



BRYAN, GARNIER & CO

MARKET UPDATE

# HEALTHCARE

*November 2018*



A close-up, blue-tinted photograph of a microscope's objective lenses and eyepiece, positioned at the top of the page. The lenses are in sharp focus, with some technical markings visible on them.

## HIGHLIGHTS

Dear Reader,

In November, Roivant continued growing its unicorn status. 15 months after its massive \$1.1Bn raise, the Company has raised \$200 million to roll out another round of startups. In between the two rounds, Roivant more than doubled the number of startups in its roster, bringing the total up to 14 for a number of therapies in development of 34. The company is today valued \$7Bn, up from \$5.6Bn from its last raise. However it was no walk in the park, with the company having to lay off and reassign staff. Next year should give investors the answer whether it is all worth it as Roivant is heading towards a series of other late-stage readouts.

We now have one year of read on CAR-T therapies. Researchers are still trying to determine what the median overall survival rate for large B-cell lymphoma treated with Yescarta in third-line therapy: two years after the clinical study Zuma-1, 58% of patients have achieved a complete response and after a median 27 months, out of the patients with an ongoing response at 12 months, 93% remain in response. However despite these impressive survival rates, the first 9 months of sales at Gilead hit \$183m, a long way from blockbuster status. So what can make these promising therapies really get off the ground? The response might lie in the allogenic CAR-T treatments where the step of individualized manufacturing processes is skipped, thus significantly reducing costs. Beginning of summer last year, Cellectis administered the first AML patient with UCART123, its allogenic therapy. However, the T-cells are engineered using TALEN, a gene editing technology that despite being more specific than CRISPR, is also more expensive. Interesting contender is CYAD-101, the allogenic product from the Belgian company Celyad. CYAD-101 does not require any gene editing. The Company announced this month the successful injection of CYAD-101 in a non resectable mCRC patient. Next year should give interesting insights on this approach.

This month also, Astra Zeneca struck 3 deals in a row in an effort to cut costs and drive cash flow up to improve the bottom line and achieve its goal of doubling its annual revenues to \$40Bn by 2023. It started with the sale of certain rights to Nexium and Vimovo to Grünenthal for \$922 million shortly after followed by a pact with Covis Pharma, scooping up \$350 million in a sale of rights to respiratory drugs Alvesco, Omnaris and Zetonna. Last but clearly not least, in a \$2.3Bn total deal value, AZ handed off the rights of its RSV drug to Sobi, its largest divestiture in 5 years.

One more month before we can conclude on what is set to be a memorable year!

**HERVE RONIN**

Partner | Bryan, Garnier & Co

**+6.5%**

5Y-CAGR

*Worldwide prescription  
drugs -expected sales*

**+5.3%**

5Y-CAGR

*Medtech market -  
expected growth*

**3.2% / 1.1%**

*Monthly EU Pharma &  
biotech performance*

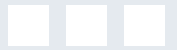
**16 / \$1.95 bn**

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

**Drug prices in  
ads rebuttal**

*The newly proposed  
requirement to  
disclose list prices for  
drugs on-screen during  
television commercials  
could push drugmakers  
to rethink their  
marketing strategies*





## NOVEMBER AT A GLANCE — FOCUS ON EUROPE

### EQUITY MARKETS

- Healthcare stocks recovered from last month market sell-off. Overall, US Pharma & Biotech stocks outperformed their European counterparts
- Markets were less nervous both in Europe (V2X: -9%) and US (VIX: -15%)
- Monthly US / EU Biotech perf.: +4.7% / +1.1%
- Monthly US / EU Pharma perf.: +6.1% / +3.2%

### INDUSTRY & SCIENCE

- **News of the month: Celyad progresses with its CAR-T trials in solid tumors, with early sign of clinical benefits**
- Celyad reported stable disease (THINK trial) in 3 of 11 patients with colorectal cancer (mCRC), and 1 of 2 ovarian cancer. In SHRINK, 3 of 3 mCRC had objective responses, including 1 complete response in FOLFOX combo therapy
- Also, Celyad initiated its first allogeneic CAR-T trial in colorectal cancer

### FINANCING

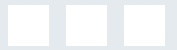
- **Raise of the month: Roivant Sciences raises \$200 million to launch new firms that will develop medicines**
- Based in Switzerland, Roivant Sciences is a pharmaceutical company developing in-licensed late-stage drug candidates through subsidiaries
- Roivant has a pipeline of 35 drugs in 14 therapeutic areas including women's health, chronic infectious diseases, dermatology, neurology, or metabolic disorders

### M&A

- **Transaction of the month: Boston Scientific bags UK-based BTG for £3.3 billion**
- BTG, listed on LSE, develops and manufactures minimally-invasive devices for cancer and cardiovascular disorders, and also has a portfolio of acute care pharmaceuticals
- In the first half of the year ending September 30<sup>th</sup>, the company generated ~\$500m in revenues. The transaction is expected to close in H1-2019

