



BUREAU VAN DIJK

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Biotech M&A Review February 2019

The following report details mergers and acquisitions activity in the biotech sector in February 2019 using data from the Zephyr database.

It focuses on global deals activity by target company within the cleantech sector.

Click [here](#) to access the raw data in an Excel spreadsheet.

Biotech PE, VC and DC value halves in February

The value of private equity, venture capital and development capital (PE, VC and DC) investment in biotech companies declined by 55 per cent in February, against a 21 per cent decrease in volume month-on-month. In total, there were 41 deals worth an aggregate USD 574 million announced in the four weeks under review, compared to 52 deals worth EUR 1,280 million in January. However, it is worth noting that last month's figure was the second-largest of the last 12 months.

Year-on-year, volume slipped slightly, while value declined 44 per cent, from USD 1,020 million across 43 deals in February 2018.

The decline can be attributed to the lack of high-valued deals in February as only one exceeded USD 100 million.

Private equity, venture capital and development capital deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
Feb-19	41	574
Jan-19	52	1,280
Dec-18	56	1,087
Nov-18	49	891
Oct-18	51	492
Sep-18	43	717
Aug-18	64	1,495
Jul-18	45	495
Jun-18	55	939
May-18	73	1,027
Apr-18	45	607
Mar-18	59	1,064
Feb-18	43	1,020



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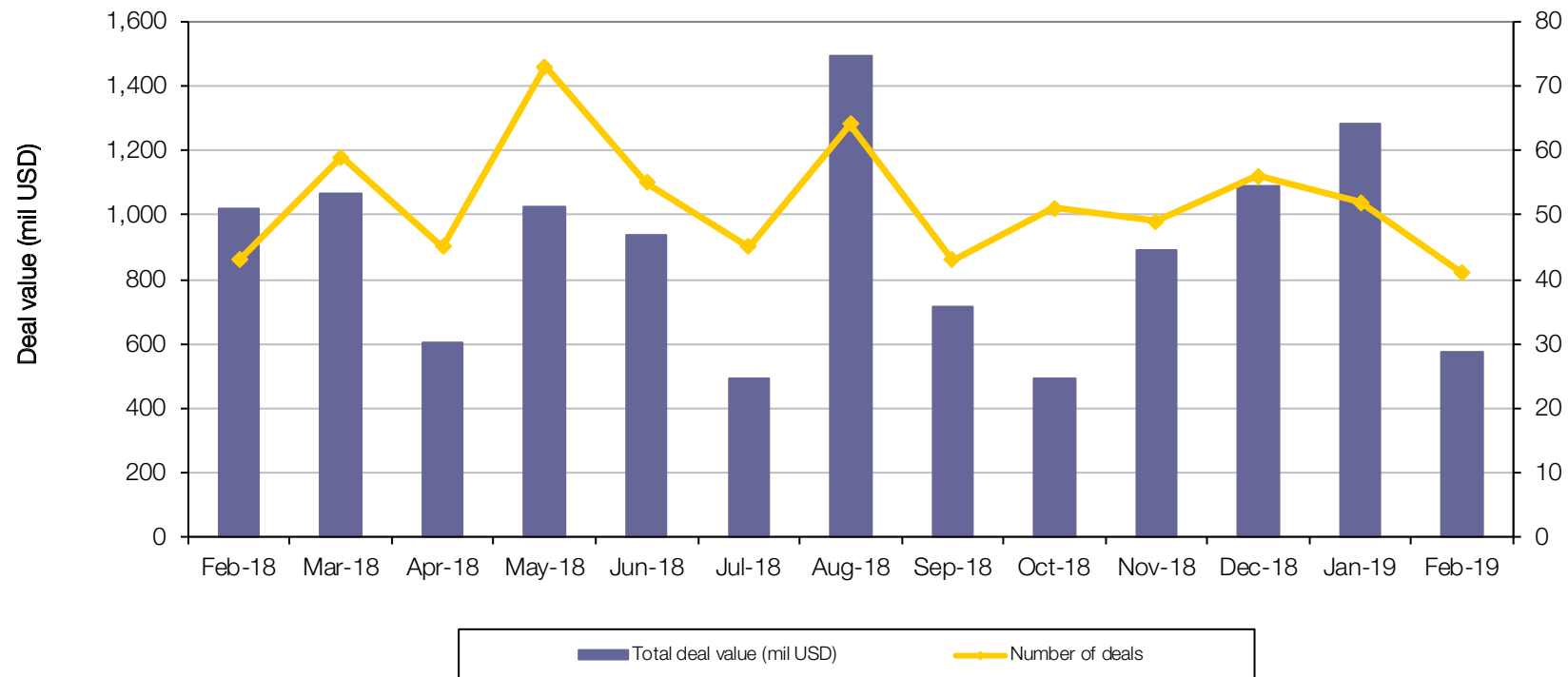
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Combining deal and company data

