

Bicycle® molecules are a novel class of cancer therapeutics currently in development that are made from structurally constrained bicyclic peptides that can be readily conjugated to a payload. Bicycle® molecules combine the pharmacological properties normally associated with a biologic with the manufacturing and pharmacokinetic advantages of a small molecule.¹⁻⁴

Key features of Bicycle® molecules include^{4,5}:

High specificity

Targeted drug delivery

Rapid distribution into tumors

Renal elimination

What is a Bicycle® molecule?



Monomeric Bicycle® molecules

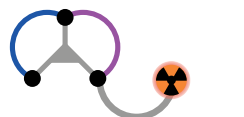
Bicycle® molecules consist of short, fully synthetic peptides constrained with a molecular scaffold to form 2 loops that stabilize their structure and enable high-affinity and selective binding to targets^{1,2,6}



Bicycle® Drug Conjugates



Targeted/ multi-specific Bicycle® molecules



Bicycle® Radioconjugates

Bicycle® molecules can support a variety of conjugation options^{2,3}:

- Chemical payloads
- Other Bicycle® peptides, for additional functionality without negatively impacting target binding
- Targeted radionuclides

How is a Bicycle® molecule different from an antibody-drug conjugate?

	 Bicycle® molecule	Antibody-drug conjugate
SIZE	~1-8 kDa ^{2,5,7}	~150 kDa ^{8,9}
SYNTHETIC	Yes ^{2,3,5,7}	No
TUMOR TARGETING	Highly specific, leading to fewer off-tumor and off-target effects ^{4,5,7,10}	High specificity; known off-tumor, on-target effects and off-target effects ^{4,11,12}
TUMOR PENETRATION	High ³⁻⁵	Low ^{4,11,12}
ELIMINATION	Plasma half-life: <1 hour ^{13,14} to hours ⁷	Half-life: 3-6 days ^{8,9}

In contrast to large antibody-drug conjugates, Bicycle® molecules^{5,15,16}:



Are smaller and highly specific, with high tumor penetration



Rapid tissue penetration

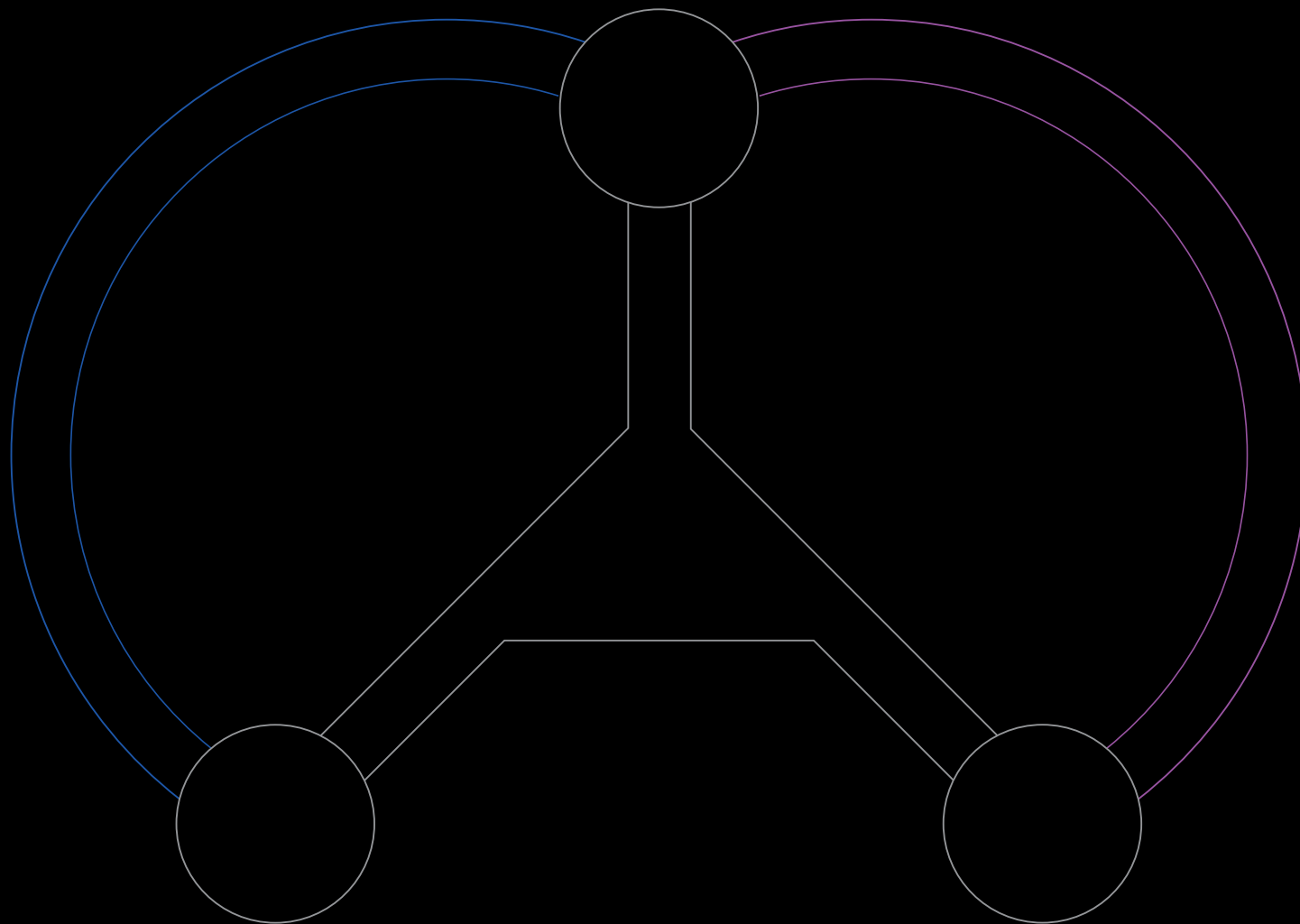


Do not require sustained systemic exposure to deliver the drug to tumor cells

Product candidates are investigational only and are not approved medicines.



Visit bicycletherapeutics.com or contact medinfo@bicycletx.com to learn more about how Bicycle® molecules have the potential to transform treatment approaches and patients' lives.



References: 1. Heinis C, et al. *Nat Chem Biol*. 2009;5(7):502-507. doi:10.1038/nchembio.184 2. Mudd GE, et al. *J Med Chem*. 2020;63(8):4107-4116. doi:10.1021/acs.jmedchem.9b02129 3. Eder M, et al. *Cancer Res*. 2019;79(4):841-852. doi:10.1158/0008-5472.CAN-18-0238 4. Rigby M, et al. *Mol Cancer Ther*. 2022;21(12):1747-1756. doi:10.1158/1535-7163.MCT-21-0875 5. Bennett G, et al. *Mol Cancer Ther*. 2020;19(7):1385-1394. doi:10.1158/1535-7163.MCT-19-1092 6. Baeriswyl V, et al. *ChemMedChem*. 2012;7(7):1173-1176. doi:10.1002/cmdc.201200071 7. Hurov K, et al. *J Immunother Cancer*. 2021;9(11):e002883. doi:10.1136/jitc-2021-002883 8. PADCEV (enfortumab vedotin). Prescribing information. Seagen Inc; 2025. 9. ADCETRIS (brentuximab vedotin). Prescribing information. Seagen Inc; 2025. 10. Bader J, et al. Presented at: 2024 American Society of Clinical Oncology (ASCO) Annual Meeting; May 31-June 4, 2024; Chicago, IL; Abstract 3088. 11. Fu Z, et al. *Signal Transduct Target Ther*. 2022;7(1):93. doi:10.1038/s41392-022-00947-7 12. Mahalingaiah PK, et al. *Pharmacol Ther*. 2019;200:110-125. doi:10.1016/j.pharmthera.2019.04.008 13. Baldini C, et al. Presented at: 2023 American Society of Clinical Oncology (ASCO) Annual Meeting; June 2-6, 2023; Chicago, IL; Abstract 498. 14. Duan X, et al. *Clin Cancer Res*. 2023;29(17):3395-3407. doi:10.1158/1078-0432.CCR-23-0609 15. Li Z, Krippendorff BF, et al. *MAbs*. 2016;8(1):113-119. doi:10.1080/19420862.2015.1111497 16. Thurber GM, et al. *J Theor Biol*. 2012;314:57-68. doi:10.1016/j.jtbi.2012.08.034