### NEXT MONTH

- **American Society of Hematology (12/01-04):** the 60<sup>th</sup> edition of one of the most comprehensive conference on hematology will take place in San Diego, USA
- **Final bid for BMS's UPSA?** The final bidders for UPSA, the French OTC branch of BMS, are rumored to include Stada, Angelini, CVC, and PAI Partners. The transaction could be valued between €1.0bn and €1.5bn



# Asthma KOL Event - Airway to Heaven

14<sup>th</sup> November 2018

## Pharmaceuticals

Healthcare

| KOL Events

### Airway to Heaven



RESEARCH AS A SERVICE

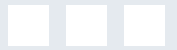
**Severe asthma is an attractive market.** This report follows a meeting we organised with a KOL to discuss asthma treatment and, more specifically, severe asthma. Asthma is a significant market, valued today at approximately USD24bn. It is estimated that close to 2 million patients have uncontrolled asthma and 5 million have severe asthma.

**A step by step treatment approach.** Treatment of asthma is divided into five steps according to the gravity of the disease. Since asthma is an inflammatory disease, the basis of treatment is an inhaled corticosteroid. When the severity of the disease increases, different classes of bronchodilators are added from step 2 to step 4 (and even step 5). This is why many doublet or triplet inhaled combinations exist today. This KOL sees the market of inhaled drugs as overcrowded and believes it is too complicated for GPs who are the main prescribers for non-severe asthma.

**Dupixent is the best biologic today.** When patients reach step 5, it is best to use a biologic drug. Three of them are currently on the market targeting different cytokines. Nucala (anti-IL-5) was the first one and is to lose its leadership to Fasenna (anti-IL-5) from AstraZeneca which is easier to use and has a quicker onset of action. But a new entrant, Dupixent (anti-IL4/13), is viewed as the best biologic by the KOL. Dupixent has demonstrated a stronger efficacy than its competitors on different endpoints (exacerbation, FEV1, speed of onset). However, tezepelumab (AZN) should be a key competitor if the phase III results are positive with a launch time estimated in 2021.

**None of these drugs will have efficacy in COPD.** Since COPD is a "destruction" of bronchi and not an inflammatory disease, drugs acting on inflammation process will never have a positive impact.

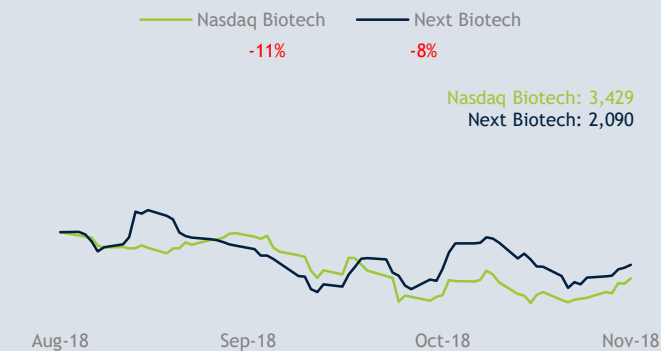
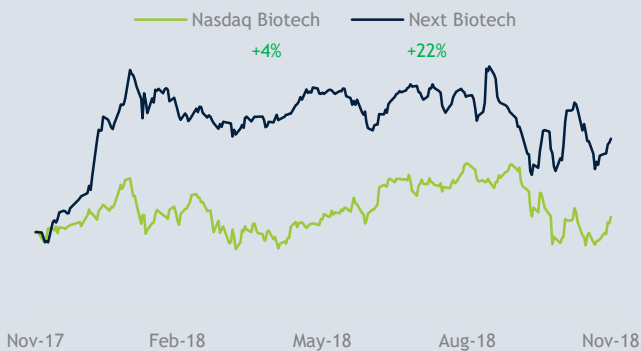
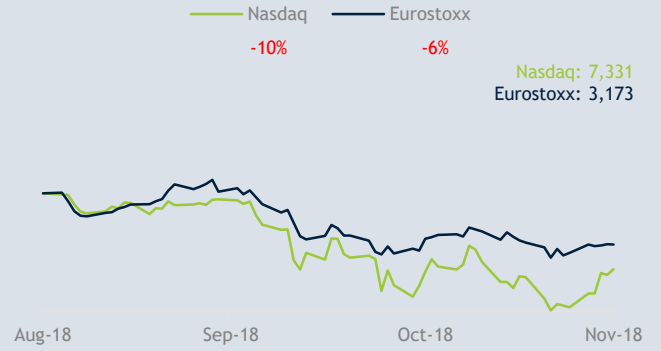
Jean Jacques Le fur | 33 (1) 70 36 57 45 | [jjlefur@bryangarnier.com](mailto:jjlefur@bryangarnier.com)

