



BRYAN, GARNIER & CO

MARKET UPDATE

HEALTHCARE

February 2019





HIGHLIGHTS

Dear Reader,

With drug pricing still a political priority for the US administration, the latest development in this years-long debate was the Senate hearings of pharma CEOs (Abbvie, AZ, BMS, Merck, J&J, Pfizer, Sanofi). Another opportunity to put the spotlight on a system built on high list prices coupled with rebates, whose reform seems more than ever to be the most actionable and consensual way to moderate drug price inflation. Other possible initiatives (e.g. international pricing index or price transparency) look tougher to implement as the 2020 US presidential election nears.

Meanwhile, the 1st approval of a biosimilar in China was almost unnoticed, Fosun's copy of Roche's Rituxan. Its introduction came with comments from the Chinese regulator that approving more biosimilars would help increase drugs' accessibility and cut costs. Being the 2nd largest market in the world, China is also the country with the most biosimilars in development (>200 ongoing trials). Everything comes at a price.

On the M&A front, February brought a stream of large deals. The prize money went to GE Life Sciences, acquired by Danaher for \$21.4bn in a deal that strengthens its footprint in bioprocessing technologies and further concentrates the life science tools market around an oligopoly of global players. Another key deal in Medtech was J&J's acquisition of Auris for \$5.8bn, accelerating its entry into surgical robotics, a fast-growing market that could attract players in need of disruptive technologies.

Roche's takeover of Spark for \$4.3bn is another notable move and more than a "bolt-on": 1) it brings the 1st US-approved gene therapy, Luxturna for retinal dystrophy, and a strong platform to compete in a nascent but competitive landscape; 2) a hemophilia project, due to start phase 3 in 2019, might shield Roche's Hemlibra; and 3) it is another way to diversify beyond oncology, somewhat mitigating biosimilars risks.

We also noted Blackstone teaming up with Novartis to launch Anthos, a new cardiovascular biotech with a giant \$250m launch round. Six months after its acquisition of Clarus, Blackstone convinced Novartis to spin out its anticoagulant MAA868 (anti factor XI antibody) against a minority equity stake and rights to the drug. Mirroring Bain Capital's \$350m commitment in January 2019 to fund Pfizer's neurosciences pipeline into newly created Cerevel Therapeutics, we would expect more deals like these, potentially unlocking the hidden value of pharma pipelines.

Last but not least, the \$1.3bn Clementia deal marks Ipsen's continued transformation, with a landmark move in rare diseases. It brings the late-stage asset palovarotene in FOP (fibrodysplasia ossificans progressive, US filing in 2H19), and in MO (multiple osteochondromas), both growth disorders with high unmet need. Aligned with Ipsen's focus on near-term launch and almost de-risked opportunities, Clementia will also strengthen Ipsen's US footprint with sales potential close to its flagship Somatuline.

HERVE RONIN

Partner | Bryan, Garnier & Co

+6.5%
5Y-CAGR

Worldwide prescription drugs - expected sales

+5.3%
5Y-CAGR

Medtech market - expected growth

+4.3% / +7.1%

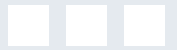
Monthly EU Pharma & biotech performance

24 / \$3.91 bn

Number & total value of US ECM deals priced in February

**Corporate VCs
bet on CNS**

Oncology still tops corporate VC rounds though slightly eroding, while CNS becomes the 2nd area doubling over 2015-2018



FEBRUARY AT A GLANCE — FOCUS ON EUROPE

EQUITY MARKETS

- EU Biotech and Pharma stocks outperformed US Biotech and Pharma securities, in a relative calm market (VIX: -10.8%; V2X: -10.1%)
- Monthly US / EU Biotech perf.: +2.7% / +7.1%
- Monthly US / EU Pharma perf.: +3.6% / +4.3%

INDUSTRY & SCIENCE

- **News of the month: positive phase 3 results for Sanofi's Dupixent in chronic rhinosinusitis**
- Dupixent is the first biologic therapy for this indication. The company demonstrated that the drug could improve nasal polyp size, congestion severity, and sense of smell. In severe patients, the need for systemic corticosteroid use and nasal surgery was also reduced
- Dupixent is approved in atopic dermatitis and asthma

FINANCING

- **Raise of the month: Hookipa raises \$37 million in Series D**
- Hookipa is a clinical-stage biotech company developing prophylactic and therapeutic vaccines in the fields of infectious diseases and cancer
- Invus, Samsara BioCapital and current investors participated in this financing round led by Redmile Group

M&A

- **Transaction of the month: Ipsen bags Clementia to boost rare disease portfolio for \$1.31bn.** Ipsen acquires late-stage clinical asset palovarotene for treatment of rare musculoskeletal and eye disorders
- Charles River acquires Citoxlab for €448m, a French, privately-held, provider of safety assessment and discovery services to the pharmaceutical, biotechnology, medical device, and chemical industries