Private equity, venture capital and development capital deals by volume and value



Chinese genetic cancer treatment provider targeted in February's largest deal

The largest deal targeting a biotech company in February took the form of a USD 126 million series C round of funding for Chinese genetic testing cancer treatment developer Guangzhou Burning Rock Medical Laboratory. Investors in the round included Sequoia Capital Operations, GIC Special Investments and CMB International Asset Management.

All of the top 20 PE, VC and DC deals by value took the form of a funding round or minority stake purchase and no other deal exceeded the USD 100 million barrier.

The second-largest deal involved US-based clinical stage ocular surface disease products developer Oyster Point Pharmaceuticals raising USD 93 million from the Invus Group, Falcon Vision and New Enterprise Associates, among others.

Companies based in the US made up 14 of the top 20 deals by value in February, with China, Switzerland and the UK also featuring.

US ranks top by both volume and value

Unsurprisingly, given its dominance in the top 20 PE, VC and DC deals targeting biotech companies, the US topped the country rankings by both volume and value, with 29 deals worth USD 267 million in February. In terms of value, this represents a 66 per cent decline from USD 774 million in January and 73 per cent decrease from USD 985 million in February 2018.

The only other country to record a value that exceeded USD 100 million was China, with USD 255 million, compared to USD 458 million in January and USD 14 million in February 2018. Three other countries notched up a value in February, namely Switzerland, the UK and Poland, with USD 38 million, USD 13 million and USD 1 million, respectively.

In terms of volume, China placed second, with six deals, followed by Switzerland, with 2 deals. Poland, the UK, France and Canada were each targeted in one deal apiece.

Private equity, venture capital and development capital deals by value

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	General Partner/Fund Manager	Deal status
1.	126	Minority stake 25%	Guangzhou Burning Rock Medical Laboratory Co., Ltd	Individualised genetic testing cancer treatment solutions developer	CN	Sequoia Capital Operations LLC; GIC Special Investments Pte Ltd; CMB International Asset Management (Shenzhen) Co., Ltd; Lyfe Equity Investment Management (Shanghai) Co., Ltd; T&Brothers Capital	Completed
2.	93	Minority stake	Oyster Point Pharmaceuticals Inc.	Clinical stage ocular surface disease products developer	US	New Enterprise Associates Inc.; Versant Venture Management LLC; Vida Ventures LLC; Flying L Partners LLC; The Invus Group LLC	Completed
3.	85	Minority stake	Gracell Biotechnology (Shanghai) Co., Ltd	Cell bank and cell gene provider, Research and development in stem cell therapy	CN	Temasek Capital (Pte) Ltd; Suzhou Kington Capital Co., Ltd; King Star Capital	Completed
4.	54	Minority stake	Bolt Biotherapeutics Inc.	Biotechnology company provider	US	Vivo Ventures LLC; Pivotal bioVenture Partners LLC; Novo Holdings A/S	Completed
5.	35	Minority stake	Anaveon AG	Immunological oncology treatment research and development services	CH	Syncona Ltd	Completed
6.	30	Minority stake	Hangzhou Sciwind Biosciences Co., Ltd	Metabolic disease drug developer	CN	Shiyu Capital	Completed
7.	25	Minority stake	Axial Biotherapeutics Inc.	CNS diseases therapeutics developer	US	Domain Associates LLC; Seventure Partners SA; Longwood Fund Management LLC	Completed
8.	15	Minority stake	Beijing Jingzhun Medical Technology Co., Ltd	Molecular diagnostic reagent developer, Molecular diagnostic reagent manufacturer	CN	Beijing E-Town International Investment Development Co., Ltd; Zhejiang Jiuren Capital Management Co., Ltd; China Growth Capital; Shanghai Yabao Fanghe Investment Management Centre (LP); Nanjing Dynamic Balance Investment & Management Co., Ltd; Suzhou Hi-tech Venture Capital Investment Group Taihu Jingu Capital Management Co., Ltd	Completed
9.	14	Minority stake	EdenRoc Sciences LLC	Biotechnology	US		Completed
10.	13	Minority stake	Grey Wolf Therapeutics Ltd	Immuno-oncology drug discovery and biotechnology research services	GB	Canaan Management Inc.; Andera Partners SA	Completed

