EDISON

Edison Healthcare Insight

August 2016

Published by Edison Investment Research

The Edison healthcare team

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.

Contents

Prices at 12 August 2016

Published 18 August 2016

Welcome to the August edition of the Edison Healthcare Insight. In this edition we have profiled 74 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.

We welcome any comments/suggestions our readers may have.

Lala Gregorek & Maxim Jacobs

Healthcare Research

Upcoming newsflow

Exhibit 1: Upcoming conferences

Start Date	End Date	Conference	Location
Sep-16			
05 September 2016		JMP Securities Biotech Day	Boston, MA
07 September 2016	08 September 2016	Baird Global Healthcare Conference	New York, NY
07 September 2016	08 September 2016	Citi 11th Annual Biotech Conference	Boston, MA
11 September 2016	13 September 2016	Rodman & Renshaw 18th Annual Global Investment Conference	New York, NY
13 September 2016	15 September 2016	BioPharm America 2016	Boston, MA
21 September 2016		Boston Biotech Conferences - Anti-Infectives Rx Conference	Boston, MA
26 September 2016		4th Annual Sachs MedTech & Digital Health Forum	Basel, Switzerland
27 September 2016	28 September 2016	16th Annual Sachs Biotech in Europe Investor Forum for Global Partnering & Investment	Basel, Switzerland
TBC		Bank of America Merrill Lynch Global Healthcare Conference	London, UK
TBC		Aegis Capital 2016 Healthcare Conference	Las Vegas, NV
Oct-16			
05 October 2016	07 October 2016	BioNetwork Partnering Summit	Dana Point, CA
16 October 2016	18 October 2016	American Neurological Association 141st Annual Meeting	Baltimore, MD
18 October 2016	19 October 2016	14th Annual BIO Investor Forum	San Francisco, CA
Nov-16			
10 November 2016	14 November 2016	American College of Allergy, Asthma & Immunology Annual Scientific Meeting	San Francisco, CA
11 November 2016	15 November 2016	The Liver Meeting 2016 (AASLD)	Boston, MA
12 November 2016	16 November 2016	American Heart Association (AHA) Scientific Sessions	New Orleans, LA
15 November 2016	17 November 2016	World Orphan Drug Congress	Brussels
17 November 2016		Canaccord Genuity Medical Technology & Diagnostics Forum	New York, NY

Source: Edison Investment Research

Performance tables

Exhibit 2: Risers and fallers, biotechnology subsector

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance
ATHX US Equity	Athersys	NASDAQ CM	USD	2.02	172	70
AKTX US Equity	Akari Therapeutics	NASDAQ CM	USD	9.35	110	60
PTX AU Equity	Prescient Therapeutics	ASE	AUD	0.10	16	55
BTH1V FH Equity	Biotie Therapies Corp	Helsinki	EUR	0.29	322	40
TIG BB Equity	TiGenix	EN Brussels	EUR	1.03	235	40
VLA AU Equity	Viralytics Limited	ASE	AUD	0.91	169	37
OPXA US Equity	Opexa Therapeutics	NASDAQ CM	USD	4.18	29	34
PHO NO Equity	Photocure	Oslo	NOK	52.75	139	32
ACHN US Equity	Achillion Pharmaceuticals	NASDAQ GS	USD	8.86	1211	20
EVT GY Equity	Evotec	Xetra	EUR	4.46	668	17
RGS AU Equity	Regeneus	ASE	AUD	0.15	23	0
NANO FP Equity	Nanobiotix	EN Paris	EUR	17.27	305	-2
PBD NA Equity	Probiodrug AG	EN Amsterdam	EUR	20.25	170	-5
BAVA DC Equity	Bavarian Nordic A/S	Copenhagen	DKK	248.50	1167	-11
TNG FP Equity	Transgene	EN Paris	EUR	2.75	120	-17
MF6 GY Equity	MagForce	Xetra	EUR	4.55	132	-18
CERU US Equity	Cerulean	NASDAQ GM	USD	2.88	79	-20
IMU AU Equity	Imugene	ASE	AUD	0.01	11	-20
ALNEV FP Equity	Neovacs	EN Paris	EUR	0.79	38	-20
PHM SM Equity	PharmaMar	Soc.Bol SIBE	EUR	3.00	753	-21
MDG1 GY Equity	Medigene	Xetra	EUR	6.87	156	-22
ATNM US Equity	Actinium Pharmaceuticals	NYSE MKT LLC	USD	1.72	82	-27
PRR AU Equity	Prima BioMed Ltd	ASE	AUD	0.04	61	-27
NWRN SW Equity	Newron Pharmaceuticals	SIX Swiss Ex	CHF	20.15	303	-29
BSLN SW Equity	Basilea	SIX Swiss Ex	CHF	74.15	911	-30
ONXEO FP Equity	Onxeo	EN Paris	EUR	3.19	149	-30
VSC GY Equity	4SC	Xetra	EUR	2.28	49	-39
NRT AU Equity	Novogen	ASE	AUD	0.10	33	-41
MOR GY Equity	MorphoSys	Xetra	EUR	40.20	1205	-42
BLRX US Equity	BioLineRx	NASDAQ CM	USD	0.86	49	-43
ALHYG FP Equity	Hybrigenics	EN Paris	EUR	0.89	36	-44
RENE LN Equity	ReNeuron Group	London	GBp	2.88	118	-45
ISCO US Equity	International Stem Cell	OTC US	USD	1.99	6	-46
OXB LN Equity	Oxford BioMedica	London	GBp	4.30	151	-47
SNSS US Equity	Sunesis Pharmaceuticals	NASDAQ CM	USD	0.61	53	-48
CYAD BB Equity	Celyad	EN Brussels	EUR	22.59	238	-54
MSB AU Equity	Mesoblast Limited	ASE	AUD	1.51	444	-59
MGN GY Equity	Mologen AG	Xetra	EUR	1.90	49	-60
TXCL FP Equity	TxCell	EN Paris	EUR	3.36	49	-63
ATOS US Equity	Atossa Genetics	NASDAQ CM	USD	0.25	10	-75
GTCL FP Equity	Genticel	EN Paris	EUR	1.45	25	-80
THLD US Equity	Threshold Pharmaceuticals	NASDAQ CM	USD	0.64	46	-85
STEM US Equity	StemCells	NASDAQ CM	USD	0.37	4	-93
AMBS US Equity	Amarantus BioScience	OTC US	USD	0.05	3	-99
AFP AU Equity	AFT Pharmaceuticals	ASE	AUD	2.90	217	#N/A N/A
ORY SM Equity	Oryzon Genomics	Soc.Bol SIBE	EUR	2.89	93	#N/A N/A

Source: Edison Investment Research

Exhibit 3: Risers and fallers, medTech subsector

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance (%)
LSIC LN Equity	Lifeline Scientific inc	London	GBp	298.50	76	47
PIX FP Equity	Pixium Vision	EN Paris	EUR	7.53	109	18
CSRT LN Equity	Consort Medical	London	GBp	1026.00	655	11
SBS GY Equity	Stratec Biomedical	Xetra	EUR	53.92	722	11
VNRX US Equity	VolitionRx	NYSE MKT LLC	USD	3.42	80	4
PEB NZ Equity	Pacific Edge	NZX	NZD	0.59	164	4
ALCJ FP Equity	Crossject	EN Paris	EUR	7.23	57	-2
TRX LN Equity	Tissue Regenix	London	GBp	19.00	188	-4
ALTHE FP Equity	Theraclion	EN Paris	EUR	6.79	37	-15
AGL LN Equity	Angle	London	GBp	64.00	62	-28
ALCAR FP Equity	CARMAT	EN Paris	EUR	35.79	240	-41
ETX LN Equity	e-Therapeutics	London	GBp	12.75	44	-66
NXTMH FH Equity	Nexstim	FN Finland	EUR	0.88	9	-86

Source: Edison Investment Research

Exhibit 4: Risers and fallers, specialty pharma subsector

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance (%)
UDG LN Equity	UDG Healthcare	London	GBp	616.50	1972.20	20
HCM LN Equity	Hutchison China Meditech Ltd	London	GBp	1812.50	1427.40	0
GWP LN Equity	GW Pharmaceuticals	London	GBp	550.00	2155.17	-5
4582 JT Equity	SymBio Pharmaceuticals	Tokyo	JPY	235.00	96.84	-8
ORX SS Equity	Orexo AB	Stockholm	SEK	54.00	223.16	-10
PA8 GY Equity	Paion	Xetra	EUR	2.17	136.78	-12
VER LN Equity	Vernalis	London	GBp	45.75	312.60	-46
MTPH LN Equity	Midatech	London	GBp	138.00	59.97	-51
TNXP US Equity	Tonix Pharmaceuticals	NASDAQ GM	USD	2.50	64.65	-64
OREX US Equity	Orexigen Therapeutics	NASDAQ GS	USD	4.34	63.31	-88
ADR AU Equity	Adherium	ASE	AUD	0.49	62.72	#N/A N/A

Source: Edison Investment Research

Exhibit 5: Risers and fallers, research services subsector

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance (%)
C4XD LN Equity	C4X Discovery	London	GBp	115.50	49	46
SLV PW Equity	Selvita	Warsaw	PLN	21.53	77	19
ABZA LN Equity	Abzena	London	GBp	43.00	77	-45
LIO1 GY Equity	Sygnis	Xetra	EUR	1.29	55	-46
GDR LN Equity	Genedrive	London	GBp	80.00	19	-59

Source: Edison Investment Research

Exhibit 6: Risers and fallers, investment company subsector

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance (%)
IVO LN Equity	Imperial Innovations	London	GBp	394.00	825	-24
PDLI US Equity	PDL BioPharma	NASDAQ GS	USD	2.82	467	-47

Source: Edison Investment Research

Exhibit 7: Risers and fallers over the last 30 days

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	30-day performance	Subsector
MSB AU Equity	Mesoblast Limited	ASE	AUD	1.51	444	36	Biotechnology
PHM SM Equity	PharmaMar	Soc.Bol SIBE	EUR	3.00	753	35	Biotechnology
PHO NO Equity	Photocure	Oslo	NOK	52.75	139	27	Biotechnology
CERU US Equity	Cerulean	NASDAQ GM	USD	2.88	79	26	Biotechnology
TNXP US Equity	Tonix Pharmaceuticals	NASDAQ GM	USD	2.50	65	23	Specialty pharma
PTX AU Equity	Prescient Therapeutics	ASE	AUD	0.10	16	-18	Biotechnology
TXCL FP Equity	TxCell	EN Paris	EUR	3.36	49	-18	Biotechnology
GTCL FP Equity	Genticel	EN Paris	EUR	1.45	25	-17	Biotechnology
AMBS US Equity	Amarantus BioScience	OTC US	USD	0.05	3	-16	Biotechnology
PDLI US Equity	PDL BioPharma	NASDAQ GS	USD	2.82	467	-16	Investment company

Source: Edison Investment Research

Exhibit 8: Risers and fallers over the last 90 days

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	90-day performance	Sector
OPXA US Equity	Opexa Therapeutics	NASDAQ CM	USD	4.18	29	96	Biotechnology
THLD US Equity	Threshold Pharmaceuticals	NASDAQ CM	USD	0.64	46	74	Biotechnology
PHM SM Equity	PharmaMar	Soc.Bol SIBE	EUR	3.00	753	28	Biotechnology
CERU US Equity	Cerulean	NASDAQ GM	USD	2.88	79	26	Biotechnology
SNSS US Equity	Sunesis Pharmaceuticals	NASDAQ CM	USD	0.61	53	25	Biotechnology
STEM US Equity	StemCells	NASDAQ CM	USD	0.37	4	-87	Biotechnology
GTCL FP Equity	Genticel	EN Paris	EUR	1.45	25	-71	Biotechnology
CYAD BB Equity	Celyad	EN Brussels	EUR	22.59	238	-52	Biotechnology
MGN GY Equity	Mologen AG	Xetra	EUR	1.90	49	-46	Biotechnology
AKTX US Equity	Akari Therapeutics	NASDAQ CM	USD	9.35	110	-43	Biotechnology

