ADC Therapeutics Pipeline and Expanded Platforms



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Exatecan

Platform

Introduction to ADC Therapeutics and Advancing Next-Generation ADCs in Hematologic Cancers and Solid Tumors









OUR COMPANY

ADC Therapeutics is a clinical-stage oncology biotechnology company leading the development and commercialization of next-generation antibody-drug conjugates (ADCs) with highly potent and targeted pyrrolobenzodiazepine (PBD) dimer technology.

OUR MISSION

To confront cancer with the full potential of our science to bring unique, targeted therapies and hope to patients and their families.

OUR VISION

To transform what patients and their families can expect from cancer therapy.

OUR VALUES

Patients

Patients and their families are at the core of everything we do; they inspire our scientific creativity and innovation.

Character

We are open, honest, trustworthy, and respectful in our words and actions.

Urgency

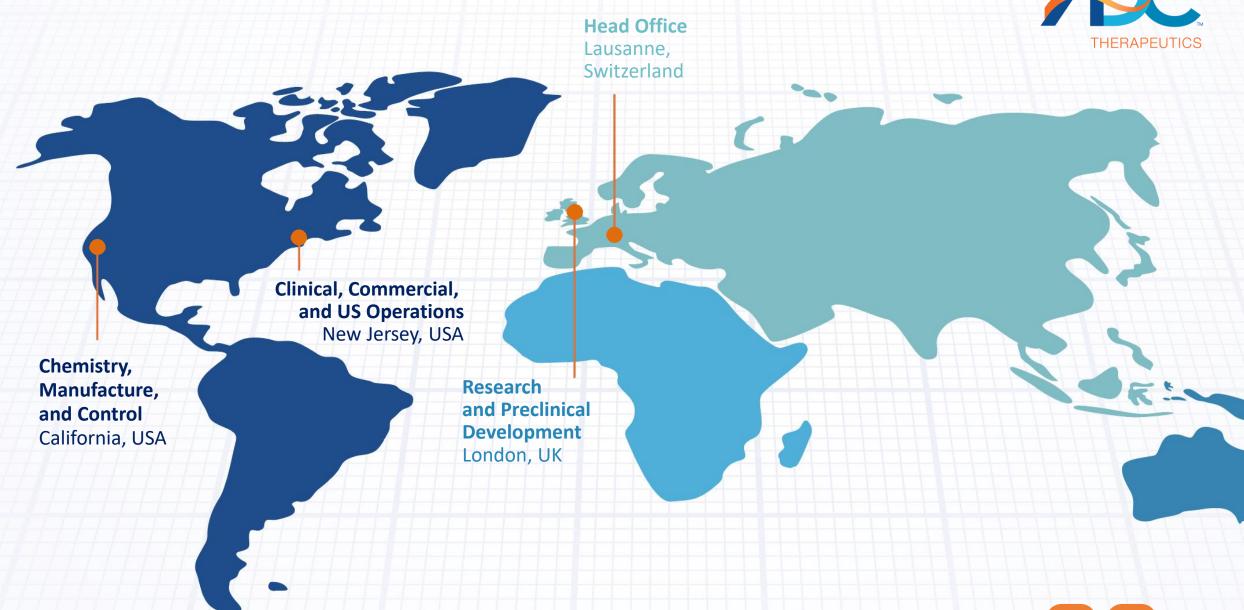
We operate with a sense of urgency in all that we do.

People

ADCT encourages individuals to continually learn and grow so that everyone can work at their full potential.