Private equity, venture capital and development capital deals by value (cont'd)

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	General Partner/Fund Manager	Deal status
11.	12	Minority stake	NeuSpera Medical Inc.	Research and development in medicine and biotechnology	US	Delta Capital Management LLC; Windham Venture Management LLC; Purple Arch Ventures; 6 Dimensions Capital	Completed
12.	10	Minority stake	Knopp Biosciences LLC	Medicines for urgent unmet medical needs research and development services, Neurological disorders treatment manufacturer	US		Completed
13.	10	Minority stake	Rainier Therapeutics Inc.	Biotechnology	US		Completed
14.	7	Minority stake	Exagen Inc.	Biotechnology	US		Completed
15.	5	Minority stake	NemaMetrix Inc.	Biotechnology	US		Completed
16.	5	Minority stake	Blaze Bioscience Inc.	Biotechnology research company, Tumor Paint technology manufacturer	US		Completed
17.	5	Minority stake	TearClear Corp	Biotechnology	US		Completed
18.	5	Minority stake	Mill Creek Life Sciences LLC	Biotechnology	US		Announced
19.	4	Minority stake	Sunp International Inc.	Biotechnology	US		Completed
20.	3	Minority stake	Aqua Medical LLC	Biotechnology	US		Completed

Target countries by volume - private equity, venture capital and development capital deals

Target country	Feb-18	Jan-19	Feb-19
US	37	33	29
China	4	10	6
Switzerland	0	1	2
Poland	0	0	1
UK	0	2	1
France	1	1	1
Canada	0	1	1

Target countries by value - private equity, venture capital and development capital deals

Target country	Feb-18 (mil USD)	Jan-19 (mil USD)	Feb-19 (mil USD)
US	985	774	267
China	14	458	255
Switzerland	0	3	38
UK	0	25	13
Poland	0	0	1

Private equity, venture capital and development capital investors

	Company name	Number of deals	Number with consideration	Total deal value (mil USD)	Average deal value (mil USD)
1	Lyfe Equity Investment Management (Shanghai) Co., Ltd	1	1	126	126
2	T&Brothers Capital	1	1	126	126
3	CMB International Asset Management (Shenzhen) Co., Ltd	1	1	126	126
4	Sequoia Capital Operations LLC	1	1	126	126
5	GIC Special Investments Pte Ltd	1	1	126	126
6	Flying L Partners LLC	1	1	93	93
7	Vida Ventures LLC	1	1	93	93
8	Versant Venture Management LLC	1	1	93	93
9	The Invus Group LLC	1	1	93	93
10	New Enterprise Associates Inc.	1	1	93	93
11	Suzhou Kington Capital Co., Ltd	1	1	85	85
12	Temasek Capital (Pte) Ltd	1	1	85	85
13	King Star Capital	1	1	85	85
14	Pivotal bioVenture Partners LLC	1	1	54	54
15	Vivo Ventures LLC	1	1	54	54
16	Novo Holdings A/S	1	1	54	54
17	Syncona Ltd	1	1	35	35
18	Shiyu Capital	1	1	30	30
19	Longwood Fund Management LLC	1	1	25	25
20	Seventure Partners SA	1	1	25	25
21	Domain Associates LLC	1	1	25	25



Biotech M&A value improves year-on-year

There were 83 mergers and acquisitions (M&A) deals worth an aggregate USD 7,843 million targeting biotech companies announced in February. Despite volume being the lowest recorded for any month since February 2017 (81 deals), and value declining significantly from a 12-month high of USD 77,055 million in January, dealmaking was not completely stripped away as the four weeks under review improved on the USD 2,994 million recorded in February 2018. It is also worth noting that January's result was unusually high and primarily attributable to a single deal.

Value, which was actually the fourth-largest of the trailing 12-month period, was supported by two deals each worth more than USD 1,000 million. The largest of these involved Roche agreeing to acquire Spark Therapeutics for USD 4,315 million. The acquiror will purchase the US gene-based therapeutics research and development service provider via its wholly-owned subsidiary, 022019 Merger Subsidiary. This deal accounts for 55 per cent of total biotech M&A value in February and was followed by France-based Ipsen picking up Canadian clinical stage fibrodysplasia ossificans progressiva therapeutic developer Clementia Pharmaceuticals for USD 1,310 million.