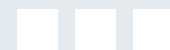


# EQUITY MARKETS

## 1-YEAR PERFORMANCE

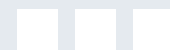
## 3-MONTH PERFORMANCE





## EURONEXT HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals ↗			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SANOFI	EN Paris	98,894	15.1%	1.5%
UCB SA	EN Brussels	14,603	15.6%	3.3%
IPSEN	EN Paris	9,863	19.1%	-5.3%
FAGRON	EN Brussels	1,086	33.3%	1.4%
VIRBAC SA	EN Paris	1,056	1.1%	-12.2%
BOIRON SA	EN Paris	924	-28.1%	0.8%
STALLERGENES GRE	EN Paris	683	-10.4%	23.9%
VETOQUINOL SA	EN Paris	593	-16.8%	3.3%
Biotech ↘			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
GALAPAGOS NV	EN Amsterdam	4,960	15.3%	-2.9%
ARGENX SE	EN Brussels	3,434	82.0%	13.9%
MITHRA PHARM	EN Brussels	986	155.4%	6.9%
CELLECTIS	EN Paris	831	-17.8%	-16.4%
DBV TECHNOLOGIES	EN Paris	824	-34.7%	-19.3%
GENFIT	EN Paris	646	-13.3%	-3.1%
INNATE PHARMA SA	EN Paris	566	86.3%	5.0%
PHARMING GRP NV	EN Amsterdam	507	-27.4%	-13.1%
VALNEVA SE	EN Paris	323	26.7%	0.6%
CELYAD	EN Brussels	277	-33.0%	-6.1%
NANOBIOTIX	EN Paris	243	-16.5%	-6.5%
KIADIS PHARM	EN Amsterdam	209	8.2%	-3.9%
TRANSGENE SA	EN Paris	188	6.7%	-1.0%
AB SCIENCE SA	EN Paris	162	-52.5%	-7.9%
OXURION NV	EN Brussels	158	21.8%	-22.6%
POXEL SA	EN Paris	157	-7.8%	-5.2%
NICOX SA	EN Paris	150	-50.1%	-5.2%
MEDINCELL SA	EN Paris	143	n.a.	-1.4%
INVENTIVA SA	EN Paris	134	22.0%	-5.0%
PHARNEXT SA	EN Paris	125	29.4%	3.5%
ERYTECH PHARMA	EN Paris	124	-62.7%	0.1%
ACACIA PHARMA GR	EN Brussels	108	n.a.	-9.2%
GENKYOTEX SA	EN Paris	100	-23.9%	-14.6%
ABIVAX SA	EN Paris	98	11.0%	54.8%
ADVICENNE	EN Paris	93	-17.1%	-1.3%
ADOCIA SAS	EN Paris	90	-8.9%	0.8%
GENSIGHT	EN Paris	71	-53.7%	68.7%
GENEURO SA	EN Paris	58	-30.8%	-5.0%
QUANTUM GEN-REGR	EN Paris	57	34.8%	44.1%
BONE THERAPEUTIC	EN Brussels	54	-15.8%	-37.7%
ONCODESIGN	EN Paris	54	-31.7%	2.1%
ONXEO	EN Paris	52	-10.6%	-6.9%
THERANEXUS SADIR	EN Paris	50	7.1%	1.3%
OSE IMMUNO	EN Paris	50	-12.5%	-3.7%
ASIT BIOTECH SA	EN Brussels	39	-41.3%	-2.7%
CERENIS THERAPEU	EN Paris	30	-16.9%	-5.3%
PROBIODRUG AG	EN Amsterdam	24	-72.5%	-5.8%
BIOPHYTIS	EN Paris	22	-64.6%	-16.7%
NEOVACS	EN Paris	21	-52.9%	-7.9%
LYSOGENE SA	EN Paris	19	-61.8%	-27.5%
PLANT ADVANCED	EN Paris	16	-31.2%	-11.1%
SENSORION SA	EN Paris	15	-68.9%	-24.8%
VALBIOTIS SAS	EN Paris	14	-48.1%	-11.9%
GENOWAY SA	EN Paris	12	2.0%	10.9%
INTEGRAGEN	EN Paris	8	-54.3%	-11.8%
ESPERITE	EN Amsterdam	6	-69.2%	-14.4%
HYBRIGENICS	EN Paris	3	-91.1%	20.6%



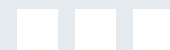
## EURONEXT HEALTHCARE COMPANY PERFORMANCE

