

YOUR FRONTIER TECHNOLOGY PLATFORM FOR **BIOCONJUGATES**

Conjugation and Payload-Linker
Technology Innovation

LEARN MORE

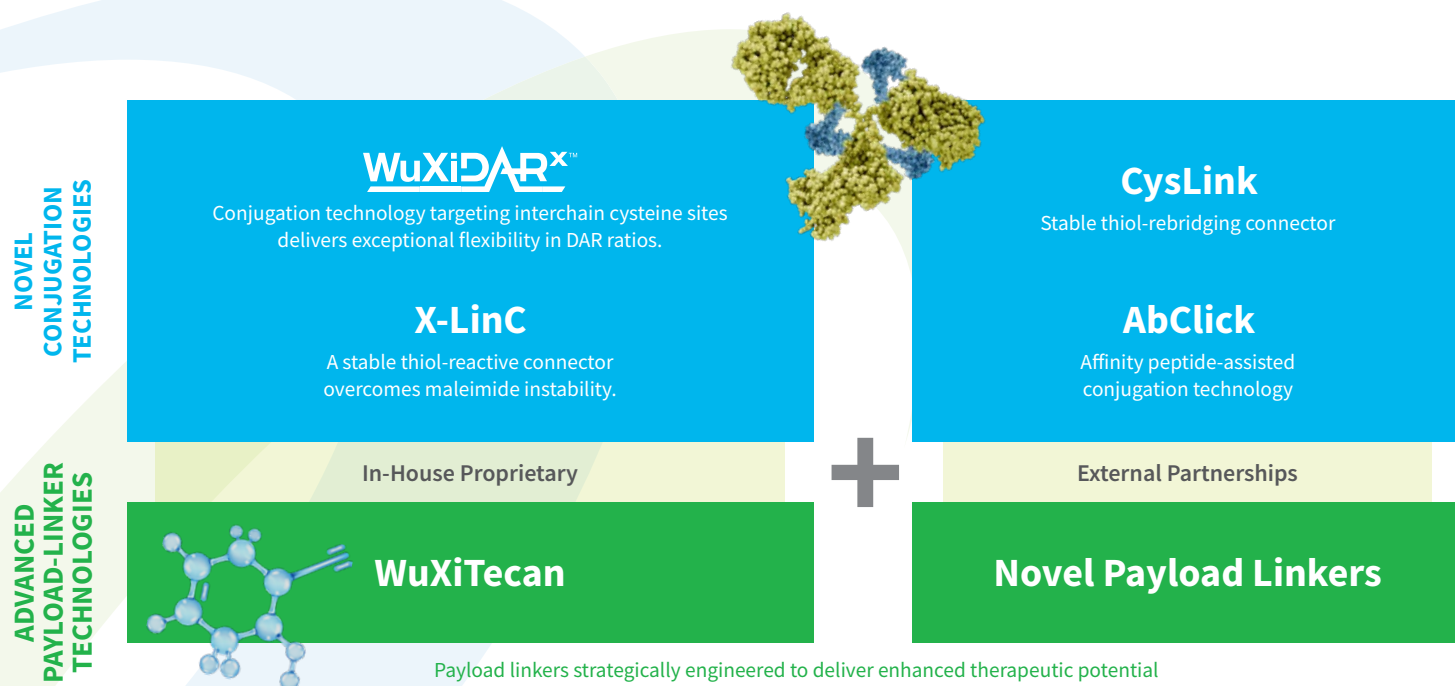


WuXi XDC TECHNOLOGY PLATFORM

Turn Transformative Potential into Reality

From achieving optimal conjugation stability to ensuring precise payload delivery and minimizing off-target toxicity, every step of bioconjugate development demands cutting-edge solutions. WuXi XDC possesses deep expertise and extensive experience in conjugation. Leveraging our proprietary technologies, we have built a robust foundation for advanced bioconjugate development.

Beyond our internal capabilities, we are actively forging and expanding partnerships with leading industry players. Through these collaborations, we continuously enrich and refine our technology platform, positioning it as the premier destination for comprehensive, customized bioconjugate development solutions.