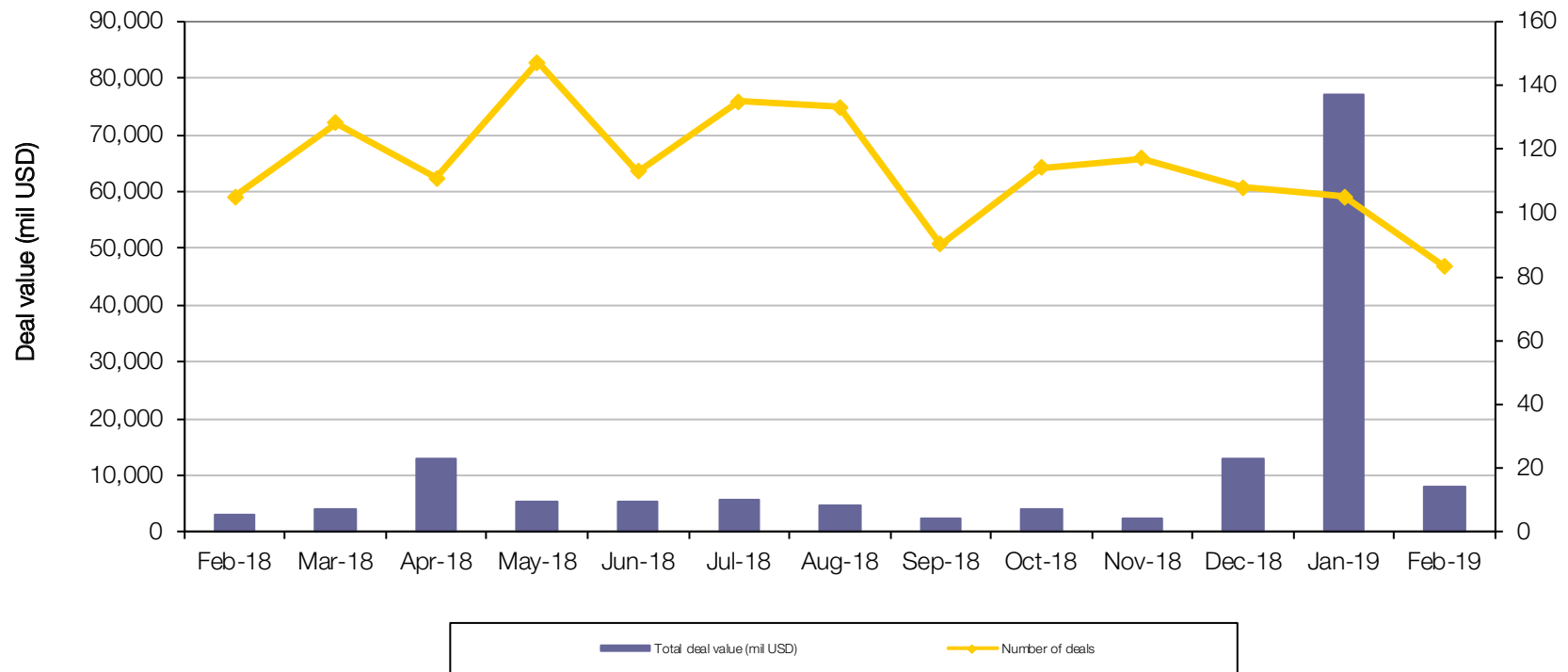
A French target featured in the third-largest deal as Charles River Laboratories International agreed to acquire Citoxlab France for USD 508 million, making the country the third most valuable in the biotech industry behind the US (USD 5,153 million) and Canada (USD 1,630 million).

