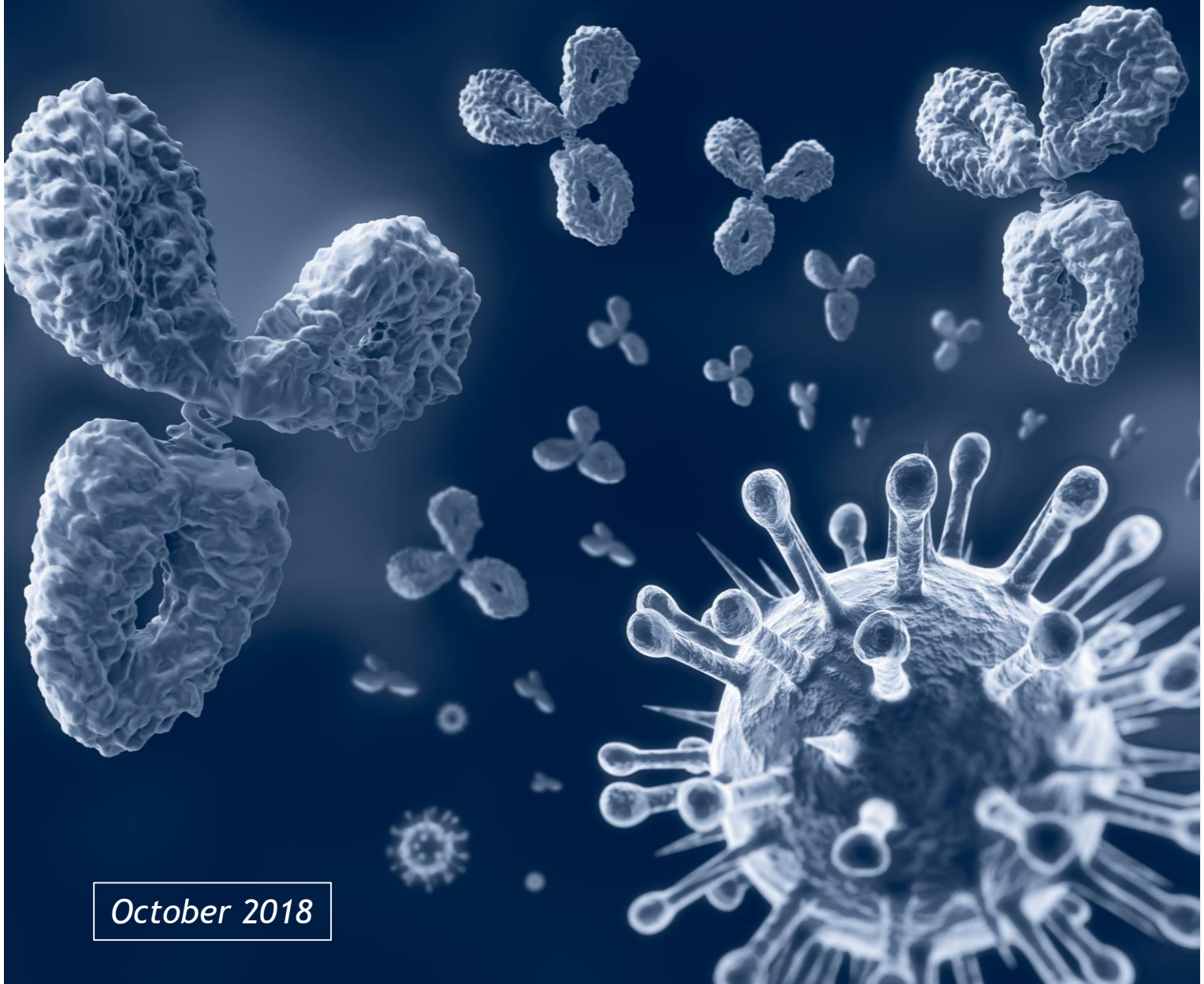




BRYAN, GARNIER & CO

MARKET UPDATE

HEALTHCARE



October 2018

A close-up, blue-tinted photograph of a microscope's objective lenses and eyepiece, positioned over a slide on the stage. The lighting is dramatic, highlighting the metallic textures and glass surfaces.

HIGHLIGHTS

Dear Reader,

Unless one has been living under a rock for the past month, there is no chance to have missed October bloodbath. With nearly \$2 trillion loss in the stock market, the slide snapped a six-month winning streak for the benchmark S&P 500 index and on October 24th, the Nasdaq biotechnology sector stumbled 6.3%. October was the worst month for the market since September 2011. Multiple factors played a role, with investors worried about politics and the upcoming midterm elections, escalating US-China trade tensions, geopolitical flareups from Italy to Saudi Arabia and hiking interest rate by the Federal Reserve. The pain spread to overseas markets, with the Hong Kong's Hang Seng tumbling 10% and China's Shanghai Composite losing 8%, sinking deeper into a bear market. Could that be the end of the longest bull market in American history?

However, it is interesting to note that before the chopper fell on the markets, European biotech sector was on track to break its annual funding record with a total for the first nine months of the year at \$6.3Bn. While the follow-on market thrived in Q3, the VC world was more active. In particular, the British biotech sector enjoyed a big Q3 for VC financing with more than \$600m flowing into UK biotechs. The sector raised 30% more money from public and private sources than it managed in all of 2017. This month, after its oversubscribed \$150m Serie C back in August, Orchard Therapeutics managed to raise \$200m on the Nasdaq –exceeding its \$173m goal– to finance the pivotal trials and regulatory filings for three gene therapies in the US and Europe.