**A Powerful Technology Platform
for ADCs and Diverse
Bioconjugate Development**



Diverse conjugation strategy and
payload linker options



Redefine bioconjugate development
efficiency and reliability

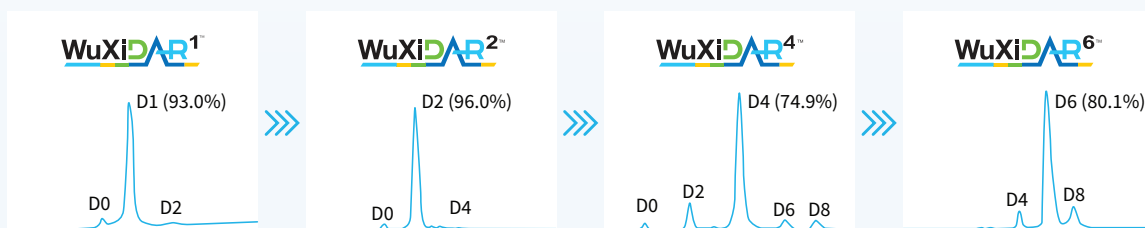
Versatile Drug-to-Antibody Ratio Options with

WuXiDAR^x

Proprietary Conjugation Technology

WuXiDARx, our proprietary conjugation technology targeting the clinically validated interchain cysteine sites, delivers exceptional flexibility in drug-to-antibody ratio (DAR) and demonstrates high homogeneity. It is compatible with native IgG1 antibodies and a wide range of common payload linker and significantly simplifies the CMC process. The technology delivers significant value across the development continuum: When screening antibody and payload-linker combinations during discovery, it streamlines ADC engineering and facilitates optimal DAR identification. At the CMC stage, it accelerates development, mitigates risks, and reduces large-scale manufacturing costs.

Features and Advantages



Flexible DAR	Highly Homogenous ADC	Compatible with Native mAbs	Meeting Clients' Diversified Needs	Simple CMC and Cost Savings
<ul style="list-style-type: none"> WuXiDAR1 WuXiDAR2 WuXiDAR4 WuXiDAR6 	<ul style="list-style-type: none"> ≥ 85% (DAR1, DAR2) or ≥ 65% (DAR4, DAR6) a single conjugated species without column purification ≥ 95% with column purification 	<ul style="list-style-type: none"> No antibody engineering modification needed 	<ul style="list-style-type: none"> Compatible with common payload-linkers: MMAE, MMAF, DXD, PBD No connector modification needed 	<ul style="list-style-type: none"> Simple conjugation process Comparable COGs with conventional Cys random conjugation

* WuXiDARx was developed with BioReinno's MCLICK-DAR1-A1, MCLICK-DAR2-A1, and MCLICK-DAR6-A1 technologies.

Enable Versatility across Diversified Bioconjugates beyond Conventional ADCs

Dual-Payload ADC	BsADC	AOC	APC
<p>4+4 format 4+2 format 6+2 format</p> <p>WuXiDARx technology can be used to generate dual-payload ADCs using only the interchain cysteine sites.</p>	<p>WuXiBody + WuXiDARx</p>	<p>Antibody oligonucleotide conjugates using WuXiDAR1</p>	<p>AAntibody peptide conjugates using WuXiDAR2</p>

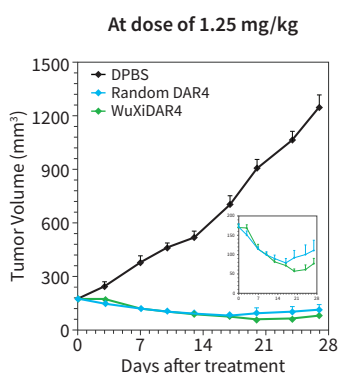
Robust and Validated Conjugation Technology

WuXiDAR⁴

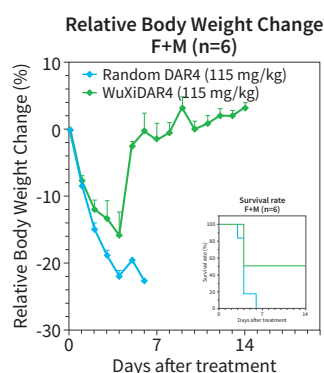
ADCs produced from WuXiDAR4 demonstrated comparable cytotoxicity to ADCs produced by conventional random conjugation methods, but demonstrate better pharmacokinetics (PK) profiles and tolerability. So far, 7 ADC molecules that WuXiDAR4 generated have entered clinical trials.