Deals by volume and value

Announced date	No of deals	Total deal value (mil USD)
Feb-19	83	7,843
Jan-19	105	77,055
Dec-18	108	12,918
Nov-18	117	2,440
Oct-18	114	4,105
Sep-18	90	2,352
Aug-18	133	4,701
Jul-18	135	5,559
Jun-18	113	5,333
May-18	147	5,507
Apr-18	111	13,060
Mar-18	128	3,973
Feb-18	105	2,994



Deals by volume and value





Top deals by value

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Announced date
1.	4,315	Acquisition 100%	Spark Therapeutics Inc.	Gene based therapeutics research and development services	US	Roche Holding AG, via 022019 Merger Subsidiary Inc.	22/02/2019
2.	1,310	Acquisition 100%	Clementia Pharmaceuticals Inc.	Clinical stage fibrodysplasia ossificans progressiva (FOP) therapeutic developer	CA	Ipsen SA	25/02/2019
3.	508	Acquisition 100%	Citoxlab France SAS	Biotechnology research and development laboratories services provider	FR	Charles River Laboratories International Inc.	13/02/2019
4.	500	Capital Increase 91%	SAGE Therapeutics Inc.	Central nervous system (CNS) disorder treatment therapeutics research and development services, Central nervous system (CNS) disorder treatments manufacturer	US		25/02/2019
5.	319	Acquisition 100%	FHF Holdings Ltd	Health hemp food manufacturer, Hemp butter manufacturer, Hemp seeds manufacturer, Protein powders manufacturer	CA	Tilray Inc., via Tilray Subco	20/02/2019
6.	126	Minority stake 25%	Guangzhou Burning Rock Medical Laboratory Co., Ltd	Individualised genetic testing cancer treatment solutions developer	CN	Sequoia Capital Operations LLC; GIC Special Investments Pte Ltd; Lilly Asia Ventures Management Co., Ltd; CMB International Asset Management (Shenzhen) Co., Ltd; Lyfe Equity Investment Management (Shanghai) Co., Ltd; T&Brothers Capital	14/02/2019
7.	93	Minority stake	Oyster Point Pharmaceuticals Inc.	Clinical stage ocular surface disease products developer	US	New Enterprise Associates Inc.; Versant Venture Management LLC; Vida Ventures LLC; Flying L Partners LLC; Falcon Vision LLC; Invus Opportunities	26/02/2019
8.	85	Minority stake increased to 5%	BeiGene Ltd	Immuno-oncology drugs research and development services holding company, Immuno-oncology preparations manufacturer holding company	KY	The Capital Group Companies Inc.	20/02/2019
9.	85	Minority stake	Gracell Biotechnology (Shanghai) Co., Ltd	Cell bank and cell gene provider, Research and development in stem cell therapy	CN	Temasek Capital (Pte) Ltd; Lilly Asia Ventures Management Co., Ltd; Suzhou Kington Capital Co., Ltd; King Star Capital; Chengdu Miaoji Medical Technology Co., Ltd	26/02/2019
10.	60	Acquisition increased to 100%	Tanvex BioPharma USA, Inc.	Biological drugs manufacturer, Biological drugs technology development services, Biologics production services	US	Tanvex BioPharma Inc.	13/02/2019



Top deals by value (Cont'd)

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Acquiror	Announced date
11.	57	Capital Increase 22%	Polaris Group	Cancer treatment biological drugs developing holding company	KY	Investors	22/02/2019
12.	54	Minority stake	Bolt Biotherapeutics Inc.	Biotechnology company provider	US	Vivo Ventures LLC; Pivotal bioVenture Partners LLC; Novo Holdings A/S; Nan Fung Life Sciences	05/02/2019
13.	44	Acquisition 50%	Runjia (Suzhou) Biosciences Co., Ltd's 2 inhibitor drug projects	Small molecular drugs related research and development services	CN	Shanghai Junshi Biosciences Co., Ltd	19/02/2019
14.	35	Minority stake	Anaveon AG	Immunological oncology treatment research and development services	CH	Novartis Venture Fund; Syncona Ltd	26/02/2019
15.	30	Minority stake	Hangzhou Sciwind Biosciences Co., Ltd	Metabolic disease drug developer	CN	Beijing Kawin Technology Share-Holding Co., Ltd; Shiyu Capital; Legend Capital Management Co., Ltd	13/02/2019
16.	25	Minority stake	Axial Biotherapeutics Inc.	CNS diseases therapeutics developer	US	Domain Associates LLC; Seventure Partners SA; Angel Investors; Longwood Fund Management LLC; Heritage Medical Systems Inc.	27/02/2019
17.	17	Capital Increase 2%	AnGes Inc.	Gene medicine research and development services	JP		26/02/2019
18.	15	Minority stake	Beijing Jingzhun Medical Technology Co., Ltd	Molecular diagnostic reagent developer, Molecular diagnostic reagent manufacturer	CN	Investors; Beijing E-Town International Investment Development Co., Ltd; Zhejiang Jiuren Capital Management Co., Ltd; China Growth Capital; Shanghai Yabao Fanghe Investment Management Centre (LP); Nanjing Dynamic Balance Investment & Management Co., Ltd; Suzhou Hi-tech Venture Capital Investment Group Taihu Jingu Capital Management Co., Ltd	18/02/2019
19.	14	Minority stake	EdenRoc Sciences LLC	Biotechnology	US		19/02/2019
20.	13	Minority stake	Grey Wolf Therapeutics Ltd	Immuno-oncology drug discovery and biotechnology research services	GB	Canaan Management Inc.; Andera Partners SA	11/02/2019



