quoted £66.9m net fair value loss (£54.8m loss attributable to Circassia following negative Phase III cat allergy results in June). The unquoted portfolio continues to progress well and shows growth though fair value gains and investment activity. The oncology portfolio of eight investments could be one such source of potential uplift in the coming years as these companies mature and approach value inflection points.

INDUSTRY OUTLOOK

The investment case rests on the real value of the portfolio and the success of investments in maturing companies. There is potential for significant value creation if 'exits' (IPOs/M&A/license deals) are achieved at valuations in excess of typically modest carrying values, which justifies IVO's current share price premium (net portfolio value of £335.1m as of 31 July 2016, vs £327.2m at 31 July 2015).

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:	NIS19.15
Market cap:	NIS219m
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	(6.0)	(14.5)	(15.8)
Relative*	(2.3)	(9.1)	(5.8)

* % 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. The company currently has two disclosed development programmes: AP-CDLD, a controlled release formulation of carbidopa and levodopa for Parkinson's in Phase III; and AP-ZP, a controlled release formulation of zaleplon for insomnia ready to enter Phase III though awaiting a strategic partner before doing so.

INDUSTRY OUTLOOK

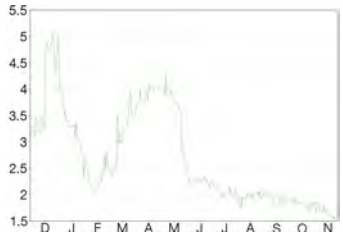
Parkinson's disease is a neurodegenerative disease in which the dopamine secreting neurons in the brain are lost, leading to severe motor defects and cognitive impairment. Approximately one million people in the US have Parkinson's.

Y/E Dec	Revenue (NISm)	EBITDA (NISm)	PBT (NISm)	EPS (NIS)	P/E (x)	P/CF (x)
2014	0.0	(22.8)	(20.4)	(4.22)	N/A	N/A
2015	0.0	(32.4)	(27.9)	(3.58)	N/A	N/A
2016e	0.0	(54.9)	(50.6)	(4.31)	N/A	N/A
2017e	0.0	(55.4)	(51.6)	(4.18)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.80
Market cap:	US$6m
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	(1.6)	(6.3)	(43.4)
Relative*	(2.9)	(5.3)	(45.7)

* % 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 expected before the end of the year. Preclinical safety data was recently published in Nature. 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 $8m in sales and $1.7m in underlying operating profit in 2015.

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 (fd) (c)	P/E (x)	P/CF (x)
2014	7.0	(9.1)	(8.7)	(970.82)	N/A	N/A
2015	7.6	(5.0)	(4.6)	(129.29)	N/A	N/A
2016e	8.2	(5.5)	(5.5)	(173.36)	N/A	N/A
2017e	9.0	(5.2)	(5.8)	(182.56)	N/A	N/A

Sector: Pharma & healthcare

Price:	€10.32
Market cap:	€144m
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) is in preclinical; a Phase I/II will start in H216.

Price performance

%	1m	3m	12m
Actual	(5.3)	(10.1)	(15.4)
Relative*	(4.1)	(8.0)	(10.9)

* % 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 is leveraging 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 is aiming for accelerated filing of ATIR101 with the European Medicines Agency (EMA) in Q117. A Phase III trial will start in H216. ATIR201 will start a Phase I/II trial in H216. Cash at end June 2016 was €23.7m, sufficient to fund operations until early 2018. We value the company at €327.3m or €27.1/share.

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 Diasease (GVHD). One year data (Event-Free Survival and Overall Survival) from Phase II clinical trial with ATIR101 will be presented at the American Society of Hematology 58th Annual Meeting in San Diego on December 5, 2016.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(6.0)	(7.2)	(7.5)	N/A	N/A
2015	0.0	(15.9)	(17.4)	(13.6)	N/A	N/A
2016e	0.0	(8.6)	(10.0)	(8.3)	N/A	N/A
2017e	0.0	(11.9)	(13.5)	(11.2)	N/A	N/A

Sector: Pharma & healthcare

Price:	€4.32
Market cap:	€111m
Market	FRA

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	(2.2)	(4.3)	(17.9)
Relative*	(3.0)	(3.6)	(16.0)

* % Relative to local index

Analyst

Dr Susie Jana

MagForce (MF6)

INVESTMENT SUMMARY

MagForce continues to drive forward its strategy to increase uptake of its NanoTherm therapy for cancer. NanoTherm is approved in Europe for brain cancer and commercial patients are being treated in Germany. Six NanoActivators are currently installed in Germany. In the US, an IDE for prostate cancer is filed and management is working with FDA to advance the IDE approval. The first clinical treatment site is operational (other sites are in development) and will be used in the short-term to provide the required pre-clinical study data. Note: Our financial forecasts have not been updated post publication of FY14 and FY15 results.

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)
2014	0.0	(8.0)	(7.9)	(32.8)	N/A	N/A
2015	2.6	(4.4)	(4.5)	(18.0)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	€8.40
Market cap:	€169m
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	(21.9)	19.6	49.5
Relative*	(22.5)	20.4	52.9

* % 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 others in 2017 and 2018. Recent important 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 held €43.6m cash at Q316, following a €46m equity issue (5.6m shares at €8.30) in July 2015.

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)
2014	13.8	(2.0)	(5.3)	(42.3)	N/A	N/A
2015	6.8	(9.4)	(12.8)	(73.5)	N/A	N/A
2016e	7.1	(11.1)	(13.1)	(66.0)	N/A	43.4
2017e	10.7	(8.8)	(10.2)	(50.3)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$1.18
Market cap:	A$448m
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	4.4	(18.7)	(65.5)
Relative*	6.7	(16.4)	(67.2)

* % Relative to local index

Analyst

Dr Dennis Hulme

Mesoblast (MSB)

INVESTMENT SUMMARY

Mesoblast cut its cash burn by 15% in FY16 to US$90m, and guided for a further ~25% reduction in FY17, which will give it headroom to fund the Phase III heart failure (HF) trial that Teva relinquished in June. It has ~12 months of cash runway plus a US$90m equity finance facility, which will give a further 12 months' runway. It expects to report interim analyses of three Phase III programmes by end Q117, including the HF trial. We value Mesoblast ahead of these potential catalysts at A$1.5bn (A$3.84 per share).

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, Lonza and Teva 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	6.8	(80.3)	(81.0)	(21.24)	N/A	N/A
2018e	9.0	(80.3)	(82.6)	(21.65)	N/A	N/A

Sector: Pharma & healthcare

Price:	119.5p
Market cap:	£58m
Market	LSE

Share price graph (p)

Company description

Midatech Pharma is an ambitious speciality pharmaceutical company, founded in 2000. The patented gold nanoparticle technology platform is developing therapeutics for several diseases such as diabetes and various cancers.

Price performance

%	1m	3m	12m
Actual	(0.7)	(8.3)	(55.9)
Relative*	4.0	(6.0)	(58.4)

* % Relative to local index

Analyst

Maxim Jacobs

Midatech Pharma (MTPH)

INVESTMENT SUMMARY

Midatech is a specialty pharma company with two key platforms focusing on commercializing and developing products in oncology, immunology & other therapeutic areas. The first is a drug conjugate delivery system based on gold nanoparticles. The second is a sustained release technology; proprietary microspheres that can be tailored to deliver a precise release profile for numerous drugs. An agreement is in place with Ophthotech to explore the use of the technology for sustained delivery formulations. It has also recently announced the dosing of a second patient for MTX110 in Diffuse Intrinsic Pontine Glioma, a very rare pediatric cancer. It currently markets a suite of oncology products in the US. Our forecasts are under review.

INDUSTRY OUTLOOK

The proprietary platforms develop products that address debilitating conditions with significant clinical needs. Applications that target larger market sizes are expected to be out-licensed for development and niche indications likely developed/marketed in-house.

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	0.2	(9.9)	(10.1)	(100.6)	N/A	N/A
2015	1.4	(12.7)	(11.0)	(34.9)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	€1.45
Market cap:	€49m
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 reinitiated on successful out-licensing of lefitolimod.

Price performance

%	1m	3m	12m
Actual	4.5	(20.0)	(59.3)
Relative*	3.7	(19.4)	(58.3)

* % 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; full enrollment is expected by Q117. Recruitment has completed for the 100-patient Phase II trial (IMPULSE) in small-cell lung cancer (SCLC) and initial data is expected in H117. The Phase I TEACH study to treat HIV (the first non-cancer study for MGN1703) has had its dosing regimen extended to six months; final results now expected mid 2017. A 60-patient Phase I combination study of MGN1703 with Yervoy in solid tumours is now being conducted by MD Anderson. Cash of €10.2m as of 30th September 2016 alongside the recently announced €16.1m cash raise should be sufficient to complete recruitment of IMPALA and reach top-line data from IMPULSE.

INDUSTRY OUTLOOK

Results for IMPALA are expected in 2018/19. Final overall survival (OS) data from IMPACT (Phase II in mCRC), and initial OS data from IMPULSE (expected H117) 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)
2014	0.0	(17.0)	(17.0)	(1.01)	N/A	N/A
2015	0.0	(20.4)	(20.5)	(0.99)	N/A	N/A
2016e	0.0	(20.8)	(20.8)	(0.85)	N/A	N/A
2017e	0.0	(20.6)	(20.7)	(0.61)	N/A	N/A

Sector: Pharma & healthcare

Price:	€46.23
Market cap:	€1227m
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	6.4	15.0	(18.6)
Relative*	5.5	15.8	(16.8)

* % Relative to local index

Analyst

Maxim Jacobs

MorphoSys (MOR)

INVESTMENT SUMMARY

MorphoSys has a broad portfolio with 110 total programmes, 14 of those proprietary, including 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 recently released blockbuster data for Guselkumab, an anti-IL-23 antibody, for psoriasis. Bimagrumab, partnered with Novartis, recently failed a Phase IIb/III trial in myositis, although other trials continue.