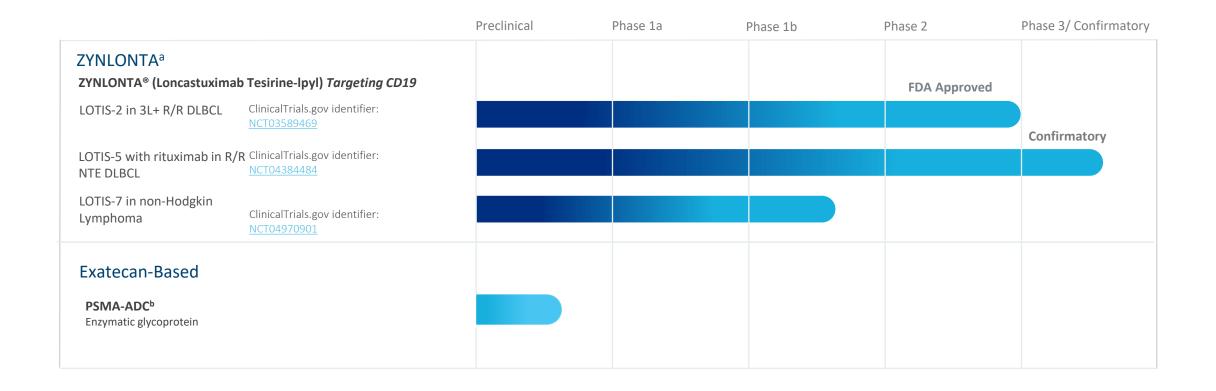




Platform



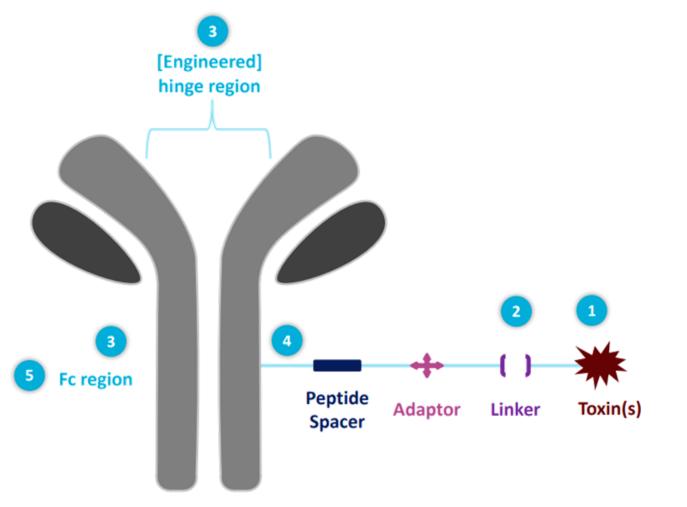
ADCT Pipeline







Developing New ADC Platforms





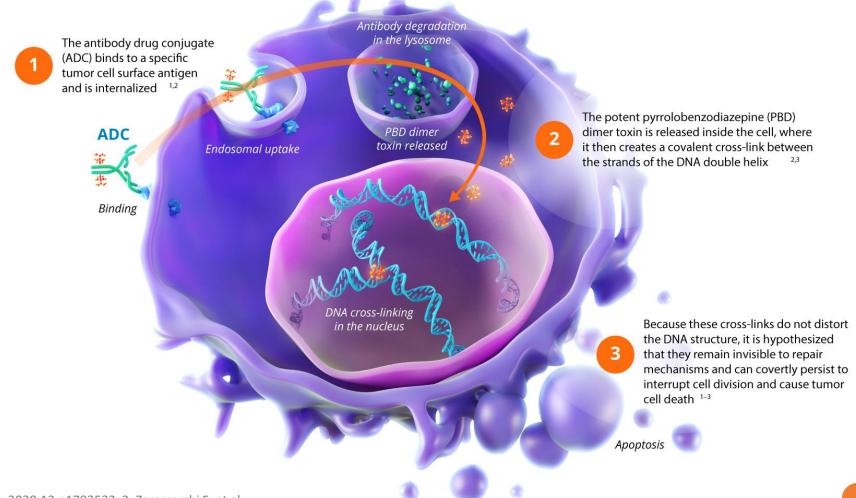
ADC Platform Optionality

1 Toxin	
Exatecan	DNA damaging agents
Immunomodulators	○ PBD
Oual Payloads	
2 Linker	
Cleavable	O Non-cleavable
Reducible	
3 Drug to Antibody Ratio	
OAR 2 / 4 / 6 / 8: [engineered] hinge region	OAR 2 / 4: Fc region
4 Conjugation chemistry	
 Amino acid modification 	Glycan-remodeling
○ Thiomab	Hinge cysteine-conjugation
5 Fc receptor silencing	
Yes	○ No