Source: Edison Investment Research

Exhibit 9: Risers and fallers over the last 12 months

Ticker	Company	Exchange	Currency	Share Price	Market Cap in USD	12-month performance (%)	Subsector
ATHX US Equity	Athersys	NASDAQ CM	USD	2.02	172	70	Biotechnology
AKTX US Equity	Akari Therapeutics	NASDAQ CM	USD	9.35	110	60	Biotechnology
PTX AU Equity	Prescient Therapeutics	ASE	AUD	0.10	16	55	Biotechnology
LSIC LN Equity	Lifeline Scientific inc	London	GBp	298.50	76	47	MedTech
C4XD LN Equity	C4X Discovery	London	GBp	115.50	49	46	Research services
AMBS US Equity	Amarantus BioScience	OTC US	USD	0.05	3	-99	Biotechnology
STEM US Equity	StemCells	NASDAQ CM	USD	0.37	4	-93	Biotechnology
OREX US Equity	Orexigen Therapeutics	NASDAQ GS	USD	4.34	63	-88	Specialty pharma
NXTMH FH Equity	Nexstim	FN Finland	EUR	0.88	9	-86	MedTech
THLD US Equity	Threshold Pharmaceuticals	NASDAQ CM	USD	0.64	46	-85	Biotechnology

Source: Edison Investment Research

Company profiles

Prices at 12 August

US$/£ exchange rate: 0.7600
€/£ exchange rate: 0.8423
C$/£ exchange rate: 0.5812
A$/£ exchange rate: 0.5757
NZ$/£ exchange rate: 0.5417
SEK/£ exchange rate: 0.0886
DKK/£ exchange rate: 0.1132
NOK/£ exchange rate: 0.0897
JPY/£ exchange rate: 0.0073
NIS/£ exchange rate: 0.1978
CHF/£ exchange rate: 0.7751

Sector: Pharma & healthcare

Price:	€2.25
Market cap:	€43m
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 in 2016) and partnered with Yakult Honsha and Menarini. Partners for two Phase I assets are sought.

Price performance

%	1m	3m	12m
Actual	(5.4)	(28.7)	(39.5)
Relative*	(12.0)	(34.4)	(38.3)

* % 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 in Europe 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, Yakult announced that it did not reach the primary endpoint in its Phase II Asian liver cancer trial with all-comer patients and would not be progressing to a pivotal study. This does not impact the Phase II study in CTCL in Europe and further clinical trials are ongoing in Japan in NSCLC, pancreatic and bile duct cancer. 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. 4SC held €13.8m 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)
2014	7.1	(8.3)	(8.8)	(87.62)	N/A	N/A
2015	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
2017e	4.0	(3.9)	(4.0)	(20.55)	N/A	N/A

Sector: Pharma & healthcare

Price:	43.0p
Market cap:	£59m
Market	AIM

Share price graph (p)

Company description

Abzena offers services/technologies to develop better biopharmaceuticals. Antitope, PolyTherics, PacificGMP and TCRS are the main business units.

Price performance

%	1m	3m	12m
Actual	7.5	(9.5)	(45.2)
Relative*	3.3	(19.3)	(47.7)

* % 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), simtuzumab (Phase II for NASH and PSC) and Roche's SDP015. 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

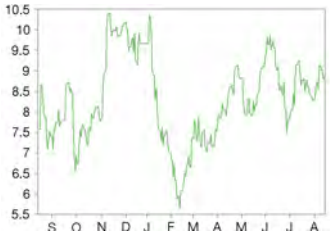
The biological services industry is highly competitive but Abzena's deepening portfolio of technologies and services is compelling, while its ADC technology offers safety and efficacy advantages over competitors.

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$8.74
Market cap:	US$1195m
Market	NASDAQ

Share price graph (US$)



Company description

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

Price performance

%	1m	3m	12m
Actual	(5.4)	10.5	11.5
Relative*	(6.8)	4.4	6.5

* % Relative to local index

Analyst

Maxim Jacobs

Achillion Pharmaceuticals (ACHN)

INVESTMENT SUMMARY

Achillion, with partner Janssen, is the only company with candidates in three classes of HCV, and is well placed to develop an oral, once-a-day, single pill treatment more competitive than leader Harvoni. The company is undergoing a Phase IIa study by Janssen to evaluate 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. Phase I results with its factor-D inhibitor candidate, ACH-4471, were presented at the EHA meeting in June. Interim Phase II results in PNH patients are expected by year end.

INDUSTRY OUTLOOK

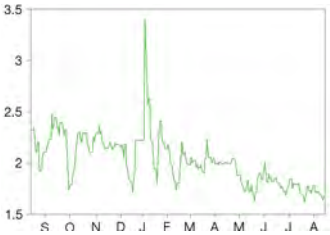
More than 150m people are infected with HCV worldwide. Treatment has been transformed in recent years by the approval of Sovaldi (sofosbuvir) and Gilead's combination product; recent pressure from key healthcare groups has led to a drop in HCV prices.

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	247.0
2016e	0.0	(83.0)	(79.1)	(57.7)	N/A	N/A
2017e	0.0	(85.5)	(83.5)	(58.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$1.69
Market cap:	US$81m
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	(6.1)	(1.7)	(24.6)
Relative*	(7.5)	(7.1)	(27.9)

* % 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 is expected to enter the Phase II portion in mid-2016. 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:	NZ$3.11
Market cap:	NZ$301m
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	1.0	5.4	N/A
Relative*	(2.9)	(0.4)	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. AFT is also developing a handheld device called SURF Nebuliser, which is able to deliver therapies intranasally, with a main focus on the conscious sedation market (though initially it is targeting the smaller sinusitis surgery market). It expects to meet with the FDA later this year, with clinical studies initiating soon thereafter. The addressable market for conscious sedation in the US alone is US$3bn.

INDUSTRY OUTLOOK

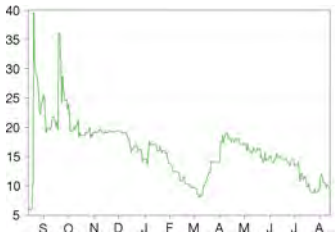
AFT is a multi product company targeting pharmacy prescription, OTC and hospital markets. Data for Maxigesic offers them a competitive advantage in a fragmented industry.

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	48.6	276.0

Sector: Pharma & healthcare

Price:	US$9.20
Market cap:	US$108m
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	(17.9)	(42.5)	41.8
Relative*	(19.1)	(45.7)	35.4

* % 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

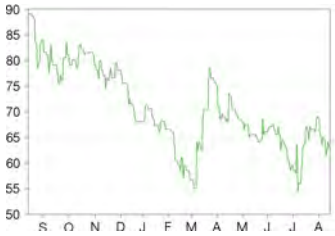
Akari is targeting a $2.59 billion market with their tick derived complement inhibitor. A main advantange over the competition is that Coversin can be given subcutaneously at home while competitors generally need to be given via infusion at an infusion center.

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:	63.5p
Market cap:	£47m
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	0.8	(3.1)	(28.7)
Relative*	(3.2)	(13.5)	(31.9)

* % 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$1.95
Market cap:	US$166m
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	(15.9)	(12.6)	59.8
Relative*	(17.2)	(17.4)	52.7

* % 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 is assessing next development steps and recently signed a partnership agreement with Healios in Japan for stroke and other indications. Discussions with the Japanese PMDA on the design for a pivotal trial are ongoing. A Phase II trial with MultiStem in acute myocardial infarction is underway as is a Phase IIa study for acute respiratory distress syndrome (ARDS).

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	16.5	(16.9)	(16.4)	(19.18)	N/A	N/A
2017e	0.0	(34.4)	(34.1)	(39.46)	N/A	N/A

Sector: Pharma & healthcare

Price:	US$0.25
Market cap:	US$10m
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	(13.8)	(13.8)	(74.2)
Relative*	(15.1)	(18.5)	(75.4)

* % 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 recently started advancing oral endoxifen, a metabolite of tamoxifen, as a potential treatment for breast cancer patients refractory to tamoxifen. Up to half of the 1.0m US women taking tamoxifen 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; further details on the endoxifen clinical trial strategy is expected in H216.

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:	CHF72.00
Market cap:	CHF850m
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	4.4	0.8	(29.9)
Relative*	2.5	(4.2)	(22.4)

* % 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 (Recently launched in Italy) for severe mold infections and Zevtera for bacterial infections. Zevtera should enter US phase III development late 2016/early 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	59.3	(56.1)	(63.3)	(580.77)	N/A	N/A
2017e	84.9	(38.1)	(45.0)	(404.06)	N/A	N/A

Sector: Pharma & healthcare

Price: DKK246.00
Market cap: DKK7608m
Market NASDAQ OMX Mid Cap

Share price graph (DKK)

Company description

Bavarian is a Danish biotech focused on developing and manufacturing novel cancer immunotherapies and vaccines for infectious diseases. Its lead products are Prostvac (prostate cancer) partnered with BMS and Imvamune (smallpox).

Price performance

%	1m	3m	12m
Actual	2.3	(5.4)	(11.5)
Relative*	7.0	(3.3)	(8.0)

* % Relative to local index

Analyst

Juan Pedro Serrate

Bavarian Nordic (BAVA)

INVESTMENT SUMMARY

Bavarian Nordic has recently reported positive Phase I data of respiratory syncytial virus vaccine MVA-BN RSV which will start Phase II testing in H216. It also closed a DKK655m (gross) private placement with existing and new European and US investors in April. This fund raise replaces the proposed NASDAQ IPO which was shelved due to market conditions. Funds raised will be used to accelerate clinical development of multi-tumour cancer immunotherapy CV-301 and MVA-BN RSV and to expand its manufacturing capacity. In H216, the company will begin a Phase II trial of CV-301 in combination with nivolumab in lung cancer and will conduct interim analyses of Prostvac's Phase III trial, with final data expected in 2017. Smallpox vaccine Imvamune keeps generating revenues and has secured a $100m order from the US government and a $7.7m order from the Canadian government.

INDUSTRY OUTLOOK

Bavarian Nordic has expertise in both vaccines (with two technology platforms) and manufacturing (with a multipurpose, approved facility). The pipeline includes two Phase III assets (Prostvac and Imvamune) and is largely focused on cancer immunotherapy (Prostvac and CV-301) and infectious diseases (Imvamune/smallpox, RSV and Ebola).

Y/E Dec	Revenue (DKKm)	EBITDA (DKKm)	PBT (DKKm)	EPS (ore)	P/E (x)	P/CF (x)
2014	1217.0	62.0	110.0	27.3	901.1	18.6
2015	1021.0	48.0	80.0	22.4	1098.2	87.7
2016e	1032.0	(119.0)	(112.0)	(38.6)	N/A	N/A
2017e	3057.0	1805.0	1753.0	542.2	45.4	7.3

Sector: Pharma & healthcare

Price: US$0.85
Market cap: US$48m
Market NASDAQ, TASE

Share price graph (US$)

Company description

BioLineRx is an Israel-based biotech company focused on the in-licensing and early development of therapeutics. It has a pipeline with six clinical and four preclinical candidates for a variety of indications.

Price performance

%	1m	3m	12m
Actual	6.2	(8.6)	(44.4)
Relative*	4.6	(13.6)	(46.9)

* % Relative to local index

Analyst

Maxim Jacobs

BioLineRx (BLRX)

INVESTMENT SUMMARY

Lead cancer drug BL-8040 is in development for multiple oncology indications. At the end of March, the company reported positive top line Phase II results for BL-8040 in AML. A Phase IIa trial in two bone marrow failure conditions should yield interim results by end 2016. BL-7010 is in development for coeliac disease, with EU classification as a medical device. A Phase II trial will start in 2016. Novel skin lesion product BL-5010 received CE-Mark approval in early April. BioLineRx also has strategic collaborations with Novartis (9% shareholder) to co-develop selected Israeli programmes and Merck to support a Ph II study of BL-8040 starting in Q316 with pembrolizumab in pancreatic cancer. Our forecasts are under review.