INDUSTRY OUTLOOK

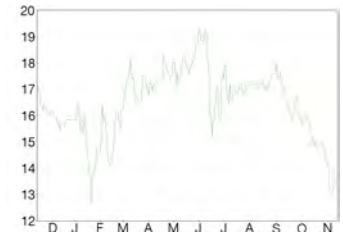
The pharmaceutical industry is out-licensing more drug discovery and developing more biological products, both trends that should benefit MorphoSys. Also, there is increasing demand for novel therapies, such as those in MorphoSys's proprietary pipeline.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	64.0	(1.8)	(1.6)	(1.3)	N/A	N/A
2015	106.2	21.4	22.1	62.8	73.6	N/A
2016e	48.6	(59.5)	(58.6)	(153.4)	N/A	N/A
2017e	56.0	(67.4)	(66.5)	(172.1)	N/A	N/A

Sector: Pharma & healthcare

Price:	€13.55
Market cap:	€212m
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	(12.1)	(20.8)	(18.4)
Relative*	(12.1)	(20.1)	(10.8)

* % Relative to local index

Analyst

Dr Jonas Peciulis

Nanobiotix (NANO)

INVESTMENT SUMMARY

In September, Nanobiotix announced a submission for the CE mark approval of the lead product, radiotherapy enhancer NBTXR3, with the guided review time of nine months. In October Nanobiotix's partner PharmaEngine has launched a new Phase I/II trial with NBTXR3 in head and neck (H&N) cancer patients. In July, Nanobiotix announced positive data from its own Phase I/II trial with H&N cancer patients, which is now the second indication with clinical data and the project can move into late stage. The first results from pre-clinical research in immuno-oncology area were released in May showing a promising proof-of-concept. Currently NBTXR3 is being investigated for a total of six indications including STS (Europe/Asia; Phase II/III; with PharmaEngine), liver cancers (Europe; HCC and metastases; Phase I/II), H&N cancers (Europe/Asia; Phase I/II) and rectal cancer (Phase I/II, run by PharmaEngine in Asia). We are updating our estimates.

INDUSTRY OUTLOOK

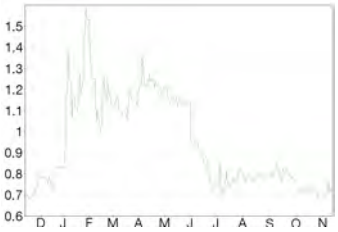
Radiotherapy is a cornerstone cancer treatment used in around 60% of all cancer patients. NanoXray aims to improve the benefits of current radiotherapy without increasing the risks to surrounding healthy tissue. The purely physical mechanism of action is supported by clinical data that have demonstrated encouraging efficacy with no serious adverse events.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	2.8	(9.3)	(9.5)	(74.14)	N/A	N/A
2015	4.0	(16.7)	(17.0)	(120.18)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharmaceutical & healthcare

Price:	€0.71
Market cap:	€31m
Market	Alternext Paris

Share price graph (€)



Company description

Neovacs is a French biotech company focused on the development of active immunotherapies for the treatment of lupus and dermatomyositis. A Phase II programme with IFN-alpha-Kinoid in lupus is underway.

Price performance

%	1m	3m	12m
Actual	0.0	(9.0)	4.5
Relative*	0.0	(8.3)	14.2

* % Relative to local index

Analyst

Dr John Savin

Neovacs (ALNEV)

INVESTMENT SUMMARY

Neovacs is running a Phase IIb trial on its lead immunotherapy project, IFN-Kinoid (IFN-K) for lupus. The US arm is being expanded from 5 to 15 centers due to strong clinical interest. Edison now expects the results from end of 2017; formerly mid-2017. Assuming trial success, CKD, the Korean partner, may start sales in 2018 but the main impact will be in 2019. Delays to the trial might cause the CKD €1.8m payment expected in 2017 to slip into 2018. Partnering for other territories is now expected from mid-2018. Cash in June 2015 was €9.2m. The H116 rights issue raised €8.2m gross at €0.85/share.

INDUSTRY OUTLOOK

There is a programme in dermatomyositis (DM), an orphan skin and muscular condition that the rights issue might help to fund in 2017. Neovacs plans to evaluate INF Kinoid in Type 1 diabetes and has set up a new academic collaboration. The important VEGF-Kinoid for cancer and AMD could start Phase I in H117.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	0.2	(9.6)	(9.8)	(31.6)	N/A	N/A
2015	1.2	(11.2)	(11.2)	(26.8)	N/A	N/A
2016e	0.0	(14.0)	(14.0)	(26.5)	N/A	N/A
2017e	1.8	(12.6)	(12.6)	(20.5)	N/A	N/A

Sector: Pcare & household prd

Price:	65.5p
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 heath (Wanda), diagnostics (Vortex, ProAxsis, Glycotest) and therapeutics (PDS Biotech).

Price performance

%	1m	3m	12m
Actual	(4.4)	(9.7)	(46.5)
Relative*	0.2	(7.4)	(49.6)

* % Relative to local index

Analyst

Maxim Jacobs

NetScientific (NSCI)

INVESTMENT SUMMARY

NetScientific has a focused portfolio of potentially disruptive biomedical and healthcare technology investments. 2015 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 five core investments in which it has controlling stakes (Vortex, Wanda, ProAxsis, Glycotest and Glucosense) 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)
2014	0.0	(6.4)	(6.2)	(15.3)	N/A	N/A
2015	0.1	(11.5)	(11.3)	(24.4)	N/A	N/A
2016e	1.0	(20.0)	(19.9)	(29.2)	N/A	N/A
2017e	4.1	(18.1)	(18.8)	(27.8)	N/A	N/A

Sector: Pharma & healthcare

Price: CHF19.40
Market cap: CHF306m
Market Swiss Stock Exchange

Share price graph (CHF)

Company description

Newron is a CNS-focused biotech. Safinamide/Xadago (partnered with Zambon, US WorldMeds, Meiji Seika) for PD has been launched in Europe. The Sarizotan (Rett syndrome) pivotal trial STARS (Sarizotan Treatment of Apneas in Rett Syndrome) has initiated.

Price performance

%	1m	3m	12m
Actual	(3.7)	(3.5)	(26.1)
Relative*	(0.6)	1.6	(16.7)

* % 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 11 European countries and further launches are expected this year. It is now generating sales through commercial partner Zambon (ex-Japan/Asia). In the US, Xadago's NDA has been re-submitted (PDUFA date 21st March 2017); FDA do not require additional clinical trials to be conducted. Other pipeline assets include sarizotan for Rett syndrome, the IND has been approved in the US and pivotal trial STARS (placebo-controlled Phase II/III trial) to investigate breathing disorders associated with RS has initiated. Data from the Phase II study of evenamide (NW-3509) for schizophrenia as an add-on to anti psychotics is expected in Q416. Newron recently raised CHF26.1m in a private placement that it expects will help fund operations through 2018.

INDUSTRY OUTLOOK

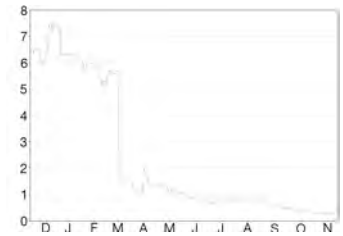
Parkinson's disease is a growing market. Xadago could have a unique position, with once-a-day dosing and a clean safety profile.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.6	(9.1)	(8.6)	(62.72)	N/A	N/A
2015	2.4	(17.6)	(18.3)	(117.21)	N/A	N/A
2016e	2.1	(23.6)	(23.3)	(147.51)	N/A	N/A
2017e	6.4	(11.7)	(11.3)	(71.77)	N/A	N/A

Sector: Pharma & healthcare

Price: €0.32
Market cap: €5m
Market NASDAQ OMX First North

Share price graph (€)



Company description

Nexstim sells a non-invasive brain stimulation technology (nTMS) used as a diagnostic device for brain surgery planning (NBS System). The therapy system (NBT) failed in Phase III for stroke but an FDA submission is planned

Price performance

%	1m	3m	12m
Actual	(10.3)	(64.1)	(95.0)
Relative*	(7.5)	(63.2)	(94.9)

* % Relative to local index

Analyst

Dr John Savin

Nexstim (NXTMH)

INVESTMENT SUMMARY

Nexstim has announced that the FDA requires further data on stroke rehabilitation and that a limited additional study using a different sham comparator will be required. Nexstim estimates that the trial design will be approved by the FDA in H1 2017. Phase III data showed that 66% of treated patients achieved the primary endpoint, but also that 'active' sham patients showed a similar response. Nexstim is financed until 2018 due to a SEDA and loan deal with Bracknor and Sitra; June 2016 cash was €1.8m. Cost savings of €2.3m/year have been implemented. There are now 19.6m shares in issue in the course of the funding agreement with Bracknor and Sitra.