Target countries by volume

Target country	Feb-18	Jan-19	Feb-19
US	51	43	38
China	16	22	11
UK	5	8	10
Canada	5	3	5
Japan	3	2	4
Switzerland	1	1	3
Australia	4	2	2
Cayman Islands	0	0	2
France	1	2	2
Poland	1	1	2
Sweden	1	6	2
Denmark	0	0	1
Taiwan	0	0	1

Target countries by value

Target country	Feb-18 (mil USD)	Jan-19 (mil USD)	Feb-19 (mil USD)
US	2,148	75,456	5,153
Canada	23	49	1,630
France	18	24	508
China	134	1,396	320
Cayman Islands	0	0	142
Switzerland	42	3	38
UK	20	50	29
Japan	62	22	18
Australia	392	1	2
Poland	0	0	1
Taiwan	0	0	1
Sweden	20	0	1



IPOs by volume and value

Announced date	No of deals	Total deal value (mil USD)
Feb-19	1	80
Jan-19	3	225
Dec-18	5	288
Nov-18	3	1,052
Oct-18	1	225
Sep-18	5	96
Aug-18	3	120
Jul-18	3	0
Jun-18	8	1,237
May-18	7	915
Apr-18	1	6
Mar-18	1	144
Feb-18	5	181



February IPOs

	Deal value (mil USD)	Deal type	Target	Target business description	Target country	Deal status	Announced date
1	80	Planned IPO 22% on Nasdaq	TCR2 Therapeutics Inc.	Immune-oncology therapies developer	US	Announced	01/02/2019

Notes to editors

The search criteria uses a key word system based on the targets' business description

The key words and phrases are: "biotechnology" OR "antimicrobial" OR "CNS" OR "neurotransmitter" OR "cardiovascular" OR "blood system agent" OR "cell control agent" OR "dermatological" OR "genetic" OR "hormone" OR "immunomodulator" OR "Ion Channel" OR "modulat" OR "metabolic" OR "musculoskeletal" OR "renal system" OR "reproductive" OR "respiratory" OR "diagnostic" OR "gastrointestinal" OR "degeneration" OR "endocrine" OR "growth disorder" OR "gynecology" OR "obstetrics" OR "haematological" OR "neurological" OR "neoplasm" OR "neurological" OR "nutritional" OR "psychiatric" OR "toxicity" OR "ulcer" OR "genitourinary" OR "oncology" OR "biological" OR "clinical" OR "biomedical" OR "bioinformatics" OR "cheminformatics" OR "biologicgenerics" OR "genetics" OR "genomics" OR "transgenic" OR "protein" OR "RNA" OR "DNA" OR "enzyme" OR "fermentation" OR "oncogenomics" OR "proteomics" OR "nanobiotechnology" OR "Gene" OR "Central nervous system" OR "Cloning" OR "genome" OR "genotyping" OR "molecular" OR "microbiology" OR "animal cell culture" OR "biochemistry" OR "embryology" OR "cell biology" OR "Tissue Engineering" OR "Stem Cell" OR "Pharmacogenomics" OR "Escherichia Coli" OR "E. Coli" OR "Embryos" OR "molecule" OR "transgenic" OR "biotechnology" OR "biotech" OR "bio tech" OR "biopharmaceuticals" OR "micropropagation" OR "biobased products" OR "biopharming" OR "biotechnology-derived" OR "bt corn" OR "chromosomes" OR "embryonic stem cells" OR "fibroblast" OR "molecular biology" OR "mutation" OR "nucleotide" OR "organic agriculture" OR "phenotype" OR "plant-incorporated protectants" OR "pollen" OR "tissue culture" OR "transfection" OR "virus" OR "vitamin" OR "xenotransplantation" OR "zygote"

Activity is based on the activity of the target company

Deal status is announced, completed, pending or unconditional

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