

MARKET UPDATE

# HEALTHCARE



*December 2017*



## HIGHLIGHTS

### Dear Reader,

2017 came to an end with the announcement of the largest healthcare M&A deal of the year: the drugstore giant CVS Health has agreed to acquire one of the biggest US healthcare insurers Aetna for \$69bn. A combined insurer and Pharmacy Benefit Manager is likely to offer cheaper and easier access to medication and care. However, the prospects for the deal are uncertain, since similar mergers involving health insurance companies have recently run into regulatory roadblocks citing antitrust concerns.

This move comes in the context of the need to curb the growth in costs, with the tax reform expected to disrupt existing coverage, drive up premiums and lead to drastic cuts to Medicare and Medicaid. So, in contrast, the recent approval of cutting-edge therapies is bringing the question of how much is too much back on the table.

Spark Therapeutics' Luxturna is the 3<sup>rd</sup> gene therapy cleared by the US-FDA, and indicated for a rare eye genetic disorder, leading to the progressive loss of vision in affected patients. Although not confirmed by Spark, this one-time therapy may come at a cost of a \$1m per patient. CAR-T cell therapies are no exception as Gilead's Yescarta, and Novartis's Kymriah are priced at \$373k and \$475k, respectively. While Gilead struggles to find traction for its therapy, Novartis successfully secured a deal with Medicare and Medicaid, by which the company would only get reimbursement for Kymriah responders. A mix between a high price tag and payers failing to anticipate the arrival of such innovative therapies are probably to blame for the limited access to patients, and concerns about drug pricing will continue to dominate the conversation.

In other news, after struggling in finding a CEO, and sales lower than anticipated, Teva ends 2017 with drastic measures to improve its business performance. The company is to slash 14,000 jobs globally within the next two years, to deal with the mountain of debt it carries since the acquisition of Allergan's generic business in 2016.

In a more positive note, Roche bagged US-based Ignyta through a \$1.7bn all cash transaction, representing a 74% premium to Ignyta's closing price on December 21<sup>st</sup>, 2017. This acquisition will help Roche to strengthen its oncology portfolio with entrectinib, currently in Phase II for the treatment of solid tumors. As a CNS-active drug, entrectinib also has the potential to treat brain metastases.

This concludes our newsletter, and on behalf of the entire Bryan, Garnier & Co. team, we wish you a Happy New Year!

**HERVE RONIN**

Partner | Bryan, Garnier & Co

**+6.5%**

5Y-CAGR

Worldwide

*prescription drugs -  
expected sales*

**+5.3%**

5Y-CAGR

*Medtech market -  
expected growth*

**-0.2% / +8.5%**

*Monthly EU Pharma &  
biotech performance*

**21 / \$2.0bn**

*Number & total value  
of US ECM deals  
priced in December*

**Humira to  
remain 2018  
top  
blockbuster**

*With \$20bn+ sales  
Abbvie's drug more  
than doubles sales of  
the next closest  
medication*

## DECEMBER AT A GLANCE — FOCUS ON EUROPE

### EQUITY MARKETS

- Overall, US healthcare equities showed steady performances while European biotechs increased. US volatility decreased by -2.1% while European volatility remained stable (+0.3%):
- Monthly US / EU Biotech perf.: +1.5% / +8.5%
- Monthly US / EU Pharma perf.: +0.4% / -0.2%

### INDUSTRY & SCIENCE

- News of the month: the US-FDA approved Biom'up's Hemoblast Bellows, a hemostatic product to stop bleeding during surgical procedures
- Biom'up was granted PMA approval 7 months ahead of schedule. The company intends to launch Hemoblast Bellows in the US in the second half of 2018

### FINANCING

- Raise of the month: Argenx closed a US public offering with gross proceeds of \$266m
- Argenx is a clinical-stage biotech company specialized in autoimmune diseases and cancer. Argenx's lead drug candidate ARGX-113 successfully showed efficacy in treating myasthenia gravis, a rare autoimmune disorder, and is investigated in Phase II trials in two other indications

### M&A

- Wright Medical bags France-based Imascap for €75m, software company specialized in shoulder surgery planning
- Wright Medical, which develops and markets orthopedic implants for lower and upper extremities will pay €39.7m in cash and €13.2m in ordinary shares at closing. The remaining €22.2m are contingent of the development of new software modules and implant systems

### NEXT MONTH

- 36<sup>th</sup> annual JP Morgan Healthcare conference: the event will be held in January (1/8-11), where 400 public and private companies are expected to deliver presentations
- Conference & Events: Gastrointestinal Cancers Symposium (01/18-20), World Stem Cell Summit (01/23-26), ASA (01/24-26)



# Update on CAR-T @ASH2017

BRYAN, GARNIER & CO

## INDEPENDENT RESEARCH

18th December 2017

## Biotechnology

### Update on CAR-T @ASH2017

#### Biotechnology

##### CELLECTIS

Bloomberg	ALCLS.FP	Reuters	ALCLS.PA
Price	EUR24.01	High/Low	29.61/15.96
Market cap.	EUR850m	Enterprise Val	EUR662m
PE (2017e)	NS	EV/EBIT (2017e)	NS