INDUSTRY OUTLOOK

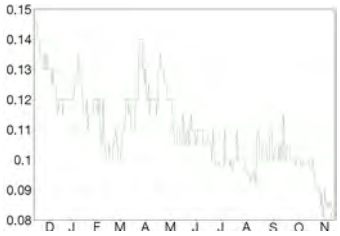
Nexstim has developed a technology platform for diagnosis (NBS) and treatment (NBT) of vital motor and speech cortices in the brain. The system is CE marked and can be sold in the EU. Sales of NBS will be by distributors so management expect reduced revenues in 2016. A new indication for spinal cord injury treatment is being developed.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	2.2	(7.4)	(10.2)	(143.0)	N/A	N/A
2015	2.5	(10.0)	(9.6)	(119.0)	N/A	N/A
2016e	2.1	(7.7)	(8.3)	(91.0)	N/A	N/A
2017e	2.6	(5.2)	(5.4)	(40.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.08
Market cap:	A$40m
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	(17.0)	(21.0)	(40.7)
Relative*	(15.2)	(18.7)	(43.6)

* % Relative to local index

Analyst

Dr Dennis Hulme

Novogen (NRT)

INVESTMENT SUMMARY

Novogen is developing three groups of anti-cancer compounds. The company has recently licensed GDC-0084, a PI3K inhibitor from Genentech. The molecule is phase II-ready and intended for glioblastoma. To move forward with this programme, the company has acquired neuro-oncology company Glioblast for AU$2.1m plus milestones. The company will transfer the IND from Genentech and design the Phase II study in the upcoming months. 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. Its lead anti-tropomyosin drug, Anisina, shows strong synergy with SoC anti-mitotic vinca alkaloid drugs. Anisina has orphan drug designation for neuroblastoma by the US FDA. The company has AU$33.4m cash at June 2016 and is on track to have Cantrixil in clinical trials in Q416 (IND approved) and Anisina in the clinic in 2017.

INDUSTRY OUTLOOK

Novogen is a biotechnology company listed on the ASX and NASDAQ. Its two main drug technology platforms are super-benzopyrans (SBP) and anti-tropomyosins (ATM). SBP compounds show potent activity against cancer stem cells and also have potential application in degenerative diseases.

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	4.9	(20.4)	(19.9)	(4.64)	N/A	N/A
2018e	4.7	(31.8)	(31.6)	(7.36)	N/A	N/A

Sector: Pharma & healthcare

Price:	€2.41
Market cap:	€113m
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 Validive). Royalty-earning Beleodaq (belinostat) is launched in the US, along with two non-core, partnered, specialty products.

Price performance

%	1m	3m	12m
Actual	(7.3)	(24.5)	(40.3)
Relative*	(7.3)	(23.9)	(34.8)

* % Relative to local index

Analyst

Dr Jonas Peciulis

Onxeo (ONXEO)

INVESTMENT SUMMARY

With its Q316 results, Onxeo reported that R&D is progressing according to plan. Onxeo is making progress with the development of the first-in-class AsiDNA, a signal-interfering DNA repair technology, which should move into clinic in 2017. A preclinical study showed that AsiDNA could potentially be combined with existing PARP inhibitors. A second lead product, Livatag, is in Phase III. ReLive and liver cancer data are expected in mid-2017. The 400-patient trial, which began in 2012, is >90% enrolled. Onxeo's third lead asset, 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. In September Onxeo raised gross €12.5m boosting its cash position to around €34m at end Q316.

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 (fd) (c)	P/E (x)	P/CF (x)
2014	22.1	(4.5)	0.2	(5.03)	N/A	N/A
2015	3.5	(20.4)	(20.0)	(43.53)	N/A	N/A
2016e	3.5	(21.6)	(21.5)	(52.06)	N/A	N/A
2017e	8.7	(16.6)	(16.8)	(40.55)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$0.58
Market cap:	US$4m
Market	NASDAQ

Share price graph (US$)

Company description

Opexa is developing personalized T-cell immunotherapy to treat multiple sclerosis (MS) and other autoimmune diseases such as neuromyelitis optica (NMO). Lead candidate Tcelna is in Phase IIb studies for secondary progressive MS (SPMS), with data expected in Q416.

Price performance

%	1m	3m	12m
Actual	(85.3)	(86.2)	(82.8)
Relative*	(85.5)	(86.0)	(83.5)

* % Relative to local index

Analyst

Pooya Hemami

Opexa Therapeutics (OPXA)

INVESTMENT SUMMARY

Opexa's reported in October 2016 that its lead program Tcelna did not meet the primary endpoint in the Phase IIb Abili-T trial in secondary progressive MS (SPMS). Tcelna is a patient-specific (autologous) immunotherapy that aims to suppress myelin-reactive T-cells (MRTCs) and curb autoimmune responses against myelin. Secondary analyses are underway and the company is also seeking strategic options, and it also announced a 40% workforce reduction. Opexa has sufficient resources to maintain operations into Q117.

INDUSTRY OUTLOOK

Opexa has also been developing OPX-212 in neuromyelitis optica (NMO), a rare autoimmune disorder leading to vision loss and paralysis. Opexa believes it has mostly overcome the manufacturing challenges faced by this program, although we estimate it will need to secure additional funding or partnerships to start OPX-212 human studies.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	1.3	(14.7)	(15.1)	(432.9)	N/A	N/A
2015	2.6	(11.7)	(12.1)	(206.5)	N/A	N/A
2016e	27.0	15.7	15.4	218.9	0.3	0.3
2017e	0.0	(14.3)	(14.3)	(188.5)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$2.53
Market cap:	US$37m
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	(15.1)	(39.2)	(90.7)
Relative*	(16.2)	(38.6)	(91.1)

* % 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. The company is now marketing the drug with a new dedicated salesforce of 160 reps. Contrave is approved under the brand Mysimba in most international markets. It was launched in South Korea by partner Kwang Dong. Partner Valeant has launched in 5 CEE countries so far and will launch in a further 6 countries by year end. Launch in Spain through partner ROVI is expected in January.

INDUSTRY OUTLOOK

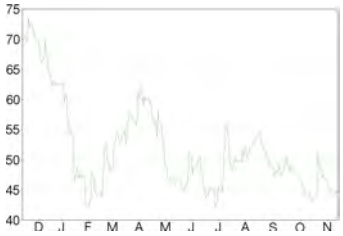
Orexigen is a biopharmaceutical company focusing on obesity treatments. Contrave was launched in the US in October 2014 and approved in the EU in March 2015, under the trade name Mysimba.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	55.5	(30.7)	(37.5)	(317.36)	N/A	1.1
2015	24.5	(60.3)	(67.3)	(523.81)	N/A	N/A
2016e	116.7	(89.7)	(63.3)	(431.49)	N/A	N/A
2017e	87.3	(95.2)	(110.7)	(716.09)	N/A	N/A

Sector: Pharma & healthcare

Price: SEK44.00
Market cap: SEK1520m
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.

Price performance

%	1m	3m	12m
Actual	(1.4)	(17.8)	(35.8)
Relative*	1.0	(17.7)	(34.6)

* % Relative to local index

Analyst

Lala Gregorek

Orexo (ORX)

INVESTMENT SUMMARY

Orexo's Q316 results delivered positive momentum in Zubsolv revenues and market share. Exclusive preferred status on Maryland FFS Medicaid from July boosted Zubsolv's market share in the public segment by 1.4pp. In the coming quarters we expect further US market share gains. Orexo is targeting a disproportionally higher share of new patients embarking on opioid dependence treatment, enabled by continued salesforce optimisation. The impact of the US Department of Health and Human Services' (HHS) increased 275 patient cap coupled with the Comprehensive Addiction and Recovery Act (CARA 2016) implementation from H217 and ongoing progress in improving market access will support this. Nevertheless, the share price performance remains muted ahead of a Q416 court decision on the Actavis IP litigation.

INDUSTRY OUTLOOK

The US buprenorphine/naloxone market is worth >$2bn. 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)
2014	570.3	(12.5)	(52.6)	(165.0)	N/A	N/A
2015	643.2	(88.4)	(191.2)	(573.0)	N/A	N/A
2016e	728.1	86.3	42.8	105.0	41.9	5.5
2017e	898.8	173.1	153.7	255.0	17.3	5.8

Sector: Pharma & healthcare

Price: €2.85
Market cap: €81m
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	(4.4)	(3.1)	N/A
Relative*	(3.8)	(2.2)	N/A

* % Relative to local index

Analyst

Dr Jonas Peciulis

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) and currently is in Phase I/IIa for acute leukaemia, with the results expected to be presented at ASH in December 2016. LSD1 is a key effector causing arrest in cell differentiation in subtypes of acute myeloid leukaemia and that the inhibition could potentially lead to an effective treatment. ORY-1001 is partnered with Roche, which can take over further development after the end of the Phase I/IIa. Oryzon's second product, ORY-2001, targets Alzheimer's disease (AD) and has entered a Phase I trial in early 2016. Preclinical data also support its use in multiple sclerosis. ORY-3001 has been recently revealed as the third product to enter pre-clinical development in non-oncological indications.

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)
2014	15.5	11.7	11.3	48.32	5.9	5.5
2015	7.2	0.7	(0.1)	(0.58)	N/A	64.9
2016e	4.8	(3.8)	(4.9)	(15.79)	N/A	N/A
2017e	2.8	(5.3)	(6.2)	(21.85)	N/A	N/A

Sector: Pharma & healthcare

Price:	3.4p
Market cap:	£106m
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	11.0	(19.3)	(52.7)
Relative*	16.3	(17.2)	(55.4)

* % Relative to local index

Analyst

Dr Susie Jana

Oxford BioMedica (OXB)

INVESTMENT SUMMARY

We expect pipeline focus in the near term as OXB aims to optimise development via out-licensing or externally funded SPVs; Phase I/II studies for OXB-102 (Parkinson's disease), OXB-202 (corneal graft rejection) and OXB-302 (CAR-T 5T4) for solid cancers. The newly announced strategy takes into account the balance of risk versus reward for stakeholders (against the backdrop of the significant financial resources required over the next two to three years to advance OXB's value, driving assets to the next stage). The expansion of the manufacturing capacity for third parties (e.g Novartis's CTL019/CART-019) is now complete; with Novartis indicating a 2017 filing for CTL019, Oxford should start earning royalties and substantial manufacturing fees (up to $76m over three years). The recent net £10m equity fund-raising will extend the current cash runway beyond 2017 due to reduced R&D expenditure; further funding and value may arise from additional manufacturing or IP licensing deals.