In the US, the CAR-T player Allogene too was able to pull a \$288m IPO in this bumpy environment after setting a goal of “only” \$100m. The stock price leaped as high as 39% on its first day of trading. Even more flabbergasting, the company created by former Kite executives with assets from Cellectis in their pockets, raised a whopping \$300 m series A round back in April of this year and in September, they went on to close a \$120m private round. Some players definitively can get by rocky conditions while others are slaughtered.

On a side note, a survey conducted by KPMG and the Regulatory Affairs Professionals Society (RAPS) found US and European manufacturers of all sizes have little familiarity with the European Union's new Medical Device Regulation (MDR) and its requirements (postmarket surveillance and tracking of medical devices mainly) set to take full effect in May 2020. This is a major challenge for medical device companies in the European market and might open a door for M&A with big players eating up smaller ones who cannot afford to implement MDR.

Now for the end of the year, bull or bear, that is the question!

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% / -5.7%

*Monthly EU Pharma &
biotech performance*

24 / \$1.5bn

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

**US midterms
looming,
pressure on
pharmas**

*Drug pricing was a
central issue in the
election with results
potentially affecting
future performance*



OCTOBER AT A GLANCE — FOCUS ON EUROPE



EQUITY MARKETS

- Healthcare stocks were not spared by the October market sell off, with Biotechs suffering the most compared to Pharma companies
- Sharp increase in the volatility of financial markets, to a greater extent in the US (+75%) than in Europe (+38%)
- Monthly US / EU Biotech perf.: -14.6% / -5.7%
- Monthly US / EU Pharma perf.: -3.3% / -0.2%



INDUSTRY & SCIENCE

- **News of the month: Merck KGaA doubles Progression Free Survival in Renal Cell Carcinoma with Avelumab**
- Avelumab is an immune checkpoint inhibitor targeting PD-L1, and was used in combination with axitinib, a Tyrosine Kinase inhibitor
- During ESMO, Merck KGaA announced a PFS of 13.8 months for the combination, vs 7.2 months in the sunitinib group. Overall Survival data are expected at the end of the year



FINANCING

- **Raise of the month: AstraZeneca to acquire a 9.8% stake in Innate Pharma in extended monalizumab deal**
- AZ and Innate Pharma extended their 2015 deal, whereby AZ gets full oncology rights of monalizumab. On top of the equity investment, Innate Pharma is to receive \$100 m in Q1-2019, and is eligible to \$100 m should AZ start a Phase 3 trial
- Innate Pharma was also granted US commercial rights of recently approved AZ' Lumoxiti for Hairy Cell Leukemia



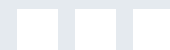
M&A

- **Transaction of the month: consolidation in the French medical biology space**
- Cerba Healthcare acquired Accolab from LFPI Gestion for an estimated €100m. Accolab is a French operator of clinical laboratories
- Swiss Unilabs acquired three French operators of clinical labs, Biopath, Polibio and SFTMBio. The combined revenues of the three entities are estimated to be around €100m



NEXT MONTH

- **Bryan, Garnier & Co's Healthcare conference:** more than 30 Biotech, Medtech and Pharma companies will attend the 6th edition of BG's Healthcare conference, taking place on November 22nd and 23rd
- **Conference and Events in November:** AHA (11/10-14), ACAAI (11/15-19), RNSA (11/25-30)



BRYAN, GARNIER & CO 6TH HEALTHCARE CONFERENCE


BRYAN, GARNIER & CO

SAVE THE DATE

6TH EUROPEAN HEALTHCARE CONFERENCE

22-23 November 2018

Etoile Business Center | 21-25 rue Balzac | 75008 | Paris

PLENARY SESSIONS | GROUP MEETINGS | ONE ON ONE MEETINGS

Participants will include:

ARIX BIOSCIENCE | ASTRAZENECA | BASILEA | BIOCARTIS | BIOMERIEUX | BONE THERAPEUTICS | CELYAD |
DBV TECHNOLOGIES | GALAPAGOS | GENEURO | GENFIT | GENMAB | IDORSIA | INNATE | IPSEN | KORIAN | LNA
SANTE | MEDARTIS | MEDIGENE | MORPHOSYS | NICOX | NOVARTIS | NOVO NORDISK | ORPEA | QIAGEN | SANOFI |
TRANSGENE | UCB | ZEALAND | 4D PHARMA |

(registration will be open on 24 September)