INDUSTRY OUTLOOK

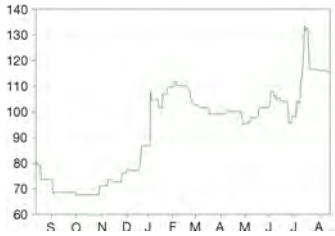
BioLineRx was founded with the intent to provide development for early-stage assets in Israel, and holds a strong track record of in-licensing clinical candidates through its extensive long-term relationships with academic and research centres.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(15.9)	(13.0)	(0.31)	N/A	N/A
2015	0.0	(16.2)	15.9	(28.1)	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:	115.5p
Market cap:	£38m
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	(6.9)	18.5	43.5
Relative*	(10.5)	5.7	36.9

* % Relative to local index

Analyst

Dr Linda Pomeroy

C4X Discovery Holdings (C4XD)

INVESTMENT SUMMARY

C4X Discovery's (C4XD) proprietary drug discovery platform allows the accurate measurement of molecular shapes in solution, enabling improved and accelerated drug discovery. It aims to become a highly efficient and productive discovery R&D engine; currently there are six programmes targeting validated clinical targets. The plan is to rapidly expand this to up to 15-20 new projects in the next three years. 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. Net cash of £5m at 31 January 2016 should be sufficient through to end-FY16.

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:	€36.14
Market cap:	€214m
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	23.3	(2.4)	(40.8)
Relative*	18.3	(6.6)	(35.9)

* % 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. French regulators recently cleared the commencement of a CE-mark enabling pivotal study, and the firm plans to start recruitment in H216. 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

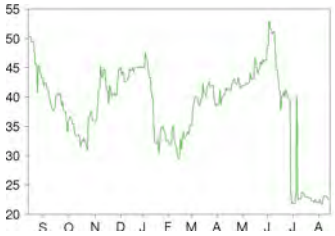
The Carmat artificial heart is being developed as a permanent replacement or destination therapy (DT) for chronic heart failure or acute myocardial infarction patients, who do not have access to a human donor heart. Despite the high worldwide prevalence of heart failure (c 100,000 patients), the shortfall 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:	€22.30
Market cap:	€208m
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	(5.6)	(48.3)	(55.6)
Relative*	(9.7)	(51.2)	(54.4)

* % Relative to local index

Analyst

Dr John Savin

Celyad (CYAD)

INVESTMENT SUMMARY

The Japanese pharmaceutical company ONO is jumping a therapeutic generation by licensing Celyad's allogeneic preclinical NKR-T cancer cell therapy for Japan, Korea and Taiwan. Allogeneic NKR-T has the same action as the Phase I/II NKR-T autologous product; allogeneic versions could be mass produced and provided "off the shelf". ONO paid €11.25m cash with €270.75m possible in milestones plus royalties. NKR-T is being tested in two haematological cancers. Trials in solid tumours planned for early 2017. Q116 accounts showed cash of €94.7m ($106m).

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. Celyad management intends to submit a conditional marketing authorisation for European approval. More data on the CHART-1 composite endpoint will be presented on 28 August 2016. The US Chart-2 trial with a new endpoint and EDV focus will run if partnered.

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:	US$2.99
Market cap:	US$82m
Market	NASDAQ

Share price graph (US$)

Company description

Cerulean is an oncology company with a proprietary platform using NDCs. Lead product CRLX101 combined with Avastin is in Ph II trials in 3rd- and 4th-line RCC and 2nd- and 3rd-line ovarian cancer.

Price performance

%	1m	3m	12m
Actual	39.1	44.4	(20.5)
Relative*	37.0	36.5	(24.0)

* % Relative to local index

Analyst

Maxim Jacobs

Cerulean Pharma (CERU)

INVESTMENT SUMMARY

Cerulean is a US oncology company developing nanoparticle-drug conjugates (NDCs). Cerulean recently presented the results on the Phase II trial of CRLX101 with weekly paclitaxel for the treatment of platinum resistant ovarian cancer. The nine patient trial showed a 56% overall response rate (ORR). The company also reported data from the Phase I dose escalation trial of CRLX301 (docetaxel nanoparticle conjugate) for solid tumors. The primary purpose of the study was to determine the maximum tolerated dose, but six of the 13 patients evaluable for efficacy were stabilized during the study. Cerulean will announce critical results from a randomized Phase II trial for CRLX101 plus Avastin in metastatic renal cancer in Q316.

INDUSTRY OUTLOOK

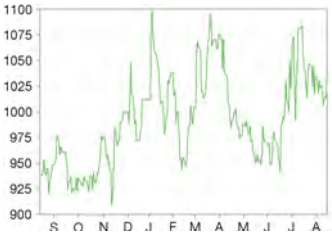
CRLX101 represents a new approach to advanced RCC patients. Potential for CRLX101 is significant in mRCC, a cancer where c 30% of patients experience disease recurrence. There are limited treatment options for third/fourth-line use and little in development.

Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	0.1	(20.4)	(21.4)	(164.0)	N/A	N/A
2015	0.0	(37.4)	(39.6)	(156.0)	N/A	N/A
2016e	0.0	(40.0)	(40.4)	(148.0)	N/A	N/A
2017e	0.0	(42.3)	(42.7)	(152.0)	N/A	N/A

Sector: Pharma & healthcare

Price:	1035.0p
Market cap:	£509m
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	(4.3)	7.9	10.9
Relative*	(8.1)	(3.8)	5.8

* % 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 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.

INDUSTRY OUTLOOK

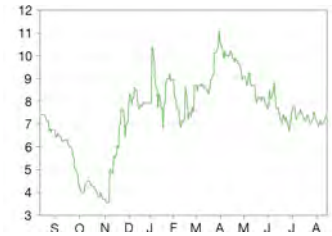
Management has positioned Consort Medical to generate sustainable revenue and profit growth, with the latter targeted at a double-digit rate. Improvements in operating efficiencies, coupled with investment in innovation and development capabilities, has laid the foundation for establishing a broader 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	21.7	19.1
2016	276.9	47.6	32.3	57.6	18.0	10.8
2017e	281.5	50.1	33.5	55.8	18.5	10.6
2018e	298.7	54.3	36.3	60.5	17.1	9.9

Sector: Pharma & healthcare

Price:	€7.56
Market cap:	€52m
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	1.2	(13.0)	2.9
Relative*	(2.9)	(16.7)	11.2

* % 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

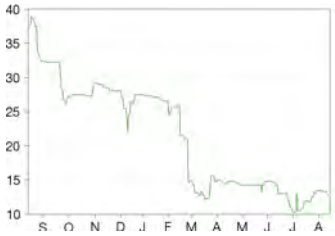
Traditional injections have multiple issues with them which inhibit patient acceptance. These often include: a multi-step injection process, difficulty in performing the injection correctly and convenience.

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:	12.8p
Market cap:	£34m
Market	AIM

Share price graph (p)



Company description

e-Therapeutics is a drug discovery and development company with a proprietary network pharmacology discovery platform and a clinical pipeline (with potential to be out-licensed post-Phase II proof-of-concept trials).

Price performance

%	1m	3m	12m
Actual	17.2	(10.5)	(66.1)
Relative*	12.6	(20.2)	(67.7)

* % Relative to local index

Analyst

Lala Gregorek

e-Therapeutics (ETX)

INVESTMENT SUMMARY

e-Therapeutics is a leader in network pharmacology, an innovative approach to drug discovery. The resignation of founder CEO Professor Malcolm Young has prompted organisational changes. Chairman Iain Ross becomes executive chairman, taking responsibility for corporate and commercial discussions. Other changes include the appointment of CFO Steve Medlicott as interim COO, and non-executive director, Professor Trevor Jones, becoming responsible for oversight of the scientific team and a newly initiated comprehensive project review. We anticipate further disclosure in due course; potentially at interims in September. As e-Therapeutics seeks to transition to commercialisation under new leadership, management attention is focused on finding a new CEO to continue to develop the business and secure partnerships. Deals should validate the platform, as well as fund future discovery work, identifying the next wave of lead candidates.

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)	(3.3)	N/A	N/A
2017e	0.0	(12.9)	(12.7)	(3.6)	N/A	N/A
2018e	0.0	(9.9)	(9.9)	(2.5)	N/A	N/A

Sector: Pharma & healthcare

Price:	€4.36
Market cap:	€579m
Market	FRA

Share price graph (€)

Company description

Evotec is a drug discovery business that provides outsourcing solutions to pharmaceutical companies, including Bayer, Boehringer Ingelheim, Janssen and Roche. It has operations in Germany, France, the UK and the US.

Price performance

%	1m	3m	12m
Actual	14.1	16.2	15.7
Relative*	6.1	7.0	18.0

* % Relative to local index

Analyst

Dr Jonas Peciulis

Evotec (EVT)

INVESTMENT SUMMARY

Evotec delivered better than expected H116 results with 37% total and 35% base revenue (excluding milestones, upfronts and licences) increases year-on-year. Double-digit base revenue growth guidance of >15% was reiterated, while adjusted EBITDA is now seen to more than double, underpinned by the continued growth of the company's core drug discovery services business. Evotec has announced a spin-off, Topas Therapeutics, with a €14m series A funding round co-led by three VC companies and Evotec, which will remain the largest shareholder. Topas has a nanoparticle-based platform with potential to deliver multiple projects in autoimmune and inflammatory disorders. Evotec reached a milestone in its partnership with Bayer, which is now progressing into Phase I with a new, first-in-class treatment for endometriosis, one of the largest unmet needs in women's health area, in our view.

INDUSTRY OUTLOOK

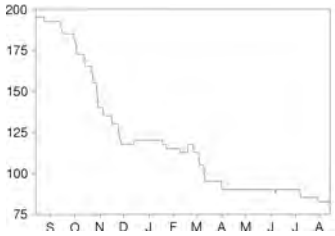
Evotec is a healthcare company that provides high-quality drug discovery services to the pharmaceutical industry and has collaborations with academic institutions to create novel drug discovery programmes.

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	35.1
2016e	157.4	26.6	15.0	6.68	65.3	82.7
2017e	177.4	30.5	21.2	11.31	38.5	19.2

Sector: Pharma & healthcare

Price:	80.0p
Market cap:	£15m
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	(5.9)	(11.1)	(59.0)
Relative*	(9.6)	(20.7)	(60.9)

* % Relative to local index

Analyst

Dr John Savin

Genedrive (GDR)

INVESTMENT SUMMARY

Genedrive, previously Epistem, have recently completed a placing of ordinary shares which raised £6.05m net of expenses. Genedrive's non-core service businesses will continue to trade under the Epistem brand while it focuses solely on molecular diagnostics. Indian partner, Xcelris Labs, started sales of the Genedrive PCR system tuberculosis (TB) test on 18 April. FY16 revenues were £5m, EBITDA loss of £3.9m. Unaudited cash balance as at 30 June 2016 were £1.1m before the placing which occurred post period. Our forecasts are under review.

INDUSTRY OUTLOOK

Genedrive believes its Genedrive device (a DNA-based diagnostic point-of-care system) will change the shape of DNA diagnostics, and is targeting 5,000 private laboratories. David Budd has joined as the new CEO and the recent name change from Epistem to Genedrive is to highlight the companies focus on near patient and point of care molecular diagnostics.