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)
2014	13.6	(9.5)	(10.4)	(0.41)	N/A	N/A
2015	15.9	(12.5)	(16.6)	(0.49)	N/A	N/A
2016e	27.5	(6.8)	(13.6)	(0.34)	N/A	N/A
2017e	33.6	(1.0)	(8.7)	(0.15)	N/A	N/A

Sector: Pharma & healthcare

Price:	NZ$0.46
Market cap:	NZ$176m
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	0.0	(20.7)	12.2
Relative*	6.4	(11.6)	4.9

* % Relative to local index

Analyst

Maxim Jacobs

Pacific Edge (PEB)

INVESTMENT SUMMARY

Pacific Edge's lead product, Cxbladder Detect, is a molecular diagnostic for the early detection and management of bladder cancer in patients with haematuria. Launched in the US, New Zealand and Australia, we expect news related to the success of numerous User Programmes over the next 12 months. Kaiser Permanente Southern California is recruiting c 2,000 patients in a large User Programme, evaluating follow-on diagnostic test Cxbladder Triage. In late February, 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.

INDUSTRY OUTLOOK

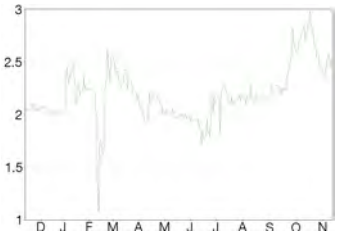
Molecular diagnostics is a growing, but increasingly competitive field. Lead time from the initiation of user programmes to payment can be long.

Y/E Mar	Revenue (NZ$m)	EBITDA (NZ$m)	PBT (NZ$m)	EPS (c)	P/E (x)	P/CF (x)
2015	3.6	(10.5)	(11.1)	(3.5)	N/A	N/A
2016	6.4	(14.9)	(15.5)	(4.1)	N/A	N/A
2017e	11.4	(6.7)	(7.4)	(1.9)	N/A	N/A
2018e	24.4	4.7	4.0	0.6	76.7	30.7

Sector: Pharma & healthcare

Price:	€2.54
Market cap:	€141m
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	(6.5)	18.1	16.9
Relative*	(7.3)	18.9	19.5

* % Relative to local index

Analyst

Dr Dennis Hulme

Paion (PA8)

INVESTMENT SUMMARY

Paion reported positive top-line results from the first of two US pivotal studies of short-acting anaesthetic remimazolam in procedural sedation, and has out-licensed US rights to Cosmo Pharmaceuticals for c €20m of cash, €42.5m potential milestones and a 20-25% royalty. In the pivotal trial 91% of patients in the remimazolam arm achieved the primary outcome vs 1.7% on placebo, while the safety profile was consistent with previous studies. Recruitment in the second Phase III, in bronchoscopy patients, is expected to complete in Q217. Planned changes in the US reimbursement of day procedures favouring less supervision by anaesthetists could incentivise gastroenterologists to use remimazolam. Japan's PMDA advised that the data packages for remimazolam for general anaesthesia were ready for filing (we expect filing in H217). The €35.9m cash at 30 September is sufficient to complete ongoing Phase III development and preparation of filing for procedural sedation in the US (we anticipate filing in 2018).

INDUSTRY OUTLOOK

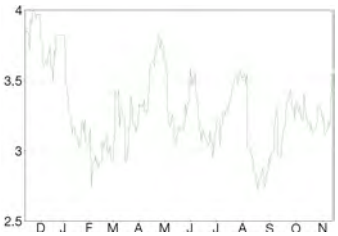
Remimazolam has important advantages over competing products, including fast onset and offset of action with lower risk of cardiopulmonary events than the standard of care midazolam and propofol, and a reversal agent exists if there is over sedation.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	3.5	(11.5)	(11.6)	(22.9)	N/A	N/A
2015	0.1	(34.1)	(34.0)	(55.7)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	US$3.58
Market cap:	US$593m
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	8.8	21.8	(7.3)
Relative*	7.4	23.0	(11.1)

* % 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 (of which they own >88%) on a high margin basis. This strategy allows investors to gain exposure in healthcare through a relatively low-risk, diversified vehicle. Weakness in debt and equity markets has led to more opportunities to invest for the company than ever.

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)
2014	581.2	546.3	501.3	203.66	1.8	1.9
2015	590.4	550.4	530.1	203.69	1.8	1.9
2016e	224.9	154.8	134.5	53.27	6.7	8.4
2017e	197.9	98.5	72.5	31.61	11.3	53.1

Sector: Pharma & healthcare

Price: €2.46
Market cap: €547m
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	(11.2)	(5.6)	(36.3)
Relative*	(10.6)	(4.7)	(23.4)

* % Relative to local index

Analyst

Dr Dennis Hulme

PharmaMar (PHM)

INVESTMENT SUMMARY

Following restructuring in late-2015 PharmaMar is focused on its potentially high-growth marine oncology activities. It has built a pipeline of first-in-class cancer drugs for development with strategic partners. Royalty income flowing from Yondelis for soft tissue sarcoma in Japan and the US (approved in September and October 2015, respectively) should drive strong profit growth from 2017. EMA acceptance of the Aplidin MAA (multiple myeloma) means potential EU approval is on track for H217; a pivotal study of Aplidin in angioimmunoblastic T-cell lymphoma, the lead US indication, was initiated in June. The 420-patient CORAIL Phase III of PM1183 in platinum-resistant ovarian cancer has completed recruitment and passed an interim futility analysis (n=210). A second pivotal study of PM1183 started in August; the 600-patient Phase III ATLANTIS study will evaluate PM1183 in combination with doxorubicin in patients with small cell lung cancer. A Phase II trial of the drug in BRCA 1/2 breast cancer achieved a 41% ORR.

INDUSTRY OUTLOOK

PharmaMar's oncology portfolio has been validated through multiple global partnerships, eg J&J in the US and Taiho in Japan (over 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)
2014	149.7	25.7	16.3	6.8	36.2	23.3
2015	162.0	19.3	6.5	3.2	76.9	53.6
2016e	169.6	(7.8)	(19.6)	(9.5)	N/A	N/A
2017e	181.7	15.1	3.6	0.9	273.3	43.3

Sector: Pharma & healthcare

Price: NOK37.00
Market cap: NOK797m
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	(5.4)	(25.3)	(2.9)
Relative*	(5.3)	(27.1)	(0.9)

* % Relative to local index

Analyst

Maxim Jacobs

Photocure (PHO)

INVESTMENT SUMMARY

Photocure specialises in photodynamic therapy. Its bladder cancer imaging product is sold as Hexvix in Europe and Cysview in the US. It improves detection rates and helps prolong recurrence-free survival. Photocure handles the marketing in Nordic countries and the US, while Ipsen is its marketing partner in the EU. Cevira is a Phase III-ready product for HPV-related diseases of the cervix and Visonac is a Phase III-ready product for acne. Both Cevira and Visonac are the subject of partnership discussions.

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 (fd) (öre)	P/E (x)	P/CF (x)
2014	129.0	(4.2)	1.5	7.0	528.6	N/A
2015	134.7	(18.1)	(17.4)	(82.0)	N/A	N/A
2016e	132.6	(16.5)	(21.3)	(99.0)	N/A	N/A
2017e	150.4	(8.7)	(13.4)	(61.0)	N/A	208.7

Sector: Pharma & healthcare

Price:	€5.93
Market cap:	€76m
Market	Euronext Paris

Share price graph (€)

Company description

Pixium is a French medical device company developing retinal implants for patients with complete vision loss. Its lead product Iris is an epi-retinal implant scheduled for CE mark approval in mid-2016; a sub-retinal implant (Prima) is in pre-clinical.

Price performance

%	1m	3m	12m
Actual	(0.5)	(20.1)	18.8
Relative*	(0.5)	(19.5)	29.9

* % 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 restore vision 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 and interim 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 Q416. Pixium held €17.3m in cash at 30 September 2016 and recently 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)
2014	2.4	(10.8)	(11.6)	(118.43)	N/A	N/A
2015	3.3	(14.6)	(15.6)	(122.88)	N/A	N/A
2016e	2.9	(13.3)	(14.2)	(111.13)	N/A	N/A
2017e	5.5	(12.9)	(15.3)	(119.61)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.10
Market cap:	A$21m
Market	ASX

Share price graph (A$)

Company description

Prescient Therapeutics (previously Virax) is an ASX-listed biotechnology company focused on developing novel products for the treatment of cancer. It has two products, PTX-100 and PTX-200 in clinical development for a range of cancers.

Price performance

%	1m	3m	12m
Actual	(4.8)	(4.8)	40.5
Relative*	(2.7)	(2.1)	33.6

* % Relative to local index

Analyst

Dr Dennis Hulme

Prescient Therapeutics (PTX)

INVESTMENT SUMMARY

Prescient is developing two promising anti-cancer compounds that target major tumour survival pathways. The company's most advanced compound, PTX-200, is in Phase Ib/II trials in breast and ovarian cancers, while a Phase Ib trial in acute myeloid leukaemia is also planned. The breast cancer study has identified the recommended Phase II dose, and researchers have initiated an expansion cohort in 12 patients to better characterise the safety profile. The second drug, PTX-100, is expected to begin a Phase Ib trial in breast cancer in 2017. Cash as of 30th September was A$10.4m. We are currently updating our model for FY16 results.