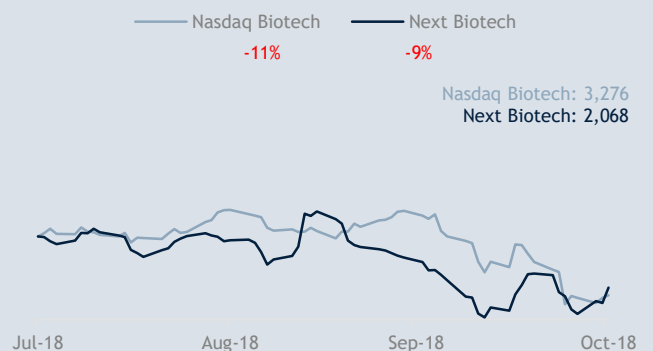
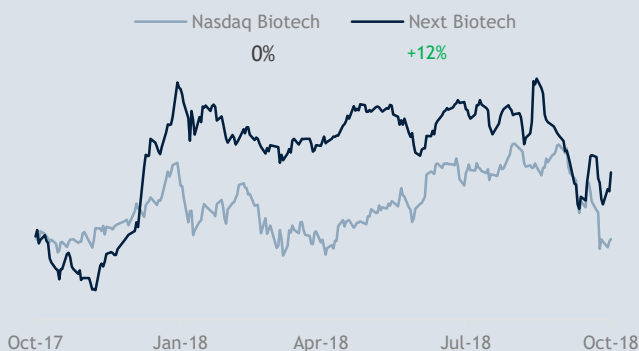
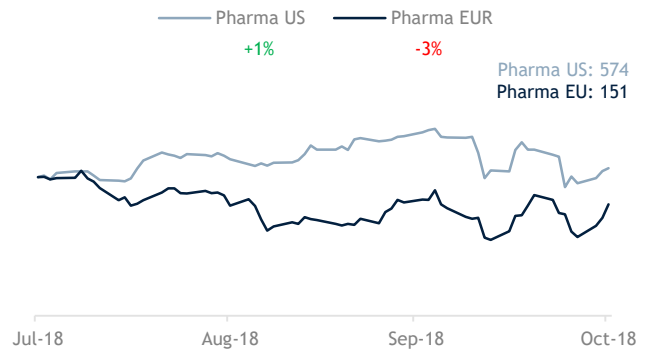
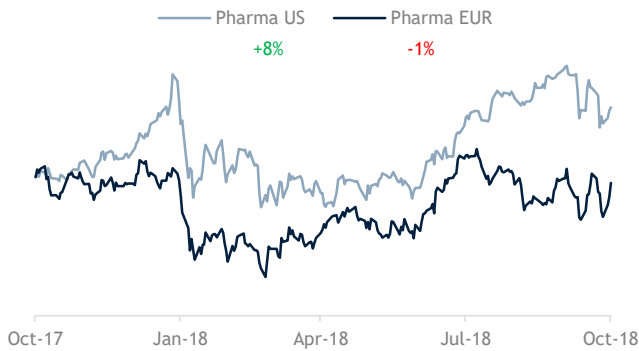
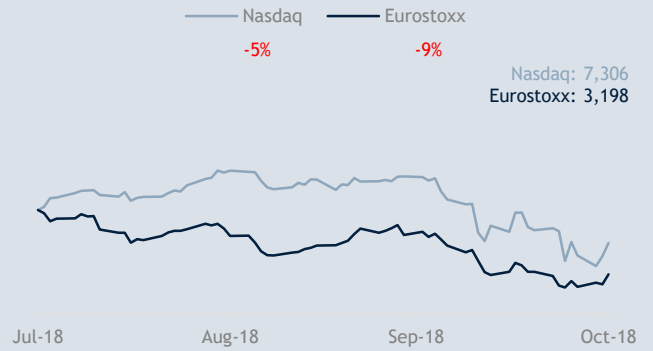
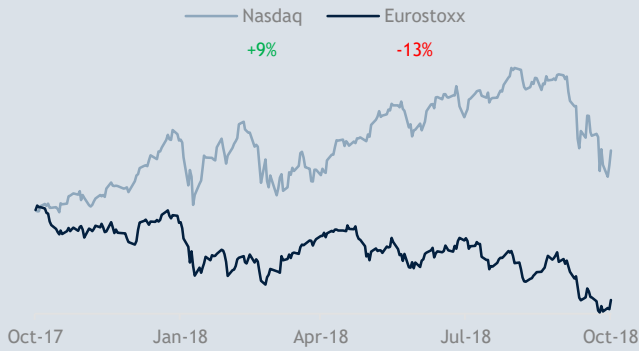
Click [here](#) and visit the registration website.

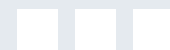


EQUITY MARKETS


1-YEAR PERFORMANCE


3-MONTH PERFORMANCE

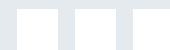




EURONEXT HEALTHCARE COMPANY PERFORMANCE


Pharmaceuticals 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SANOFI	EN Paris	98,774	14.9%	3.0%
UCB SA	EN Brussels	14,428	14.2%	-4.2%
IPSEN	EN Paris	10,273	24.0%	-15.3%
VIRBAC SA	EN Paris	1,199	14.8%	-0.8%
FAGRON	EN Brussels	1,033	26.8%	-13.6%
BOIRON SA	EN Paris	1,027	-27.7%	-8.8%
VETOQUINOL SA	EN Paris	588	-17.5%	-3.7%
STALLERGENES GRE	EN Paris	536	-29.6%	-11.9%