##### CELYAD

Bloomberg	CARD.BB	Reuters	CARD.BB
Price	EUR33.49	High/Low	54.05/17.56
Market Cap.	EUR330m	Enterprise Val	EUR266m
PE (2017e)	x	EV/EBIT (2017e)	NS

##### NOVARTIS

Bloomberg	NOVN.VX	Reuters	NOVN.VX
Price	CHF83.85	High/Low	85.15/69.55
Market Cap.	CHF219,422m	Enterprise Val	CHF213,558m
PE (2017e)	17.7x	EV/EBIT (2017e)	17.2x

##### NEUTRAL

Reuters	ALCLS.PA
High/Low	29.61/15.96
Enterprise Val	EUR662m
EV/EBIT (2017e)	NS

##### BUY

Reuters	CARD.BB
High/Low	54.05/17.56
Enterprise Val	EUR266m
EV/EBIT (2017e)	NS

##### BUY

Reuters	NOVN.VX
High/Low	85.15/69.55
Enterprise Val	CHF213,558m
EV/EBIT (2017e)	17.2x

##### FV EUR23

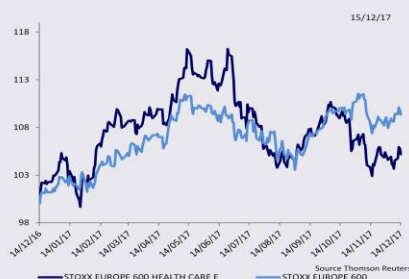
ALCLS.PA
29.61/15.96
EUR662m
NS

##### FV EUR58

CARD.BB
54.05/17.56
EUR266m
NS

##### FV CHF92 vs 93

NOVN.VX
85.15/69.55
CHF213,558m
17.2x



With Novartis' anti-CD19 CAR-T therapy making its way through the hematologic malignancies, and Kite's anti-CD19 CAR-T approval addressing a larger population with patients suffering from diffuse large B-cell lymphoma (DLBCL), the Chimeric Antigen Receptor (CAR)-T cell therapy arena continues its meteoric rise, in particular in Multiple Myeloma. Also next-generation CAR-T product candidates are underway to address current challenges such as enhancing CAR-T safety profile.

- **Updates from the most-awaited clinical trials include:** Novartis (Phase II JULIET pivotal study #577), Kite Pharma (Phase II ZUMA-1 pivotal study #578), Juno (Phase I TRANSCEND NHL 001 study #581), Bluebird Bio/Celgene (Phase I CBX-401 study #740), Cellectis (Phase I CALM #887 and PALL #1271 studies).
- **One of the most important highlights is that CAR-T therapies offer durable remissions.** 1/Kite Pharma's therapy can keep some of the sickest refractory NHL patients alive for at least a year. Yescarta, showed that after a median period of 15.4 months, 59 % of patients with non-Hodgkin lymphoma were still alive, 42 % were in remission and 40 % exhibited no trace of cancer. 2/Novartis's product candidate has also confirmed the trend as most patients with DLBCL who responded at 3 months remained in complete response at 6 months (ORR: 37%; CR: 30%). **Data presented at the ASH meeting also shed light on why therapy fails in some patients.**
- **One remaining big challenge with CAR-T therapy is to improve safety.** Despite significant progress at identifying treatment-related toxicities and managing them, understanding better these toxicities is a key focus to make this therapy safer and therefore apply it to a wider patient population.
- **What might be next in the CAR-T space?** 1/Additional long-term follow-up from more clinical programs to see if durable remissions are possible across a wider range of indications, 2/The discovery of novel targets (CD22 in ALL? CD123 in AML?), 3/See if next-gen CARs translate into differentiated clinical outcomes (enhanced efficacy with reduced toxicity)? 4/Whether there is therapeutic benefit in combining CAR-T with other therapies.
- **From a technology standpoint but also now considering clinical data available,** our favourites in the CAR-T space are Kite/Gilead, Juno, Bluebird Bio and Celyad.



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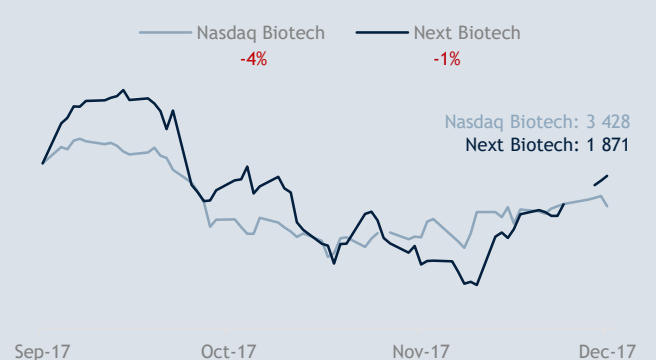
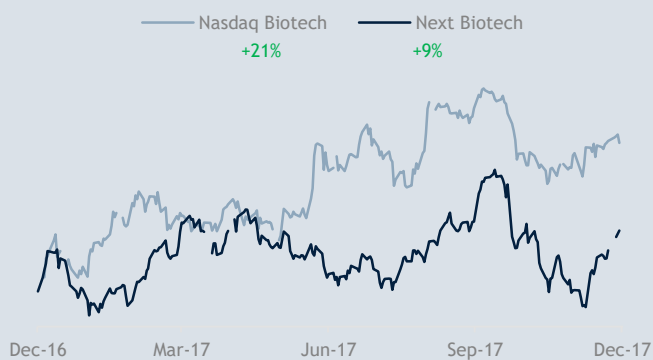
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Please see the section headed "Important information" on the back page of this report.