Medical Products & Devices 📉			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SARTORIUS STEDIM	EN Paris	8,517	54.2%	-17.7%
BIOMERIEUX	EN Paris	7,528	-14.5%	-7.7%
EUROFINS SCIEN	EN Paris	6,902	-22.9%	-11.9%
GUERBET	EN Paris	737	-25.0%	2.4%
BIOCARTIS NV	EN Brussels	610	-0.5%	-4.8%
ION BEAM APPLICA	EN Brussels	494	-31.4%	-3.4%
LUMIBIRD	EN Paris	199	76.2%	0.2%
CARMAT	EN Paris	190	-4.9%	-9.3%
AMPLITUDE SURGIC	EN Paris	143	-15.3%	-6.5%
MDXHEALTH	EN Brussels	123	-36.1%	10.5%
EOS IMAGING SA	EN Paris	83	-22.9%	-13.1%
BIOM'UP SACA	EN Paris	67	-60.2%	7.5%
MAUNA KEA TECHNO	EN Paris	65	-46.0%	-8.2%
VOLUNTIS SA	EN Paris	44	n.a.	-17.1%
MEDICREA INTERNA	EN Paris	38	-21.3%	39.2%
EUROBIO-SCIENTIF	EN Paris	38	-19.7%	-9.8%
CURETIS AG	EN Amsterdam	35	-57.4%	-36.6%
PIXIUM VISIO	EN Paris	35	-36.4%	-10.2%
SUPERSONIC	EN Paris	34	-22.9%	-8.8%
BIOCORP	EN Paris	30	-34.6%	-8.9%
MEDIAN TECHNOLOG	EN Paris	30	-72.9%	13.5%
CELLNOVO GROUP S	EN Paris	25	-56.2%	-28.2%
BIOSYNEX	EN Paris	24	-22.2%	7.9%
BLUELINEA	EN Paris	22	-20.3%	8.7%
I CERAM	EN Paris	21	-49.4%	-30.5%
EUROMEDIS GROUPE	EN Paris	20	-7.4%	-3.6%
STENTYS	EN Paris	15	-63.0%	-19.8%
NOVACYT	EN Paris	14	-46.7%	-6.6%
CROSSJECT	EN Paris	13	-71.2%	2.2%
DMS	EN Paris	11	-50.9%	-5.3%
THERADIAG	EN Paris	9	-53.3%	-3.2%
VISIONED GROUP	EN Paris	8	-88.6%	7.0%
SAFE ORTHOPAEDIC	EN Paris	7	-66.3%	-7.3%
THERACLION	EN Paris	6	-80.9%	-38.9%
GENOMIC VIS	EN Paris	6	-84.9%	-16.9%
IMPLANET	EN Paris	6	-60.5%	-7.8%
SPINEGUARD	EN Paris	5	-76.2%	-26.6%
SPINEWAY	EN Paris	3	-94.3%	-18.9%

Healthcare Services 📉			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
ESSILORLUXOTTICA	EN Paris	40,768	-0.1%	-6.0%
ORPEA	EN Paris	6,220	-1.2%	-10.9%
KORIAN	EN Paris	2,889	22.2%	2.1%
RAMSAY GENERALE	EN Paris	1,451	21.3%	-9.9%
LNA SANTE	EN Paris	488	-14.1%	9.3%
BASTIDE	EN Paris	254	-38.6%	-3.1%

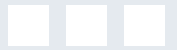




## LONDON HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals ↗			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
GLAXOSMITHKLINE	London	81,145	30.6%	11.9%
ASTRAZENECA PLC	London	78,149	25.4%	7.6%
SHIRE PLC	London	42,003	18.5%	1.1%
HIKMA PHARMACEUT	London	4,344	61.6%	-3.9%
HUTCHISON CHINA	London	3,497	-6.3%	7.6%
BTG PLC	London	3,223	9.2%	46.3%
ABCAM PLC	London	2,390	11.4%	-5.7%
DECHRA PHARMA	London	2,241	5.5%	-3.7%
INDIVIOR PLC	London	758	-74.5%	-48.6%
VECTURA GROUP	London	481	-38.6%	0.8%
Biotechs ↘			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
OXFORD BIOMEDICA	London	465	59.1%	0.3%
ALLIANCE PHARMA	London	344	0.4%	-1.8%
BENCHMARK HOLDIN	London	332	7.2%	-1.7%
ECO ANIMAL HEALT	London	302	-23.3%	17.6%
CIRCASSIA PH	London	204	-45.2%	-8.4%
BIOVENTIX PLC	London	177	44.8%	16.0%
VERSEON CORP	London	148	-19.8%	-8.5%
MEREO BIOPHARMA	London	135	-41.5%	0.0%
VERONA PHARMA PL	London	111	0.5%	-10.6%
MAXCYTE INC	London	103	-17.8%	-1.0%
TIZIANA LIFE SCI	London	92	-51.4%	-27.2%
ALLERGY THERAPEU	London	89	-50.9%	-20.0%
4D PHARMA PLC	London	86	-60.6%	-10.8%
MOTIF BIO PLC	London	82	-32.7%	-6.0%
TISSUE REGENIX G	London	79	-27.0%	-16.9%
SILENCE THERAPEU	London	66	-52.0%	-18.8%
ONCIMMUNE HOLDIN	London	56	-12.9%	-9.4%
C4X DISCOVERY HO	London	44	-4.4%	-2.6%
SHIELD THERAPEUT	London	42	-68.0%	18.0%
AMRYT PHARMA PLC	London	35	-37.4%	-6.1%
SCANCELL HOLDING	London	32	-35.9%	2.2%
CATHAY INTL HLDG	London	31	8.2%	-2.9%
SKINBIOTHERAPEUT	London	23	n.a.	2.7%
FARON PHARMACEUT	London	20	-91.8%	-14.9%
SAREUM HOLDINGS	London	20	-17.6%	-12.5%
IMMUPHARMA PLC	London	19	-91.9%	42.8%
RENEURON GROUP P	London	18	-69.9%	-6.6%
SUMMIT THERAPEUT	London	16	-88.2%	-27.3%
DIURNAL GROUP PL	London	15	-83.3%	-21.0%
FUTURA MEDICAL	London	13	-77.9%	-13.2%
MIDATECH PHARMA	London	6	-72.9%	-31.6%





