

Top ten deals of 2022

Dealmaking is returning to pre-pandemic levels with numerous billion-dollar deals being signed, many focusing on immuno-oncology and inflammation.

Biopharma Dealmakers and DealForma

Following an unusual two years dominated by the pandemic and consequential increases in dealmaking, deal volume and total deal value have dropped back (Fig. 1). Up to October 31 this year, almost \$120 billion worth of deals were signed, similar to the total value for 2019. However, in comparison to recent years, the number of deals has fallen more sharply, with just over 630 having been signed so far in 2022.

Yet 2022 has not been short of billion-dollar deals, with the most valuable to date being signed between IGM Biosciences and Sanofi for an estimated \$6.2 billion (Table 1). The deal, signed in March, saw the two companies team up for the development of immunoglobulin M (IgM) antibody agonists against a range of oncology and immunology/inflammation targets. This was not the only major deal Sanofi was involved in this year, as it signed three further billion-dollar deals focusing primarily on immuno-oncology.

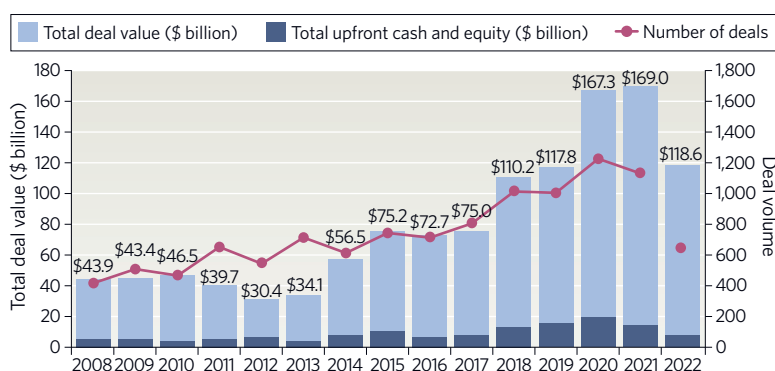


Fig.1 | Research and development (R&D) partnerships in global healthcare and life sciences. 2008–2022 (up to October 31). Source: DealForma Database.

Table 1 | Top 10 partnerships in global healthcare and life sciences by total deal value announced since January 1, 2022

Licensor, licensee	Total deal value (\$ million), date	Description
IGM Biosciences, Sanofi	6,265 29 March	Sanofi is partnering with IGM to develop IgM antibody agonists against three oncology targets and three immunology/inflammation targets. \$150 million will be paid upfront to IGM, and milestone payments could total over \$6 billion.
Poseida Therapeutics, Roche	6,220 30 July	Poseida has signed a licence agreement with Roche to develop allogeneic CAR-T cell therapies for hematologic malignancies, including P-BCMA-ALLO1, an allogeneic CAR-T cell product to treat multiple myeloma, and P-CD19CD20-ALLO1, an allogeneic dual CAR-T cell product to treat B cell malignancies.
Exscientia, Sanofi	5,300 7 January	Sanofi is partnering with Exscientia to develop up to 15 small molecules using Exscientia's AI-driven platform for oncology and immunology targets. Exscientia will receive \$100 million upfront and \$5.2 billion in milestone payments.
Orna Therapeutics, MSD/Merck & Co.	3,650 16 August	Merck will pay Orna \$150 million upfront to leverage their circular RNA technology in the collaborative development of vaccines and therapeutics for infectious disease and oncology targets.
Century Therapeutics, BMS	3,150 10 January	BMS is applying its oncology cell-therapy expertise to a collaboration with Century to develop iPSC-derived treatments for myeloid leukemia and multiple myeloma with Century's allogeneic cell-therapy platform.
Adagene, Sanofi	2,518 2 March	Adagene is leveraging its SAFEbody precision masking technology in a partnership with Sanofi to develop masked antibody candidates for immuno-oncology. Adagene will receive \$17.5 million upfront.
Skyhawk Therapeutics, Sanofi	2,054 5 July	Sanofi will pay Skyhawk \$54 million upfront to leverage their SkySTAR technology platform to discover and develop small molecules that modulate RNA splicing against oncology and immunology targets.
Code Biotherapeutics, Takeda	2,000 22 February	Code has signed an option deal with Takeda to develop gene therapies for rare diseases, using its targeted 3DNA non-viral genetic medicine-delivery platform. Takeda could exercise options to obtain licences for four programs.
GentiBio, BMS	1,900 10 August	GentiBio will apply its engineered regulatory T cell platform in a deal with BMS to develop new engineered T _{reg} therapies to treat inflammatory bowel diseases. GentiBio is to receive up to \$1.9 billion in milestone payments.
Generate Biosciences, Amgen	1,900 6 January	Amgen will pay Generate \$50 million upfront to harness its machine-learning-enabled technology to discover and develop protein therapeutics for five clinical targets across a range of therapeutic areas and modalities.

AI, artificial intelligence; BMS, Bristol Myers Squibb; CAR-T cell, chimeric antigen receptor T cell; IgM, immunoglobulin M; iPSC, induced pluripotent stem cell. *Data as of October 31, 2022