# EQUITY MARKETS

## 1-YEAR PERFORMANCE

## 3-MONTH PERFORMANCE



# EURONEXT HEALTHCARE COMPANY PERFORMANCE


## Pharmaceuticals ↗


Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
SANOFI	EN Paris	90 643	-3.5%	-4.1%
UCB SA	EN Brussels	13 009	10.4%	4.9%
IPSEN	EN Paris	8 482	46.0%	0.7%
BOIRON SA	EN Paris	1 456	-9.5%	-0.7%
VIRBAC SA	EN Paris	1 054	-26.1%	17.4%
FAGRON	EN Brussels	830	17.5%	5.6%
STALLERGENES GRE	EN Paris	772	24.6%	-2.4%
VETOQUINOL SA	EN Paris	713	34.1%	10.0%

## Biotech ↗

Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
GALAPAGOS NV	EN Amsterdam	3 967	29.6%	6.3%
ARGENX SE	EN Brussels	1 737	229.5%	107.5%
ABLYNX NV	EN Brussels	1 523	91.6%	4.2%
DBV TECHNOLOGIES	EN Paris	1 053	-36.9%	13.8%
CELLECTIS	EN Paris	880	47.1%	20.3%
GENFIT	EN Paris	734	13.9%	3.6%
PHARMING GRP NV	EN Amsterdam	676	421.7%	-3.9%
AB SCIENCE SA	EN Paris	373	-39.0%	4.0%
MITHRA PHARM	EN Brussels	354	13.5%	-3.5%
CELYAD	EN Brussels	340	94.3%	0.8%
ERYTECH PHARMA	EN Paris	326	34.6%	-22.8%
NANOBIOTIX	EN Paris	296	-4.0%	7.2%
NICOX SA	EN Paris	295	18.9%	-1.3%
INNATE PHARMA SA	EN Paris	277	-67.5%	-0.2%
TIGENIX NV	EN Brussels	274	37.7%	6.4%
VALNEVA SE	EN Paris	225	-10.4%	-1.4%
TRANSGENE SA	EN Paris	178	5.6%	5.9%
POXEL SA	EN Paris	154	-5.7%	-0.7%
GENSIGHT	EN Paris	149	-20.3%	19.8%
KIADIS PHARM	EN Amsterdam	139	-6.3%	4.0%
THROMBOGENICS NV	EN Brussels	123	33.8%	-24.3%
ADVICENNE PROM	EN Paris	112	n.a	n.a
ADOCIA SAS	EN Paris	101	-76.5%	-2.7%
PHARNEXT SA	EN Paris	88	-13.5%	-6.2%
PROBIODRUG AG	EN Amsterdam	88	-41.2%	-10.6%
ABIVAX SA	EN Paris	85	37.0%	-7.9%
GENEURO SA	EN Paris	84	-44.0%	-1.5%
ONCODESIGN	EN Paris	81	-19.0%	1.8%
INVENTIVA SA	EN Paris	78	n.a	-19.1%
BIOPHYTIS	EN Paris	63	21.5%	5.0%
ONXEO	EN Paris	59	-56.8%	5.5%
OSE IMMUNO	EN Paris	57	-45.6%	10.2%
BONE THERAPEUTIC	EN Brussels	55	-0.2%	-14.4%
THERANEXUS SADIR	EN Paris	47	n.a	1.3%
ASIT BIOTECH SA	EN Brussels	47	-42.9%	-5.2%
LYSOGENE SA	EN Paris	43	n.a	-14.4%
TXCELL	EN Paris	36	-36.4%	16.1%
CERENIS THERAPEU	EN Paris	35	-77.9%	0.4%
SENSORION SA	EN Paris	35	-23.1%	36.9%
QUANTUM GEN-REGR	EN Paris	34	-57.2%	3.2%
NEOVACS	EN Paris	30	-43.2%	-12.8%
HYBRIGENICS	EN Paris	29	-24.6%	27.3%
VALBIOTIS SAS	EN Paris	23	n.a	-7.6%
PLANT ADVANCED	EN Paris	22	31.4%	-1.2%
INTEGRAGEN	EN Paris	16	-25.1%	-3.8%
GENOWAY SA	EN Paris	12	11.7%	4.7%
ESPERITE	EN Amsterdam	9	-64.8%	-15.0%