NEXT MONTH

- **Galapagos Phase 3 readouts in Rheumatoid Arthritis:** filgotinib's FINCH 1 and FINCH 3 trials are expected to readout in March. The drug is co-developed with Gilead
- **Aimmune BLA filing for peanut allergy:** Aimmune submitted its BLA for AR101 last December and the FDA is expected to determine its acceptability for filing by March end
- **Conference and events in March:** AAPM (03/06-08), BioEurope (03/25-27), AACR (03/29-04/03)

BRYAN GARNIER & CO UP AND COMING CONFERENCES



BRYAN, GARNIER & CO

SAVE THE DATE

4th Annual Technology Conference

Thursday 14 & Friday 15 March 2019

Etoile Business Center | 75008 | Paris



For more information: write to your Bryan, Garnier & Co contact or email, events@bryangarnier.com



18
European
TMT
Companies



2
Days



More than
400
meetings



Over
90
European
Investors

(2018 FIGURES)

Under the High Patronage of
Mr Emmanuel MACRON
President of the French Republic



PARIS
25 JUIN 2019

**HEALTHTECH
INVESTOR DAY**

INVESTIR DANS LA SANTÉ INNOVANTE

france
by
bio-tech

SAVE THE DATE

June 25th 2019 all day

Salon Etoile

19, Avenue Kléber - 75116 Paris

Program :

- One-on-one meetings with **entrepreneurs and investors from all around the world :**
France, Europe, United States, Asia, Middle East, Russia
- Meetings with **major pharmaceutical companies**
- Conferences and panel discussions

For more information : www.htid-paris.com

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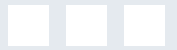








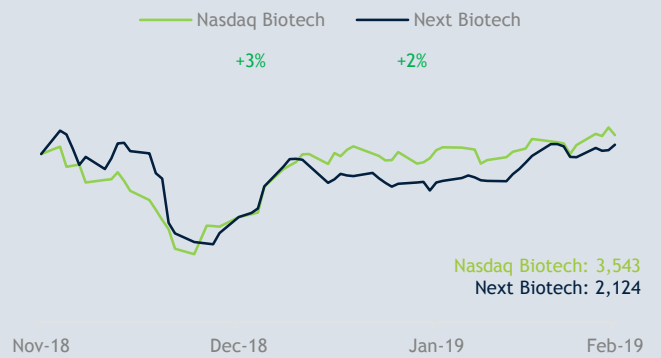
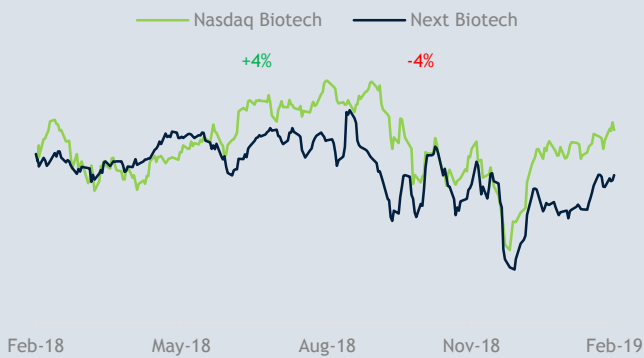
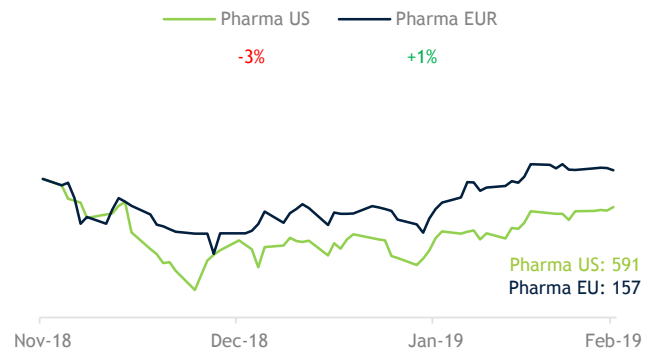
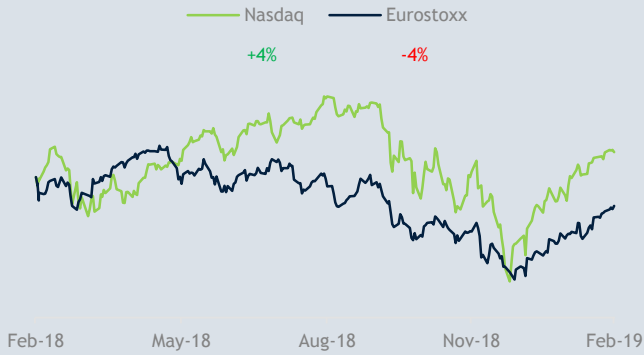