THERAPEUTICS

Mechanism of Action and Properties of PBD-based ADCs

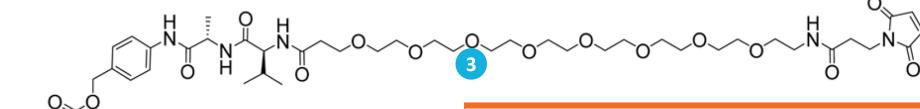






Next-Generation Technology Optimizes Linker and Payload Characteristics

 Tesirine, which comprises the PBD dimer SG3199 plus all linker components, was designed to combine potent, antitumor activity with enhanced physicochemical properties



HO 1 2 O N H

SG3249, Tesirine, Payload (drug-linker) clogD = 2.11

- Optimized site of linker attachment to the PBD dimer, offering a prodrug approach
- 5-carbon tether between PBD monomers offers flexibility and opportunity for binding with the minor groove within the DNA helix
- Long PEG spacer has **lower hydrophobicity**, contributing to low aggregation





Exatecan Platform

PSMA-ADC



Loncastuximab Tesirine (ADCT-402)

Hematology Franchise







Indication and Usage



Loncastuximab tesirine (Lonca) is indicated for the treatment of adult patients with relapsed or refractory large B-cell lymphoma after two or more lines of systemic therapy, including diffuse large B-cell lymphoma (DLBCL) not otherwise specified, DLBCL arising from low-grade lymphoma, and high-grade B-cell lymphoma.

This indication is approved under accelerated approval based on the overall response rate. Continued approval for this indication may be contingent upon the verification and description of the clinical benefit in a confirmatory trial(s).





Loncastuximab Tesirine (ADCT-402) Clinical Development





- Phase 1b trial of Lonca and Glofitamab in 2L+ DLBCL
- Trial is currently enrolling

OTIS-5

2L DLBCL
ASCT
ineligible

Phase 3 confirmatory trial in combination with rituximab

- Completed enrolment
- Intended to support a supplemental BLA in 2L R/R DLBCL patients who are not eligible for ASCT



- Pivotal Phase 2 monotherapy trial in 3L+ DLBCL, basis of FDA accelerated approval
- Supports broad use in the 3L+ DLBCL patient population

- 1. Zynlonta (loncastuximab tesirine-lpyl) prescribing information. Murray Hill, NJ; ADC Therapeutics; October 2022.
- 2. Caimi P, et al. Lancet Oncol. 2021;22(6):790-800. 3. https://www.adctherapeutics.com/our-pipeline/. Accessed May 6, 2024.
- 4. https://clinicaltrials.gov/ct2/show/NCT04970901. Accessed May 9, 2024.
- 5. https://clinicaltrials.gov/ct2/show/NCT04384484. Accessed May 9, 2024.
- 6. https://clinicaltrials.gov/ct2/show/NCT05660395. Accessed May 9, 2024.