# EURONEXT HEALTHCARE COMPANY PERFORMANCE

Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
EUROFINS SCIEN	EN Paris	8 998	25.8%	0.3%
BIOMERIEUX	EN Paris	8 782	58.7%	6.5%
SARTORIUS STEDIM	EN Paris	5 563	1.2%	0.8%
GUERBET	EN Paris	1 018	12.5%	11.9%
ION BEAM APPLICA	EN Brussels	729	-42.3%	-1.3%
BIOCARTIS NV	EN Brussels	616	8.9%	-1.1%
CARMAT	EN Paris	193	-24.6%	-20.5%
AMPLITUDE SURGIC	EN Paris	168	-7.1%	-4.3%
VEXIM SA	EN Paris	164	114.1%	0.2%
MDXHEALTH	EN Brussels	159	-32.9%	-17.9%
BIOM'UP SACA	EN Paris	154	n.a	38.5%
QUANTEL	EN Paris	115	117.6%	8.5%
MEDIAN TECHNOLOG	EN Paris	110	-18.2%	-3.2%
EOS IMAGING SA	EN Paris	107	13.8%	-2.0%
MAUNA KEA TECHNO	EN Paris	107	57.0%	8.3%
CURETIS AG	EN Amsterdam	58	-39.3%	-2.3%
CELLNOVO GROUP S	EN Paris	54	-54.2%	9.7%
MEDICREA INTERNA	EN Paris	46	-44.4%	-6.1%
DIAXONHIT	EN Paris	46	-23.9%	3.3%
SUPERSONIC	EN Paris	44	-9.8%	-2.1%
CROSSJECT	EN Paris	41	3.3%	4.3%
PIXIUM VISIO	EN Paris	41	-56.5%	22.5%
BIOCORP	EN Paris	39	13.2%	7.5%
I CERAM	EN Paris	38	6.2%	-7.7%
THERACLION	EN Paris	30	-21.8%	1.3%
BIOSYNEX	EN Paris	30	50.6%	-8.2%
VISIOMED GROUP	EN Paris	30	-55.1%	-5.5%
STENTYS	EN Paris	30	-35.0%	-7.8%
NOVACYT	EN Paris	28	-38.4%	17.1%
BLUELINEA	EN Paris	24	1.6%	-4.3%
DMS	EN Paris	24	-28.2%	-12.5%
EUROMEDIS GROUPE	EN Paris	22	3.3%	-12.1%
THERADIAG	EN Paris	20	-39.3%	-6.9%
SPINEGUARD	EN Paris	19	-25.7%	3.6%
GENOMIC VIS	EN Paris	18	-25.2%	-1.3%
SPINEWAY	EN Paris	18	18.1%	-1.6%
IMPLANET	EN Paris	13	-47.5%	-2.9%
SAFE ORTHOPAEDIC	EN Paris	13	-54.1%	-2.2%

Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
ESSILOR INTL	EN Paris	24 677	8.4%	4.6%
ORPEA	EN Paris	6 342	29.4%	-1.6%
KORIAN	EN Paris	2 389	7.9%	2.2%
RAMSAY GENERALE	EN Paris	1 200	0.1%	4.6%
LNA SANTE	EN Paris	571	67.3%	4.7%
BASTIDE	EN Paris	418	137.9%	27.7%

# LONDON HEALTHCARE COMPANY PERFORMANCE

## Pharmaceuticals 📈

Company	Exchange	Mkt Cap (£m)	Performance	
			YTD	1 Month
GLAXOSMITHKLINE	London	65 534	-10.8%	2.5%
ASTRAZENECA PLC	London	64 641	21.2%	7.1%
SHIRE PLC	London	35 409	-16.3%	6.6%
HUTCHISON CHINA	London	3 741	146.7%	10.1%
BTG PLC	London	2 916	29.2%	4.8%
INDIVIOR PLC	London	2 904	37.8%	5.4%
HIKMA PHARMACEUT	London	2 667	-39.1%	9.3%
ABCAM PLC	London	2 097	39.0%	4.8%
DECHRA PHARMA	London	1 896	57.6%	-5.5%
VECTURA GROUP	London	816	-14.2%	23.3%

## Biotechs ➡

Company	Exchange	Mkt Cap (£m)	Performance	
			YTD	1 Month
ECO ANIMAL HEALT	London	395	19.8%	0.8%
CIRCASSIA PH	London	328	10.6%	-2.2%
ALLIANCE PHARMA	London	320	45.0%	15.5%
OXFORD BIOMEDICA	London	293	117.4%	5.4%
BENCHMARK HOLDIN	London	290	-33.1%	8.8%
IMMUPHARMA PLC	London	250	226.9%	51.2%
FARON PHARMACEUT	London	244	201.9%	-1.8%
MEREO BIOPHARMA	London	231	21.5%	2.4%
4D PHARMA PLC	London	219	-52.6%	-1.0%
VERSEON CORP	London	184	-23.6%	-2.8%
TIZIANA LIFE SCI	London	176	-27.8%	-5.7%
ALLERGY THERAPEU	London	169	36.5%	0.0%
SILENCE THERAPEU	London	140	94.5%	0.0%
SHIELD THERAPEUT	London	131	-35.0%	-4.3%
SINCLAIR PHARMA	London	127	-22.6%	-10.6%
BIOVENTIX PLC	London	127	90.6%	-4.3%
SUMMIT THERAPEUT	London	127	18.5%	-4.2%
TISSUE REGENIX G	London	115	-54.9%	35.5%
VERONA PHARMA PL	London	111	-33.1%	-3.2%
MAXCYTE INC	London	102	75.3%	-0.4%
MOTIF BIO PLC	London	101	65.7%	12.4%
DIURNAL GROUP PL	London	80	37.6%	6.3%
ONCIMMUNE HOLDIN	London	72	-20.2%	6.1%
RENEURON GROUP P	London	61	-28.6%	0.0%
AMRYT PHARMA PLC	London	54	3.2%	-8.7%
VERNALIS PLC	London	48	-74.3%	-26.1%
FUTURA MEDICAL	London	41	-47.1%	33.3%
SCANCELL HOLDING	London	40	-13.6%	4.1%
C4X DISCOVERY HO	London	37	-17.3%	0.0%
CATHAY INTL HLDG	London	29	-58.2%	-4.7%
MIDATECH PHARMA	London	26	-69.3%	1.2%
SAREUM HOLDINGS	London	24	13.3%	9.4%
SKINBIOTHERAPEUT	London	11	n.a	-9.0%