INDUSTRY OUTLOOK

PTX-200 is a specific inhibitor of Akt, a key component of one of the Ras signalling pathways. The three Ras genes in humans (HRAS, KRAS and NRAS) are the most common oncogenes in human cancer; mutations that permanently activate Ras are found in 20-25% of all human tumours. Celator Pharmaceuticals saw its stock price increase 10-fold after reporting positive results in a Phase III AML trial in March 2016, highlighting the strong interest in potential new AML drugs. Celator was subsequently acquired by Jazz Pharmaceuticals for c US$1.5bn.

Y/E Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(1.8)	(1.8)	(5.94)	N/A	N/A
2015	0.3	(2.1)	(2.1)	(4.28)	N/A	N/A
2016e	0.2	(2.0)	(1.9)	(2.57)	N/A	N/A
2017e	0.3	(10.1)	(10.0)	(10.70)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.04
Market cap:	A$73m
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	(7.9)	(10.3)	(30.0)
Relative*	(5.9)	(7.7)	(33.4)

* % Relative to local index

Analyst

Dr Dennis Hulme

Prima BioMed (PRR)

INVESTMENT SUMMARY

Prima BioMed has a pipeline of four clinical assets (one partnered with GSK and a second partnered with Novartis), the three most promising ones based on a promising and versatile immunotherapy target Lymphocyte activation gene-3, LAG-3. The lead in-house LAG-3 product, IMP321, is being developed initially in metastatic breast cancer in combination with chemotherapy (211-patient randomised Phase IIb initiated Q415) and in melanoma in combination with the anti-PD1 checkpoint inhibitor, Keytruda (Phase I initiated January 2016). Novartis and GSK have commenced clinical trials of partnered LAG-3 programmes, providing additional validation for the LAG-3 technology. Prima out-licensed its CVac dendritic vaccine, which improved overall survival in second remission ovarian cancer patients in the CAN-003 Phase II trial, to US-based Sydys in April 2016. We are currently updating our model for FY16 results.

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)
2014	2.0	(14.0)	(13.3)	(1.1)	N/A	N/A
2015	1.3	(13.3)	(12.9)	(0.9)	N/A	N/A
2016e	2.2	(13.8)	(15.1)	(0.9)	N/A	N/A
2017e	1.1	(15.1)	(14.7)	(0.7)	N/A	N/A

Sector: Pharma & healthcare

Price:	€18.70
Market cap:	€153m
Market	Euronext Amsterdam

Share price graph (€)

Company description

Probiodrug 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	(4.3)	(6.1)	(6.5)
Relative*	(3.1)	(3.9)	(1.5)

* % Relative to local index

Analyst

Dr Jonas Peciulis

Probiodrug (PBD)

INVESTMENT SUMMARY

Probiodrug 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 glutaminyl cyclase, which is essential for the formation of pGlu-Abeta. Recruitment is on track for the Phase IIa study, SAPHIR, in early AD, with the full results including exploratory efficacy data in Q117/Q217. Recently, Probiodrug announced positive results from the first combination study of PQ912 with the second product specific monoclonal antibody PBD-C06, which showed an additive effect in lowering toxic Abeta. The capital raise of €14.9m in September extends the cash runway well beyond the SAPHIR data readout, when Probiodrug may seek to partner PQ912.

INDUSTRY OUTLOOK

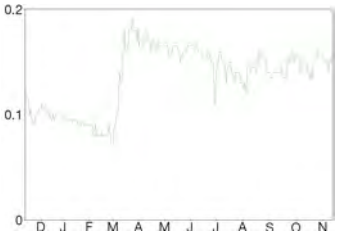
There are 44m dementia sufferers worldwide, 60% of whom have AD. The lack of disease-modifying therapies leaves a vast unmet clinical need. This, combined with increasing understanding of the disease process and the development of biomarkers, has led to increased optimism that a disease-modifying therapy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

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(11.2)	(11.4)	(234.69)	N/A	N/A
2015	0.0	(13.3)	(13.5)	(196.10)	N/A	N/A
2016e	0.0	(14.3)	(14.2)	(181.58)	N/A	N/A
2017e	0.0	(11.0)	(11.0)	(134.70)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$0.15
Market cap:	A$32m
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	6.9	6.9	34.8
Relative*	9.2	9.9	28.2

* % Relative to local index

Analyst

Dr Dennis Hulme

Regeneus (RGS)

INVESTMENT SUMMARY

Regeneus is developing and commercialising its adipose-derived mesenchymal stem cell technology for musculoskeletal conditions in animals and humans. In May 2016, the company announced the completion of enrolment of all 20 patients in the STEP randomised Phase I/II study of Progenza (allogeneic) in human osteoarthritis, and confirmed no safety concerns had been identified. Recent Japanese legislation offers an accelerated path to market for regenerative medicine products and the company is currently working to finalise manufacturing and clinical development partnerships in Japan. Regeneus also holds global rights to autologous cancer vaccine technologies for human (RGSH4K - Phase I began in Q215) and veterinary (Kvax) applications. Cash at 30 September was A$1.5m.

INDUSTRY OUTLOOK

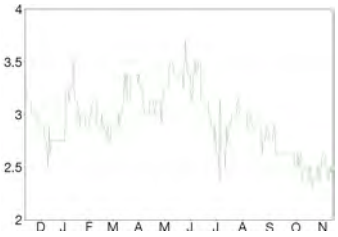
Regeneus has firmed up its strategy to partner its product opportunities for development and commercialisation, allowing it to focus on early-stage product development. It has partnered with a top-5 global animal health company for development of CryoShot Canine, and will seek to identify wider applications of its off-the-shelf Progenza human stem cells, beyond the initial development for osteoarthritis. Cancer immunotherapy, including cancer vaccines such as RGSH4K, is a biotech hotspot.

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	2.0	(6.1)	(3.6)	(1.73)	N/A	N/A
2018e	2.6	(5.6)	(3.2)	(1.53)	N/A	N/A

Sector: Pharma & healthcare

Price:	2.5p
Market cap:	£79m
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	0.0	(13.0)	(25.9)
Relative*	4.8	(10.8)	(30.1)

* % Relative to local index

Analyst

Dr Linda Pomeroy

ReNeuron Group (RENE)

INVESTMENT SUMMARY

ReNeuron is funded (£65.7m in cash at 31 March 2016) to undertake pivotal studies with two cell therapy-based programmes. This includes the CTX neural stem cell programme (a 21-patient Phase II study ongoing in stroke disability and six-patient Phase I for critical limb ischaemia) and the hRPC (human retinal progenitor cells) programme for retinitis pigmentosa (a 15-patient Phase I/II trial is underway in the US). ReNeuron recently announced promising early pre-clinical data for its exosome nanomedicine platform in oncology, with the first clinical target being glioblastoma multiforme. The company recently relocated to a new GMP cell manufacturing and research facility in South Wales (funded by a £7.8m Welsh government grant).

INDUSTRY OUTLOOK

Stroke is a high-risk indication, but ReNeuron is attempting to demonstrate a meaningful reduction in disability that would offer a compelling case for further development and/or partnering (Initial three month follow-up data from its Phase IIa stroke study will be presented at H116 results (5th Dec), which will determine next steps). The hRPC programme has Orphan (EU/US) and Fast Track (US) designation with a potentially pivotal Phase II/III study planned for 2017.

Y/E Mar	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2015	0.0	(10.3)	(10.3)	(0.50)	N/A	N/A
2016	0.0	(13.6)	(12.8)	(0.44)	N/A	N/A
2017e	0.0	(27.1)	(26.7)	(0.74)	N/A	N/A
2018e	0.0	(32.8)	(32.6)	(0.91)	N/A	N/A

Sector: Pharma & healthcare

Price: 24.00PLN
Market cap: PLN323m
Market Warsaw Stock Exchange

Share price graph (PLN)

Company description

Selvita is a drug discovery services provider based in Poland. 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	(7.2)	8.8	(4.0)
Relative*	(8.9)	12.0	8.0

* % Relative to local index

Analyst

Dr Jonas Peciulis

Selvita (SLV)

INVESTMENT SUMMARY

Selvita is a rapidly emerging drug discovery and research services company. Operating off a solid base from its profitable contract research business, the company is also developing its own novel oncology compounds, currently self-financed but potentially through partnerships. Most advanced are two preclinical kinase inhibitor programmes: SEL24 (dual PIM/FLT3 inhibitor, for AML) expected to enter Phase I in Q416, and SEL120 (CDK8 inhibitor, colon cancer and other malignancies) about to begin IND-enabling studies and potentially move to Phase I in 2017. Multiple collaborations signed with partners such as Merck KGaA, H3 Biomedicine (Eisai) and most recently joint venture with Epidarex Capital to form Nodthera validate Selvita's research capabilities. Cash of PLN27m at end of October 2016, bolstered by profits from research service contracts, is sufficient to fund current activities.

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)
2014	41.6	7.6	5.4	55.91	42.9	N/A
2015	56.1	10.2	7.6	83.58	28.7	N/A
2016e	66.3	5.9	3.6	23.58	101.8	N/A
2017e	76.6	9.9	5.8	42.32	56.7	N/A

Sector: Pharma & healthcare

Price: 113.0p
Market cap: £79m
Market AIM

Share price graph (p)

Company description

Silence Therapeutics is a leading UK RNA therapeutics development company, with proprietary RNA interference (RNAi) technology and delivery systems. It is expanding into targeted gene editing technology (using the CRISPR/Cas9 system) and non-liposomal conjugation delivery systems.