Improved Efficacy and Tolerability

WuXiDAR4 technology features an enhanced high-homogeneity DAR 4 profile. ADCs engineered with the technology demonstrate superior PK, *in vivo* efficacy, and safety profile relative to ADCs achieving DAR 4 via conventional random cysteine conjugation.

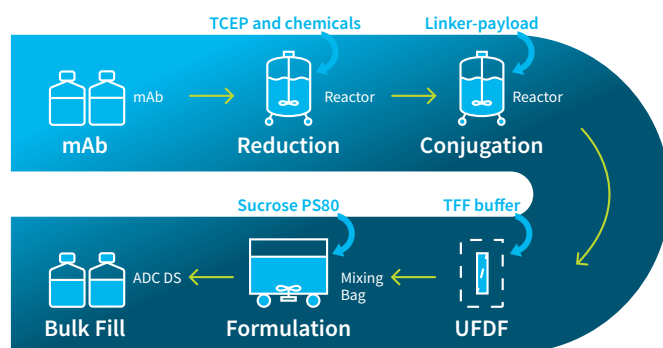


WuXiDAR4-ADC shows stronger *in vivo* efficacy (N87CDX)



WuXiDAR4-ADC shows better tolerability (C57BL/6 mice, single dose)

Simple and Robust CMC



10+
CMC projects

7
Clinical-stage
ADC molecules

2+ kg
GMP batches
prepared

Ideal for Your Antibody-Oligonucleotide Conjugates



High Purity
Up to ~90% D1 species
before column
purification

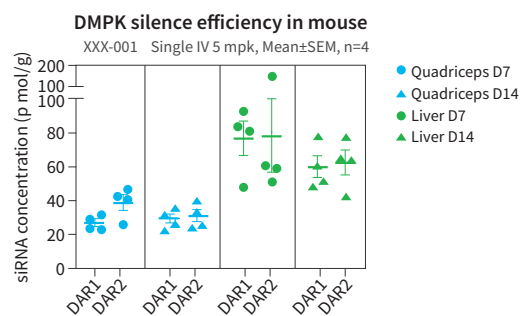
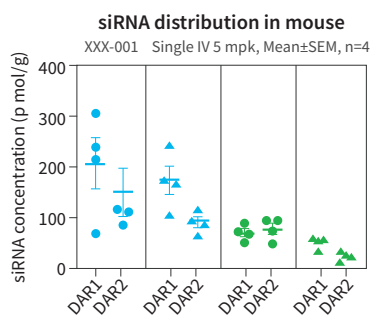
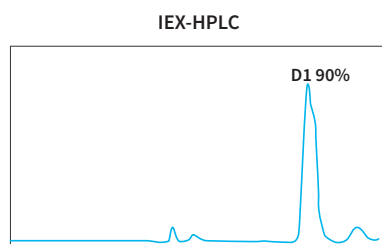


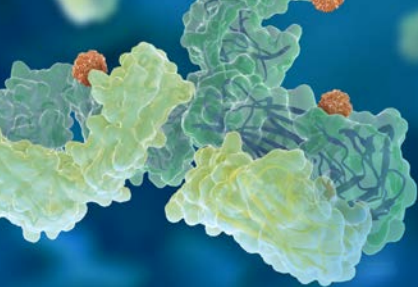
Simple Process
Chemical conjugation, comparable with
symmetrical antibody, no sequence engineering
or enzymatic reaction required



Good Efficacy
Higher siRNA in target tissue
and stronger DMPK silence
efficiency in mouse