# LONDON HEALTHCARE COMPANY PERFORMANCE

Medical Products & Devices →			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
SMITH & NEPHEW	London	11 054	7.5%	-2.7%
CONVATEC GROUP P	London	3 976	-11.8%	2.1%
ADVANCED MEDICAL	London	659	43.8%	0.5%
CONSORT MEDICAL	London	577	12.3%	0.8%
MEDICA GROUP PLC	London	224	n.a	-9.5%
EKF DIAGNOSTICS	London	117	53.3%	0.0%
TRISTEL PLC	London	105	63.0%	-11.7%
IMMUNODIAGNOSTIC	London	80	30.3%	-0.7%
BIOQUELL PLC	London	60	91.8%	4.7%
CREO MEDICAL GRO	London	56	-14.7%	0.0%
NETSCIENTIFIC PL	London	49	8.4%	6.0%
AVACTA GROUP PLC	London	44	-11.1%	-1.5%

Healthcare Services →			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
CLINIGEN GROUP P	London	1 234	45.8%	-0.9%
OXFORD BIODYNAMI	London	149	13.2%	-16.6%
ANPARIO PLC	London	92	40.6%	-0.6%
ERGOMED PLC	London	78	20.3%	-4.2%
ABZENA PLC	London	65	-15.3%	-3.2%
HVIVO PLC	London	43	-67.1%	1.9%

# GERMAN HEALTHCARE COMPANY PERFORMANCE

## Pharmaceuticals 📈

Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
BAYER AG-REG	Xetra	85 252	7.4%	-3.3%
MERCK KGAA	Xetra	39 001	-8.5%	0.2%
BIOTEST AG	Xetra	845	42.4%	5.1%
MEDIGENE AG	Xetra	290	7.0%	14.9%
ECKERT & ZIEGLER	Xetra	185	37.7%	-8.8%
MAGFORCE AG	Xetra	169	44.9%	-4.2%
BIOFRONTERA AG	Xetra	160	31.4%	4.0%
CO.DON AG	Xetra	153	153.7%	-3.3%
HAEMATO AG	Xetra	108	-17.7%	-0.3%
SANOCHEMIA PHARM	Xetra	19	7.2%	-2.3%

## Biotechs 📈

Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
MORPHOSYS AG	Xetra	2 286	57.1%	-3.4%
EVOTEC AG	Xetra	2 005	81.4%	10.4%
FORMYCON AG	Xetra	307	36.9%	9.8%
PAION AG	Xetra	166	11.3%	10.4%
4SC AG	Xetra	150	105.9%	-5.8%
MOLOGEN AG	Xetra	89	50.0%	2.7%
HEIDELBERG PHARM	Xetra	76	45.6%	24.6%
ELANIX BIOTECHNO	Xetra	27	-20.8%	4.5%
CYTOTOOLS AG	Xetra	24	26.5%	10.9%
BIOSILU HEALTHCA	Munich	20	53.8%	150.0%

## Medical Products & Devices 📈

Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
FRESENIUS SE & C	Xetra	35 657	-11.7%	5.5%
FRESENIUS MEDICA	Xetra	26 785	10.3%	4.1%
SARTORIUS AG	Xetra	5 835	5.3%	3.1%
CARL ZEISS ME-BR	Xetra	4 598	49.2%	4.2%
DRAEGERWERK-PREF	Xetra	1 166	-8.9%	1.9%
STRATEC BIOMEDIC	Xetra	793	43.5%	-2.8%
PULSION MED SY-R	Munich	190	12.6%	-9.8%
EPIGENOMICS AG	Xetra	106	-6.6%	8.5%
GERATHERM MEDICA	Xetra	58	6.7%	-7.2%
AAP IMPLANTATE	Xetra	50	47.5%	4.2%
HUMANOPTICS AG	Frankfurt	36	76.9%	-25.3%
CURASAN AG	Xetra	18	14.3%	-3.9%

## Healthcare Services ➡

Company	Exchange	Mkt Cap (€m)	Performance	
			YTD	1 Month
RHOEN-KLINIKUM	Xetra	1 993	18.0%	2.0%
MEDICLIN AG	Xetra	297	7.0%	-4.1%
M1 KLINIKEN AG	Frankfurt	216	29.0%	11.5%
VITA 34 AG	Xetra	51	116.3%	29.7%
MATERNUS-KLINIKE	Xetra	50	84.7%	-1.6%
EIFEL-KLINIK AG	Frankfurt	16	-5.7%	-1.7%