LOTIS-5 Trial Rationale



Lonca in R/R DLBCL

 Lonca is indicated for the treatment of adult patients with relapsed or refractory large B-cell lymphoma, including DLBCL, after ≥2 lines of systemic therapy¹

Lonca combined with rituximab

- Preclinical data have demonstrated durable synergistic activity between Lonca and rituximab-induced cytotoxicity²
- Rituximab, an anti-CD20 monoclonal antibody, is part of standard frontline and subsequent DLBCL immunotherapy³







Phase 3 trial of Lonca in combination with rituximab^{1,2}



Nonrandomized Safety Run-in Target N = 20

Loncastuximab tesirine
0.15 mg/kg + rituximab 375 mg/m²
Q3W for 2 cycles

Loncastuximab tesirine
0.075 mg/kg + rituximab 375 mg/m²
Q3W for up to 6 additional cycles

Treatment Period

Lonca (0.15 mg/kg) + rituximab (375 mg/m²)
Q3W for 2 cycles
Lonca (0.075 mg/kg) + rituximab (375 mg/m²)
Q3W for up to 6 additional cycles

R-GemOx: rituximab 375 mg/m² + gemcitabine 1000 mg/m² + oxaliplatin 100 mg/m² Q2W for up to 8 cycles

Follow-Up Period

For both parts of the study, irrespective of disease status, patients will be followed for up to 4 years after EOT until withdrawal of consent, loss to follow-up, or death—whichever occurs first

PRIMARY ENDPOINTS

PFS^a by independent central review

SECONDARY ENDPOINTS

OS, ORR, CRR, DOR

Randomized 1:1 Target N=330

- Frequency and severity of AEs and laboratory parameters
- PK parameters, for Lonca total Ab,
 PBD-conjugated Ab, and free SG3199
- ADA titers to Lonca
- Changes in PROs from baseline

KEY INCLUSION/EXCLUSION CRITERIA

 Adults with a pathologic diagnosis of R/R DLBCL (including DLBCL transformed from indolent lymphoma) or HGBCL, with MYC and BCL2 and/or BCL6 rearrangements

End of Treatment

- R/R disease following ≥1 multi-agent systemic treatment regimen
- Measurable disease (2014 Lugano classification)
- Not a candidate for SCT based on performance status, advanced age, and/or significant medical comorbidities (as considered by the investigator)
- If patient had received previous CD19 directed therapy, biopsy proven CD19 expression required
- ECOG performance status of 0-2
- Excludes previous treatment with Lonca or R-GemOx

^aDefined as time between randomization and the first documentation of recurrence or progression, or death from any cause.

- 1. Kwiatek M, et al. Poster presented at: SOHO 2023. September 6-9, 2023. Houston, TX, USA.
- 2. https://clinicaltrials.gov/ct2/show/NCT04384484. Accessed May 6, 2024.







LOTIS-7 Trial Rationale



Lonca in R/R B-NHL

 Lonca is indicated for the treatment of adult patients with relapsed or refractory large B-cell lymphoma, including DLBCL, after ≥2 lines of systemic therapy¹

Lonca combined with glofitamab or mosunetuzumab

- Glofitamab and mosunetuzumab target different B-cell surface antigens (CD20) from Lonca (CD19) and leverage different mechanisms of action, with different safety profiles
- Combining agents with these complimentary mechanisms of action is hypothesized to have additive or possibly synergistic efficacy along with maintaining a manageable safety profile^{2,3}



^{1.} Zynlonta (loncastuximab tesirine-lpyl) prescribing information. Murray Hill, NJ; ADC Therapeutics; October 2022.

^{2.} Li Y, et al. Poster presented at: AACR 2024. April 5-10, 2024; San Diego, CA USA. 3. <a href="https://ir.adctherapeutics.com/press-releases/press-release-details/2024/ADC-Therapeutics-Announces-Updates-on-LOTIS-7-Clinical-Trial-Evaluating-ZYNLONTA-in-Combination-with-Glofitamab-or-Mosunetuzumab-in-Patients-with-RelapsedRefractory-B-cell-Non-Hodgkin-Lymphoma/default.aspx. Accessed May 9, 2024.