WuXiDAR¹





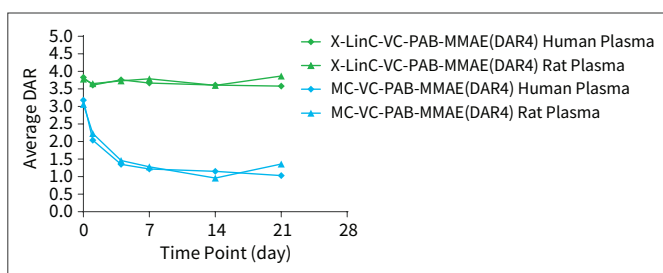
X-LinC

Novel Thiol Reactive Connector

The commonly employed maleimide-thiol conjugation in ADCs is susceptible to retro-Michael addition—a reversible reaction that leads to compromised efficacy and off-target toxicity. WuXi XDC addresses this inherent instability through our proprietary X-LinC connector technology. This innovative solution has demonstrated superior plasma stability, high conjugation efficiency, and seamless compatibility with WuXiDARx.

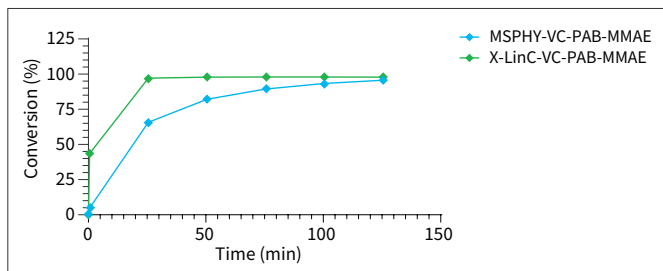
Superior stability

Maintain ADC stability with minimal payload release in circulation.

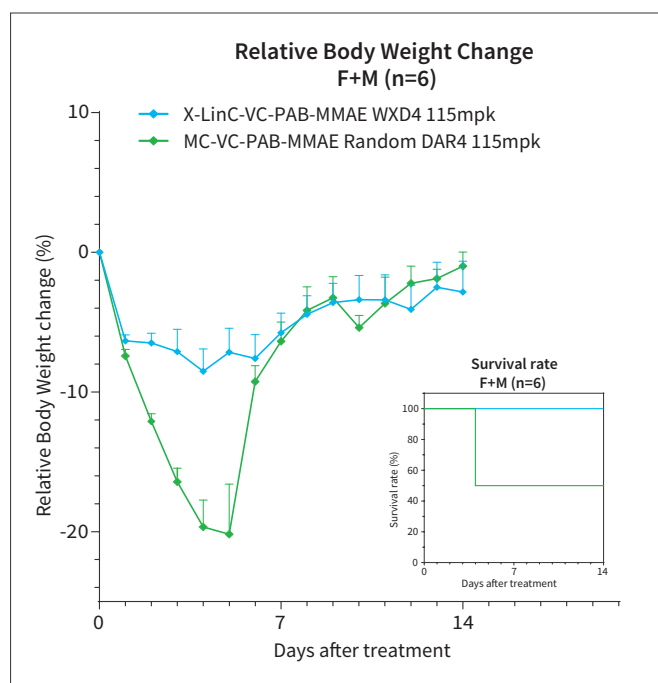


Fast reaction kinetics

Enable fast and efficient conjugation.



Better toxicity tolerance



CysLink

Thiol-Rebridging Connector

Advantages

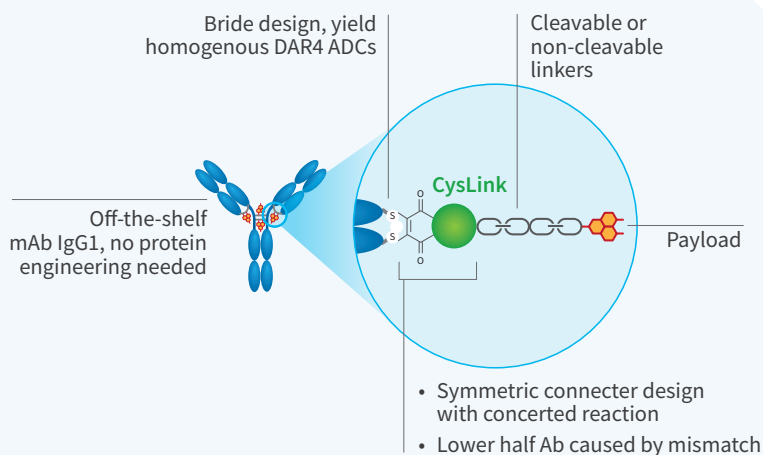
Superior stability:

Forms robust conjugation, ensuring ADC stability and controlled drug release while minimizing toxicity.