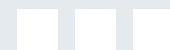
Biotechs 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
GALAPAGOS NV	EN Amsterdam	4,937	14.8%	-6.9%
ARGENX SE	EN Brussels	2,518	33.5%	7.7%
DBV TECHNOLOGIES	EN Paris	986	-21.9%	-16.4%
CELLECTIS	EN Paris	938	-7.3%	-8.6%
MITHRA PHARM	EN Brussels	913	136.4%	-17.5%
GENFIT	EN Paris	643	-13.8%	3.2%
PHARMING GRP NV	EN Amsterdam	594	-15.0%	-2.3%
INNATE PHARMA SA	EN Paris	427	55.9%	60.4%
VALNEVA SE	EN Paris	305	21.3%	-10.6%
NANOBIOTIX	EN Paris	263	-9.6%	-16.6%
CELYAD	EN Brussels	263	-36.4%	-3.3%
KIADIS PHARM	EN Amsterdam	224	16.4%	-36.3%
TRANSGENE SA	EN Paris	191	8.3%	0.8%
OXURION NV	EN Brussels	181	40.1%	-13.3%
AB SCIENCE SA	EN Paris	172	-49.8%	4.7%
POXEL SA	EN Paris	156	-8.2%	-8.8%
NICOX SA	EN Paris	155	-48.7%	-18.9%
MEDINCELL SA	EN Paris	139	n.a.	-4.8%
INVENTIVA SA	EN Paris	134	21.2%	-23.7%
ACACIA PHARMA GR	EN Brussels	124	n.a.	-40.2%
PHARNEXT SA	EN Paris	122	26.9%	12.0%
ERYTECH PHARMA	EN Paris	118	-64.5%	-10.1%
GENKYOTEX SA	EN Paris	116	-10.8%	-2.1%
ADVICENNE	EN Paris	94	-16.3%	-6.9%
ADOCIA SAS	EN Paris	88	-11.2%	-22.6%
BONE THERAPEUTIC	EN Brussels	83	33.3%	13.2%
TXCELL	EN Paris	60	67.2%	1.2%
GENEURO SA	EN Paris	60	-28.0%	-3.3%
ABIVAX SA	EN Paris	58	-34.0%	-18.7%
OSE IMMUNO	EN Paris	56	-1.6%	-3.1%
ONXEO	EN Paris	52	-10.4%	-8.2%
ONCODESIGN	EN Paris	50	-35.7%	-24.3%
THERANEXUS SADIR	EN Paris	48	4.6%	9.4%
GENSIGHT	EN Paris	41	-73.0%	-9.7%
ASIT BIOTECH SA	EN Brussels	37	-42.7%	-34.0%
QUANTUM GEN-REGR	EN Paris	34	-10.2%	37.4%
CERENIS THERAPEU	EN Paris	31	-15.1%	-12.9%
PROBIODRUG AG	EN Amsterdam	26	-70.0%	-6.5%
LYSOGENE SA	EN Paris	25	-50.0%	2.7%
BIOPHYTIS	EN Paris	23	-63.5%	-22.1%
NEOVACS	EN Paris	21	-50.0%	-21.2%
SENSORION SA	EN Paris	18	-61.9%	-51.8%
PLANT ADVANCED	EN Paris	18	-22.7%	-15.2%
VALBIOTIS SAS	EN Paris	16	-40.6%	-32.1%
GENOWAY SA	EN Paris	11	-11.8%	-14.7%
INTEGRAGEN	EN Paris	8	-53.9%	-34.5%
ESPERITE	EN Amsterdam	6	-63.3%	-29.2%
HYBRIGENICS	EN Paris	2	-91.9%	-88.6%



EURONEXT HEALTHCARE COMPANY PERFORMANCE

Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SARTORIUS STEDIM	EN Paris	10,103	82.9%	-7.5%
BIOMERIEUX	EN Paris	7,978	-9.4%	-6.1%
EUROFINS SCIEN	EN Paris	7,909	-11.6%	-8.7%
GUERBET	EN Paris	703	-28.4%	-14.0%
BIOCARTIS NV	EN Brussels	615	0.3%	-2.8%
ION BEAM APPLICA	EN Brussels	466	-34.9%	-11.6%
CARMAT	EN Paris	204	2.3%	-17.8%
LUMIBIRD	EN Paris	190	69.6%	-12.7%
AMPLITUDE SURGIC	EN Paris	154	-9.0%	7.3%
MDXHEALTH	EN Brussels	104	-46.0%	-37.6%
EOS IMAGING SA	EN Paris	95	-12.6%	-5.0%
MAUNA KEA TECHNO	EN Paris	69	-42.2%	-3.5%
BIOM'UP SACA	EN Paris	64	-62.3%	-41.6%
VOLUNTIS SA	EN Paris	50	n. a.	-37.2%
CURETIS AG	EN Amsterdam	40	-37.9%	-26.2%
PIXIUM VISIO	EN Paris	39	-28.9%	-5.2%
SUPERSONIC	EN Paris	37	-15.4%	-9.0%
EUROBIO-SCIENTIF	EN Paris	36	-21.8%	-5.4%
CELLNOVO GROUP S	EN Paris	34	-38.3%	-25.1%
BIOCORP	EN Paris	32	-29.1%	-8.3%
I CERAM	EN Paris	28	-33.0%	-19.0%
MEDIAN TECHNOLOG	EN Paris	27	-75.0%	-42.9%
MEDICREA INTERNA	EN Paris	27	-45.0%	-20.7%
BIOSYNEX	EN Paris	23	-25.5%	-19.2%
EUROMEDIS GROUPE	EN Paris	20	-4.6%	3.8%
STENTYS	EN Paris	19	-53.3%	-40.3%
BLUELINEA	EN Paris	18	-34.7%	18.7%
NOVACYT	EN Paris	15	-42.3%	-19.1%
CROSSJECT	EN Paris	12	-73.2%	-26.8%
DMS	EN Paris	11	-51.7%	-28.6%
THERACLION	EN Paris	10	-69.3%	-26.2%
THERADIAG	EN Paris	9	-52.4%	-19.4%
VISIONED GROUP	EN Paris	7	-87.6%	-21.3%
SAFE ORTHOPAEDIC	EN Paris	7	-62.9%	-31.8%
SPINEGUARD	EN Paris	7	-67.5%	-30.1%
GENOMIC VIS	EN Paris	6	-81.6%	-38.5%
IMPLANET	EN Paris	6	-58.6%	-25.6%
SPINEWAY	EN Paris	3	-92.8%	-58.2%

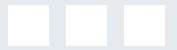
Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
ESSILORLUXOTTICA	EN Paris	43,007	6.5%	-5.3%
ORPEA	EN Paris	7,056	11.7%	-2.3%
KORIAN	EN Paris	2,800	20.8%	11.1%
RAMSAY GENERALE	EN Paris	1,595	37.1%	21.3%
LNA SANTE	EN Paris	453	-20.2%	-12.5%
BASTIDE	EN Paris	251	-37.6%	-6.6%