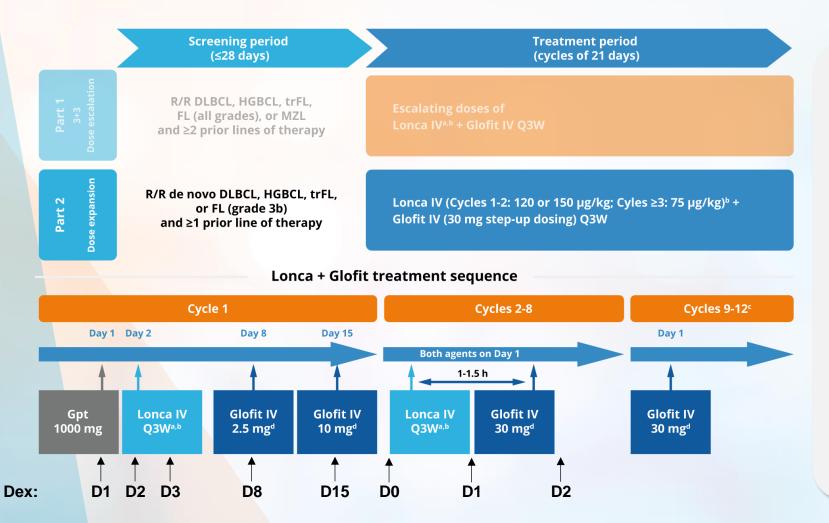
Exatecan Platform

ADCT-

402

PSMA-ADC

LOTIS-7 STUDY DESIGN & PATIENT POPULATION



dose of Glofit on Cycle 1, Day 8 has a 24-hour mandatory hospitalization; subsequent doses require hospitalization if grade ≥2 CRS occurs.

Study population

- Patients with 3L+ R/R B-NHL (part 1) and 2L+ R/R LBCL (part 2)
- ECOG PS score of 0-2
- Prior autologous SCT (>100 days) or CAR-T therapy (>100 days) is allowed
- Measurable disease (per 2014 Lugano Classification)
- Excludes patients with clinically significant third-space fluid accumulation

Endpoints

- Primary: safety and tolerability; MTD and/or RDE
- Secondary: ORR, DOR, CR rate, PFS, RFS, and OS; PK and immunogenicity
- Exploratory: Glofit concentration in circulation; biomarker and PK correlations with clinical outcomes

2L+, second line or later; 3L+, third line or later; B-NHL, B-cell non-Hodgkin lymphoma; CAR-T, chimeric antigen receptor T cell; CR, complete response; CRS, cytokine release syndrome; D, day; Dex, dexamethasone; DLBCL, diffuse large B-cell lymphoma; DOR, duration of response; ECOG PS, Eastern Cooperative Oncology Group Performance Status; FL, follicular lymphoma; Glofit, glofitamab; Gpt, obinutuzumab; HGBCL, high-grade B-cell lymphoma; IV, intravenous; Lonca, loncastuximab tesirine; MTD, maximum tolerated dose; MZL, marginal zone lymphoma; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PK, pharmacokinetic; Q3W, every 3 weeks; RDE, recommended dose for expansion; RFS, relapsed or refractory; SCT, stem cell transplant; trFL, transformed follicular lymphoma.

aDose level 1, 90 μg/kg; dose level 2, 120 μg/kg; and dose level 3, 150 μg/kg. blf the starting dose of Lonca is 120 μg/kg, the dose will be reduced to 75 μg/kg for Cycles ≥3 per label. Participants may continue Glofit up to 12 cycles and may continue lonca up to 8 cyles (or until disease progression, unacceptable toxicity, or other discontinuation criteria, whichever occurs first). The follow-up period is for ≤2 years from the end of treatment, and the first



LOTIS-10 Trial Rationale

Lonca in R/R DLBCL

 Lonca is indicated for the treatment of adult patients with relapsed or refractory large B-cell lymphoma, including DLBCL, after ≥2 lines of systemic therapy¹