Price performance

%	1m	3m	12m
Actual	(8.5)	(2.0)	(35.4)
Relative*	(4.1)	0.5	(39.1)

* % Relative to local index

Analyst

Dr Linda Pomeroy

Silence Therapeutics (SLN)

INVESTMENT SUMMARY

Silence Therapeutics is a leading RNA therapeutics development company, with proprietary RNA interference (RNAi) technology and delivery systems. It has a broad genetic toolkit enabling the key areas of RNA therapeutics, siRNA (silencing genes) and mRNA (upregulating genes). It is able to use its platform to target a wide range of tissues and therefore potential indications. It is also applying its platform technology to gene editing, an area of high focus and potential. Silence already has a licence deal with Quark for its AtuRNAi technology, which has recently progressed into a Phase III clinical trial in delayed graft function (DGF) and Phase II for acute kidney injury (AKI). Silence held €47.6m in cash at H116, following a c £40m equity issue in 2015.

INDUSTRY OUTLOOK

RNA therapeutics is an increasingly high profile sector of the biotechnology industry. Improvements in technology and a growing body of clinical evidence has created a resurgence of interest in the sector. Developments in RNA therapeutics now offer a number of options, which are being used to target a number of disease areas. RNA therapies are potentially going to be in the market in the next couple of years.

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	0.0	(11.8)	(11.7)	(21.51)	N/A	N/A
2015	0.0	(9.6)	(9.4)	(10.38)	N/A	N/A
2016e	0.0	(11.2)	(11.1)	(13.95)	N/A	N/A
2017e	0.0	(14.0)	(14.1)	(17.77)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.11
Market cap:	US$18m
Market	NASDAQ

Share price graph (US$)

Company description

StemCells is focused on developing and commercialising stem cell-based therapeutics. Its lead product, HuCNS-SC (human neural stem cells), is in clinical development for spinal cord injury and age-related macular degeneration.

Price performance

%	1m	3m	12m
Actual	8.8	198.3	(78.2)
Relative*	7.4	201.2	(79.1)

* % Relative to local index

Analyst

Maxim Jacobs

StemCells (STEM)

INVESTMENT SUMMARY

StemCells Inc. is a development stage cell therapy company. After initially reporting highly encouraging data from the first cohort of its Phase II PATHWAY study in spinal cord injury (SCI), the company announced that an interim analysis of the second cohort suggested that the trial was unlikely to succeed. Hence, they announced an orderly wind-down of operations. Subsequent to that, they announced a strategic merger with Microbot Medical, a robotics based medical device company.

INDUSTRY OUTLOOK

StemCells is a US company developing stem cell-based therapeutics. Stemcells' HuCNS-SC are allogeneic cells derived from donor human neural stem cells, adopting a homologous approach.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.0	(32.2)	(32.2)	(6.8)	N/A	N/A
2015	0.1	(37.5)	(36.8)	(4.6)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	€45.00
Market cap:	€534m
Market	Deutsche Börse

Share price graph (€)

Company description

Stratec designs and manufactures OEM diagnostic instruments. Design and assembly of systems from modules is in Germany and Switzerland. It now has five subsidiary businesses.

Price performance

%	1m	3m	12m
Actual	(16.2)	(15.8)	(13.6)
Relative*	(16.9)	(15.2)	(11.7)

* % Relative to local index

Analyst

Dr John Savin

Stratec Biomedical (SBS)

INVESTMENT SUMMARY

Stratec has completed the acquisition of an Austrian business, Sony DADC Biosciences, that designs and manufactures complex precision consumables for high-end biomedical and diagnostic systems. This is an excellent strategic fit as it allows Stratec to integrate high-value consumables into system designs and accumulate recurring revenues: Stratec expects 2016 sales to increase to between €175m and €182m following the time apportioned consolidation of Diatron and STRATEC Consumables. An EBIT margin of between 16.0% and 17.5% is expected in 2016. Sales in 2017 are expected to be between €205 and €220m, with a slight increase in EBIT margin over 2016.

INDUSTRY OUTLOOK

The Diatron acquisition adds about €25m revenue in FY16 and €37m in FY17. Sony DADC will add over €5m in 2016 and perhaps €20m in 2017 making Edison forecast revenues of €183.5m in 2016 and rising to perhaps €220m in 2017. Stratec has a €50m bridging loan to part fund the €97m of acquisitions to date in 2016.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	144.9	31.1	29.7	215.6	20.9	13.7
2015	146.9	36.1	34.9	252.9	17.8	16.5
2016e	183.5	38.0	35.6	248.9	18.1	17.8
2017e	220.1	43.6	41.2	286.1	15.7	12.7

Sector: Pharma & healthcare

Price:	US$4.07
Market cap:	US$85m
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	(11.5)	9.4	(20.2)
Relative*	(12.7)	10.5	(23.5)

* % 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 Qinprezo, a quinolone derivative for relapsed/refractory acute myeloid leukemia (AML) without the dose limiting cardiotoxicity of anthracyclines. The FDA discouraged submitting an NDA after it missed its primary endpoint, but significant potential remains in Europe where Qinprezo has data comparable to those used in other related approvals. Sunesis is also advancing its clinical asset, 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. A Phase I/IIa is expected to begin around year-end.

INDUSTRY OUTLOOK

Sunesis is an oncology company with a late-stage asset, potentially near European approval, as well as preclinical assets utilising promising targets, making it an attractive partner.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	5.7	(41.3)	(43.0)	(430.0)	N/A	N/A
2015	3.1	(35.8)	(36.7)	(302.0)	N/A	N/A
2016e	2.4	(35.7)	(37.0)	(253.0)	N/A	N/A
2017e	1.7	(45.6)	(49.1)	(320.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	€1.06
Market cap:	€40m
Market	FRA

Share price graph (€)

Company description

Sygnis develops tools for molecular biologists. Its main focus is in the field of polymerases for the amplification and sequencing of DNA. Sygnis launched its own TruePrime and SunScript branded products in 2015.

Price performance

%	1m	3m	12m
Actual	(14.7)	(18.2)	(50.5)
Relative*	(15.5)	(17.6)	(49.3)

* % Relative to local index

Analyst

Dr John Savin

Sygnis (LIO1)

INVESTMENT SUMMARY

Following the acquisition of Expedeon on 1 August, sales to 30 Sept were €976k including two months of Expedeon revenues. Sygnis produces innovative molecular biology kits, while Expedeon makes well-designed products for protein analysis. Expedeon has a UK- and US-focused, 13-person sales and marketing team and a five-year sales CAGR of about 20%. Integration and sales training will take most of 2016. Revenues for 2016 including 5 months of Expedeon sales are guided to be €1.7-2m with a reduced loss over 2015. Sygnis expects to achieve break even during 2017; management is focused on achieving sales synergies and controlling costs. The acquisition was funded by issuing 20.54m shares at €1.10 each including a cash fund-raising of €5.3m gross. Cash as of 30th Sept 2016 was €4.6m.

INDUSTRY OUTLOOK

Sygnis is working on a new research kit for liquid biopsy testing to detect fragments of cancer DNA in blood. Sygnis has gained a €2m Spanish government grant paid over 3 years.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.4	(1.7)	(1.9)	(19.27)	N/A	N/A
2015	0.6	(2.4)	(2.6)	(19.31)	N/A	N/A
2016e	3.2	(0.9)	(1.0)	(3.79)	N/A	N/A
2017e	6.9	0.8	0.7	1.94	54.6	7907.6

Sector: Pharma & healthcare

Price:	¥229.00
Market cap:	¥10411m
Market	Tokyo

Share price graph (¥)

Company description

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

Price performance

%	1m	3m	12m
Actual	(6.2)	(5.8)	14.5
Relative*	(7.6)	(10.1)	32.5

* % Relative to local index

Analyst

Maxim Jacobs

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 has signed a deal for a pain management device. Treakisym is approved for r/r iNHL/MCL, and recently, CLL patients and is awaiting approval for additional indications. Rigosertib is in development for myelodysplastic syndromes and has started a pivotal Phase III global study, with FPI enrolled in Japan and interim results expected in 2017. IONSYS was in-licensed from The Medicines Company and SymBio expects to launch IONSYS in 2019. SymBio plans to build its own salesforce to support rigosertib and IONSYS.

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 should 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 (¥)	P/E (x)	P/CF (x)
2014	1955.0	(1134.0)	(1116.0)	(36.39)	N/A	N/A
2015	1933.0	(2641.0)	(2640.0)	(81.61)	N/A	N/A
2016e	1951.0	(2725.0)	(2733.0)	(84.51)	N/A	N/A
2017e	2290.0	(3295.0)	(3326.0)	(102.80)	N/A	N/A

Sector: Pharma & healthcare

Price:	€5.21
Market cap:	€34m
Market	Euronext Paris

Share price graph (€)

Company description

Theraclion, based in southern Paris, sells a high-precision, high-intensity ultrasound system (EchoPulse) in Europe and Asia for non-invasive treatment of benign breast and thyroid growths. A US clinical programme is underway. A single-use consumable is required per treatment.

Price performance

%	1m	3m	12m
Actual	(10.3)	(29.4)	(26.4)
Relative*	(10.3)	(28.8)	(19.5)

* % Relative to local index

Analyst

Dr John Savin

Theraclion (ALTHE)

INVESTMENT SUMMARY

Theraclion's H116 update shows two EchoPulse ultrasound devices sold and three leased, with momentum building from a low base in consumable EPack sales for thyroid treatments. This gave H1 revenues of €463k. Our 2016 revenue target has been adjusted from €5.9m to €4.6m based on 20 EchoPulse sales. Cash on 30 June 2016 was €2m. A rights issue for €9.6 million gross was completed in August. The net proceeds might be €9.15m giving cash till at least mid 2017. Following the capital increase, Theraclion's issued capital is 6,441,029 shares.