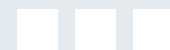


EQUITY MARKETS

1-YEAR PERFORMANCE

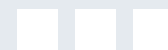
3-MONTH PERFORMANCE






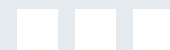
EURONEXT HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals →			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SANOFI	EN Paris	93 312	-1.1%	-3.1%
UCB SA	EN Brussels	14 549	4.9%	-2.6%
IPSEN	EN Paris	10 392	9.9%	10.5%
FAGRON	EN Brussels	1 185	15.5%	2.4%
BOIRON SA	EN Paris	975	13.4%	14.7%
VIRBAC SA	EN Paris	973	1.1%	-6.0%
VETOQUINOL SA	EN Paris	687	13.8%	13.6%
STALLERGENES GRE	EN Paris	522	-6.7%	-9.2%
Biotechs →			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
GALAPAGOS NV	EN Amsterdam	4 962	13.1%	-4.0%
ARGENX SE	EN Brussels	4 441	37.6%	26.3%
MITHRA PHARM	EN Brussels	1 051	39.5%	-12.3%
GENFIT	EN Paris	730	35.0%	19.3%
CELLECTIS	EN Paris	728	13.8%	1.2%
PHARMING GRP NV	EN Amsterdam	617	31.0%	12.1%
DBV TECHNOLOGIES	EN Paris	452	41.4%	20.1%
INNATE PHARMA SA	EN Paris	419	-11.9%	-3.8%
VALNEVA SE	EN Paris	323	10.7%	1.5%
PHARNEXT SA	EN Paris	281	104.8%	38.1%
KIADIS PHARM	EN Amsterdam	223	20.1%	-2.4%
NANOBIOTIX	EN Paris	220	-3.5%	5.2%
CELYAD	EN Brussels	219	10.3%	-6.4%
POXEL SA	EN Paris	194	47.2%	35.0%
NICOX SA	EN Paris	184	23.1%	-2.6%
TRANSGENE SA	EN Paris	172	1.1%	-3.9%
OXURION NV	EN Brussels	160	15.7%	11.7%
AB SCIENCE SA	EN Paris	157	10.4%	-3.6%
ERYTECH PHARMA	EN Paris	137	22.3%	-2.8%
MEDINCELL SA	EN Paris	110	-17.3%	-0.9%
ADOCIA SAS	EN Paris	103	-10.2%	4.7%
ABIVAX SA	EN Paris	92	-23.7%	-11.8%
ADVICENNE	EN Paris	87	13.7%	1.4%
ACACIA PHARMA GR	EN Brussels	87	27.3%	4.7%
QUANTUM GEN-REGR	EN Paris	86	-0.9%	1.1%
INVENTIVA SA	EN Paris	78	-37.7%	-43.0%
GENKYOTEX SA	EN Paris	74	-8.3%	-6.7%
GENSIGHT	EN Paris	67	-30.0%	-14.8%
OSE IMMUNO	EN Paris	61	20.6%	22.4%
GENEURO SA	EN Paris	54	7.0%	11.8%
ONCODESIGN	EN Paris	50	13.1%	6.3%
ONXEO	EN Paris	48	1.9%	-0.9%
BONE THERAPEUTIC	EN Brussels	36	-6.7%	-9.9%
LYSOGENE SA	EN Paris	30	41.3%	28.4%
NEOVACS	EN Paris	26	24.4%	32.6%
ASIT BIOTECH SA	EN Brussels	23	-28.3%	-12.9%
THERANEXUS SADIR	EN Paris	22	-60.4%	-66.3%
BIOPHYTIS	EN Paris	20	-11.1%	-13.7%
VALBIOTIS SAS	EN Paris	17	27.3%	3.7%
GENOWAY SA	EN Paris	15	15.7%	6.0%
PLANT ADVANCED	EN Paris	15	0.0%	-14.3%
SENSORION SA	EN Paris	13	0.4%	0.6%
PROBIODRUG AG	EN Amsterdam	12	-41.2%	3.1%
CERENIS THERAPEU	EN Paris	8	-17.3%	-10.9%
INTEGRAGEN	EN Paris	7	2.7%	-12.3%
HYBRIGENICS	EN Paris	7	78.0%	-1.6%
ESPERITE	EN Amsterdam	5	-6.5%	-5.0%