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:	€1.44
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	(17.7)	(71.1)	(80.0)
Relative*	(21.1)	(72.3)	(78.4)

* % Relative to local index

Analyst

Juan Pedro Serrate

Genticel (GTCL)

INVESTMENT SUMMARY

Genticel has announced 18-month data from the Phase II trial of the GTL001 vaccine to treat early-stage human papillomavirus 16 and 18 infections (HPV16/18). In this update, GTL001 showed no statistically significant difference in any subgroup. Safety remains positive. Genticel will present 24-month data in Q117, which will include the full data set and inform next steps. Additionally, the company has engaged corporate specialist Eumedix to advise on business development activities. Cash was €18.8m in March 2016. Cash is now sufficient until 2018.

INDUSTRY OUTLOOK

As GTL001 is under review, 24 month data will be useful to assess the future of the product. Lessons learnt from the fully completed trial could allow a partnership to assess GTL001 in a new Phase II trial focused on a specific subgroup of patients that have shown a sufficiently robust signal. A partnership could also be focused on preparing the next-generation candidate GTL002 for Phase I.

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:	564.0p
Market cap:	£1702m
Market	AIM, NASDAQ

Share price graph (p)

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	(8.0)	29.1	3.5
Relative*	(11.6)	15.1	(1.3)

* % 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 trials in Dravet syndrome and Lennox-Gastaut syndrome (LGS) were both 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:	1885.0p
Market cap:	£1143m
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	(0.8)	7.7	3.6
Relative*	(4.7)	(3.9)	(1.2)

* % Relative to local index

Analyst

Dr Susie Jana

Hutchison China MediTech (HCM)

INVESTMENT SUMMARY

HCM has built a substantial pipeline of potential first-in-class or best-in-class tyrosine kinase inhibitor (TKI) drugs, some of which are in development with strategic partners. 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 with potential for savolitinib's US NDA submission under breakthrough therapy designation by year end. 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.

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	156.2
2015	178.2	(7.8)	(10.5)	14.6	170.0	N/A
2016e	180.4	(43.3)	(48.1)	(0.5)	N/A	N/A
2017e	226.0	(20.5)	(26.7)	6.0	413.7	N/A

Sector: Pharma & healthcare

Price:	€0.90
Market cap:	€32m
Market	Alternext Paris

Share price graph (€)

Company description

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

Price performance

%	1m	3m	12m
Actual	0.0	3.4	(43.0)
Relative*	(4.1)	(1.0)	(38.4)

* % 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. A Phase II study is planned to start in France and the US in 2016. Interim Phase II data are expected in 2016 in CML. Inecalcitol is supported by strong anti-proliferative potency and excellent safety profile demonstrated in the 2014 CLL study. The investment case rests on inecalcitol's potential to enhance rather than replace approved therapies, particularly in view of the weakened general health of older leukaemia patients who are unable to tolerate therapies with harmful side effects. Our peak sales estimate is US$769m across the three indications.

INDUSTRY OUTLOOK

Inecalcitol faces competition from existing drugs and those in development. However, a good safety profile could give it an advantage. Preclinical models show that it has additional potential in breast cancer. Hybrigenics has a cash-generative subsidiary in protein research and genomics services.

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:	401.8p
Market cap:	£648m
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	(3.3)	(5.1)	(15.9)
Relative*	(7.1)	(15.4)	(19.7)

* % Relative to local index

Analyst

Lala Gregorek

Imperial Innovations (IVO)

INVESTMENT SUMMARY

Imperial Innovations (IVO) has c £239m available for portfolio investment, following the February £100m gross equity raise (23.5m new shares at 425p), end-January cash of £91.6m and a £50m EIB loan facility. IVO invested £27.5m in 17 companies in H116 (H115: £22.2m in 13), including addition of six new companies to the unquoted investment portfolio. Circassia's negative Phase III data will depress the value of the quoted portfolio for FY16, however, this is counterbalanced by recent funding rounds which should prompt a revaluation of the unquoted portfolio. These include Kesios (£19m), Mission (£60m), Nexeon (£30m), Inivata (£31.5m), FeatureSpace (£6.2m) and Storm (£12m). The increased number and size of these private rounds evidences the increasing maturity of the portfolio and brings valuation inflection points and/or 'exits' for various companies into view.

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 £355m as of 31 January 2016, vs £327m at 31 July 2015).

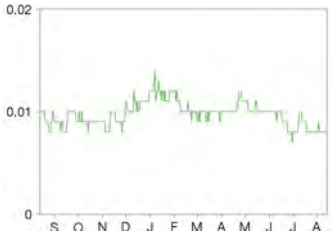
Y/E Jul	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
2014	3.6	(8.4)	(8.3)	(8.1)	N/A	N/A
2015	5.1	(8.2)	(7.4)	(5.4)	N/A	N/A
2016e	5.1	(10.6)	(10.2)	(6.9)	N/A	N/A
2017e	5.2	(11.2)	(11.5)	(7.1)	N/A	N/A

Imugene (IMU)

Sector: Pharma & healthcare

Price:	A$0.01
Market cap:	A$14m
Market	ASX

Share price graph (A$)



Company description

Imugene is an immune oncology company developing HER-Vaxx, a proprietary HER2 +ve cancer vaccine. A Ph Ib dose study is planned in gastric cancer starting in mid-2016 with a direct Ph II follow-on study in 68 patients.

Price performance

%	1m	3m	12m
Actual	(11.1)	(20.0)	(20.0)
Relative*	(14.2)	(22.9)	(23.5)

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

Imugene has completed manufacture of its strongly immunogenic gastric cancer therapeutic vaccine, HER-Vaxx, and has received ethics approval in preparation for a randomised Phase Ib/II trial in H216. HER-Vaxx could replicate or improve on the combination of two proven therapeutic antibodies, Herceptin and Perjeta (Roche), a combination that significantly improves survival in breast cancer and may do so in gastric cancer. In HER-Vaxx Phase I, management observes that patient antibodies displayed potent anti-tumour activity with an immune response. A new formulation of HER-Vaxx stimulated a 10-fold increase in antibody response in recent animal model testing. Imugene has entered a partnership to develop new mimotope-based immunotherapies against oncology targets, which could dramatically expand its product pipeline. Cash at 30 June was A$1.6m.

INDUSTRY OUTLOOK

Global gastric cancer incidence is 934,000 cases with few current therapeutic options. Gastric cancer trials are faster to run than in breast cancer as median survival in metastatic gastric cancer is less than 12 months. An 18-patient Phase Ib dose-finding study is planned from H116, followed by a Phase II in 68 patients. HER2 is overexpressed in up to 20% of gastric cancers.

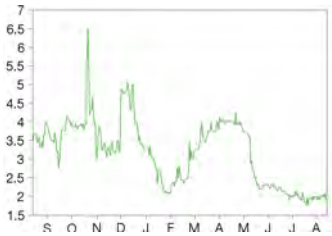
Y/E Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (c)	P/E (x)	P/CF (x)
2014	N/A	N/A	N/A	N/A	N/A	N/A
2015	0.6	(2.0)	(2.0)	(0.17)	N/A	N/A
2016e	0.8	(2.4)	(2.4)	(0.15)	N/A	N/A
2017e	0.8	(2.5)	(2.5)	(0.14)	N/A	N/A

International Stem Cell (ISCO)

Sector: Pharma & healthcare

Price:	US$1.99
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	4.7	(27.1)	(43.6)
Relative*	3.2	(31.1)	(46.2)

* % Relative to local index

Analyst

Maxim Jacobs

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. 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: Pharmaceutical and healthcar

MagForce (MF6)

Price:	€4.55
Market cap:	€117m
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	(7.1)	(1.4)	(18.0)
Relative*	(13.6)	(9.3)	(16.4)

* % Relative to local index

Analyst

Dr Susie Jana

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)	(32.8)	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

Medigene (MDG1)

Price:	€6.96
Market cap:	€140m
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 2016.

Price performance

%	1m	3m	12m
Actual	3.2	(16.8)	(20.3)
Relative*	(4.0)	(23.4)	(18.7)

* % Relative to local index

Analyst

Dr Linda Pomeroy

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 underway 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), which Medigene has recently entered into a cooperation agreement to conduct the Phase I and others in 2017 and 2018. Investment will also be made in the process development of TCRs according to GMP, and preclinical work on TABs. Recent non-core business deals have proved beneficial for Medigene, which further strengthens its immune-oncology focus. Medigene held €48.7m in cash at Q216, 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)	(42.0)	N/A	N/A
2015	6.8	(9.4)	(12.8)	(74.0)	N/A	N/A
2016e	7.1	(11.1)	(13.1)	(66.0)	N/A	N/A
2017e	7.3	(12.1)	(13.5)	(67.0)	N/A	N/A

Sector: Pharmaceutical & healthcare

Mesoblast (MSB)

Price:	A$1.61
Market cap:	A$616m
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	41.0	(13.4)	(56.1)
Relative*	36.2	(16.5)	(58.0)

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

Mesoblast announced impressive results through the 12-week primary endpoint in its Phase II trial of MPC therapy in RA patients refractory to biologics. The data are comparable to response rates seen with TNF alpha-biologics in first-line therapy and better than approved JAK inhibitor Xeljanz in comparable biologic refractory patients. JCR-031 was launched in Japan for acute graft versus host disease (GvHD) in February. Clinical data from phase III studies of MPC-150-IM in heart failure will support regulatory approval; the first trial cleared an interim safety analysis in Q216. Mesoblast has regained full rights to the cardiovascular program from Teva and at the appropriate time will seek to partner with a pharma company with a cardiovascular focus. Teva and Mesoblast continue to collaborate in CNS and bone marrow transplant fields. Mesoblast had cash of US$81M on 30 June. It has entered an equity finance facility with Kentgrove Capital to fund the ongoing Phase III CHF trial and a 600-patient confirmatory trial.

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 (c)	P/E (x)	P/CF (x)
2014	25.1	(83.9)	(75.5)	(23.64)	N/A	N/A
2015	32.4	(98.0)	(94.9)	(29.59)	N/A	N/A
2016e	44.1	(54.1)	(53.5)	(13.84)	N/A	N/A
2017e	7.1	(78.8)	(78.8)	(20.67)	N/A	N/A

Sector: Pharmaceutical & healthcare

Midatech Pharma (MTPH)

Price:	130.0p
Market cap:	£44m
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	8.3	(24.2)	(51.9)
Relative*	4.1	(32.4)	(54.1)

* % Relative to local index

Analyst

Maxim Jacobs

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: Pharmaceutical and healthcar

Mologen (MGN)

Price:	€1.92
Market cap:	€43m
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	4.2	(47.2)	(59.2)
Relative*	(3.1)	(51.4)	(58.4)

* % Relative to local index

Analyst

Dr Susie Jana

INVESTMENT SUMMARY

Mologen is developing novel immunotherapies for use in the post-chemo maintenance setting in cancer and for the treatment of infectious diseases. Recent completion of the strategic review focuses Mologen's efforts on lead product lefitolimod, which is in four clinical trials. IMPALA is a 540-pt pivotal study in metastatic colorectal cancer (mCRC) maintenance; full enrolment is expected by end-2016. Recruitment has completed for the 100-patient Phase II trial (IMPULSE) in small-cell lung cancer (SCLC) and analysis is expected to start at end-2016. 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 H117. A 60-patient Phase I combination study of MGN1703 with Yervoy in solid tumours is now being conducted by MD Anderson. Cash of €15.3m as of 30th June 2016 should be sufficient to complete recruitment of IMPALA and could reach top-line data from IMPULSE.