INDUSTRY OUTLOOK

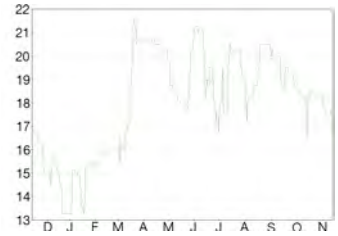
A new study from Tübingen University in FA found that after 12 months 24/27 of patients were without residual vital BFA tissue. This could be the basis of a breast cancer indication; there are no cancer trials so far. The FDA has agreed a de novo 510(k) regulatory track and granted an IDE to start a 100 patient US fibroadenoma trial. US sales might start from H2 2019. Furui, a Chinese investor, holds 19% of the shares.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.8	(4.7)	(4.8)	(122.1)	N/A	N/A
2015	1.6	(6.9)	(7.0)	(140.4)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharma & healthcare

Price:	16.8p
Market cap:	£127m
Market	AIM

Share price graph (p)



Company description

Tissue Regenix is a UK-based company developing and commercialising medical devices for regeneration of soft tissue. It has three divisions including a US-based wound care subsidiary, orthopaedics/sports medicine and a cardiac division.

Price performance

%	1m	3m	12m
Actual	(8.2)	(10.7)	(2.9)
Relative*	(3.8)	(8.4)	(8.4)

* % Relative to local index

Analyst

Dr Linda Pomeroy

Tissue Regenix Group (TRX)

INVESTMENT SUMMARY

Tissue Regenix's (TRX) investment case is built on dCELL, a versatile regenerative medical technology, and its potential across wound care, orthopaedics and cardiac implants. We forecast that US wound care will be the initial driver of rapid sales growth, boosted by product launches from all three divisions. Recently the company has made progress on multiple fronts, including an increase in distribution reach for DermaPure, a dermal substitute for hard-to-heal chronic wounds and acute wounds in the US, and approval of SurgiPure XD, a porcine dermis Xenograft for use in hernia repair in the US. Meanwhile, the Orthopaedics division targets the significant medical need in meniscus and anterior cruciate ligament (ACL) repair with a potential CE mark submission and grant for OrthoPure XT end of 2016 and launch 2017 and OrthoPure XM grant and launch 2018. Further, TRX took a first step towards the commercialisation of human dCELL heart valves and DermaPure in the EU through a JV agreement with the German tissue bank in January. TRX held £13.5m in cash at H116.

INDUSTRY OUTLOOK

The adoption of biological, as opposed to standard treatments, is driven by the need for earlier intervention, cost savings and longer-term healing solutions.

Y/E Jan / Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	0.0	(6.5)	(6.3)	(0.88)	N/A	N/A
2015	0.1	(8.2)	(8.2)	(1.19)	N/A	N/A
2016e	2.6	(11.7)	(11.8)	(1.47)	N/A	N/A
2017e	6.9	(12.0)	(12.2)	(1.52)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$0.44
Market cap:	US$17m
Market	NASDAQ

Share price graph (US$)

Company description

Tonix is an emerging specialty pharmaceutical focused on psychiatric and neurological disorders. TNX-102 SL for fibromyalgia is the most advanced programme, entering Ph III. It is also being developed for PTSD.

Price performance

%	1m	3m	12m
Actual	(31.0)	(80.4)	(93.1)
Relative*	(31.9)	(80.2)	(93.4)

* % Relative to local index

Analyst

Maxim Jacobs

Tonix Pharmaceuticals (TNXP)

INVESTMENT SUMMARY

Tonix is a company focused on the development of TNX-102 SL for post-traumatic stress disorder (PTSD). Data for its 237-patient, Phase II proof-of-concept trial in PTSD were announced in May and showed a statistically significant benefit to patients in the primary endpoint at the high dose (5.6mg). The company is currently planning to initiate a Phase III trial in military-related PTSD early next year with another in predominantly civilian PTSD to follow. Breakthrough Therapy Designation is possible which would allow for an expedited approval process and increased interaction with the FDA.

INDUSTRY OUTLOOK

Tonix is an emerging specialty pharmaceutical company focused on psychiatric and neurological disorders.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(27.7)	(27.6)	(277.0)	N/A	N/A
2015	0.0	(48.2)	(48.1)	(286.0)	N/A	N/A
2016e	0.0	(38.6)	(38.5)	(170.0)	N/A	N/A
2017e	0.0	(30.6)	(30.5)	(112.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	€2.65
Market cap:	€149m
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	(16.2)	(1.6)	(11.0)
Relative*	(16.2)	(0.8)	(2.7)

* % Relative to local index

Analyst

Juan Pedro Serrate

Transgene (TNG)

INVESTMENT SUMMARY

Transgene is focused on advancing the clinical 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). Seven clinical trials will start before YE2017, including TG4010+Opdivo in the 1st/2nd-line treatment of NSCLC and Pexa-Vec+Yervoy in the first-line treatment of liver cancer/other solid tumours. Transgene and partner Sillajen are running a global 600-patient Phase III study in liver cancer. TG1050 for HBV is advancing through Phase I/Ib testing. In October 2016 it announced a collaboration agreement with Merck and Pfizer to evaluate TG4001 with Avelumab in HPV-positive Head & Neck Cancer patients in a Phase I/II Study. Cash and equivalents at end Q316 amount to €25.4m. The company plans to raise an additional €48.1m (gross) through a rights issue that will fund operations to the end of 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)
2014	11.1	(35.5)	(38.9)	(103.25)	N/A	N/A
2015	9.6	(25.7)	(28.9)	(78.08)	N/A	N/A
2016e	6.1	(23.9)	(27.2)	(70.55)	N/A	N/A
2017e	7.8	(27.9)	(31.5)	(81.87)	N/A	N/A

Sector: Pharma & healthcare

Price:	€2.41
Market cap:	€32m
Market	Euronext Paris

Share price graph (€)

Company description

TxCell is a pioneer in developing regulatory T-cell therapies against autoimmune and inflammatory disorders. The lead product in Crohn's disease is planned to start Phase IIb in 2018. A novel CAR Treg technology platform is in early development.

Price performance

%	1m	3m	12m
Actual	(17.2)	(32.1)	(68.7)
Relative*	(17.2)	(31.6)	(65.8)

* % Relative to local index

Analyst

Dr John Savin

TxCell (TXCL)

INVESTMENT SUMMARY

TxCell offers a fast developing and novel opportunity in the new field of T-regulatory-cells. The lead product, Ovasave, uses an ovalbumin (egg white) trigger to activate autologous regulatory T-cells to control Crohn's disease. CAR T-reg cells are being developed to control a variety of major autoimmune disorders. In August, TxCell received €1.1m in advance Tax credits and drew down €3m of convertible loans of which €300k have converted to shares. By the beginning of 2017, TxCell expects to receive a further €1m in advance tax credits and draw a further €2m in convertible loans. Operational cash use in 2016 is now guided at €12m, down from €15m.

INDUSTRY OUTLOOK

The planned Ovasave Phase IIb trial will now switch to a new, faster manufacturing process which will delay the start till 2018, formerly late 2016. The earlier, but more flexible CAR Treg platform is being developed with academic partners to address indications like lupus nephritis, bullous pemphigoid and perhaps multiple sclerosis.

Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.4	(8.7)	(8.7)	(82.6)	N/A	N/A
2015	1.6	(10.8)	(10.7)	(87.4)	N/A	N/A
2016e	0.1	(12.4)	(12.4)	(92.8)	N/A	N/A
2017e	0.0	(10.1)	(10.1)	(70.6)	N/A	N/A

Sector: Pharma & healthcare

Price:	648.5p
Market cap:	£1600m
Market	LSE

Share price graph (p)

Company description

UDG is a leading international provider of services to healthcare manufacturers and pharmacies. It employs 8,300 staff and is present in 22 countries. Its three divisions are Ashfield Commercial & Medical Services, Supply Chain Services and Sharp Packaging Services.

Price performance

%	1m	3m	12m
Actual	0.5	7.6	30.2
Relative*	5.3	10.4	22.8

* % Relative to local index

Analyst

Lala Gregorek

UDG Healthcare (UDG)

INVESTMENT SUMMARY

UDG held a capital markets day on 27 September hosted by senior management across all divisions and regions. Ashfield is expected to contribute c 60% of UDG's profits in 2016. The UK is the most mature market with the highest outsourcing rates. The key focus is on the US, EU and Japan. Ashfield's current operating margin of 12% after 'pass-through' costs is seen gradually growing thanks to the positive mix effect. At Sharp, medium-term constant currency operating profit growth is guided at 10% pa. Market expansion in packaging is seen at 5-10%, while clinical services enjoy up to 10% growth. UDG recognises the need for both organic and M&A-led growth in clinical services in order to upscale the business and win larger pharma customers. Prelims report on 24 November.

INDUSTRY OUTLOOK

We understand that the company considers 2.0x net debt-to-EBITDA as comfortable, suggesting that there is capacity to borrow in total up to €600m in addition to the recent M&A proceeds and cash on hand. If the company is unable to find attractive M&A targets within 12 months it may consider returning funds to shareholders.