# SWISS HEALTHCARE COMPANY PERFORMANCE

## Pharmaceuticals

Company	Exchange	Mkt Cap (CHFm)	Performance	
			YTD	1 Month
NOVARTIS AG-REG	SIX Swiss Ex	215 628	15.2%	-1.7%
ROCHE HLDG-GENUS	SIX Swiss Ex	212 574	9.4%	-0.6%
VIFOR PHARMA AG	SIX Swiss Ex	8 119	10.5%	1.5%
COSMO PHARMACEUT	SIX Swiss Ex	2 201	-12.7%	4.7%
CASSIOPEA SPA	SIX Swiss Ex	348	18.4%	3.1%

## Biotech

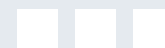
Company	Exchange	Mkt Cap (CHFm)	Performance	
			YTD	1 Month
IDORSIA LTD	SIX Swiss Ex	3 032	n.a	18.1%
BASILEA PHAR-REG	SIX Swiss Ex	901	3.8%	-0.5%
MOLECULAR PARTNE	SIX Swiss Ex	553	6.0%	6.5%
EVOLVA HOLDING S	SIX Swiss Ex	239	-49.3%	-3.1%
SANTHERA PHA-REG	SIX Swiss Ex	226	-32.2%	20.6%
NEWRON PHARMACEU	SIX Swiss Ex	207	-42.4%	2.7%
KUROS BIOSCIENCE	SIX Swiss Ex	97	-40.4%	-5.6%
ADDEX THERAPEUTI	SIX Swiss Ex	35	24.5%	6.5%
RELIEF THERAPEUT	SIX Swiss Ex	20	-66.7%	0.0%

## Medical Products & Devices

Company	Exchange	Mkt Cap (CHFm)	Performance	
			YTD	1 Month
STRAUMANN HLDG-R	SIX Swiss Ex	10 933	74.8%	-4.5%
SONOVA HOLDING A	SIX Swiss Ex	9 943	25.1%	-1.9%
TECAN GROUP AG-R	SIX Swiss Ex	2 364	29.0%	-0.1%
YPSOMED HOLD-REG	SIX Swiss Ex	2 032	-12.6%	-2.7%
IVF HARTMANN-REG	SIX Swiss Ex	434	-9.7%	-0.3%
COLTENE HOLD-REG	SIX Swiss Ex	400	32.5%	0.2%
SHL TELEMEDI-REG	SIX Swiss Ex	69	-7.9%	-7.2%

## Healthcare Services

Company	Exchange	Mkt Cap (CHFm)	Performance	
			YTD	1 Month
LONZA GROUP -REG	SIX Swiss Ex	19 608	63.4%	2.9%
BACHEM HOL-REG B	SIX Swiss Ex	2 094	74.2%	13.2%
DOTTIKON ES H-RE	SIX Swiss Ex	1 028	88.0%	3.6%



## KEY SECTOR NEWS IN DECEMBER

DATE	NEWS
22 Dec 17	<b>CELYAD</b> - Celyad confirms that it will focus on two indications for CYAD-01: AML & colorectal cancer
22 Dec 17	<b>ROCHE</b> - Roche makes bolt-on targeted acquisition in oncology
21 Dec 17	<b>ONCIMMUNE</b> - Oncimmune EarlyCDT®-Liver Test validated
21 Dec 17	<b>ROCHE</b> - Perjeta approved in the US for Adjuvant BC, Alecensa in Europe in 1L ALK+ NSCLC
20 Dec 17	<b>NICOX</b> - Approval of Rhopressa not a threat to Vyzulta's US launch
20 Dec 17	<b>IPSEN</b> - 1L mRCC indication for Cabometyx greenlighted in the US well ahead of schedule
18 Dec 17	<b>BIOTECHNOLOGY</b> - Update on CAR-T @ASH2017
18 Dec 17	<b>QIAGEN</b> - Settlement with OXFD on Q-TB enables QIAGEN to focus on the platform roll-out
18 Dec 17	<b>MERCK KGAA</b> - Mavenclad's US filing in Q2 2018
18 Dec 17	<b>BIOM'UP</b> - PMA obtained significantly ahead of schedule
15 Dec 17	<b>ASTRAZENECA</b> - Pipeline made AZ busy in 2017 and 2018 looks exciting too
15 Dec 17	<b>MERCK KGAA</b> - Merck to go in the US with Mavenclad in Q2 2018
15 Dec 17	<b>GALAPAGOS</b> - Value creating step undertook. End of standstill agreement with GILD on Dec. 31st
14 Dec 17	<b>INNATE PHARMA</b> - Effikir: feedback from ASH 2017
13 Dec 17	<b>MORPHOSYS</b> - MOR208: L-MIND confirms its potential in DLBCL
13 Dec 17	<b>SANOFI</b> - Sustaining innovation meeting to take place today in Paris
13 Dec 17	<b>ABLYNX</b> - ASH2017: additional data from phase III trial reinforce our positive stance on caplacizumab
12 Dec 17	<b>PHARMACEUTICALS</b> - KOL Meeting, Lung Cancer: IMpower150 is a "yes but"
12 Dec 17	<b>GSK</b> - BCMA antibody likely first asset for a come-back in oncology
11 Dec 17	<b>CELLECTIS</b> - Cellectis is at the ASH 2017: nothing new so far
11 Dec 17	<b>ROCHE</b> - Polatuzumab shows impressive results in R/R DLBCL while IMmotion151 meets PFS endpoint
11 Dec 17	<b>ASTRAZENECA</b> - Talazoparib posts comparable results to olaparib in BRCA1/2 positive breast cancer
11 Dec 17	<b>BONE THERAPEUTICS</b> - Upcoming deal with pharma willing to participate in a potential fundraising
8 Dec 17	<b>ERYTECH</b> - Graspa fails in AML phase IIb trial
8 Dec 17	<b>ZEALAND PHARMA</b> - Pivotal phase III trial initiated with dasiglucagon
7 Dec 17	<b>ROCHE</b> - IMpower150 presented today, HAVEN-4 positive
6 Dec 17	<b>NOVO NORDISK</b> - Ozempic (semaglutide) approved by the FDA
4 Dec 17	<b>SANOFI</b> - Cdiff vaccine stopped for lack of efficacy
1 Dec 17	<b>MORPHOSYS</b> - MOR202, the story still goes on
1 Dec 17	<b>FRESENIUS SE</b> - KABI GX business should trade (at least) 3x higher than its current ~7x P/E+1