Lonca in patients with hepatic impairment

- Lonca has not been studied in patients with moderate or severe hepatic impairment¹
- Optimal dose adjustment of Lonca for patients with baseline moderate-to-severe hepatic impairment is not clear²









LOTIS-10 Trial Design

Phase 1b trial of Lonca in R/R DLBCL or HGBCL with moderate and severe hepatic impairment¹

of Treatment

End

Screening Period (≤28 d)

Treatment Period (cycles of 21 days)

Arm A: Normal Hepatic Function

Lonca 0.15 mg/kg IV Q3W x 2 cycles, then Lonca 0.075 mg/kg Q3W for subsequent cycles^a

Arm B: Moderate Hepatic Impairment
Lonca IV in standard 3+3 dose-escalation design:

Initial dose: Lonca 0.09 mg/kg IV Q3W x 2 cycles, then Lonca 0.045 mg/kg Q3W for subsequent cycles^a

Max dose: Lonca 0.15 mg/kg Q3W

Arm C: Severe Hepatic Impairment
Lonca IV in standard 3+3 dose-escalation design:

Initial dose: Lonca 0.09 mg/kg IV Q3W x 2 cycles, then Lonca 0.045 mg/kg Q3W for subsequent cycles^a

Max dose: Lonca 0.15 mg/kg Q3W

PRIMARY ENDPOINTS

 Number of participants with moderate or severe hepatic impairment who experience DLT

SECONDARY ENDPOINTS

- Efficacy: ORR, DOR, CR, PFS, RFS, OS
- Pharmacokinetics: T_{max}, C_{max}, CL, AI, AUC, T_{1/2}
- AE frequency, and AEs leading to dose delay, dose interruption, and dose reduction
- Clinically significant changes from baseline: safety lab values, vital signs, ECOG, and ECG
- Immunogenicity: ADA titers to Lonca

KEY INCLUSION/EXCLUSION CRITERIA

- Adult patients with pathologic diagnosis of R/R disease DLBCL (2016 WHO classification) who have received
 ≥1 systemic treatment regimens
- ECOG performance status of 0 to 2 for participants with normal hepatic function; ECOG 0 to 3 for participants with moderate or severe hepatic involvement
- Arm A Normal hepatic function: bilirubin and AST ≤ ULN
- Arm B Moderate hepatic impairment: bilirubin > 1.5 x to 3 x ULN (any AST)
- Arm C Severe hepatic impairment: bilirubin > 3 × ULN (any AST)
- Measurable disease as defined by the 2014 Lugano Classification
- Excludes patients with HIV, HBV, or HCV
- Excludes previous treatment with Lonca or stem cell transplant within 60 days prior to start of study drug

^aParticipants who have a toxicity meeting the criteria for dose reduction will have subsequent doses reduced by 50%. If the toxicity recurs, subsequent doses must be reduced by an additional 50%. A maximum of 2 dose reductions are allowed. Participants who have a toxicity meeting the criteria for dose reduction following Cycle 2 will receive the protocol-specified dose of 50% of initiate dose for Cycle 3, i.e., they will not have an additional dose reduction for Cycle 3.

https://clinicaltrials.gov/ct2/show/NCT05660395. Accessed May 6, 2024.