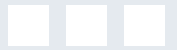
EURONEXT HEALTHCARE COMPANY PERFORMANCE

Medical Products & Devices 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SARTORIUS STEDIM	EN Paris	10 011	24.3%	7.5%
BIOMERIEUX	EN Paris	8 853	30.1%	17.5%
EUROFINS SCIEN	EN Paris	6 858	18.5%	5.3%
GUERBET	EN Paris	668	1.3%	-7.4%
BIOCARTIS NV	EN Brussels	666	18.9%	-4.1%
ION BEAM APPLICA	EN Brussels	364	-5.8%	-6.1%
LUMIBIRD	EN Paris	248	34.5%	8.1%
CARMAT	EN Paris	209	-4.5%	-1.6%
AMPLITUDE SURGIC	EN Paris	147	12.0%	-6.1%
SEQUANA MEDICAL	EN Brussels	79	n.a.	n.a.
MDXHEALTH	EN Brussels	76	-31.4%	9.9%
EOS IMAGING SA	EN Paris	59	-33.2%	-8.7%
BIOM'UP SACA	EN Paris	54	-18.5%	-11.8%
MAUNA KEA TECHNO	EN Paris	49	-4.2%	-5.8%
CROSSJECT	EN Paris	43	104.8%	52.4%
VOLUNTIS SA	EN Paris	41	9.6%	10.4%
MEDICREA INTERNA	EN Paris	37	0.4%	5.1%
PIXIUM VISIO	EN Paris	37	0.2%	0.0%
BIOCORP	EN Paris	33	11.0%	-15.1%
EUROBIO-SCIENTIF	EN Paris	32	6.9%	-12.0%
CURETIS AG	EN Amsterdam	30	-5.7%	-11.5%
BIOSYNEX	EN Paris	29	28.0%	4.7%
SUPERSONIC	EN Paris	24	-24.6%	-13.6%
I CERAM	EN Paris	22	28.4%	1.6%
CELLNOVO GROUP S	EN Paris	20	-11.9%	-14.0%
EUROMEDIS GROUPE	EN Paris	19	-3.0%	-4.4%
DMS	EN Paris	18	53.4%	-11.4%
MEDIAN TECHNOLOG	EN Paris	18	46.8%	2.4%
BLUELINEA	EN Paris	16	-8.9%	-0.2%
STENTYS	EN Paris	14	21.0%	-2.6%
VISIOMED GROUP	EN Paris	13	-41.9%	-3.5%
THERADIAG	EN Paris	11	28.9%	2.5%
NOVACYT	EN Paris	9	-35.6%	-25.9%
THERACLION	EN Paris	7	25.4%	48.4%
SAFE ORTHOPAEDIC	EN Paris	6	25.0%	-15.5%
GENOMIC VIS	EN Paris	5	-2.2%	-4.9%
IMPLANET	EN Paris	5	-14.2%	-13.0%
SPINEGUARD	EN Paris	4	-15.4%	-12.4%
SPINEWAY	EN Paris	3	-46.3%	-28.8%
Healthcare Services 			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
ESSILORLUXOTTICA	EN Paris	46 567	-2.7%	-3.8%
ORPEA	EN Paris	6 669	15.7%	19.6%
KORIAN	EN Paris	2 748	7.9%	5.9%
RAMSAY GENERALE	EN Paris	1 595	-1.9%	5.9%
LNA SANTE	EN Paris	461	9.0%	-0.2%
BASTIDE	EN Paris	232	21.5%	7.5%



LONDON HEALTHCARE COMPANY PERFORMANCE

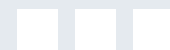
Pharmaceuticals ↗			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
ASTRAZENECA PLC	London	78 458	7.9%	13.6%
GLAXOSMITHKLINE	London	75 132	3.0%	2.9%
HIKMA PHARMACEUT	London	4 127	-0.4%	3.6%
BTG PLC	London	3 228	0.4%	0.1%
HUTCHISON CHINA	London	2 683	15.0%	12.4%
DECHRA PHARMA	London	2 593	22.1%	4.5%
ABCAM PLC	London	2 478	10.6%	-3.2%
INDIVIOR PLC	London	791	-3.6%	-5.3%
VECTURA GROUP	London	526	12.9%	5.5%
Biotechs ↘			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
OXFORD BIOMEDICA	London	434	-7.3%	-3.0%
ALLIANCE PHARMA	London	343	-1.2%	3.8%
ECO ANIMAL HEALT	London	307	12.0%	-3.4%
BENCHMARK HOLDIN	London	284	-11.3%	-10.1%
BIOVENTIX PLC	London	192	21.5%	15.2%
CIRCASSIA PH	London	125	-30.6%	-18.0%
VERSEON CORP	London	123	-19.4%	-16.0%
MEREO BIOPHARMA	London	119	-7.2%	-7.2%
MAXCYTE INC	London	102	-6.1%	-4.1%
ALLERGY THERAPEU	London	87	0.9%	-6.5%
TISSUE REGENIX G	London	81	5.8%	19.6%
SHIELD THERAPEUT	London	77	116.4%	14.2%
ONCIMMUNE HOLDIN	London	66	-7.4%	10.4%
4D PHARMA PLC	London	65	-5.5%	-23.9%
TIZIANA LIFE SCI	London	61	-29.4%	-14.3%
VERONA PHARMA PL	London	58	-37.1%	-8.7%
SUMMIT THERAPEUT	London	51	61.5%	46.5%
AMRYT PHARMA PLC	London	42	-12.9%	-4.3%
SILENCE THERAPEU	London	38	1.1%	8.1%
C4X DISCOVERY HO	London	33	-15.6%	-3.7%
FUTURA MEDICAL	London	31	148.0%	-13.2%
MIDATECH PHARMA	London	27	12.1%	75.8%
SCANCELL HOLDING	London	24	-32.6%	1.4%
SKINBIOTHERAPEUT	London	23	33.3%	-2.7%
SAREUM HOLDINGS	London	22	42.9%	33.3%
MOTIF BIO PLC	London	21	-77.2%	-81.2%
DIURNAL GROUP PL	London	20	47.7%	-3.0%
FARON PHARMACEUT	London	20	16.2%	1.6%
RENEURON GROUP P	London	18	17.3%	-3.4%
IMMUPHARMA PLC	London	18	8.5%	6.5%