# EUROPEAN FUNDRAISING : IPO & FOLLOW-ONS

	Pricing Date	Issuer	Country	Industry	Size (€m)	Offer type	Offer To Date
Last month	12/13/2017	Argenx SE	NETHERLANDS	Medical-Biomedical/Gene	225	Follow-on	21%
	12/12/2017	Carmat SA	FRANCE	Medical Products	53	Follow-on	8%
	12/08/2017	Wilson Therapeutics AB	SWEDEN	Medical-Biomedical/Gene	24	Follow-on	7%
	12/08/2017	Asit Biotech SA	BELGIUM	Medical-Drugs	10	Follow-on	n.a
	12/07/2017	ALK-Abello A/S	DENMARK	Medical-Drugs	85	Follow-on	n.a
	12/06/2017	GW Pharmaceuticals PLC	BRITAIN	Therapeutics	269	Follow-on	15%
	12/05/2017	Advicenne SACA	FRANCE	Medical-Biomedical/Gene	27	IPO	-1%
	11/29/2017	Hansa Medical AB	SWEDEN	Medical Labs&Testing Srv	55	Follow-on	26%
	11/28/2017	Biocartis NV	BELGIUM	Diagnostic Equipment	80	Follow-on	-4%
	11/22/2017	IRRAS AB	SWEDEN	Medical Products	30	IPO	-36%
	11/16/2017	Orphazyme A/S	DENMARK	Medical-Biomedical/Gene	81	IPO	-5%
	11/15/2017	Ambu A/S	DENMARK	Medical Instruments	91	Follow-on	4%
	11/14/2017	ProQR Therapeutics NV	NETHERLANDS	Medical-Drugs	14	Follow-on	-1%
	11/10/2017	Erytech Pharma SA	FRANCE	Medical-Biomedical/Gene	123	IPO	-5%
	11/10/2017	Cambian Group PLC	BRITAIN	Medical-Outptnt/Home Med	17	Follow-on	n.a
	11/10/2017	Transgene SA	FRANCE	Medical-Biomedical/Gene	14	Follow-on	11%
	11/08/2017	InflaRx NV	GERMANY	Medical-Drugs	90	IPO	40%
	10/31/2017	Eurofins Scientific SE	LUXEMBOURG	Medical Labs&Testing Srv	299	Follow-on	-7%
	10/31/2017	Nanobiotix	FRANCE	Medical Products	27	Follow-on	6%
	10/25/2017	TheraNexus SADIR	FRANCE	Medical-Biomedical/Gene	20	IPO	-4%
	10/24/2017	Ablynx NV	BELGIUM	Medical-Biomedical/Gene	196	IPO	43%
	10/24/2017	uniQure NV	NETHERLANDS	Medical-Drugs	78	Follow-on	7%
	10/18/2017	Akari Therapeutics PLC	BRITAIN	Medical-Drugs	15	Follow-on	-13%
	10/18/2017	Novacyt SA	FRANCE	Medical Products	10	IPO	-1%
	10/11/2017	Biom'Up SACA	FRANCE	Medical Products	43	IPO	27%
	10/10/2017	Kiadis Pharma NV	NETHERLANDS	Medical-Biomedical/Gene	18	Follow-on	-1%
	10/05/2017	Faron Pharmaceuticals Oy	FINLAND	Medical-Drugs	11	Follow-on	0%
3 months	09/27/2017	Terveystalo Oyj	FINLAND	Medical-Hospitals	877	IPO	-9%
	09/27/2017	Ascendis Pharma A/S	DENMARK	Medical-Drugs	132	Follow-on	13%
	09/27/2017	NuCana PLC	BRITAIN	Medical-Biomedical/Gene	96	IPO	-33%
	09/27/2017	Handicare Group AB	SWEDEN	Medical Products	89	IPO	6%
	09/27/2017	Nightstar Therapeutics PLC	BRITAIN	Medical-Biomedical/Gene	73	IPO	-6%
	09/26/2017	Newron Pharmaceuticals SpA	ITALY	Medical-Biomedical/Gene	24	Follow-on	-14%
	09/21/2017	Amryt Pharma Plc	IRELAND	Medical-Drugs	15	Follow-on	1%
	09/19/2017	Nabriva Therapeutics PLC	IRELAND	Medical-Drugs	67	Follow-on	-30%
	09/13/2017	BioArctic AB	SWEDEN	Medical-Biomedical/Gene	84	IPO	8%
	09/13/2017	Summit Therapeutics PLC	BRITAIN	Medical-Drugs	17	Follow-on	-8%
	09/06/2017	Straumann Holding AG	SWITZERLAND	Medical Products	228	Follow-on	15%
	09/01/2017	Senzagen AB	SWEDEN	Medical-Biomedical/Gene	9	IPO	75%