INDUSTRY OUTLOOK

Results for IMPALA are expected in 2018. 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	(24.9)	(24.9)	(1.10)	N/A	N/A
2017e	0.1	(25.7)	(25.8)	(1.14)	N/A	N/A

Sector: Pharmaceutical & healthcare

MorphoSys (MOR)

Price:	€40.22
Market cap:	€1067m
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	3.0	(9.1)	(40.9)
Relative*	(4.2)	(16.4)	(39.7)

* % Relative to local index

Analyst

Maxim Jacobs

INVESTMENT SUMMARY

MorphoSys has a broad portfolio with 104 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 has now initiated six Phase III studies with guselkumab in psoriasis, a programme with blockbuster potential. Bimagrumab, partnered with Novartis, recently failed a Phase IIb/III trial in myositis, although other trials in sarcopenia and muscular atrophy after hip operations 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	64.0	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: Pharmaceutical & healthcare

Nanobiotix (NANO)

Price:	€17.21
Market cap:	€269m
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	1.3	(5.6)	(2.5)
Relative*	(2.8)	(9.7)	5.4

* % Relative to local index

Analyst

Dr Jonas Peciulis

INVESTMENT SUMMARY

In July, Nanobiotix announced positive results from its Phase I/II trial with head and neck (H&N) cancer patients, which is now the second indication with supportive clinical data for radiotherapy enhancer NBTXR3 and the project can move into late stage clinical development. On 5 January, the company revealed plans to expand preclinical research into immuno-oncology with the first pre-clinical data 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; in partnership with PharmaEngine), liver cancers (Europe; HCC and metastases; Phase I/II), head and neck cancers (Europe; Phase I/II) and rectal cancer (Phase I/II, run by PharmaEngine in Asia). Catalysts in H216 include Phase II/III STS trial data, results from two Phase I/II studies for liver cancers and the CE-mark approval in Europe, potentially end 2016. 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

Neovacs (ALNEV)

Price:	€0.77
Market cap:	€33m
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	(4.9)	(32.2)	(21.4)
Relative*	(8.8)	(35.1)	(15.1)

* % Relative to local index

Analyst

Dr John Savin

INVESTMENT SUMMARY

Neovacs's lead project, IFN-Kinoid (IFN-K) for lupus, started a 178-patient EU, US and RoW Phase II in Q315. It expects data by mid-2017. This is based on clinical response and measurement of the interferon signature (IS), a diagnostic marker of lupus. CKD, a leading Korean pharmaceutical company, partnered the product for Korea in 2015; marketing may start in 2018. Neovacs plans to partner IFN-K, implying possible launches in 2021. VEGF Kinoid for cancer and AMD could start a Phase I in 2017. Cash in December 2015 was €6.1m; a French rights issue raised €8m gross at €0.85/share.

INDUSTRY OUTLOOK

Neovacs' nine-month efficacy Phase IIb data is due in H117; the Phase II includes a 12 patient US arm after FDA agreement. There is a programme in dermatomyositis (DM), an orphan skin and muscular condition that the rights issue will help to fund. Neovacs plans to evaluate INF Kinoid in Type 1 diabetes. A VEGF inhibitor is in preclinical for cancer and macular degeneration.

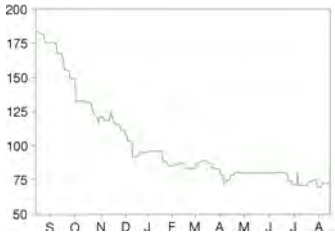
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	0.2	(9.6)	(9.8)	(31.6)	N/A	N/A
2015	1.2	(11.2)	(11.2)	(26.8)	N/A	N/A
2016e	0.0	(14.0)	(14.0)	(26.5)	N/A	N/A
2017e	1.8	(12.6)	(12.6)	(20.5)	N/A	N/A

Sector: Pharmaceutical & healthcare

NetScientific (NSCI)

Price:	72.5p
Market cap:	£37m
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, Glucosense), diagnostics (Vortex, ProAxsis, Glycotest) and therapeutics (PDS Biotech).

Price performance

%	1m	3m	12m
Actual	2.1	(9.4)	(60.6)
Relative*	(1.9)	(19.2)	(62.4)

* % Relative to local index

Analyst

Maxim Jacobs

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	(5.5)	(5.5)	(13.4)	N/A	N/A
2015	0.1	(10.1)	(10.2)	(21.8)	N/A	N/A
2016e	0.7	(14.5)	(14.6)	(25.0)	N/A	N/A
2017e	3.4	(13.6)	(13.7)	(22.9)	N/A	N/A

Sector: Pharmaceutical & healthcare

Newron Pharmaceuticals (NWRN)

Price:	CHF20.00
Market cap:	CHF289m
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) is expected to start Q3 2016

Price performance

%	1m	3m	12m
Actual	20.5	19.8	(27.9)
Relative*	18.3	13.9	(20.2)

* % Relative to local index

Analyst

Dr Susie Jana

INVESTMENT SUMMARY

Newron's lead product, Xadago (safinamide) for Parkinson's disease (PD) has been launched in the UK, Germany, Italy, Switzerland, Spain, Belgium, Denmark, Sweden and the Netherlands. It is now generating sales through commercial partner Zambon (ex-Japan/Asia). In the US, Xadago's NDA is due to be re-submitted in November 2016; 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. A Phase II study of NW-3509 for schizophrenia as an add-on to anti psychotics has also started; this could be a candidate for out-licensing. Our financial forecasts and valuation are under review.

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	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

Nexstim (NXTMH)

Price: €0.89
Market cap: €8m
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	6.6	(16.8)	(85.2)
Relative*	1.7	(25.8)	(85.4)

* % Relative to local index

Analyst

Dr John Savin

INVESTMENT SUMMARY

Nexstim has filed an FDA de novo 510(k) stroke rehabilitation application which might give US sales from mid-2017 if the FDA agrees. Phase III data, stopped at an interim stage, shows that 66% of treated patients achieved the primary endpoint, but also that the 'active' sham treated patients showed a similar response. The system is CE marked and can be sold in the EU. Nexstim project that it is financed until 2018 due to a SEDA and loan deal with Bracknor and Sitra; June 2016 cash was €1.8m.

INDUSTRY OUTLOOK

Nexstim has developed a technology platform for diagnosis (NBS) and treatment (NBT) of vital motor and speech cortices in the brain. Trials for economic validation and reimbursement are likely to be needed. An FDA response on whether it will undertake a de novo review is due between late August and September. This is critical to the company. Cost savings of €2.3m / year are planned. Sales of NBS will be by distributors so management expect reduced revenues in 2016.

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)	(622.0)	N/A	N/A
2016e	3.1	(7.9)	(8.5)	(725.0)	N/A	N/A
2017e	4.2	(6.8)	(7.0)	(595.0)	N/A	N/A

Sector: Pharmaceutical & healthcare

Novogen (NRT)

Price: A$0.11
Market cap: A$47m
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	10.0	4.8	(35.3)
Relative*	6.2	1.0	(38.1)

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

Novogen is developing two groups of anti-cancer compounds that have shown promise in preclinical studies. Its super-benzopyran drugs, which include Cantrixil and Trilexium, are potent against cancer stem cells that are resistant to standard chemotherapy drugs, both in vitro and in animal models. Its lead anti-tropomyosin dug, Anisina, shows strong synergy with standard-of-care anti-mitotic vinca alkaloid drugs. Anisina has been granted orphan drug designation for neuroblastoma by the US FDA. The company is well-funded, with A$37.6m cash at 31 December 2015 and is on track to have Cantrixil in clinical trials in Q416 (IND submitted in August) and Anisina in the clinic in 2017. Novogen has strengthened its management team with the appointment of Dr James Garner (ex Sanofi) as CEO and John O'Connor as Chairman.

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)
2014	0.3	(5.8)	(7.6)	(4.76)	N/A	N/A
2015	1.6	(7.6)	(8.4)	(2.99)	N/A	N/A
2016e	2.8	(13.7)	(12.6)	(2.95)	N/A	N/A
2017e	4.9	(13.9)	(13.1)	(3.05)	N/A	N/A

Sector: Pharmaceutical & healthcare

Onxeo (ONXEO)

Price: €3.19
Market cap: €132m
Market Euronext Paris

Share price graph (€)

Company description

Onxeo is focused on orphan cancer and has three late-stage oncology assets it could commercialise in Europe (Livatag, Beleodaq and Validive). Royalty-earning Beleodaq is launched in the US, along with two non-core, specialty products. Acquisition of DNA Therapeutics adds a Phase I stage asset in DNA repair field to Onxeo's pipeline.

Price performance

%	1m	3m	12m
Actual	(3.6)	(1.8)	(30.2)
Relative*	(7.6)	(6.0)	(24.5)

* % Relative to local index

Analyst

Dr Jonas Peciulis

INVESTMENT SUMMARY

With its H116 results, Onxeo reported that R&D is progressing according to plan. Onxeo recently announced the development plans for recently acquired first-in-class AsiDNA, a signal-interfering DNA repair technology, which could move into clinic in 2017. 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 >80% 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. The start of the Phase III Beleodaq trial in frontline PTCL is expected in 2016, supported by the recent Phase I data presented at ASH. We are updating our estimates.

INDUSTRY OUTLOOK

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

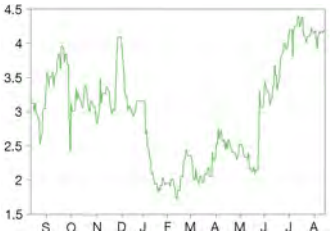
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	22.1	(4.5)	0.2	(5.03)	N/A	N/A
2015	3.5	(20.4)	(20.0)	(43.52)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharmaceutical & healthcare

Opexa Therapeutics (OPXA)

Price: US$4.19
Market cap: US$30m
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	(4.6)	94.0	30.9
Relative*	(6.0)	83.3	25.1

* % Relative to local index

Analyst

Pooya Hemami

INVESTMENT SUMMARY

Opexa's Tcelna is advancing in Phase IIb studies in secondary progressive MS (SPMS), with data expected in early Q416. Tcelna is a patient-specific (autologous) immunotherapy that aims to suppress myelin-reactive T-cells (MRTCs) and thereby, curb autoimmune responses against myelin. Following the collection of a patient's own blood, the T-cells are screened against predefined self-reacting myelin protein targets. The dominant MRTC lines are isolated and expanded. An attenuated end-product is re-injected into the patient, aiming to generate a feedback response that will suppress the undesired circulating MRTCs.

INDUSTRY OUTLOOK

The firm is fully funded into Q117, and thus through the forecast attainment of Phase IIb data which, if positive, could sharply increase investor and stakeholder interest. Merck KGaA has an option to in-license Tcelna in MS. Opexa is also 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, and envisions that if Merck in-licenses Tcelna, it will have resources to bring OPX-212 to Phase I trials.

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	1.9	2.0
2017e	0.0	(14.3)	(14.3)	(188.5)	N/A	N/A

Sector: Pharmaceutical & healthcare

Orexigen Therapeutics (OREX)

Price: US$4.18
Market cap: US$61m
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	4.0	11.0	(88.2)
Relative*	2.5	4.9	(88.7)

* % Relative to local index

Analyst

Maxim Jacobs

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 the EU. The company recently announced a collaborative agreement with Valeant in 18 Central and Eastern European countries, including 11 in the EU where we can expect first launch by year end. Contrave, was also recently launched in South Korea through partner Kwang Dong.

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)	(31.74)	N/A	18.4
2015	24.5	(60.3)	(67.3)	(52.38)	N/A	N/A
2016e	46.4	(57.5)	(59.5)	(40.09)	N/A	N/A
2017e	120.9	(19.1)	(32.6)	(21.51)	N/A	N/A

Sector: Pharmaceutical & healthcare

Orexo (ORX)

Price: SEK53.75
Market cap: SEK1852m
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	2.4	15.6	(10.0)
Relative*	(2.3)	6.9	(7.6)

* % Relative to local index

Analyst

Lala Gregorek

INVESTMENT SUMMARY

Orexo's Q216 results pointed to positive Zubsolv momentum with evidence of net revenue growth, improving margins and encouraging market access developments. Financial discipline contributed to a Q216 SEK12.1m operating profit and a second successive quarter of positive operating cash flow. The new Maryland FFS Medicaid agreement should help boost Zubsolv's penetration into the public market segment and ongoing expansion in US prescribing rights - HHS has increased the patient cap (275 from August) and Congress passed CARA 2016 - will be a key growth driver longer term. Ex-US, the recent Mundipharma licensing deal provides access to the global opioid dependence market. In the near term, however, uncertainty due to the ongoing Actavis litigation weighs on the current share price; resolution is expected in H2.

