

# Bispecific antibodies continue immuno-oncology drive

Recent deals involving bispecific antibodies illustrate the growing breadth of cancer immunotherapy applications for this platform.

## Biopharma Dealmakers

Despite the COVID-19 pandemic, a number of high-value deals involving bispecific antibodies have been signed in the past 2 years, focused on harnessing the potential of this platform to treat cancer. In this Feature, we look back at some of the key deals with the help of Clarivate Analytics.

Seven deals involving bispecifics had a total potential value of more than \$1 billion (Table 1). The largest deal was signed between AbbVie and Genmab in June 2020; the two companies collaborated to develop Genmab's pipeline of bispecific molecules that target CD3 as well as a particular tumor antigen to direct cytotoxic T cells to tumors expressing that antigen.

AbbVie agreed to pay Genmab \$750 million upfront and up to \$3.15 billion in potential milestones related to three candidates including Genmab's epcoritamab, which is designed to bind both CD3 and CD20 and is now in a phase 3 trial for diffuse large B cell lymphoma.

Other deals also highlighted interest in pursuing novel targets with bispecific molecules, such as Bristol Myers Squibb's potential \$1.56 billion deal signed in May 2021 to gain an exclusive license to Agenesis's AGEN1777. This preclinical bispecific antibody targets the immune checkpoint TIGIT, currently one of the hottest targets in immuno-oncology.

**Table 1 | Selected high-value deals involving bispecific antibodies from January 2020–July 2021**

Date	Companies	Deal summary	Total potential deal value in \$ million (upfront payment)
May 2021	BMS, Agenesis	BMS signs deal with Agenesis to license its preclinical bispecific antibody AGEN1777 for IO, which targets TIGIT and an undisclosed antigen.	1,560 (200)
April 2021	Pieris Pharmaceuticals, Boston Pharmaceuticals	Pieris signs deal with Boston to develop PRS-342, a preclinical IO anticalin-antibody bispecific fusion protein targeting 4-1BB and GPC3.	363 (10)
January 2021	Loxo Oncology, Merus	Loxo (Eli Lilly) partners with Merus to develop up to three CD3-engaging bispecific antibody IO therapies.	1,660 (60)
December 2020	Janssen, Xencor	Xencor and Janssen sign licensing deal to discover and develop XmAb bispecific antibodies against CD28 and an undisclosed prostate tumor target for the treatment of prostate cancer.	713 (50)
November 2020	Affimed, Roivant	Affimed and Roivant partner to develop innate cell engagers for cancer. Roivant will license preclinical molecule AFM32 and use of Affimed's redirected optimized cell killing (ROCK) technology to generate further innate cell engager molecules.	2,060 (60)
June 2020	AbbVie, Genmab	AbbVie and Genmab collaborate to develop three of Genmab's bispecific antibody products for cancer, including its lead product epcoritamab (DuoBody-CD3xCD20) and DuHexbody-CD3x5T4.	3,900 (750)
June 2020	Innovent, Roche	Innovent signs deal with Roche to develop cell therapies and bispecific antibodies for hematologic and solid cancers.	2,000 (not specified)
March 2020	Abpro, Abpro Bio	Abpro Bio gains license from Abpro to develop and commercialize two bispecific antibodies for IO and ophthalmology in Asian markets.	1,100 (30)
March 2020	CytomX Therapeutics, Astellas	CytomX and Astellas partner to develop Probody T cell-engaging bispecific therapies for cancer, targeting CD3 and tumor surface antigens.	1,680 (80)

BMS, Bristol Myers Squibb; IO, immuno-oncology. Deal data sourced from Cortellis from Clarivate Analytics 2021.