Fully compatible with WuXiDARx

Reduced half antibody ratio:

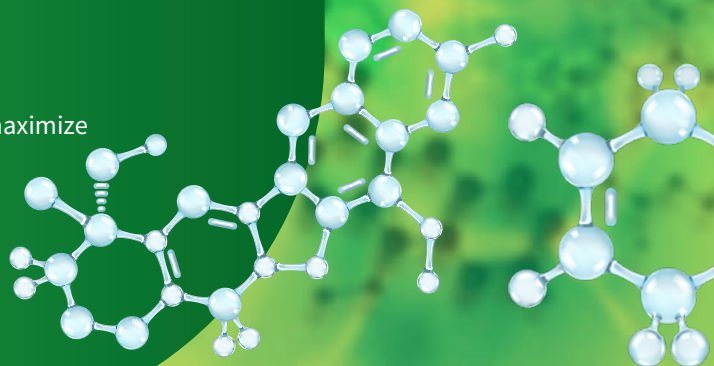
Enhances homogeneity, optimizing conjugation efficiency for more effective therapies.



Advanced Payload-Linker Technologies

Our advanced payload-linker technologies are strategically engineered to maximize therapeutic potential through 3 core innovations:

- Tunable payload potency balancing efficacy and safety
- Novel cleavage mechanisms enabling controlled drug release
- Hydrophilicity-optimized linkers engineered to enhance safety



A diverse portfolio of advanced payload-linkers engineered for safety, efficacy, and flexibility across development stages

	Design Strategy	Connector	Release Mechanism	Payload	Stage
WuXiTecan-1 Source: WuXi XDC	Novel TOPi payload with GGFG linker	Mal	Peptidase (Lysosomal)	Novel payload	Preclinical
	Efficacy	<ul style="list-style-type: none">• Payload efficacy is comparable to DXd• WuXiTecan-1 ADC efficacy is comparable to DS-8201 in CDX model			
	Safety	<ul style="list-style-type: none">• WuXiTecan-1 ADC is better tolerated than DS-8201 in acute mice toxicity study• WuXiTecan-1 ADC is well tolerated in cyno pre-tox at 55 mpk Q3W*3			

	Design Strategy and Advantages	Connector	Release Mechanism	Payload	Stage
WuXiTecan-2 Source: WuXi XDC	Exatecan with novel hydrophilic linker	Mal	Peptidase (Lysosomal)	Exatecan	Preclinical
	Hydrophilicity	<ul style="list-style-type: none">• Better hydrophilicity compared to benchmark*			
	Efficacy	<ul style="list-style-type: none">• WuXiTecan-2 ADC shows similar or better efficacy compared to benchmarks* in the CDX model			
	Safety	<ul style="list-style-type: none">• WuXiTecan-2 ADC is well tolerated in acute mice toxicity study compared to benchmark*• WuXiTecan-2 ADC is well tolerated in cyno pre-tox at 45 mpk Q3W*3			

*Benchmark: Exatecan with hydrophilic linkers that showed promising results in clinical trials

	Design Strategy and Advantages	Connector	Release Mechanism	Payload	Stage
T-moiety-Exatecan Source: Partner	Exatecan with novel hydrophilic linker	Mal	Peptidase (Lysosomal)	Exatecan	Phase I
OHPAS-Nexatecan Source: Partner	Novel payload and self-immolative adaptor	Mal/IAA	Glucuronidase (Lysosomal)	Nexatecan	CMC
UniLinker-Exatecan Source: Partner	Exatecan with novel TME release linker	Mal	Peptidase (Lysosomal and TME)	Exatecan	CMC

About WuXi XDC

WuXi XDC is a leading global CRDMO focused on antibody drug conjugates (ADC) and the broader bioconjugate market. It provides end-to-end contract research, development and manufacturing services for bioconjugates, including ADCs. Its services cover antibody and other bioconjugate intermediates, chemical payloads and linkers, as well as bioconjugate drug substances and drug products.

Your Single-Source for Bioconjugation Development and cGMP Manufacturing
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