LONDON HEALTHCARE COMPANY PERFORMANCE

<u>Medical Products & Devices</u> ↴			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
SMITH & NEPHEW	London	12 704	-0.8%	0.1%
CONVATEC GROUP P	London	2 701	-1.1%	-7.1%
ADVANCED MEDICAL	London	663	12.9%	0.2%
CONSORT MEDICAL	London	453	-1.0%	-2.2%
CREO MEDICAL GRO	London	247	3.0%	-10.0%
EKF DIAGNOSTICS	London	148	19.8%	2.5%
MEDICA GROUP PLC	London	129	-5.3%	-3.7%
TRISTEL PLC	London	128	18.2%	1.7%
IMMUNODIAGNOSTIC	London	54	2.7%	-1.3%
AVACTA GROUP PLC	London	48	35.4%	-4.0%
NETSCIENTIFIC PL	London	5	3.8%	118.2%

<u>Healthcare Services</u> ↴			Performance	
Company	Exchange	Mkt Cap (£m)	YTD	1 Month
CLINIGEN GROUP P	London	1 287	28.8%	20.0%
OXFORD BIODYNAMI	London	143	-26.2%	-16.6%
ERGOMED PLC	London	82	13.1%	3.7%
ANPARIO PLC	London	76	1.5%	-8.3%
HVIVO PLC	London	23	-1.8%	-1.8%



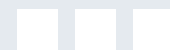
GERMAN HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals ↗			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
BAYER AG-REG	Xetra	67 638	19.8%	5.8%
MERCK KGAA	Xetra	40 304	3.0%	-0.7%
DERMAPHARM HOLDI	Xetra	1 465	19.9%	3.2%
BIOTEST AG	Xetra	925	-8.3%	-4.3%
ECKERT & ZIEGLER	Xetra	464	42.0%	-10.9%
BIOFRONTERA AG	Xetra	239	6.8%	-8.2%
MEDIGENE AG	Xetra	237	30.8%	2.8%
MAGFORCE AG	Xetra	146	6.3%	-6.9%
HAEMATO AG	Xetra	121	14.0%	1.1%
CO.DON AG	Xetra	88	38.6%	12.5%
SANOCHEMIA PHARM	Xetra	22	46.2%	29.9%

Biotechs ↗			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
EVOTEC AG	Xetra	3 289	26.5%	1.0%
MORPHOSYS AG	Xetra	2 953	4.3%	-3.1%
FORMYCON AG	Xetra	302	28.1%	12.7%
PAION AG	Xetra	146	4.3%	3.5%
4SC AG	Xetra	90	5.9%	0.2%
HEIDELBERG PHARM	Xetra	85	25.3%	14.4%
MOLOGEN AG	Xetra	46	185.9%	78.7%
CYTOTOOLS AG	Xetra	16	11.3%	11.4%
ELANIX BIOTECHNO	Xetra	10	-15.5%	-29.1%

Medical Products & Devices ↘			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
SIEMENS HEALTHIN	Xetra	36 400	1.6%	5.6%
FRESENIUS SE & C	Xetra	27 050	14.7%	8.6%
FRESENIUS MEDICA	Xetra	20 764	19.1%	6.7%
SARTORIUS AG	Xetra	10 139	33.9%	6.1%
CARL ZEISS ME-BR	Xetra	6 851	12.2%	-4.8%
DRAEGERWERK-PREF	Xetra	813	7.3%	2.0%
STRATEC SE	Xetra	710	17.9%	2.3%
PULSION MED SY-R	Munich	178	-4.4%	-2.7%
EPIGENOMICS AG	Xetra	63	-1.5%	-3.8%
HUMANOPTICS AG	Frankfurt	55	-6.3%	-3.2%
GERATHERM MEDICA	Xetra	46	4.0%	-1.6%
AAP IMPLANTATE	Xetra	27	-17.7%	-20.5%
CURASAN AG	Xetra	10	4.4%	-4.2%

