

Navigating infectious disease deals

The emergence of COVID-19 sparked a huge increase in the volume of infectious disease deals in 2020, but how has the market fared in the past year?

Biopharma Dealmakers and DealForma

The number of infectious disease deals reached an unprecedented level in 2020 (Fig. 1), with approximately 300 deals being signed as companies sought to develop new vaccines and treatments to combat COVID-19. Although COVID-19 continues to be prominent, a number of companies working in the infectious diseases field have invested substantially in the development of drugs and vaccines for other indications, as high-value deals in 2021 compiled with the help of DealForma demonstrate (Table 1).

Since the beginning of 2021, over \$5 billion has been spent on infectious disease dealmaking, including \$888 million in upfront payments. A few of these deals are linked to platforms that have had a key role in the response to COVID-19, such as mRNA vaccines, both for COVID-19 and for other infectious diseases. However, the majority of the top-ten partnerships by deal value are for diseases other than COVID-19, including influenza, HIV, and hepatitis B or C infection.

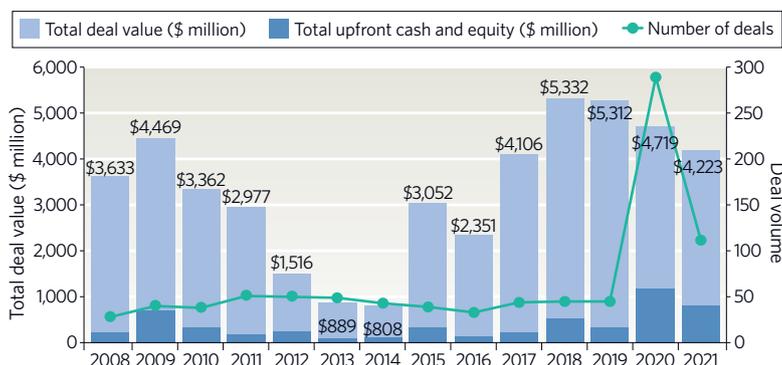


Fig. 1 | R&D partnerships in infectious diseases. Source: DealForma database. Financials based on disclosed figures as of 4 May 2022.

Table 1 | Top 10 infectious disease partnerships by upfront cash and equity announced since 1 January 2021

Licensor and licensee	Total deal value (\$ million), date	Description
Vir Biotechnology and GlaxoSmithKline	845 17 Feb 2021	GlaxoSmithKline partners with Vir Biotechnology to co-develop and commercialize mAbs, including VIR-2482, and undisclosed small molecule programs for the prevention and treatment of influenza and other respiratory viruses.
BioNTech and Pfizer	425 5 Jan 2022	Companies partner to develop an mRNA-based vaccine using Pfizer's antigen technology and BioNTech's mRNA platform technology for shingles (herpes zoster virus). BioNTech will pay Pfizer \$25 million for its antigen technology.
Gritstone Bio and Gilead	785 1 Feb 2021	Gritstone signs research partnership to develop a vaccine-based immunotherapy for HIV using its prime-boost vaccine platform comprised of self-amplifying mRNA and adenoviral vectors for Gilead's antigens.
Arbutus Biopharma and Qilu Pharmaceutical	300 13 Dec 2021	Arbutus and Qilu sign deal to develop RNAi therapy AB-729 as a treatment for hepatitis B (HBV) in mainland China, Hong Kong, Macau, and Taiwan. AB-729 is designed to reduce HBV viral proteins and antigens.
Nykode Therapeutics and Regeneron	925 23 Nov 2021	Nykode signs multi-target deal with Regeneron to develop off-the-shelf vaccines. The deal combines Nykode's modular vaccine platform with Regeneron's antigen selection expertise for 5 cancer and infectious disease programs.
Providence Therapeutics and Everest Medicines	150 13 Sep 2021	Everest signs deal to gain exclusive rights to develop Providence's mRNA COVID-19 vaccine candidate, PTX-COVID19-B, in Asia. Additionally, Everest will gain access to Providence's preclinical mRNA COVID-19 vaccines.
ViiV Healthcare and Shionogi & Co.	48 28 Sep 2021	Shionogi partners with ViiV Healthcare to develop S-365598 for the treatment of HIV. Shionogi will contribute up to annual development costs in addition to disclosed deal payments.
Cidara Therapeutics and Janssen Pharmaceutica	780 5 Apr 2021	Janssen collaborates to develop Cidara's cloudbreak antiviral conjugates (AVCs), CD-388 and other influenza AVCs for the prevention and treatment of influenza. Cidara will develop the AVCs through phase 2.
Merck & Co. and Atea Pharmaceuticals	460 1 Dec 2021	Atea partners with Merck & Co. to develop, manufacture, and commercialize ruzasvir for the treatment of HCV. Atea retains rights to sublicense ruzasvir.
AM-Pharma and Kyowa Hakkō Kirin Co.	289 8 Sep 2021	Kyowa signs license agreement to develop and commercialize AM-Pharma's recombinant human alkaline phosphatase drug, Ilofotase alfa, for the treatment of sepsis-associated acute kidney injury (SA-AKI) in Japan.

Data as of May 4, 2022

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