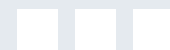
## LONDON HEALTHCARE COMPANY PERFORMANCE

### Medical Products & Devices ↴


Company	Exchange	Mkt Cap (£m)	Performance	
			YTD	1 Month
SMITH & NEPHEW	London	12,623	14.3%	6.2%
CONVATEC GROUP P	London	3,006	-24.0%	-7.6%
ADVANCED MEDICAL	London	632	-6.5%	-2.0%
CONSORT MEDICAL	London	492	-13.1%	-10.3%
CREO MEDICAL GRO	London	225	169.1%	-3.6%
MEDICA GROUP PLC	London	157	n.a.	-1.4%
EKF DIAGNOSTICS	London	127	18.2%	-2.6%
BIOQUELL PLC	London	127	112.3%	42.0%
TRISTEL PLC	London	104	-4.3%	-7.6%
IMMUNODIAGNOSTIC	London	56	-27.3%	-7.1%
AVACTA GROUP PLC	London	26	-64.7%	-6.2%
NETSCIENTIFIC PL	London	22	-61.0%	-4.5%

### Healthcare Services ↴


Company	Exchange	Mkt Cap (£m)	Performance	
			YTD	1 Month
CLINIGEN GROUP P	London	1,159	-14.4%	-2.5%
OXFORD BIODYNAMI	London	190	19.5%	-1.9%
ANPARIO PLC	London	91	0.1%	-3.9%
ERGOMED PLC	London	69	-16.9%	1.7%
HVIVO PLC	London	27	-38.2%	-20.0%




## GERMAN HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
BAYER AG-REG	Xetra	62,341	-32.9%	-4.8%
MERCK KGAA	Xetra	43,347	12.8%	5.3%
DERMAPHARM HOLDI	Xetra	1,309	n.a.	-6.7%
BIOTEST AG	Xetra	964	11.9%	15.0%
MEDIGENE AG	Xetra	237	-24.3%	-12.4%
BIOFRONTERA AG	Xetra	251	35.6%	-0.5%
ECKERT & ZIEGLER	Xetra	359	92.2%	32.6%
MAGFORCE AG	Xetra	156	-10.2%	-2.8%
CO.DON AG	Xetra	77	-43.6%	-6.5%
HAEMATO AG	Xetra	112	2.0%	-4.5%
SANOCHEMIA PHARM	Stuttgart	19	0.7%	-2.7%


  

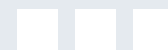
Biotechs 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
MORPHOSYS AG	Xetra	3,244	33.1%	7.8%
EVOTEC AG	Xetra	3,195	58.9%	18.5%
FORMYCON AG	Xetra	279	-6.1%	-0.3%
4SC AG	Xetra	95	-37.3%	-3.9%
PAION AG	Xetra	156	-9.8%	14.3%
HEIDELBERG PHARM	Xetra	81	-11.7%	24.2%
MOLOGEN AG	Xetra	30	-70.4%	9.9%
CYTOTOOLS AG	Xetra	17	-23.9%	16.5%
ELANIX BIOTECHNO	Xetra	21	-29.0%	-15.2%

Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
FRESENIUS SE & C	Xetra	28,890	-19.3%	-6.0%
SIEMENS HEALTHIN	Xetra	38,840	n.a.	7.6%
FRESENIUS MEDICA	Xetra	22,973	-14.2%	9.4%
SARTORIUS AG	Xetra	8,087	34.6%	-12.6%
CARL ZEISS ME-BR	Xetra	5,599	22.2%	-13.7%
DRAEGERWERK-PREF	Xetra	777	-31.3%	-0.8%
STRATEC BIOMEDIC	Xetra	680	-11.3%	-8.8%
PULSION MED SY-R	Munich	190	-6.7%	0.9%
EPIGENOMICS AG	Xetra	73	-49.0%	-2.2%
GERATHERM MEDICA	Xetra	47	-18.7%	-4.1%
AAP IMPLANTATE	Xetra	32	-37.2%	-16.6%
HUMANOPTICS AG	Frankfurt	61	86.9%	-9.5%
CURASAN AG	Xetra	9	-55.8%	-33.9%

Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
RHOEN-KLINIKUM	Xetra	1,496	-24.6%	1.1%
MEDICLIN AG	Xetra	273	-7.2%	0.0%
M1 KLINIKEN AG	Frankfurt	224	-1.1%	1.6%
VITA 34 AG	Xetra	51	10.5%	4.7%
MATERNUS-KLINIKE	Xetra	40	-18.7%	-5.9%
EIFEL-KLINIK AG	Frankfurt	12	-26.3%	-2.6%



## SWISS HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals →			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
NOVARTIS AG-REG	SIX Swiss Ex	235,015	15.9%	5.1%
ROCHE HLDG-GENUS	SIX Swiss Ex	223,007	8.9%	6.9%
VIFOR PHARMA AG	SIX Swiss Ex	8,219	2.5%	-11.5%
COSMO PHARMACEUT	SIX Swiss Ex	1,580	-28.2%	-11.2%
CASSIOPEA SPA	SIX Swiss Ex	433	24.4%	-0.5%