Healthcare Services →			Performance	
Company	Exchange	Mkt Cap (€m)	YTD	1 Month
RHOEN-KLINIKUM	Xetra	1 627	10.2%	4.5%
MEDICLIN AG	Xetra	254	-7.0%	0.0%
M1 KLINIKEN AG	Xetra	242	-8.0%	-0.7%
VITA 34 AG	Xetra	55	21.6%	12.1%
MATERNUS-KLINIKE	Xetra	35	-10.6%	-10.3%
EIFEL-KLINIK AG	Frankfurt	10	6.5%	-0.6%



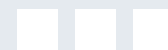
SWISS HEALTHCARE COMPANY PERFORMANCE

Pharmaceuticals			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
ROCHE HLDG-GENUS	SIX Swiss Ex	239 297	14.1%	5.1%
NOVARTIS AG-REG	SIX Swiss Ex	226 853	9.2%	5.2%
VIFOR PHARMA AG	SIX Swiss Ex	8 544	23.0%	-1.1%
COSMO PHARMACEUT	SIX Swiss Ex	1 338	1.3%	-0.3%
CASSIOPEA SPA	SIX Swiss Ex	400	9.3%	4.4%

Biotechs			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
IDORSIA LTD	SIX Swiss Ex	2 371	11.5%	-0.5%
BASILEA PHAR-REG	SIX Swiss Ex	603	27.1%	-5.5%
MOLECULAR PARTNE	SIX Swiss Ex	374	-7.7%	1.5%
POLYPHOR AG	SIX Swiss Ex	228	15.5%	-7.6%
SANTHERA PHA-REG	SIX Swiss Ex	194	169.7%	138.2%
EVOLVA HOLDING S	SIX Swiss Ex	182	2.2%	2.4%
NEWRON PHARMACEU	SIX Swiss Ex	161	60.4%	27.6%
ADDEX THERAPEUTI	SIX Swiss Ex	51	-20.7%	-14.5%
KUROS BIOSCIENCE	SIX Swiss Ex	42	22.6%	26.5%
RELIEF THERAPEUT	SIX Swiss Ex	14	26.9%	7.4%

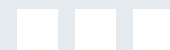
Medical Products & Devices			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
STRAUMANN HLDG-R	SIX Swiss Ex	12 505	27.4%	8.1%
SONOVA HOLDING A	SIX Swiss Ex	12 416	18.3%	0.2%
TECAN GROUP AG-R	SIX Swiss Ex	2 744	22.2%	12.9%
YPSOMED HOLD-REG	SIX Swiss Ex	1 575	7.3%	2.7%
MEDARTIS HOLDING	SIX Swiss Ex	709	9.0%	2.9%
COLTENE HOLD-REG	SIX Swiss Ex	587	16.5%	3.1%
IVF HARTMANN-REG	SIX Swiss Ex	378	-1.6%	4.6%
SHL TELEMEDI-REG	SIX Swiss Ex	65	-1.6%	0.0%

Healthcare Services			Performance	
Company	Exchange	Mkt Cap (CHFm)	YTD	1 Month
LONZA GROUP -REG	SIX Swiss Ex	21 559	13.7%	6.0%
BACHEM HOL-REG B	SIX Swiss Ex	1 526	-1.2%	-1.8%
DOTTIKON ES H-RE	SIX Swiss Ex	579	0.2%	3.2%