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	752.9	60.7	24.8	54.0	99.5	6.2
2017e	989.4	156.2	137.3	221.0	24.3	9.5

Sector: Pharmaceutical & healthcare

Oryzon Genomics (ORY)

Price: €2.89
Market cap: €82m
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	(0.3)	(1.7)	N/A
Relative*	(2.8)	(2.3)	N/A

* % Relative to local index

Analyst

Dr Jonas Peciulis

INVESTMENT SUMMARY

Oryzon's core 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 potentially out by end 2016. Preclinical models showed that LSD1 is a key effector causing arrest in cell differentiation in subtypes of acute myeloid leukaemia (AML) and that the inhibition of this target could potentially lead to an effective treatment. ORY-1001 is partnered with Roche, which can take over further development after the end of the ongoing Phase I/IIa. Oryzon's second product, ORY-2001, targets Alzheimer's disease (AD) and has entered a Phase I trial in early 2016. 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	48.3	6.0	5.5
2015	7.2	0.7	(0.1)	(0.6)	N/A	65.8
2016e	3.9	(3.7)	(4.7)	(15.1)	N/A	N/A
2017e	2.5	(4.6)	(5.6)	(19.5)	N/A	N/A

Sector: Pharmaceutical & healthcare

Oxford BioMedica (OXB)

Price: 4.1p
Market cap: £112m
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	(9.8)	(24.5)	(51.0)
Relative*	(13.4)	(32.6)	(53.3)

* % Relative to local index

Analyst

Dr Susie Jana

INVESTMENT SUMMARY

Oxford BioMedica's near-term outlook has been transformed by its specialist production capabilities. However, the next 12-24 months will see increasing pipeline driven news flow as Phase I/II studies for OXB-102 (Parkinson's disease), OXB-202 (corneal graft rejection) and OXB-302 (CAR-T 5T4) for solid cancers could start by end 2016/early 2017 respectively. The expansion of the manufacturing capacity for third parties (e.g Novartis's CTL019/CART-019) is now complete (Recent MHRA GMP manufacturing approvals); with Novartis indicating a 2017 filing for CTL019, Oxford should start earning royalties and substantial manufacturing fees (up to $76m over three years). This growing manufacturing revenue stream provides technology know-how validation and, more importantly, cash to fund R&D of the proprietary pipeline. In the longer term, additional collaborations for the late-stage projects, licence income from the patent estate and pipeline progress can be expected. Our forecasts are currently under review.

INDUSTRY OUTLOOK

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

Y/E Dec	Revenue (£m)	EBITDA (£m)	PBT (£m)	EPS (p)	P/E (x)	P/CF (x)
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	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

Pacific Edge (PEB)

Price:	NZ$0.58
Market cap:	NZ$221m
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	7.4	(9.4)	(6.5)
Relative*	3.3	(14.4)	(23.6)

* % Relative to local index

Analyst

Maxim Jacobs

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	96.7	38.7

Sector:

Paion (PA8)

Price:	€2.11
Market cap:	€118m
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	(5.1)	7.0	(17.2)
Relative*	(11.7)	(1.5)	(15.5)

* % Relative to local index

Analyst

Dr Dennis Hulme

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 5% 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 €32.1m cash at 30 June plus €10m upfront payment from Cosmo received in July 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 oversedation.

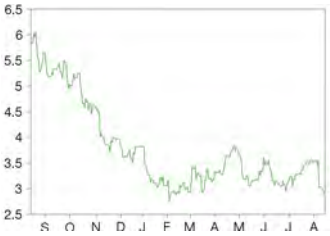
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	3.5	(11.5)	(11.6)	(22.9)	N/A	N/A
2015	0.1	(34.1)	(34.0)	(55.7)	N/A	N/A
2016e	10.1	(20.6)	(20.6)	(30.7)	N/A	N/A
2017e	2.2	(8.4)	(8.4)	(13.3)	N/A	N/A

Sector: Pharmaceutical & healthcare

PDL BioPharma (PDLI)

Price:	US$2.84
Market cap:	US$470m
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	(13.4)	(6.9)	(51.7)
Relative*	(14.7)	(12.0)	(53.9)

* % Relative to local index

Analyst

Maxim Jacobs

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	1.4	1.5
2015	590.4	550.4	530.1	203.69	1.4	1.5
2016e	224.9	154.8	134.5	53.27	5.3	6.7
2017e	197.9	98.5	72.5	31.61	9.0	42.1

Sector: Pharmaceutical & healthcare

PharmaMar (PHM)

Price:	€2.70
Market cap:	€600m
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	18.2	15.4	(28.3)
Relative*	15.3	14.7	(10.5)

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

PharmaMar restructured in late 2015 to concentrate on its potentially high-growth marine oncology activities. In the restructure, the oncology division, PharmaMar, absorbed the former parent company, Zeltia. PharmaMar has built a pipeline of first-in-class cancer drugs for development with strategic partners. Royalty income flowing from the approvals for Yondelis for soft tissue sarcoma in Japan and the US in September and October 2015, respectively, should drive strong profit growth from 2017. The 420-patient CORAIL Phase III trial of PM1183 in platinum-resistant ovarian cancer was cleared to continue in August after an interim futility analysis on the first 210 patients. Another pivotal study of PM1183 was initiated in August; the 600-patient Phase III ATLANTIS study will evaluate PM1183 in combination with doxorubicin in patients with small cell lung cancer. The Phase III trial of Aplidin in multiple myeloma reported positive results in March, while a pivotal study of Aplidin in angioimmunoblastic T-cell lymphoma was initiated in June.

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).

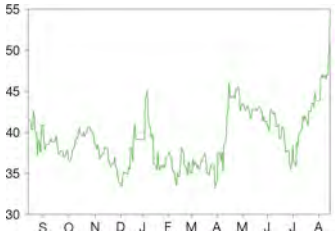
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	149.7	25.7	16.3	6.8	39.7	25.6
2015	162.0	19.3	6.5	3.2	84.4	58.8
2016e	177.1	5.9	(5.9)	(3.4)	N/A	N/A
2017e	195.6	35.2	23.6	9.9	27.3	19.3

Sector: Pharmaceutical & healthcare

Photocure (PHO)

Price: NOK54.00
Market cap: NOK1162m
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	28.9	26.5	34.0
Relative*	29.5	23.8	40.8

* % Relative to local index

Analyst

Maxim Jacobs

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.

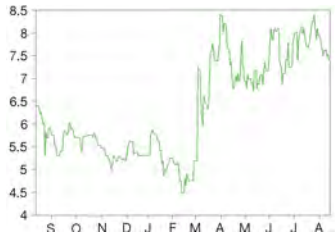
Y/E Dec	Revenue (NOKm)	EBITDA (NOKm)	PBT (NOKm)	EPS (fd) (öre)	P/E (x)	P/CF (x)
2014	129.0	(5.6)	1.5	7.0	771.4	N/A
2015	134.7	(22.0)	(17.4)	(82.0)	N/A	N/A
2016e	143.7	(16.5)	(11.7)	(54.0)	N/A	N/A
2017e	166.8	(3.0)	1.9	9.0	600.0	N/A

Sector: Pharmaceutical and healthcar

Pixium Vision (PIX)

Price: €7.42
Market cap: €95m
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	(8.5)	3.3	15.9
Relative*	(12.2)	(1.1)	25.4

* % Relative to local index

Analyst

Pooya Hemami

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 H216. Pixium held €16m in cash at 30 June 2016.

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.

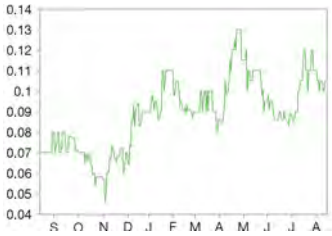
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (fd) (c)	P/E (x)	P/CF (x)
2014	2.4	(10.8)	(11.6)	(118.43)	N/A	N/A
2015	3.3	(14.6)	(15.6)	(122.88)	N/A	N/A
2016e	2.9	(13.3)	(14.2)	(111.06)	N/A	N/A
2017e	5.5	(22.9)	(24.1)	(188.56)	N/A	N/A

Sector: Pharmaceutical & healthcare

Prescient Therapeutics (PTX)

Price:	A$0.10
Market cap:	A$22m
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	0.0	(2.1)	65.7
Relative*	(3.4)	(5.6)	58.5

* % Relative to local index

Analyst

Dr Dennis Hulme

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 will start in H216. The breast cancer study has identified the recommended Phase II dose, and researchers will initiate an expansion cohort in 12 patients to better characterise the safety profile; interim data are expected in H216. The second drug, PTX-100, is expected to begin a Phase Ib trial in breast cancer in 2017. Cash of A$9.8m at 30 March has been boosted by a A$1.3m shortfall placement in July, taking pro forma cash to A$11.1m.

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.

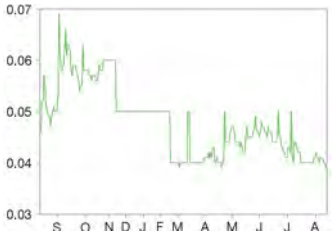
Y/E Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(1.8)	(1.8)	(5.94)	N/A	N/A
2015	0.3	(2.1)	(2.1)	(4.28)	N/A	N/A
2016e	0.2	(2.0)	(1.9)	(2.57)	N/A	N/A
2017e	0.3	(10.1)	(10.0)	(10.70)	N/A	N/A

Sector: Pharmaceutical & healthcare

Prima BioMed (PRR)

Price:	A$0.04
Market cap:	A$82m
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	(4.8)	(4.8)	(14.9)
Relative*	(8.0)	(8.2)	(18.6)

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

Prima BioMed has a pipeline of three clinical assets (one partnered with GSK and a second partnered with Novartis), all 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 LAG3 programmes, providing additional validation for the LAG3 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.

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: Pharmaceutical & healthcare

Probiodrug (PBD)

Price:	€19.84
Market cap:	€148m
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	3.1	0.2	(6.6)
Relative*	1.2	(5.0)	(1.8)

* % Relative to local index

Analyst

Dr Jonas Peciulis

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 safety data expected by end of 2016 and exploratory efficacy data 3-4 months later. Recently, Probiodrug announced a positive outcome in the chronic animal toxicology studies confirming a favourable therapeutic margin for PQ912. The capital raise of €13.5m (gross) in November 2015 should extend the cash runway into 2017, incorporating the SAPHIR initial data readout, when Probiodrug may seek to partner PQ912.

INDUSTRY OUTLOOK

There are 44 million dementia sufferers worldwide, 60% of whom have AD. The lack of disease-modifying therapies leaves a vast unmet clinical need. Results from Biogen and Eli Lilly have revived confidence in the amyloid hypothesis. This, combined with a greater 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)	(234.7)	N/A	N/A
2015	0.0	(13.3)	(13.5)	(196.1)	N/A	N/A
2016e	0.0	(14.4)	(14.2)	(190.6)	N/A	N/A
2017e	0.0	(11.2)	(11.2)	(149.8)	N/A	N/A

Sector: Pharmaceutical & healthcare

Regeneus (RGS)

Price:	A$0.14
Market cap:	A$30m
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	11.5	(12.1)	(3.3)
Relative*	7.7	(15.3)	(7.5)

* % Relative to local index

Analyst

Dr Dennis Hulme

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 aims to finalise manufacturing and clinical development partnerships in Japan in Q316. 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 June was A$0.5m.

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.