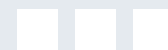
Biotechs ↘			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
IDORSIA LTD	SIX Swiss Ex	2,586	-22.5%	-0.3%
BASILEA PHAR-REG	SIX Swiss Ex	610	-32.3%	2.7%
MOLECULAR PARTNE	SIX Swiss Ex	387	-30.6%	-0.5%
EVOLVA HOLDING S	SIX Swiss Ex	188	-21.3%	-5.2%
NEWRON PHARMACEU	SIX Swiss Ex	137	-33.6%	-6.1%
SANTHERA PHA-REG	SIX Swiss Ex	86	-68.2%	-26.8%
ADDEX THERAPEUTI	SIX Swiss Ex	67	2.2%	0.4%
KUROS BIOSCIENCE	SIX Swiss Ex	25	-75.5%	-41.6%
RELIEF THERAPEUT	SIX Swiss Ex	12	-42.0%	-3.3%
POLYPHOR AG	SIX Swiss Ex	252	n.a.	-13.6%

Medical Products & Devices ↘			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
STRAUMANN HLDG-R	SIX Swiss Ex	10,043	-7.4%	-9.9%
SONOVA HOLDING A	SIX Swiss Ex	10,544	7.6%	-4.0%
TECAN GROUP AG-R	SIX Swiss Ex	2,412	2.1%	-10.3%
YPSOMED HOLD-REG	SIX Swiss Ex	1,589	-21.0%	-8.3%
MEDARTIS HOLDING	SIX Swiss Ex	749	n.a.	-14.5%
IVF HARTMANN-REG	SIX Swiss Ex	408	-4.8%	-4.8%
COLTENE HOLD-REG	SIX Swiss Ex	509	-6.6%	-17.4%
SHL TELEMEDI-REG	SIX Swiss Ex	72	5.2%	-3.2%

Healthcare Services ↗			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
LONZA GROUP -REG	SIX Swiss Ex	24,478	26.2%	1.8%
BACHEM HOL-REG B	SIX Swiss Ex	1,708	-16.6%	2.3%
DOTTIKON ES H-RE	SIX Swiss Ex	585	-43.1%	-7.4%



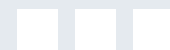
## KEY SECTOR NEWS IN NOVEMBER

DATE	NEWS
30 Nov 18	<b>CELYAD</b> - CYAD-101: First patient treated and East Asian rights regained
30 Nov 18	<b>ESSILOR</b> - In Unity We Trust
29 Nov 18	<b>ROCHE</b> - Landscape for biosimilar Mabs becoming clearer
27 Nov 18	<b>BAYER</b> - Vitrakvi approval in the US: the long-awaited blockbuster
27 Nov 18	<b>ROCHE</b> - The ES-SCLC opportunity is widely open for Tecentriq
20 Nov 18	<b>MERCK KGAA</b> - Avelumab's failure in 2L ovarian raises doubts on the program
20 Nov 18	<b>PIXIUM VISION</b> - Love is No Longer Blind
16 Nov 18	<b>ZEALAND PHARMA</b> - Disappointing delay for dasiglucagon rescue
16 Nov 18	<b>MORPHOSYS</b> - MorphoSys and I-Mab sign new I-O partnership deal
16 Nov 18	<b>DBV TECHNOLOGIES</b> - CEO change as the company evolves toward a biopharma
16 Nov 18	<b>ASTRAZENECA</b> - MYSTIC: This time, this is the end
15 Nov 18	<b>PHARMACEUTICALS</b> - Sequencing Was the Key Word
14 Nov 18	<b>MERCK KGAA</b> - Good Q3. Rebased FX assumptions might be too shy
14 Nov 18	<b>BAYER</b> - Low visibility- FV adjusted to EUR81 from EUR100
14 Nov 18	<b>KOL EVENT</b> - Airway to Heaven
13 Nov 18	<b>BAYER</b> - Q3 2018 results of poor quality
13 Nov 18	<b>ASTRAZENECA</b> - US Synagis rights sold to Sobi for USD1.5bn upfront
12 Nov 18	<b>FRESENIUS SE</b> - Helios Germany to recover by mid-2019
12 Nov 18	<b>CELYAD</b> - SITC 2018: CYAD-01 in solid tumors - a focus on clinical data
9 Nov 18	<b>BIOMERIEUX</b> - BIM steps up its footprint in China
7 Nov 18	<b>PHARMACEUTICALS</b> - Lilly disappoints but is still making progress
7 Nov 18	<b>LNA SANTE</b> - Q3 organic revenue growth accelerating. FY guidance, recently upgraded, confirmed
7 Nov 18	<b>BONE THERAPEUTICS</b> - DSMB recommends early termination to of PREOB phase III trial
6 Nov 18	<b>ORPEA</b> - New acquisition in Germany to expand high-end nursing homes
6 Nov 18	<b>NOVO NORDISK</b> - Trulicity will fight hard against Ozempic
6 Nov 18	<b>NOVARTIS</b> - Enough fruits to focus on big opportunities
6 Nov 18	<b>MORPHOSYS</b> - MorphoSys Q3 in good shape
2 Nov 18	<b>SANOFI</b> - Third quarter confirmed our investment case
2 Nov 18	<b>IPSEN</b> - Cabometyx still growing steadily in the US
2 Nov 18	<b>MORPHOSYS</b> - MorphoSys to present MOR208 and MOR202 data at ASH
2 Nov 18	<b>CELYAD</b> - ASH: Celyad to present new CYAD-01 results in AML
2 Nov 18	<b>ASTRAZENECA</b> - Upside at the current price is less clear to us
1 Nov 18	<b>NOVO NORDISK</b> - Third-quarter figures very much in line with estimates
1 Nov 18	<b>GSK</b> - Not so easy over the next two years