LONDON HEALTHCARE COMPANY PERFORMANCE


Pharmaceuticals →			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
ASTRAZENECA PLC	London	75,880	21.7%	0.5%
GLAXOSMITHKLINE	London	74,963	19.2%	-1.7%
SHIRE PLC	London	42,816	20.9%	1.2%
HIKMA PHARMACEUT	London	4,591	70.9%	2.8%
HUTCHISON CHINA	London	3,238	-13.2%	1.8%
ABCAM PLC	London	2,461	14.1%	-16.2%
DECHRA PHARMA	London	2,343	10.3%	5.8%
BTG PLC	London	2,137	-27.6%	0.1%
INDIVIOR PLC	London	1,372	-53.9%	2.3%
VECTURA GROUP	London	473	-39.6%	-10.9%

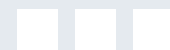
Biotechs ↘			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
OXFORD BIOMEDICA	London	456	56.0%	-24.5%
ALLIANCE PHARMA	London	344	0.4%	1.2%
BENCHMARK HOLDIN	London	301	-2.7%	-11.5%
ECO ANIMAL HEALT	London	257	-34.8%	-21.9%
CIRCISSIA PH	London	200	-46.2%	-24.5%
VERSEON CORP	London	168	-9.1%	-20.2%
SINCLAIR PHARMA	London	160	21.7%	1.9%
BIOVENTIX PLC	London	147	20.2%	-7.4%
MEREO BIOPHARMA	London	135	-41.5%	-17.7%
VERONA PHARMA PL	London	124	12.4%	2.2%
TIZIANA LIFE SCI	London	118	-33.1%	-34.5%
ALLERGY THERAPEU	London	111	-38.6%	-27.8%
MAXCYTE INC	London	105	-16.6%	-14.8%
TISSUE REGENIX G	London	97	-10.8%	-7.0%
4D PHARMA PLC	London	97	-55.8%	-13.7%
MOTIF BIO PLC	London	83	-31.7%	-21.1%
SILENCE THERAPEU	London	81	-41.4%	-10.1%
ONCIMMUNE HOLDIN	London	59	-9.0%	-25.7%
C4X DISCOVERY HO	London	45	-1.3%	-14.8%
AMRYT PHARMA PLC	London	38	-32.0%	-18.4%
SHIELD THERAPEUT	London	36	-72.9%	-9.0%
CATHAY INTL HLDG	London	32	11.5%	-5.6%
SCANCELL HOLDING	London	31	-37.3%	-25.8%
FARON PHARMACEUT	London	23	-90.6%	-27.2%
SKINBIOTHERAPEUT	London	23	113.7%	-8.2%
SUMMIT THERAPEUT	London	23	-83.8%	-19.1%
SAREUM HOLDINGS	London	21	-8.8%	0.0%
DIURNAL GROUP PL	London	19	-78.8%	-72.1%
RENEURON GROUP P	London	18	-70.4%	-18.4%
IMMUPHARMA PLC	London	15	-93.6%	-13.8%
MIDATECH PHARMA	London	9	-57.6%	-32.2%
FUTURA MEDICAL	London	9	-74.5%	-34.7%




LONDON HEALTHCARE COMPANY PERFORMANCE


Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
SMITH & NEPHEW	London	11,136	0.9%	-8.3%
CONVATEC GROUP P	London	3,185	-19.5%	-30.3%
ADVANCED MEDICAL	London	613	-9.4%	-13.2%
CONSORT MEDICAL	London	549	-3.1%	-6.6%
CREO MEDICAL GRO	London	229	174.8%	-15.1%
MEDICA GROUP PLC	London	154	-31.9%	-12.6%
EKF DIAGNOSTICS	London	121	11.4%	-16.7%
TRISTEL PLC	London	110	1.6%	-16.4%
BIOQUELL PLC	London	96	60.7%	-6.5%
IMMUNODIAGNOSTIC	London	60	-21.7%	-8.7%
AVACTA GROUP PLC	London	28	-62.3%	-3.6%
NETSCIENTIFIC PL	London	23	-59.2%	-10.8%


Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
CLINIGEN GROUP P	London	1,199	-11.8%	7.3%
OXFORD BIODYNAMI	London	192	21.3%	-2.8%
ANPARIO PLC	London	91	0.3%	-20.2%
ERGOMED PLC	London	67	-18.3%	0.0%
HVIVO PLC	London	33	-26.4%	-34.1%




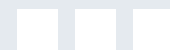
GERMAN HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
BAYER AG-REG	Xetra	63,283	-31.8%	-11.0%
MERCK KGAA	Xetra	41,026	6.8%	6.3%
DERMAPHARM HOLDI	Xetra	1,331	n.a.	-13.1%
BIOTEST AG	Xetra	902	-2.0%	-5.5%
MEDIGENE AG	Xetra	263	-15.7%	-11.2%
ECKERT & ZIEGLER	Xetra	259	38.7%	10.4%
BIOFRONTERA AG	Xetra	248	33.7%	-7.3%
MAGFORCE AG	Xetra	156	-10.2%	-8.8%
HAEMATO AG	Xetra	104	4.3%	-7.4%
CO.DON AG	Xetra	84	-38.4%	-15.9%
SANOCHEMIA PHARM	Stuttgart	19	2.1%	-9.8%


Biotechs 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
MORPHOSYS AG	Xetra	2,597	6.5%	-10.7%
EVOTEC AG	Xetra	2,575	28.6%	-4.7%
FORMYCON AG	Xetra	258	-13.1%	-9.7%
PAION AG	Xetra	135	-21.8%	-12.4%
4SC AG	Xetra	94	-38.2%	-25.1%
HEIDELBERG PHARM	Xetra	60	-34.7%	-16.9%
MOLOGEN AG	Xetra	28	-72.2%	-32.8%
ELANIX BIOTECHNO	Xetra	25	-14.1%	28.5%
CYTOTOOLS AG	Xetra	15	-32.1%	-13.7%


Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SIEMENS HEALTHIN	Xetra	36,445	n.a.	-3.5%
FRESENIUS SE & C	Xetra	31,263	-12.7%	-10.8%
FRESENIUS MEDICA	Xetra	21,360	-20.3%	-21.8%
SARTORIUS AG	Xetra	8,918	47.2%	-12.6%
CARL ZEISS ME-BR	Xetra	6,493	41.8%	0.6%
DRAEGERWERK-PREF	Xetra	800	-33.9%	-13.0%
STRATEC BIOMEDIC	Xetra	694	-9.5%	-10.4%
PULSION MED SY-R	Munich	188	-7.6%	3.6%
EPIGENOMICS AG	Xetra	73	-48.7%	-0.4%
HUMANOPTICS AG	Frankfurt	68	106.6%	-5.2%
GERATHERM MEDICA	Xetra	48	-17.0%	-9.0%
AAP IMPLANTATE	Xetra	42	-18.3%	0.0%
CURASAN AG	Xetra	15	-28.4%	-9.2%


Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
RHOEN-KLINIKUM	Xetra	1,488	-25.0%	0.8%
MEDICLIN AG	Xetra	273	-7.2%	0.0%
M1 KLINIKEN AG	Frankfurt	224	-1.1%	-16.9%
VITA 34 AG	Xetra	47	1.0%	-15.1%
MATERNUS-KLINIKE	Xetra	42	-13.5%	-5.6%
EIFEL-KLINIK AG	Frankfurt	12	-25.5%	-7.3%




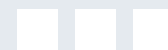
SWISS HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals 			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
NOVARTIS AG-REG	SIX Swiss Ex	225,067	11.0%	4.5%
ROCHE HLDG-GENUS	SIX Swiss Ex	211,430	3.2%	3.1%
VIFOR PHARMA AG	SIX Swiss Ex	9,461	18.0%	-14.5%
COSMO PHARMACEUT	SIX Swiss Ex	1,907	-13.4%	-1.8%
CASSIOPEA SPA	SIX Swiss Ex	448	28.7%	-15.5%

Biotech 			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
IDORSIA LTD	SIX Swiss Ex	2,557	-23.3%	-21.1%
BASILEA PHAR-REG	SIX Swiss Ex	578	-35.9%	-8.5%
MOLECULAR PARTNE	SIX Swiss Ex	393	-29.7%	-15.9%
POLYPHOR AG	SIX Swiss Ex	291	n.a.	-20.5%
EVOLVA HOLDING S	SIX Swiss Ex	200	-16.1%	-9.4%
NEWRON PHARMACEU	SIX Swiss Ex	153	-25.9%	1.2%
SANTHERA PHA-REG	SIX Swiss Ex	104	-55.5%	1.1%
ADDEX THERAPEUTI	SIX Swiss Ex	71	8.3%	-9.2%
KUROS BIOSCIENCE	SIX Swiss Ex	43	-58.0%	-10.7%
RELIEF THERAPEUT	SIX Swiss Ex	11	-46.0%	-28.9%

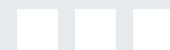
Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
STRAUMANN HLDG-R	SIX Swiss Ex	10,917	0.6%	-6.8%
SONOVA HOLDING A	SIX Swiss Ex	10,750	9.7%	-15.7%
TECAN GROUP AG-R	SIX Swiss Ex	2,673	13.1%	-2.2%
YPSOMED HOLD-REG	SIX Swiss Ex	1,710	-15.0%	-3.4%
MEDARTIS HOLDING	SIX Swiss Ex	822	n.a.	-6.3%
COLTENE HOLD-REG	SIX Swiss Ex	614	12.8%	-8.2%
IVF HARTMANN-REG	SIX Swiss Ex	415	-3.1%	-5.5%
SHL TELEMEDI-REG	SIX Swiss Ex	76	10.3%	-10.3%

Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
LONZA GROUP -REG	SIX Swiss Ex	23,584	21.5%	-5.5%
BACHEM HOL-REG B	SIX Swiss Ex	1,602	-21.8%	-6.2%
DOTTIKON ES H-RE	SIX Swiss Ex	652	-36.6%	-16.6%