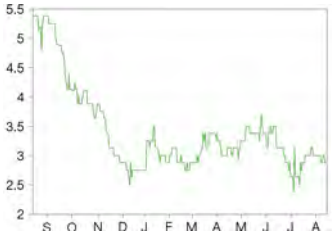
Y/E Jun	Revenue (A$m)	EBITDA (A$m)	PBT (A$m)	EPS (c)	P/E (x)	P/CF (x)
2014	2.0	(10.8)	(7.5)	(4.51)	N/A	N/A
2015	1.9	(9.8)	(6.6)	(3.15)	N/A	N/A
2016e	1.4	(6.1)	(3.9)	(1.88)	N/A	N/A
2017e	1.7	(6.2)	(4.0)	(1.92)	N/A	N/A

Sector: Pharmaceutical & healthcare

ReNeuron Group (RENE)

Price:	2.9p
Market cap:	£91m
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	(14.8)	(46.5)
Relative*	(3.9)	(24.0)	(49.0)

* % Relative to local index

Analyst

Dr Linda Pomeroy

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). Pivotal Phase II/III studies are planned for the stroke and RP programmes. 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 (Phase IIa data in mid-2016 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:

Selvita (SLV)

Price:	21.60PLN
Market cap:	PLN290m
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	(1.8)	(1.9)	21.4
Relative*	(7.2)	(4.1)	43.7

* % Relative to local index

Analyst

Dr Jonas Peciulis

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 H216, and SEL120 (CDK8 inhibitor, colon cancer and other malignancies) about to begin IND-enabling studies and 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 PLN29.6m at end March 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	38.6	N/A
2015	56.1	10.2	7.6	83.58	25.8	N/A
2016e	66.9	9.3	5.8	43.96	49.1	N/A
2017e	76.5	12.8	8.7	63.20	34.2	N/A

Sector: Pharmaceutical and healthcar

Silence Therapeutics (SLN)

Price:	116.0p
Market cap:	£81m
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	7.2	(1.3)	(53.6)
Relative*	2.9	(11.9)	(55.7)

* % Relative to local index

Analyst

Dr Linda Pomeroy

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 €51.9m in cash at FY15, 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: Pharmaceutical & healthcare

StemCells (STEM)

Price:	US$0.37
Market cap:	US$4m
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	(9.7)	(88.1)	(92.7)
Relative*	(11.0)	(88.8)	(93.0)

* % Relative to local index

Analyst

Maxim Jacobs

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.

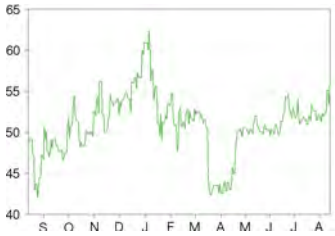
Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	1.0	(32.2)	(32.2)	(6.8)	N/A	N/A
2015	0.1	(37.5)	(36.8)	(4.6)	N/A	N/A
2016e	N/A	N/A	N/A	N/A	N/A	N/A
2017e	N/A	N/A	N/A	N/A	N/A	N/A

Sector: Pharmaceutical & healthcare

Stratec Biomedical (SBS)

Price:	€55.67
Market cap:	€660m
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	7.4	7.2	14.5
Relative*	(0.1)	(1.3)	16.7

* % Relative to local index

Analyst

Dr John Savin

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.

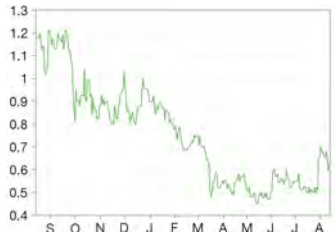
Y/E Dec	Revenue (€m)	EBITDA (€m)	PBT (€m)	EPS (c)	P/E (x)	P/CF (x)
2014	144.9	31.1	29.7	215.6	25.8	16.9
2015	146.9	36.1	34.9	252.9	22.0	20.4
2016e	183.5	38.0	35.6	248.9	22.4	22.0
2017e	220.1	43.6	41.2	286.1	19.5	15.7

Sector: Pharmaceutical & healthcare

Sunesis Pharmaceuticals (SNSS)

Price:	US$0.60
Market cap:	US$52m
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	15.4	33.3	(54.9)
Relative*	13.7	26.0	(56.9)

* % Relative to local index

Analyst

Maxim Jacobs

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 will be presented in September. 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)	(71.6)	N/A	N/A
2015	3.1	(35.8)	(36.7)	(50.3)	N/A	N/A
2016e	2.4	(35.7)	(37.0)	(42.1)	N/A	N/A
2017e	1.7	(45.6)	(49.1)	(53.4)	N/A	N/A

Sector: Pharmaceutical & healthcare

Sygnis (LIO1)

Price:	€1.26
Market cap:	€47m
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	(0.3)	(0.5)	(47.0)
Relative*	(7.3)	(8.4)	(45.9)

* % Relative to local index

Analyst

Dr John Savin

INVESTMENT SUMMARY

Sygnis sells its own-brand TruePrime and SunScript kits through an international distributor network and direct though its website. Sygnis reported first half 2016 revenues of €319k, a 63% increase on the same period in 2015. Sygnis has acquired Expedeon, a UK-based proteomics consumables company, while the integration takes place its guidance for 2016 is under review. Cash as of 30th June 2016 was €2.4m.

INDUSTRY OUTLOOK

Sygnis has completed a rights offering and placement issuing 4.8m shares for €5.3 million gross in cash. A further 15.7m shares will be issued to acquire Expedeon plus €1.7m in cash. The impact in 2016 is limited as the deal will not complete till mid-year. Synergies could become apparent from 2017. The combined business will remain loss making until the molecular biology kits are better established. A new version of the TruePrime Single Cell WGA V2 Kit shows superior sensitivity, is easy to use and works perfectly with common NGS platforms.

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)	(3.78)	N/A	N/A
2017e	6.9	0.2	0.1	0.36	350.0	9324.0

Sector: Pharmaceutical & healthcare

SymBio Pharmaceuticals (4582)

Price:	¥243.00
Market cap:	¥10011m
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	0.4	(27.0)	(6.9)
Relative*	(2.4)	(26.3)	17.2

* % Relative to local index

Analyst

Maxim Jacobs

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 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 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.

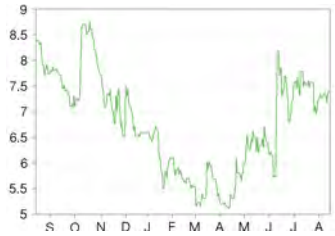
Y/E Dec	Revenue (¥m)	EBITDA (¥m)	PBT (¥m)	EPS (¥)	P/E (x)	P/CF (x)
2014	1955.0	(1134.0)	(1116.0)	(36.39)	N/A	N/A
2015	1933.0	(2641.0)	(2640.0)	(81.61)	N/A	N/A
2016e	1951.0	(2725.0)	(2733.0)	(84.51)	N/A	N/A
2017e	2290.0	(3295.0)	(3326.0)	(102.80)	N/A	N/A

Sector: Pharmaceutical & healthcare

Theraclion (ALTHE)

Price: €7.44
Market cap: €48m
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	4.2	20.0	(7.8)
Relative*	(0.1)	14.9	(0.3)

* % Relative to local index

Analyst

Dr John Savin

INVESTMENT SUMMARY

Theraclion sells the CE-marked EchoPulse ultrasound device and disposable EPack skin cooling unit to treat benign, but troublesome breast lumps: fibroadenomas (FA) and palpable thyroid nodules. EchoPulse leaves no scars and has zero infection risk. The H116 trading update shows two EchoPulse ultrasound devices sold and three leased with 125 commercial EPack sales. One unit sale recognition moved into H2. This gave H1 revenues of €463k. Management indicated that most sales are expected in Q4 once supply issues are resolved. The Edison 2016 revenue target has been adjusted from €5.9m to €4.6m. Cash at 31 December 2015 was €3.75m. A €1.78m placing of 0.39m shares at €4.54/share with a Chinese investor was announced in May.

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.

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: Pharmaceutical and healthcar

Tissue Regenix Group (TRX)

Price: 18.8p
Market cap: £143m
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	(7.4)	3.5	(5.1)
Relative*	(11.1)	(7.7)	(9.4)

* % Relative to local index

Analyst

Dr Linda Pomeroy

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, including 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 2017/2018. 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 €19.9m in cash at FY16.

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	2.4	(11.1)	(11.3)	(1.41)	N/A	N/A
2017e	6.4	(11.4)	(11.6)	(1.45)	N/A	N/A

Sector: Pharmaceutical & healthcare

Tonix Pharmaceuticals (TNXP)

Price:	US$2.56
Market cap:	US$66m
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	20.8	9.9	(65.2)
Relative*	19.0	3.8	(66.8)

* % Relative to local index

Analyst

Maxim Jacobs

INVESTMENT SUMMARY

Tonix has two programmes in development: TNX-102 SL is a sublingual version of cyclobenzaprine (CBP), which is being developed for both fibromyalgia and post-traumatic stress disorder (PTSD). The company recently completed enrolment for its Phase III AFFIRM trial in fibromyalgia with data expected in Q316. 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). As this trial was in those with military-related PTSD, these data are especially significant, as little to no efficacy has been seen in these patients previously with other medications.

INDUSTRY OUTLOOK

Tonix is an emerging specialty pharmaceutical company focused on psychiatric and neurological disorders, with two programmes, TNX-102 SL for fibromyalgia and PTSD.

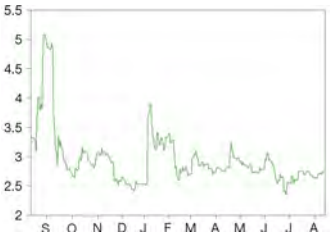
Y/E Dec	Revenue (US$m)	EBITDA (US$m)	PBT (US$m)	EPS (c)	P/E (x)	P/CF (x)
2014	0.0	(27.7)	(27.6)	(277.0)	N/A	N/A
2015	0.0	(48.2)	(48.1)	(286.0)	N/A	N/A
2016e	0.0	(41.3)	(41.1)	(240.0)	N/A	N/A
2017e	0.0	(45.1)	(48.1)	(270.0)	N/A	N/A

Sector: Pharmaceutical and healthcar

Transgene (TNG)

Price:	€2.74
Market cap:	€106m
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	0.0	(3.9)	(12.7)
Relative*	(4.1)	(8.0)	(5.6)

* % Relative to local index

Analyst

Juan Pedro Serrate

INVESTMENT SUMMARY

Transgene is focused on advancing the clinical development of its cancer immunotherapy products (oncolytic virus Pexa-Vec and MUC1 cancer vaccine TG4010) in combination with immune checkpoint inhibitors (ICIs) and infectious disease programs (TG1050 for HBV and TG4001 for HPV). Discussions with partners are underway to start five Phase II trials, including TG4010+ICI in the 1st/2nd-line treatment of NSCLC and Pexa-Vec+ICI in the first-line treatment of liver cancer/other solid tumours. The first studies should start in mid-2016 with potential readouts by end-2017. 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. Transgene has secured fresh finance of up to €30m, via a €20m EIB loan and a €10m commitment by the Institut Mérieux (52% majority shareholder). Last stated cash is €23.5m (31 March 2016).

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: Pharmaceutical & healthcare

TxCell (TXCL)

Price:	€3.45
Market cap:	€45m
Market	Euronext Paris

Share price graph (€)

Company description

TxCell is a pioneer in developing regulatory T-cell immune therapies against autoimmune and inflammatory disorders. The lead product in Crohn's refractory disease is due to restart Phase IIb in mid-2016. A novel CAR Treg technology platform is in early development.

