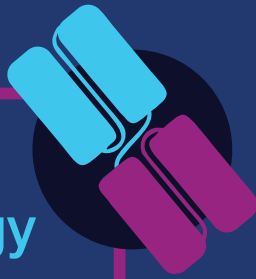


History of BiTE® Technology



Pre-1985

Construction of antibody-based molecules that do not occur in nature ^{1,2}

1988

Antibodies reduced to minimal binding domains; linker sequence addition results in single-chain antibodies ^{1,3,4}

1985

Bispecific antibodies used to engage cytotoxic T cells ^{1,2}

2017

Amgen clinical investigation of HLE BiTE® molecules initiated ⁹

Present

Amgen clinical development of investigational BiTE® therapies across tumor types

References

¹ Baeuerle PA, Reinhardt C. Bispecific T-cell engaging antibodies for cancer therapy. *Cancer Res.* 2009;69(12):4941-4944.

² Staerz UD, et al. *Nature.* 1985;314:628-631.

³ Bird RE, et al. *Trends Biotechnol.* 1991;9:132-137.

⁴ Holliger P, et al. *Proc Natl Acad Sci U S A.* 1993;90:6444-6448.

⁵ Amgen [Press Release], December 3, 2014.

⁶ Haas C, et al. *Immunobiology.* 2009;214(6):441-453.

⁷ ClinicalTrials.gov. NCT00274742. <https://clinicaltrials.gov/ct2/show/record/NCT00274742>. Accessed May 15, 2019.

⁸ Amgen [Press Release], December 3, 2014.

⁹ Giffin MJ, et al. *Cancer Res.* 2017;77(suppl 13): Abstract 3632.

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Oncology

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