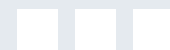
KEY SECTOR NEWS IN OCTOBER

DATE	NEWS
31 Oct 18	ONCIMMUNE - Financial results in-line & new strategy introduced
30 Oct 18	FRESENIUS MED CARE - Confirms soft Q3 numbers. Neutral reiterated on several uncertainties
30 Oct 18	FRESENIUS SE - Strong KABI, QSD margin progressing despite volatility
30 Oct 18	GENMAB - MAIA strengthens Darzalex as SoC in front-line MM
30 Oct 18	QIAGEN - Another very strong quarter. FY18 EPS guidance increased
30 Oct 18	THERANEXUS - Wake me up before it goes
30 Oct 18	UCB - 9months Revenue slightly above the consensus
26 Oct 18	BIOMERIEUX - Palmetto GBA adds further pressure on large multiplex GI panels
25 Oct 18	IPSEN - Reassuring third-quarter sales figures
25 Oct 18	KORIAN - Organic positive trend confirmed in Q3; FY conservative EBITDA guidance confirmed
25 Oct 18	VOLUNTIS - Roche backs-off of its recent partnership extension with Voluntas
24 Oct 18	GSK - GSK165: encouraging phase II results but in an overcrowded market
23 Oct 18	CELYAD - ESMO 2018: the stage is set for CYAD-01 in solid tumours
23 Oct 18	ESSILOR - Stronger than expected Q3 LFL boosted by Emerging markets and S&R
23 Oct 18	EUROFINS SCIENTIFIC - Q3 revenue broadly in line with estimates. 2019 and 2020 guidance upgraded
23 Oct 18	GALAPAGOS - ABBV scores a big win in UC phase 2b, but GLPG already in phase 3
23 Oct 18	INNATE PHARMA - Transformative new agreement with AZ
22 Oct 18	MERCK KGAA - Avelumab doubles PFS in RCC (and feedback from CMD)
22 Oct 18	SANOFI - Second good news in a row for Dupixent
18 Oct 18	BIOMERIEUX - On track to reach high-end of FY2018 guidance
18 Oct 18	BIOM'UP - Continuous efforts to roll-out HEMOBLAST underpinned by strong signal from the management
18 Oct 18	BONE THERAPEUTICS - JTA-004 puts Bone Therapeutics on the OA map
17 Oct 18	ROCHE - Impressive growth in the International region drives Q3 above estimates
15 Oct 18	GENFIT - NASH is King
11 Oct 18	ROCHE - Celltrion now close to the US market with biosimilar rituximab
10 Oct 18	MERCK - BTK is working in MS
8 Oct 18	HEALTHCARE - Five picks in healthcare in Q4 with Fresenius, Galapagos, Genmab, Novartis and Sanofi
8 Oct 18	NOVARTIS - BAF312 (siponimod) accepted for review both in the US and the EU
5 Oct 18	GENMAB - It's time to GEN up on ofa!
5 Oct 18	NOVO NORDISK - New data with dual agonist set a potential new SoC
3 Oct 18	DBV TECHNOLOGIES - A look ahead 12m data for placebo bridgers (PEOPLE)
3 Oct 18	TRANSGENE - Two new technology platforms now on the horizon
2 Oct 18	GALAPAGOS - Slashed price for a de-risked blockbuster and rich pipeline!
1 Oct 18	SANOFI - Libtayo (cemiplimab) approved in the US: a blockbuster potential



EUROPEAN FUNDRAISING : IPO & FOLLOW-ONS

	Pricing Date	Issuer	Country	Industry	Size (€m)	Offer type	Offer To Date
	30 Oct 18	Orchard Therapeutics plc	BRITAIN	Medical-Biomedical/Gene	174	IPO	0%
	26 Oct 18	Oryzon Genomics SA	SPAIN	Medical-Biomedical/Gene	13	Follow-on	24%
	19 Oct 18	Kiadis Pharma NV	NETHERLANDS	Medical-Biomedical/Gene	31	Follow-on	12%
	4 Oct 18	Laboratorios Farmaceut. Rov	SPAIN	Medical-Drugs	88	Follow-on	13%
	3 Oct 18	Medincell SA	FRANCE	Medical-Biomedical/Gene	30	IPO	-1%
Last month	2 Oct 18	GW Pharmaceuticals PLC	BRITAIN	Therapeutics	259	Follow-on	-8%
	27 Sep 18	Clinigen Group Plc	BRITAIN	Drug Delivery Systems	90	Follow-on	7%
	27 Sep 18	Nightstar Therapeutics PLC	BRITAIN	Medical-Biomedical/Gene	61	Follow-on	-39%
	27 Sep 18	Valneva SE	FRANCE	Medical-Biomedical/Gene	50	Follow-on	-7%
	20 Sep 18	CRISPR Therapeutics AG	SWITZERLAND	Medical-Biomedical/Gene	171	Follow-on	-23%
	18 Sep 18	Argenx SE	NETHERLANDS	Medical-Biomedical/Gene	257	Follow-on	11%
	12 Sep 18	Galapagos NV	BELGIUM	Medical-Drugs	297	Follow-on	-8%
	7 Sep 18	ProQR Therapeutics NV	NETHERLANDS	Medical-Drugs	90	Follow-on	42%
	7 Sep 18	Adaptimmune Therapeutics Plc	BRITAIN	Medical-Biomedical/Gene	86	Follow-on	-29%
	5 Sep 18	Ambu A/S	GERMANY	Medical Instruments	398	Follow-on	-36%
	28 Aug 18	Sonova Holding AG	SWITZERLAND	Medical Products	276	Follow-on	-5%
	27 Aug 18	Wright Medical Group NV	NETHERLANDS	Medical Products	384	Follow-on	13%
3 months	16 Aug 18	Oncopptides AB	SWEDEN	Medical-Drugs	17	Follow-on	5%
	27 Jul 18	Orpea	FRANCE	Medical-Nursing Homes	64	Follow-on	-7%
	26 Jul 18	Nabriva Therapeutics PLC	IRELAND	Medical-Drugs	43	Follow-on	-13%
	19 Jul 18	ADL Bionatur Solutions SA	SPAIN	Medical-Biomedical/Gene	12	Follow-on	-25%
	19 Jul 18	Allergy Therapeutics PLC	BRITAIN	Medical-Drugs	12	Follow-on	-34%
	18 Jul 18	AC Immune SA	SWITZERLAND	Medical-Drugs	86	Follow-on	-23%
	13 Jul 18	Creo Medical Group plc	BRITAIN	Medical Products	55	Follow-on	55%
	12 Jul 18	Myovant Sciences Ltd	BRITAIN	Medical-Drugs	64	Follow-on	5%
	11 Jul 18	Idorsia Ltd	SWITZERLAND	Medical-Drugs	262	Follow-on	-23%
	21 Jun 18	Autolus Therapeutics PLC	BRITAIN	Medical-Biomedical/Gene	145	IPO	87%
	20 Jun 18	ObsEva SA	SWITZERLAND	Medical-Drugs	63	Follow-on	6%
	19 Jun 18	Alliance Pharma PLC	BRITAIN	Medical Products	39	Follow-on	-25%
	15 Jun 18	Calliditas Therapeutics AB	SWEDEN	Medical-Drugs	64	IPO	0%
	14 Jun 18	Recipharm AB	SWEDEN	Medical-Drugs	50	Follow-on	6%
	8 Jun 18	Immunovia AB	SWEDEN	Medical Products	32	Follow-on	0%
	31 May 18	Mithra Pharmaceuticals SA	BELGIUM	Medical Products	77	Follow-on	-16%
	29 May 18	Voluntis SA	FRANCE	Medical Information Syst.	30	IPO	-58%
	25 May 18	Nuevolution AS	DENMARK	Medical-Drugs	11	Follow-on	-4%
	24 May 18	Hansa Medical AB	SWEDEN	Medical Labs&Testing Srv	62	Follow-on	34%
	24 May 18	Medigene AG	GERMANY	Medical-Biomedical/Gene	48	Follow-on	-24%
	18 May 18	Biocartis NV	BELGIUM	Diagnostic Equipment	24	Follow-on	3%