## EUROPEAN FUNDRAISING : IPO & FOLLOW-ONS

	Pricing Date	Issuer	Country	Industry	Size (€m)	Offer type	Offer To Date
Last month	29 Nov 18	Zur Rose Group AG	SWITZERLAND	Medical-Whsle Drug Dist	104	Follow-on	-4%
	26 Nov 18	Amarin Corp PLC	IRELAND	Medical-Biomedical/Gene	176	Follow-on	0%
	14 Nov 18	Hansa Medical AB	SWEDEN	Medical Labs&Testing Srv	66	Follow-on	0%
	7 Nov 18	Garofalo Health Care SpA	ITALY	Medical-Hospitals	67	IPO	9%
	6 Nov 18	Alzecure Pharma AB	SWEDEN	Medical-Drugs	19	IPO	-22%
3 months	30 Oct 18	Orchard Therapeutics plc	BRITAIN	Medical-Biomedical/Gene	174	IPO	8%
	26 Oct 18	Oryzon Genomics SA	SPAIN	Medical-Biomedical/Gene	13	Follow-on	11%
	19 Oct 18	Kiadis Pharma NV	NETHERLANDS	Medical-Biomedical/Gene	31	Follow-on	6%
	4 Oct 18	Laboratorios Farmaceuticos Rov	SPAIN	Medical-Drugs	88	Follow-on	20%
	3 Oct 18	Medincell SA	FRANCE	Medical-Biomedical/Gene	30	IPO	-3%
	2 Oct 18	GW Pharmaceuticals PLC	BRITAIN	Therapeutics	259	Follow-on	-22%
	27 Sep 18	Clinigen Group Plc	BRITAIN	Drug Delivery Systems	90	Follow-on	3%
	27 Sep 18	Nightstar Therapeutics PLC	BRITAIN	Medical-Biomedical/Gene	61	Follow-on	-17%
	27 Sep 18	Valneva SE	FRANCE	Medical-Biomedical/Gene	50	Follow-on	-9%
	20 Sep 18	CRISPR Therapeutics AG	SWITZERLAND	Medical-Biomedical/Gene	171	Follow-on	-19%
	18 Sep 18	Argenx SE	NETHERLANDS	Medical-Biomedical/Gene	257	Follow-on	12%
	12 Sep 18	Galapagos NV	BELGIUM	Medical-Drugs	297	Follow-on	-14%
	7 Sep 18	ProQR Therapeutics NV	NETHERLANDS	Medical-Drugs	90	Follow-on	21%
	7 Sep 18	Adaptimmune Therapeutics Plc	BRITAIN	Medical-Biomedical/Gene	86	Follow-on	-38%
	5 Sep 18	Ambu A/S	GERMANY	Medical Instruments	398	Follow-on	-40%
	28 Aug 18	Sonova Holding AG	SWITZERLAND	Medical Products	276	Follow-on	-9%
	27 Aug 18	Wright Medical Group NV	NETHERLANDS	Medical Products	384	Follow-on	14%
	16 Aug 18	Oncoceptides AB	SWEDEN	Medical-Drugs	17	Follow-on	26%
	27 Jul 18	Orpea	FRANCE	Medical-Nursing Homes	64	Follow-on	-19%
	26 Jul 18	Nabriva Therapeutics PLC	IRELAND	Medical-Drugs	43	Follow-on	-26%
	19 Jul 18	ADL Bionatur Solutions SA	SPAIN	Medical-Biomedical/Gene	12	Follow-on	-20%
	19 Jul 18	Allergy Therapeutics PLC	BRITAIN	Medical-Drugs	12	Follow-on	-47%
	18 Jul 18	AC Immune SA	SWITZERLAND	Medical-Drugs	86	Follow-on	-5%
	13 Jul 18	Creo Medical Group plc	BRITAIN	Medical Products	55	Follow-on	42%
	12 Jul 18	Myovant Sciences Ltd	BRITAIN	Medical-Drugs	64	Follow-on	-18%
11 Jul 18	Idorsia Ltd	SWITZERLAND	Medical-Drugs	262	Follow-on	-26%	
21 Jun 18	Autolus Therapeutics PLC	BRITAIN	Medical-Biomedical/Gene	145	IPO	130%	
20 Jun 18	ObsEva SA	SWITZERLAND	Medical-Drugs	63	Follow-on	-9%	
19 Jun 18	Alliance Pharma PLC	BRITAIN	Medical Products	39	Follow-on	-23%	
15 Jun 18	Calliditas Therapeutics AB	SWEDEN	Medical-Drugs	64	IPO	3%	
14 Jun 18	Recipharm AB	SWEDEN	Medical-Drugs	50	Follow-on	7%	
8 Jun 18	Immunovia AB	SWEDEN	Medical Products	32	Follow-on	-5%	
31 May 18	Mithra Pharmaceuticals SA	BELGIUM	Medical Products	77	Follow-on	-11%	