# PRIVATE EQUITY MARKET ACTIVITY

## Recent notable M&A / fundraisings in France, Germany, UK, Netherland, Switzerland & Belgium <sup>(1)</sup>

	DATE	TARGET	CTY	DESCRIPTION	BUYER / INVESTOR
	Dec 17	Orchard Therap.	UK	Biotech company specialized in gene therapy for rare diseases	Baillie Gifford, ORI Capital
	Dec 17	Imascap	FRA	Software for preoperative planning of shoulder surgery	Wright Medical
	Dec 17	Alloheim	GER	Nationwide care services in stationary care homes	Nordic Capital
	Dec 17	Lilial	FRA	Home delivery of primarily catheter and ostomy supplies	Coloplast
	Dec 17	VitalHealth	NET	Health management and advanced analytics solutions	Philips
	Dec 17	Bawater Healthcare	UK	Leader in home oxygen therapy	Bastide
	Dec 17	Compassio	GER	Company providing elder care services	Schönes Leben Group
	Dec 17	Alize Pharma	FRA	Biotech company developing treatments for endocrine diseases	Millendo Therapeutics
	Dec 17	Aelin Therapeutics	BEL	Biotech company specialized in antibiotics	LSP, PMV, Novartis VF, etc
	Dec 17	NorthSea Therap.	NET	Biotech company developing a drug against NASH	Forbion, BGV, Novo Seeds
	Dec 17	Lab. Ineldea	FRA	Company specialized in natural health products	Merieux Developpement
	Dec 17	Cambridge Epigenetix	UK	IVD company specialized in epigenetics	Syncona, GV, etc.
Last month	Dec 17	GVS Group	GER	Operational nursing care business of GVS Group	Convivo
	Nov 17	Xeltis	SWI	Medtech company developing bioabsorbable heart valves	Ysios, Kurma, LSP, VI Par.
	Nov 17	Horama	FRA	Gene therapy for rare, inherited, retinal diseases	Kurma, Pontifax, Omnes
	Nov 17	Pharmaterials	UK	CDMO, specialized in oral and inhaled drug delivery	Quotient Sciences
	Nov 17	Henke-Sass, Wolf	GER	Acquisition of disposable syringe division	B Braun
	Nov 17	NousCom	SWI	Biotech company specialized in cancer vaccines	Abingworth, 5AM, LSP
	Nov 17	Medisize	NET	Medtech manufacturing respiratory and anesthesia products	Flexicare
	Nov 17	Inoges	GER	Operator of outpatient rehabilitation	Celenus Kiniken/Orpea
	Nov 17	Synergy Health	UK	Medtech manufacturing products for wound care and surgery	Verna Group Limited
	Oct 17	Jotec	GER	Medtech specialized in devices for cardiovascular diseases	CryoLife
	Oct 17	Vexim	FRA	Medtech marketing devices for vertebral compression fractures	Stryker
	Oct 17	Invento Medical	GER	Single-use high definition endoscopy products	Ambu
	Oct 17	Menix Group	FRA	Orthopedics, dental implants, and cranio maxillofacial surgery	Five Arrow Managers
	Oct 17	Immatics	GER	Cancer immunotherapy with T-cell technology	Amgen, Wellington Part.
	Oct 17	Sebia	FRA	Clinical protein electrophoresis products for <i>In Vitro</i> Diag.	Tethys, CVC Capital
	Oct 17	InflaRx	GER	Clinical-stage company specialized in auto-immune disorders	Bain Cap., Cormorant AM
3 months	Oct 17	Almaviva	FRA	Fifth largest private hospital network	Antin Infrastructure Part.
	Sep 17	Eligo Bioscience	FRA	Biopharma focused on microbiome and CRISPR technology	Khosla & Seventure
	Sep 17	Autolus Ltd.	UK	Development and distribution of CAR-T cell therapies	Cormoran AM
	Sep 17	CMR	UK	Developing robotic systems in the surgical sector	Watrium
	Sep 17	Immunic	GER	Biotech specialized in autoimmune and inflammatory diseases	Omega Funds & Fund+
	Sep 17	Quantum Pharma	UK	Niche pharmaceutical developer, manufacturer and supplier	Clinigen Group
	Sep 17	Rigontec	GER	Biotech specialized in novel immuno-oncology therapies	Merck

<sup>(1)</sup> Please contact the Bryan Garnier team directly for any detail regarding valuation and transaction size of private company deals

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Acquired by

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Scientific

\$435 000 000

Advisor to the  
company



Follow-on &  
IPO on NASDAQ OMX

€70 000 000

Sole Bookrunner / Co-  
lead Manager



Private Placement

Gimv

€30 000 000

Joint Lead Manager



Follow-ons

€71 250 000

Placement Agent



Follow-on &  
Nasdaq IPO

\$414 500 000

Joint Lead Manager &  
Bookrunner



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