PRIVATE EQUITY MARKET ACTIVITY

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

DATE	TARGET	CTY	DESCRIPTION	BUYER / INVESTOR
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	Choice Care Group	UK	Provider of residential services for people with learning disabilities	Caledonia Investment
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	Novartis (Sandoz US)	CH	Sandoz US dermatology business and generic oral solids portfolio	Aurobindo Pharma
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	Fife Hospital	UK	Operator of UK-based hospitals	Semperian PPP Investment
Sep 18	Cornerstone	UK	Operator of long term acute care hospitals	Ignite Growth
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	KaNdy Therapeutics	UK	Non-hormonal drug candidates for menopause symptoms	Longitude, Advent, etc.
Aug 18	Ziyllo	UK	Glucose binding molecule platform	Novo Nordisk
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
Jul 18	ReViral	UK	Antiviral drug discovery and development company	NewLeaf, Novo Ventures
Jul 18	Polares Medical	CH	Development of transcatheter mitral valve	Endeavour, IDO, Earlybird
Jul 18	Dysis Medical	UK	Devices for the detection of pre-cancerous and cancerous lesions	Lundbeckfonden Ventures
Jul 18	Dynacure	FR	New treatments for orphan disorders	Andera, Pontifax, Bpi, etc.
Jul 18	NBE Therapeutics	CH	Next-generation ADC drugs against cancer	PPF, BIVF
Jul 18	TxCeLL	FR	Developer of CAR-Treg therapies for immune disorders	Sangamo Therapeutics

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



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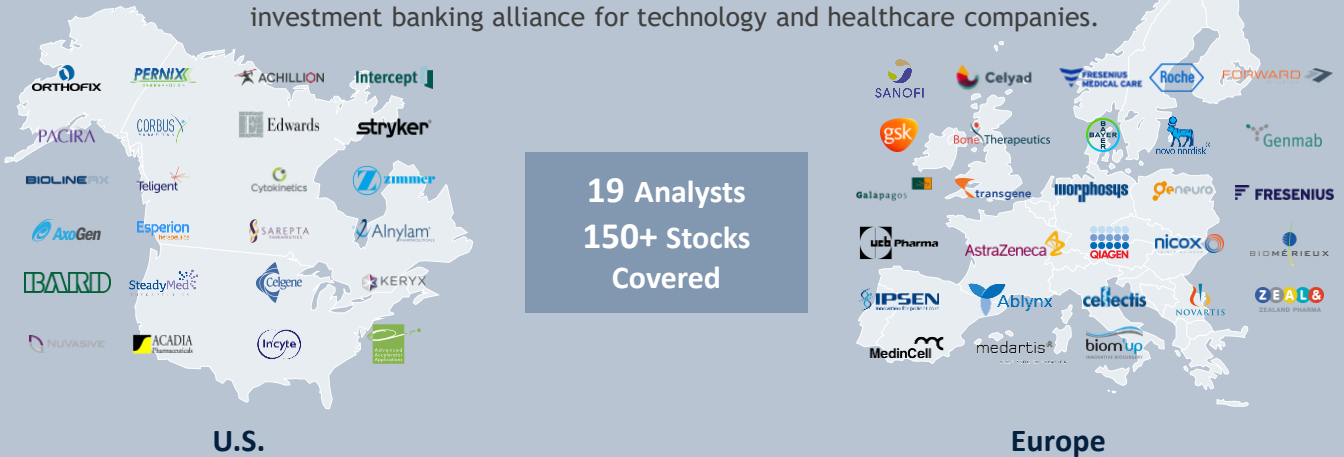
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JMP BRYAN GARNIER EQUITY RESEARCH COVERAGE

In November 2016 Bryan, Garnier & Co formed a partnership with JMP Securities LLC (NYSE : JMP) to create JMP Bryan Garnier, a full-service transatlantic investment banking alliance for technology and healthcare companies.



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 CYCLOPHARMA Acquired by CURIUM Undisclosed Advisor to the seller	 medartis® PRECISION IN FIXATION SIX IPO CHF 142 600 000 Joint Global Coordinator & Bookrunner	 biom'up INNOVATIVE BIOSURGERY Euronext Paris IPO & Follow-on €83 000 000 Sole Global Coordinator/ Joint-Bookrunner	 symetis Acquired by Boston Scientific \$435 000 000 Advisor to the company	 ZEAL & Follow-on & IPO on Nasdaq OMX €70 000 000 Sole Bookrunner / Co-lead Manager	 Spineart Private Placement Gimv €30 000 000 Joint Lead Manager	 dbv technologies Follow-on & Nasdaq IPO \$414 500 000 Joint Lead Manager & Bookrunner
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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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