## PRIVATE EQUITY MARKET ACTIVITY

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

DATE	TARGET	CTY	DESCRIPTION	BUYER / INVESTOR
Nov 18	BTG	UK	Minimally-invasive products in cancer and vascular diseases	Boston Scientific
Nov 18	Stilla Technologies	FR	Developer of digital PCR for research and molecular diagnostics	Illumina, Kurma, LBO Fr
Nov 18	Bioesterel	FR	Network of medical and biology laboratories	Biogroup-LCD
Nov 18	DOREA Famille	DE	Operator of care and retirement homes	Maisons de Famille Gr.
Nov 18	CC Pharma	DE	Distributor of pharmaceutical products	Aphria
Nov 18	Petit-Fils	FR	French network of home help services for dependent elderly people	Korian Group
Nov 18	Omeicos Therap.	DE	First-in-class molecule for cardiovascular and ophthalmic diseases	Forbion, Vesalius,...
Nov 18	Nyxoah	BE	Neurostimulation therapy for patients suffering from Sleep Apnea	Cochlear
Nov 18	Amal Therapeutics	CH	Cancer vaccine developer	BI Venture, Biomed
Nov 18	Roivant Sciences	CH	Medical drug developer	Novaquest, RTW
Nov 18	Camel-IDS	BE	Cancer-targeted radiopharmaceuticals	V-Bio, Gimv, Healthcap,...
Nov 18	CMS Unternehmens	DE	Operator of nursing homes	Alloheim
Oct 18	Accolab	FR	Operator of medical biology laboratories	Cerba Healthcare
Oct 18	BioPath/Polibio/SFMT	FR	Operators of medical biology laboratories	Unilabs
Oct 18	Visiomed AG	DE	Dermoscopy systems for 3D imaging, clinical photography...	Canfield Scientific
Oct 18	Clinical Trials Lab	UK	High quality serum, plasma and blood collection services	BioIVT
Oct 18	Nemera	FR	Manufacturer of drug administration systems	Astorg
Oct 18	Eco-Dex	FR	Devices for automatic dispensation of solid oral drugs	SantaLucia Pharma
Oct 18	Owlstone Medical	UK	Breathalyzer developer for diagnostics	Horizon, Ventura, Foxconn
Oct 18	Sitryx Therapeutics	UK	Biotech company specializing in immuno-oncology and inflammation	SV Health, Sofinnova, GSK
Oct 18	Sphingotec	DE	Medical diagnostics	HBM, Wellington
Oct 18	Novaliq	DE	Therapies against eye disease	Dievini Hopp
Oct 18	Oxford Nanopore	UK	DNA sequencing company	Amgen
Sep 18	Emerging Implant	DE	Manufacturer of 3D-printed titanium for spinal fusion surgery	Johnson & Johnson
Sep 18	Systagenix	UK	Manufacturer and supplier of wound care products	Scapa Group
Sep 18	ViraTherapeutics	AT	Developer of oncolytic viral therapies	Boehringer Ingelheim
Sep 18	Tusk Therapeutics	BE	Developer of therapeutic antibodies for the treatment of cancer	Roche
Aug 18	Genomics	UK	Company using human genetic information for drug development	Vertex, Woodford, Invesco...
Aug 18	Cytune Pharma	FR	Development of new therapies for immune modulation	SOTIO (PPF Group)
Aug 18	Blueberry Therap.	UK	Nanomedicine for skin and nail infections	China Medical System
Aug 18	Orchard Therap.	UK	Commercial stage company focusing on rare disease	Deerfield, RA Capital, etc.
Aug 18	Artios	UK	Novel cancer treatment targeting DNA damage response	Andera, LSP, Pfizer, etc.
Aug 18	Therachon	CH	Clinical stage company focusing on rare disease	Novo, Cowen, Pfizer, Tekla
Aug 18	Healx	UK	Breakthrough treatment for rare diseases	Balderton, Amadeus
Aug 18	Vernalis	UK	Company with 3 marketed drugs: Tuzistra, Moxatag, Frovatriptan	Ligand Holding

<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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Bryan, Garnier & Co is a European, full service growth-focused independent investment banking partnership founded in 1996. The firm provides equity research, sales and trading, private and public capital raising as well as M&A services to growth companies and their investors. It focuses on key growth sectors of the economy including Technology, Healthcare, Consumer and Business Services. Bryan, Garnier & Co is a fully registered broker dealer authorized and regulated by the FCA in Europe and the FINRA in the U.S. Bryan, Garnier & Co is headquartered in London, with additional offices in Paris, Munich, Zürich and New York. The firm is a member of the London Stock Exchange and Euronext.

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