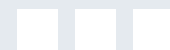
KEY SECTOR NEWS IN FEBRUARY

DATE	NEWS
28 Feb 19	BIOCARTIS - Conservative FY19 outlook and test launches updates
28 Feb 19	MERCK KGAA - Versum : a defensive move which raises eyebrows
28 Feb 19	THERANEXUS - A setback in narcolepsy for THN102 but still an opportunity in Parkinson
28 Feb 19	UCB - FY 2018 results okay but 2019 is below expectations
26 Feb 19	IPSEN - Bullish approach to the FOP indication with palovarotene
26 Feb 19	SANOFI - Good phase III results for Dupixent in Nasal Polyposis
25 Feb 19	ASIT - Cost cutting plan and upcoming convertible notes issue
25 Feb 19	IPSEN - A potentially transformative acquisition in ultra-rare diseases
25 Feb 19	ROCHE - Acquisition of Spark Therapeutics
22 Feb 19	ASTRAZENECA - A two-sided case, converging into one?
22 Feb 19	GALAPAGOS - FY18 results beat, awaiting for FINCH-1 & 3 readouts
21 Feb 19	GENMAB - On track for a better than expected year in 2019
21 Feb 19	MEDARTIS - Self-injured despite bang-in line FY18 numbers. Upgrade to Buy
21 Feb 19	NICOX - Read-through from Bausch Health FY18 results
20 Feb 19	FRESENIUS SE - Long-term growth guidance below estimates
19 Feb 19	SUMMIT THERAPEUTICS - The Right Drug for the Right Bug
15 Feb 19	ASTRAZENECA - Leverage on margins comes earlier-than-anticipated
15 Feb 19	BAYER - Darolutamide not better than Xtandi and Erleada in prostate cancer
14 Feb 19	DBV TECHNOLOGIES - Building-up a newsflow until BLA resubmission expected in Q3 19
13 Feb 19	IPSEN - Exelixis reports continuous progress for Cabometyx in the US
13 Feb 19	ONCIMMUNE - H1 results and imminent ECLS catalyst
13 Feb 19	ORPEA - FY revenue: Bang in line with consensus. Guidance 2019 above current expectations
12 Feb 19	TRANSGENE - The Platform Approach Is Worth Another Look
8 Feb 19	CASSIOPEA - 2018 Full-year financial results in line
8 Feb 19	PIXIUM VISION - Expected impairment of IRIS. 2018YE cash position of EUR15.6m
7 Feb 19	BIOMERIEUX - Increasing visibility in Industrial App. with the acquisition of Invisible Sentinel
7 Feb 19	GSK - 2019 will see more competition for the two main franchises
7 Feb 19	SANOFI - A mixed bag of numbers but the case remains valid
6 Feb 19	GSK - The return in oncology further accelerates through a deal with Merck KGaA
6 Feb 19	KORIAN - Feedback CC FY revenue: Above consensus and FY guidance upgraded
6 Feb 19	MERCK KGAA - GSK jumps-in as a new partner, with a good timing and attractive metrics
5 Feb 19	QIAGEN - Q4 2018 EPS beat despite sales miss. Very cautious start to 2019
1 Feb 19	FRESENIUS MED CARE - Legislative headwinds...a constant fight already accounted for by the Street
1 Feb 19	NOVO NORDISK - A balanced fourth quarter but a reasonably engaging guidance for 2019



EUROPEAN FUNDRAISING : IPO & FOLLOW-ONS

	Pricing Date	Issuer	Country	Industry	Size (€m)	Offer type	Offer To Date
Last month	26 Feb 19	Medios AG	GERMANY	Medical-Whsle Drug Dist	31	Follow-on	7%
	20 Feb 19	Ascelia Pharma AB	SWEDEN	Medical-Biomedical/Gene	19	IPO	0%
	7 Feb 19	Sequana Medical NV	BELGIUM	Medical Products	28	IPO	-26%
3 months	29 Jan 19	Marinomed Biotech AG	AUSTRIA	Medical-Biomedical/Gene	22	IPO	1%
	25 Jan 19	Nordic Nanovector ASA	NORWAY	Medical Products	23	Follow-on	-5%
	24 Jan 19	Oncopeptides AB	SWEDEN	Medical-Drugs	53	Follow-on	0%
	23 Jan 19	Biocartis NV	BELGIUM	Diagnostic Equipment	56	Follow-on	10%
	14 Dec 18	Axovant Sciences Ltd	BRITAIN	Medical-Biomedical/Gene	26	Follow-on	5%
	14 Dec 18	Santhera Pharmaceuticals Holdi	SWITZERLAND	Medical-Drugs	21	Follow-on	-21%
	7 Dec 18	Q-Linea AB	SWEDEN	Diagnostic Equipment	54	IPO	-14%
	6 Dec 18	Quotient Ltd	BRITAIN	Diagnostic Equipment	61	Follow-on	38%
	6 Dec 18	XSpray Pharma AB	SWEDEN	Medical-Biomedical/Gene	9	Follow-on	0%
	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	-24%
	14 Nov 18	Hansa Biopharma AB	SWEDEN	Medical Labs&Testing Srv	66	Follow-on	0%
	7 Nov 18	Garofalo Health Care SpA	ITALY	Medical-Hospitals	73	IPO	10%
	7 Nov 18	Curetis NV	GERMANY	Diagnostic Equipment	9	Follow-on	-25%
	6 Nov 18	Alzecure Pharma AB	SWEDEN	Medical-Drugs	19	IPO	-41%
	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	Oncopeptides AB	SWEDEN	Medical-Drugs	17	Follow-on	26%	