Y/E Sep	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	764.0	98.0	46.0	23.2	31.4	18.9
2015	919.0	126.0	70.0	27.4	26.6	10.8
2016e	975.0	129.0	81.0	28.6	25.5	14.4
2017e	1020.0	135.0	100.0	31.1	23.4	14.0

Sector: Pharma & healthcare

Price:	38.0p
Market cap:	£200m
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	(3.2)	(15.6)	(46.7)
Relative*	1.4	(13.4)	(49.7)

* % Relative to local index

Analyst

Lala Gregorek

Vernalis (VER)

INVESTMENT SUMMARY

Vernalis marked its transition into a commercial stage speciality pharma company with the September 2015 US launch of Tuzistra XR, the first product from its extended release prescription only cough cold pipeline. First year (FY16) Tuzistra XR net sales were £1.1m. £40m in new funds raised in May provides resources to invest in operational initiatives (pharmacy stocking and patient access) to support stronger sales growth into the 2016/17 cough cold season and beyond. Successful execution will lay important foundations for the launch of CCP-07 into the following season, subject to approval on or before its 20 April 2017 PDUFA date. NDA filing of the third the cough cold programme, CCP-08, is anticipated by year-end 2016.

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 (fd) (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	12.9	(37.7)	(37.6)	(6.8)	N/A	N/A
2018e	40.7	(18.2)	(18.4)	(3.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	A$1.20
Market cap:	A$288m
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	21.2	30.4	81.8
Relative*	23.8	34.1	73.0

* % Relative to local index

Analyst

Dr Dennis Hulme

Viralytics (VLA)

INVESTMENT SUMMARY

Viralytics is well-positioned to benefit from industry interest in oncolytic virotherapy. Data presented at the 31st Annual Meeting of the Society for the Immunotherapy of Cancer (SITC) in November 2016 showed 100% disease control rate (10/10) in Phase Ib CAPRA study which evaluates intratumoural CAVATAK in combination with anti-PD-1 Keytruda in advanced melanoma; 7 of 10 patients showed an overall response rate and 3 had stable disease. In the Phase Ib MITCI trial, 9 of 18 (50%) patients with advanced melanoma had objective responses with Cavatak in combination with Yervoy (ipilumumab). Other ongoing trials include the Phase I/II STORM study in solid cancers and a Phase Ib trial of Cavatak in combination with Keytruda (pembrolizumab) in late-stage melanoma; the Phase I/II CANON trial in superficial bladder cancer; Keynote 200 (STORM Part B), a Phase Ib trial of Cavatak and Keytruda in advanced lung and bladder cancer. Cash at 30 June was A$46m. We are currently updating our model for FY16 results.

INDUSTRY OUTLOOK

The emergence of targeted and immunotherapy agents in recent years is redefining the treatment paradigm in metastatic melanoma. The FDA approval of Amgen's Imlygic (T-vec) has made oncolytic virotherapy a commercial reality.

Y/E Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	2.5	(4.9)	(4.7)	(3.9)	N/A	N/A
2015	2.5	(6.0)	(5.5)	(3.0)	N/A	N/A
2016e	4.4	(10.2)	(9.9)	(4.7)	N/A	N/A
2017e	4.4	(10.2)	(9.4)	(4.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$4.30
Market cap:	US$112m
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 NuQ technology. Its lead program is in colorectal cancer, which may enter the European market in 2016.

Price performance

%	1m	3m	12m
Actual	(13.6)	30.7	2.4
Relative*	(14.7)	32.0	(1.9)

* % Relative to local index

Analyst

Maxim Jacobs

VolitionRx (VNRX)

INVESTMENT SUMMARY

VolitionRx's proprietary NuQ 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 NuQ triage colorectal cancer test which will launch in certain European countries in early 2017. The company also announced that it is initiating a study with DKFZ, the German Cancer Research Center, to evaluate NuQ blood tests for the detection of pancreatic cancer. This follows two successful pilot studies using its biomarkers in pancreatic cancer. A US 510(k) approval and launch is expected in late 2017 or early 2018.

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)
2014	0.0	(5.9)	(8.4)	(62.08)	N/A	N/A
2015	0.0	(10.0)	(9.7)	(54.49)	N/A	N/A
2016e	0.0	(15.1)	(15.1)	(67.06)	N/A	N/A
2017e	1.4	(16.9)	(16.9)	(71.87)	N/A	N/A

Company coverage

Company	Note	Date published
4SC	Update; Update	15/08/2016; 06/10/2016
Abzena	Update; Update	28/07/2016; 14/09/2016
Achillion Pharmaceuticals	Outlook; Update	14/07/2016; 28/09/2016
Actinium Pharmaceuticals	Update; Update	09/02/2015; 18/03/2015
Adherium	Outlook; Update	20/04/2016; 06/10/2016
AFT Pharmaceuticals	QuickView; Outlook	21/12/2015; 31/05/2016
Akari Therapeutics	Update; Outlook	08/07/2016; 14/07/2016
Allium Medical	Initiation	02/11/2016
Angle	Update; Update	27/05/2016; 01/08/2016
Athersys	Update; Update	30/06/2016; 27/10/2016
Atossa Genetics	Update; Flash	27/05/2016; 02/09/2016
Basilea Pharmaceuticals	Update; Update	30/08/2016; 16/09/2016
Bio-Light Life Sciences	Initiation	19/10/2016
C4X Discovery	Flash; Flash	06/09/2016; 29/09/2016
Carmat	Update; Update	05/05/2016; 15/07/2016
Celyad	Update; Update	10/06/2016; 13/07/2016
Consort Medical	Update; Update	09/09/2016; 17/10/2016
Crossject	Initiation; Update	13/06/2016; 23/06/2016
e-Therapeutics	Outlook; Update	19/05/2016; 20/09/2016
Evotec	Outlook; Update	29/06/2016; 16/08/2016
Factor Therapeutics	Outlook	28/10/2016
Genedrive		
Genticel	Update; Update	07/06/2016; 28/06/2016
GW Pharmaceuticals	Outlook; Update	25/02/2016; 08/06/2016
Hutchison China Meditech	Outlook	31/05/2016
Hybrigenics	Update; Update	15/02/2016; 18/05/2016
Immunovia	Outlook	10/11/2016
Imperial Innovations	Update; Update	06/09/2016; 03/11/2016
Intec Pharma	Initiation	29/09/2016
International Stem Cell	Outlook; Update	16/05/2016; 02/08/2016
Kiadis Pharma	Outlook	15/09/2016
MagForce	Update	09/02/2015
Medigene	Update; Update	08/08/2016; 05/10/2016
Mesoblast	Outlook; Update	08/07/2016; 21/09/2016
Midatech	Update; Update	18/12/2015; 06/01/2016
Mologen	Update; Update	01/09/2016; 14/11/2016
MorphoSys	Update; Outlook	17/12/2015; 17/05/2016
Nanobiotix	Update; Outlook	01/02/2016; 31/05/2016
Neovacs	Update; Outlook	23/04/2015; 01/08/2016
NetScientific	Initiation; Outlook	13/06/2016; 26/08/2016
Newron Pharmaceuticals	Flash; Outlook	31/03/2016; 02/09/2016

Nexstim	Update; Update	27/07/2016; 29/09/2016
Novogen	Update; Update	11/05/2016; 31/10/2016
Onxeo	Update; Update	02/06/2016; 23/08/2016
Opexa Therapeutics	Update; Update	01/04/2016; 29/06/2016
Orexigen Therapeutics	Update; Update	12/04/2016; 19/08/2016
Orexo	Update; Update	07/10/2016; 04/11/2016
Oryzon Genomics	Update; Update	08/08/2016; 03/11/2016
Oxford BioMedica	Outlook; Outlook	27/07/2015; 24/10/2016
Pacific Edge	Update; Outlook	17/11/2015; 24/06/2016
Paion	Update; Update	17/05/2016; 05/07/2016
PDL BioPharma	Update; Update	15/07/2016; 11/08/2016
PharmaMar	Update; Update	05/05/2016; 27/09/2016
Photocure	Update; Outlook	25/05/2016; 21/09/2016
Pixium Vision	Update; Update	27/07/2016; 19/10/2016
Prescient Therapeutics	Update; Update	28/09/2015; 03/03/2016
Prima BioMed	Outlook; Outlook	27/07/2016; 02/08/2016
Probiodrug	Outlook; Update	06/09/2016; 13/09/2016
Regeneus	Update; Update	19/05/2016; 14/09/2016
ReNeuron Group	Outlook; Update	27/07/2016; 05/08/2016
Selvita	Update; Update	22/08/2016; 14/10/2016
Silence Therapeutics	Initiation	25/07/2016
StemCells	Update; Update	08/06/2015; 05/02/2016
Stratec Biomedical	Update; Update	04/04/2016; 15/06/2016
Sunesis Pharmaceuticals	Update; Update	03/08/2016; 16/09/2016
Sygnis Pharma	Update; Update	19/05/2016; 19/09/2016
SymBio Pharmaceuticals	Update; Update	07/12/2015; 23/03/2016
Theraclion	Initiation; Update	26/02/2016; 25 /07/2016
Tissue Regenix	Update; Update	15/09/2016; 19/10/2016
Tonix Pharmaceuticals	Update; Update	25/05/2016; 03/10/2016
Transgene	Update; Update	21/09/2016; 28/10/2016
TxCell	Update; Update	24/06/2016; 28/10/2016
UDG Healthcare	Update; Update	21/07/2016; 10/10/2016
Vernalis	Update; Outlook	25/05/2016; 21/10/2016
Viralytics	Update; Update	05/05/2016; 16/06/2016
VolitionRx	Update; Outlook	01/04/2016; 23/09/2016
Investment companies		
BB Biotech AG	Investment trust review	11/03/2015; 09/02/2016
Biotech Growth Trust (The)	Investment trust review	18/02/2015; 15/12/2015
International Biotechnology Trust	Investment trust review	03/03/2015; 11/12/2015
QuickViews		

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