Price performance

%	1m	3m	12m
Actual	(15.4)	(31.3)	(62.9)
Relative*	(18.9)	(34.2)	(59.9)

* % Relative to local index

Analyst

Dr John Savin

INVESTMENT SUMMARY

TxCell offers a rare investment opportunity in the regulatory T-cell (Treg) area with major potential in inflammatory and autoimmune disorders. TxCell plans to restart the Ovasave Phase IIb study in refractory Crohn's disease once further funding is secured. A flexible CAR Treg platform is being developed with academic partners to address indications like lupus nephritis, bullous pemphigoid and perhaps multiple sclerosis. In June, the CAR platform was licensed after an EPO patent approval. Txcell have announced the implementation of convertible notes with warrants financing and the issue of the first tranche to the value of €3m.

INDUSTRY OUTLOOK

The lead product, Ovasave, uses an ovalbumin (egg white) trigger to activate autologous regulatory T-cells. These cells are intended to control Crohn's disease. The target market is about 100,000 patients who have failed on biological therapy. An efficient manufacturing system is being developed to obtain a commercial cost of goods and speed delivery times.

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	0.0	(14.5)	(14.5)	(111.8)	N/A	N/A
2017e	0.0	(18.3)	(18.3)	(135.1)	N/A	N/A

Sector: Pharmaceutical & healthcare

UDG Healthcare (UDG)

Price:	622.0p
Market cap:	£1532m
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	5.4	4.2	19.6
Relative*	1.3	(7.1)	14.1

* % Relative to local index

Analyst

Lala Gregorek

INVESTMENT SUMMARY

UDG's Q3 statement confirmed revenue and adjusted operating profit ahead of last year, with trading trends similar to H116. 9M operating profit growth was driven by continued strong underlying growth in both Sharp Packaging and Ashfield, and beneficial FX moves. Guidance for FY16 was reiterated at 6-8% adjusted diluted EPS growth for the continuing Group on a constant currency basis. The Brexit referendum decision has not materially impacted underlying trading performance; the majority of UDG's operating profits are generated ex-UK, with the UK businesses operating largely in segments insulated from this decision. From 2017 UDG is changing its reporting currency to US$ to reflect the changing geographic profile of its business.

INDUSTRY OUTLOOK

UDG's H116 results were largely driven by Sharp's US business, which continued to benefit from strong market demand and high utilisation. We expect performance to be sustained in H216 and 2017 as an incremental 30% increase in US capacity comes on stream, allowing UDG to capitalise on favourable market conditions. Overall, UDG is well positioned to benefit from an increasing industry trend towards outsourcing.

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	31.9	19.3
2015	919.0	126.0	70.0	27.4	27.0	11.0
2016e	975.0	129.0	81.0	28.6	25.9	14.7
2017e	1020.0	135.0	100.0	31.1	23.8	14.2

Sector: Pharmaceutical and healthcar

Vernalis (VER)

Price:	45.8p
Market cap:	£241m
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	11.6	(6.4)	(45.5)
Relative*	7.2	(16.5)	(48.0)

* % Relative to local index

Analyst

Lala Gregorek

INVESTMENT SUMMARY

Vernalis's £40m equity raise in May (80m new shares at 50p) will fund a conservative Tuzistra XR roll-out, Moxatag relaunch and future launches of the remaining four US cough cold programmes. Cash at end-June of £84m benefitted from US$/£ strengthening post the UK referendum vote; c 73% of cash is held in US$ to hedge against US costs and future milestones to Tris. FY16 results (to end-June 2016) will report late September. US launch of Tuzistra XR, a prescription-only (Rx), extended-release (ER) cough cold medicine is the first step in Vernalis's transition into a commercial speciality pharma company. Emphasis for year one of Tuzistra XR commercialisation is operational: establishing the platform for future sales growth. Modest Tuzistra XR sales of £0.6m were reported for the first four months of launch due to a mild cough cold season. Completion of multi-dose comparative bioavailability studies by CCP-07 and CCP-08 means NDA filing of both is on track for 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)
2013	14.1	(4.7)	(4.7)	(0.8)	N/A	N/A
2015	19.9	(8.9)	(6.9)	(1.0)	N/A	N/A
2016e	11.3	(28.3)	(25.8)	(5.4)	N/A	N/A
2017e	17.3	(24.5)	(24.5)	(4.5)	N/A	N/A

Sector: Pharmaceutical & healthcare

Viralytics (VLA)

Price:	A$0.93
Market cap:	A$223m
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	(3.1)	16.3	36.8
Relative*	(6.4)	12.1	30.9

* % Relative to local index

Analyst

Dr Dennis Hulme

INVESTMENT SUMMARY

Viralytics is well-positioned to benefit from industry interest in oncolytic virotherapy. Four of the first six (67%) patients with advanced melanoma experienced confirmed objective responses (including two complete responses) following treatment with Cavatak in combination with the immune checkpoint inhibitor Yervoy (ipilumumab), in the Phase Ib MITCI trial. This impressive preliminary response rate compares to response rates of 28% and 11% reported for Cavatak and Yervoy, respectively, as single agents in advanced melanoma. Other ongoing trials include the Phase I/II STORM study in multiple solid cancers, the Phase I CANON trial in superficial bladder cancer and an open-label Phase Ib trial of Cavatak in combination with Keytruda (pembrolizumab) in late-stage melanoma. Viralytics and Merck are collaborating on 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.

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: Pharmaceutical & healthcare

VolitionRx (VNRX)

Price:	US$3.29
Market cap:	US$77m
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	0.0	(0.6)	1.9
Relative*	(1.5)	(6.1)	(2.7)

* % Relative to local index

Analyst

Maxim Jacobs

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 expects a CE Mark for a full panel of tests and an initial European launch at the end of this year. 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 by the end of 2017.

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	0.8	(13.9)	(13.9)	(59.19)	N/A	N/A
2017e	2.2	(18.1)	(18.1)	(74.22)	N/A	N/A

Company coverage

Company	Note	Date published
4SC	Update; Update	13/06/2016; 15/08/2016
Abzena	Outlook; Update	21/06/2016; 28/07/2016
Achillion Pharmaceuticals	Update; Update	21/07/2015; 26/01/2016
Actinium Pharmaceuticals	Update; Update	09/02/2015; 18/03/2015
Adherium	Initiation	20/04/2016
AFT Pharmaceuticals	Initiation	31/05/2016
Allergy Therapeutics	Update; Update	07/07/2015; 30/03/2016
Amarantus BioScience	Update; Update	21/03/2016; 19/04/2016
Angle	Update; Update	27/05/2016; 01/08/2016
Athersys	Outlook; Update	14/12/2015; 04/03/2016
Atossa Genetics	Initiation; Update	17/02/2016; 27/05/2016
Basilea Pharmaceuticals	Initiation; Update	23/03/2016; 22/04/2016
Bavarian Nordic	Update; Outlook	26/04/2016; 02/06/2016
BioLineRx	Update; Flash	11/12/2014; 09/02/2016
Biotie Therapies Corp	Update; Flash	20/11/2015; 19/01/2016
C4X Discovery	Flash; Update	02/03/2016; 29/03/2016
Carmat	Update; Update	04/02/2015; 30/11/2015
Celyad	Update; Update	8/01/2016; 07/07/2016
Cerulean Pharma	Update; Update	16/03/2016; 17/05/2016
Consort Medical	Outlook; Update	16/03/2016; 15/08/2016
Crossject	Initiation; Update	13/06/2016; 23/06/2016
e-Therapeutics	Update; Outlook	18/02/2016; 19/05/2016
Erytech Pharma	Update; Update	17/12/2015; 29/07/2016
Evolva	Update; Update	18/05/2015; 06/04/2016
Evotec	Outlook; Update	29/06/2016; 16/08/2016
Genticel	Update; Update	07/06/2016; 28/06/2016
GW Pharmaceuticals	Update; Update	08/04/2015; 08/06/2016
Hutchison China Meditech	Update; Initiation	05/03/2015; 21/07/2016
Hybrigenics	Outlook; Update	15/02/2016; 18/05/2016
Imperial Innovations	Outlook; Flash	14/06/2016; 20/06/2016
Imugene	Update; Outlook	09/07/2015; 21/02/2016
International Stem Cell	Initiation	16/05/2016
Medigene	Update; Update	26/07/2016; 08/08/2016
Mesoblast	Update; Update	18/02/2016; 11/05/2016
Midatech	Outlook; Update	30/06/2015; 18/12/2015
Mologen	Update; Review	13/04/2016; 21/07/2016
MorphoSys	Update; Outlook	17/12/2015; 17/05/2016
Nanobiotix	Update; Outlook	01/02/2016; 31/05/2016
NetScientific	Portfolio overview	13/06/2016
Neovacs	Outlook	01/08/2016
Newron Pharmaceuticals	Update; Flash	15/03/2016; 31/03/2016
Nexstim	Update; Update	25/04/2016; 27/07/2016

Novogen	Update; Update	19/10/2015; 09/05/2016
Onxeo	Outlook; Update	08/09/2015; 22/12/2015
Opexa Therapeutics	Update; Update	01/04/2016; 29/06/2016
Orexigen Therapeutics	Initiation; Update	14/12/2015; 12/04/2016
Orexo	Flash; Update	04/07/2016; 10/08/2016
Oryzon Genomics	Update; Update	20/05/2016; 08/08/2016
Oxford BioMedica	Update; Outlook	05/05/2015; 27/07/2015
Pacific Edge	Update; Outlook	17/11/2015; 26/06/2016
Paion	Update; Update	17/05/2016; 05/07/2016
PDL BioPharma	Update; Update	19/11/2015; 04/03/2016
PharmaMar	Update	10/03/2016; 05/05/2016
Photocure	Update; Update	07/03/2016; 25/05/2016
Prescient Therapeutics	Update; Update	28/09/2015; 02/03/2016
Pixium Vision	Update; Update	08/01/2016; 27/07/2016
Prima BioMed	Update; Outlook	04/01/2016; 27/07/2016
Probiodrug	Update; Update	31/03/2016; 14/04/2016
Regeneus	Update; Update	02/12/2015; 19/05/2016
ReNeuron Group	Outlook; Update	27/07/2016; 05/08/2016
Selvita	Update	25/04/2016; 17/06/2016
Silence Therapeutics	Initiation	25/07/2016
StemCells	Update; Update	01/09/2015; 05/02/2016
Stratec Biomedical	Update; Update	04/04/2016; 15/06/2016
Sunesis Pharmaceuticals	Initiation; Update	21/04/2016; 22/06/2016
Sygnis Pharma	Update; Update	27/11/2015; 19/05/2016
SymBio Pharmaceuticals	Update; Update	30/11/2015; 23/03/2016
Tissue Regenix	Update; Outlook	22/03/2016; 28/07/2016
Threshold Pharmaceuticals	Flash; Update	09/12/2015; 11/05/2016
Tonix Pharmaceuticals	Outlook; Update	01/04/2016; 25/05/2016
Transgene	Update; Outlook	03/06/2015; 13/04/2016
TxCell	Initiation; Update	31/05/2016; 24/06/2016
UDG Healthcare	Update; Update	09/02/2016; 21/07/2016
Vernalis	Flash; Update	28/04/2016; 25/05/2016
VolitionRx	Update; Update	07/01/2016; 01/04/2016

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
Worldwide Healthcare Trust	Investment trust review	30/09/2014; 23/07/2015

QuickViews

To view the following QuickViews see the healthcare sector profile page on our website.

aap Implantate	24/05/2016
AFT Pharmaceuticals	21/12/2015
Anthera Pharmaceuticals	19/04/2016
Atossa Genetics	17/11/2015
Bone Therapeutics	14/12/2015
Cerulean	10/08/2015
Crossject	17/12/2015
Eaglet	01/04/2016
Epigenomics	11/08/2016
Genticel	01/09/2015
Immunicum	24/07/2015
LifeWatch	29/01/2016
Oryzon Genomics	06/01/2016
Photocure	06/08/2015
Smith & Nephew	02/08/2016
Theraclion	02/11/2015
Titan Pharmaceuticals	23/02/2016
Universal Biosensors	24/08/2015

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