PRIVATE EQUITY MARKET ACTIVITY

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

DATE	TARGET	CTY	DESCRIPTION	BUYER / INVESTOR	
Feb 19	Hookipa	AT	Clinical stage company developing immuno-therapeutics	Redmile, Invus, Samsara	
Feb 19	Anaveon	CH	Biotech company developing drugs in immuno-oncology	Syncona, Novartis Venture	
Feb 19	Calypso Biotech	NE	Drug developer in the field of immunological diseases	Gilde, Inkef, JJDC, M Vent.	
Feb 19	Casa Reha, Convivo	DE	Two care institutions and a healthcare real estate in Germany	Aedifica	
Feb 19	Armonea	BE	Operator of nursing homes for the elderly	Colisée	
Feb 19	Innovalens	NE	Manufacturing of high quality intraocular lenses	Johnson&Johnson	
Feb 19	Citoxlab	FR	Non-clinical CRO specialized in discovery, and medical device testing	Charles River	
Last month	Feb 19	Apceth	DE	Contract manufacturer of regenerative medicine products	Hitachi Chemical
Jan 19	Exscientia	UK	AI-powered drug discovery company	Celgene, GT Health., Evotec	
Jan 19	Wren Therapeutics	UK	Drug development for protein misfolding diseases	Baupost, Lifeforce	
Jan 19	Highlife	FR	Transcatheter, transeptal mitral valve implantation device	USVP, Andera, Sofinnova,...	
Jan 19	Juvenescence	UK	AI-powered drug discovery company	FastForward Innovations Ltd	
Jan 19	Sophia Genetics	CH	Provider of genome sequence information and analysis solutions	GIM, ID Invest	
Jan 19	Promethera	BE	Cell therapy for regenerative medicine derived from healthy liver	Itochu	
Jan 19	Immunic	DE	Clinical-stage biotech in the fields chronic inflammatory diseases	Vital Therapies	
Jan 19	MedCan Pharma	DE	Distributor of products containing cannabinoids for medical use	Fertin Pharma	
Jan 19	Omega Diagnostics	DE	<i>In vitro</i> allergy test specialist	Eurofins Scientific	
Dec 18	Tonipharm	FR	Company active in the self-medication and OTC market	Recordati	
Dec 18	CellforCure	FR	CDMO producing cell and gene therapies in Europe	Novartis	
Dec 18	UPSA (BMS)	FR	Consumer Health Business	Taisho Pharmaceuticals	
Dec 18	Evitria	CH	Custom antibodies for research purposes	Afinum	
Dec 18	Nestor Primcare	UK	Homecare services in England, Scotland and Wales	Health Care Resourcing	
Last 3 months	Dec 18	MediaPark Klinik	DE	Operator of orthopedic hospitals	ATOS
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,...	

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



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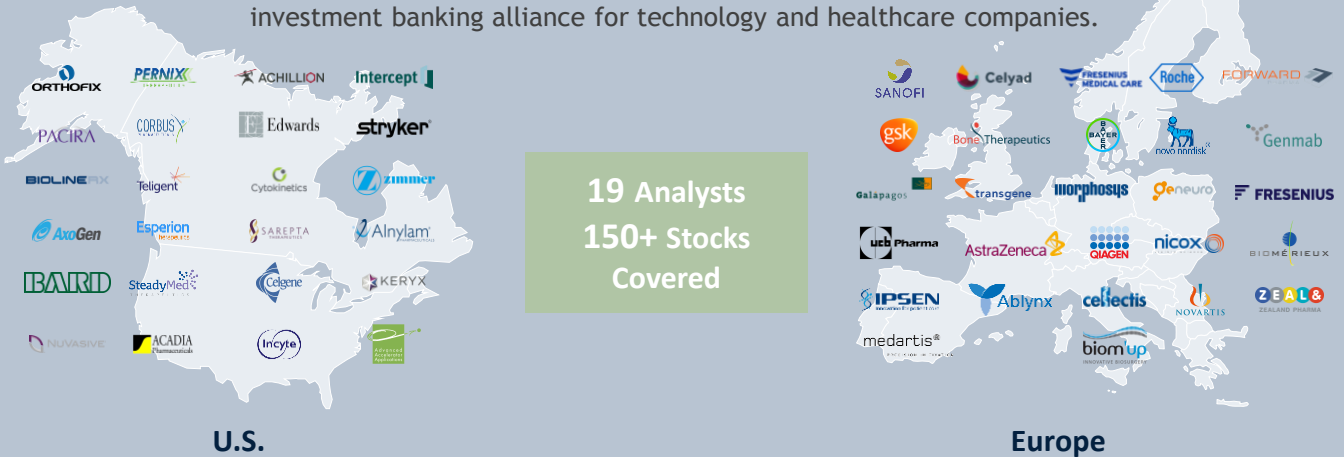
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In November 2016 Bryan, Garnier & Co formed a partnership with JMP Securities LLC (NYSE : JMP) to create JMP Bryan Garnier, a full-service transatlantic investment banking alliance for technology and healthcare companies.



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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 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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