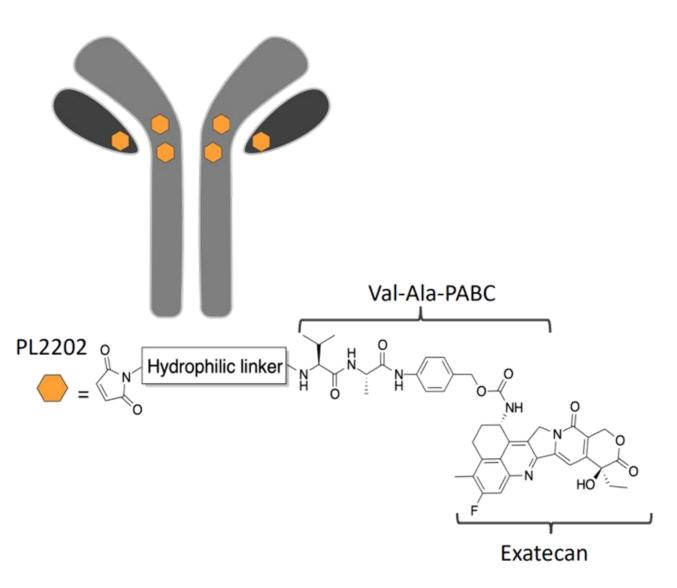




Exatecan

Platform





Key Advantages of the Exatecan Platform

- Superior therapeutic index vs Dxd and other approved Topo1 inhibitors²
 - Preclinical data in cynomolgus monkey supports strategy to dose ADC > 5 mg/kg in patients
 - Enables combinability with standard of care
- No signs of interstitial lung disease (ILD), a severe adverse event associated with Dxd²
- Increased bystander effect and potency vs Dxd²
- Not a PgP substrate; enhanced intracellular presence
- Novel hydrophilic, highly stable, protease cleavable linker
 - Enables traceless release of exatecan
 - Offsets the hydrophobicity of exatecan



Exa¹

PSMA-ADC



PSMA-ADC (PSMA-PL2202)

Solid Tumors Franchise







ADCT-241 Targeting PSMA



PSMA Target

PSMA:

- Is a type II membrane glycoprotein with enzymatic activity that facilitates neuronal glutamate synthesis in the brain and mediates folate absorption in the intestine¹
- Has a poorly defined physiological role in prostate cells¹
- May promote cancer progression by redirecting cell survival signaling to the pro-survival pathway mediated by PI3K-AKT signaling¹

Tumor Expression



Key Takeaways

- PSMA shows limited expression on normal prostate tissue and healthy tissue in general
- PSMA is a clinically validated target

PSMA-ADC is an investigational agent, and its safety and efficacy have not yet been established.



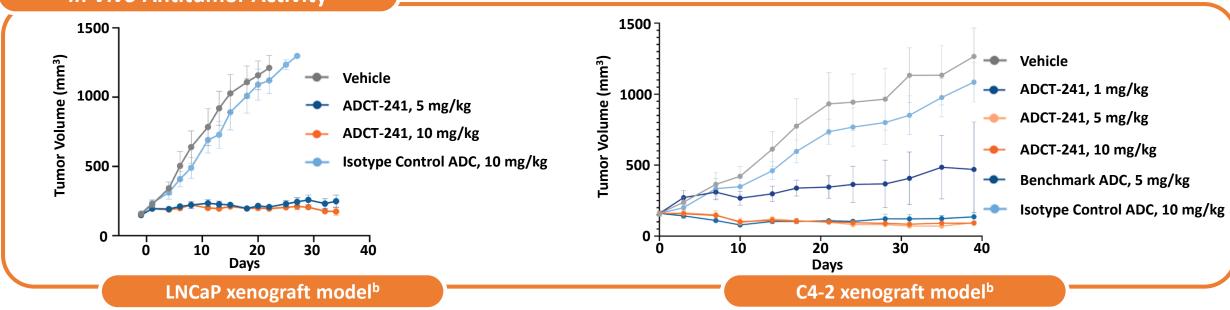


THERAPEUTICS

ADCT-241 Preclinical Studies

In vitro cytoxicity	LNCaP ^a	C4-2 ^a	CWRRv1 ^a	PC3 ^a
PSMA status	***	***	*	-
ADCT-241 EC ₅₀ (nM)	0.495	1.03	37.0	186
Isotype Control ADC EC ₅₀ (nM)	54.3	27.3	113.0	N/A

In Vivo Antitumor Activity



ADCT-241 was well tolerated in rats and cynomolgus monkeys and demonstrated potent and specific antitumor activity both *in vitro* and *in vivo*

