Proteins by Design®

XmAb® Antibody Therapeutics

Corporate Overview

March 2024

Forward-Looking Statements

Certain statements contained in this presentation, other than statements of historical fact, may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements regarding Xencor's development plans and timelines; potential regulatory actions; expected use of cash resources; the timing and results of clinical trials; the plans and objectives of management for future operations; and the potential markets for Xencor's product and development candidates. Forward-looking statements are based on the current expectations of management and upon what management believes to be reasonable assumptions based on information currently available to it, and involve numerous risks and uncertainties, many of which are beyond Xencor's control. These risks and uncertainties could cause future results, performance or achievements to differ significantly from the results, performance or achievements expressed or implied by such forward-looking statements. Such risks include, but are not limited to, potential delays in development timelines or negative preclinical or clinical trial results, reliance on third parties for development efforts and changes in the competitive landscape including changes in the standard of care, as well as other risks described in Xencor's filings with the Securities and Exchange Commission (SEC). Xencor expressly disclaims any duty, obligation or undertaking to update or revise any forward-looking statements contained herein to reflect any change in Xencor's expectations with regard thereto of any subsequent change in events, conditions or circumstances on which any such statements are based, except in accordance with applicable securities laws. For all forward-looking statements, we claim the protection of the safe harbor for forward looking statements contained in the Private Securities Litigation Reform Act of 1995.

Xencor: Engineering Antibody Immune Functions to Make Better Drugs

XmAb® Protein Engineering: small changes, big functional impacts

- XmAb Fc Domains augment native immune functions and/or control structure
- Preserves half-life, stability and production
- Over 1,500 issued patents and pending patents worldwide

Advancing XmAb bispecific antibody drug candidate portfolio

- 8 XmAb bispecific antibodies in Phase 1 or 2 clinical studies internally and with partners
- Multiple preclinical programs

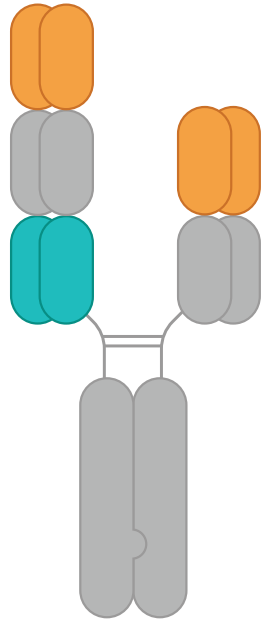
3 XmAb antibodies commercialized by partners

- Ultomiris® (Alexion) multiple indications approved worldwide
- Sotrovimab (Vir) was granted global authorizations for mild-to-moderate COVID-19
- Monjuvi® (Incyte) global approvals for relapsed or refractory DLBCL

Partnership portfolio leverages modular XmAb technology

- Multiple partnerships for technology licenses: little/no effort and greatly broadens scope

XmAb 2+1 Bispecific Antibody Format



XmAb Fc Domains

Johnson&Johnson Innovative Medicine
ALEXION AstraZeneca Rare Disease
Incyte
Genentech A Member of the Roche Group
AMGEN
GILEAD
astellas
aimmune THERAPEUTICS
VIR
xencor

Layers of Value Creation Built on XmAb® Technology

Future waves of pipeline growth are built upon technological competitive advantage

Innovations Using Bispecific Fc Domain

Novel tumor targets (e.g., ENPP3)
T cell engager mechanisms (CD3 & CD28)
Multivalent antibody formats (XmAb 2+1)

Broad internal clinical-stage pipeline of 3 bispecific antibodies with 1 additional bispecific antibody dosing in 1H 2024

Clinical Execution & Advancement

Encouraging data from **vudalimab** support mid-stage development in prostate cancer and non-small cell lung cancer

XmAb® technology platforms have enabled a strong financial foundation and provided technical validation

3 products marketed by partners

More than 15 partnerships for XmAb technology

$697.4mm in cash & equivalents*

** As of 12/31/2023. Includes marketable debt. Updated 02/27/2024.*

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Efficient XmAb® Platform Builds Differentiated Pipeline & Early Clinical Testing Rigorously Vets Lead Programs

XmAb technology

Continually grows drug pipeline

Always renewing edge

Xtend →
bispecifics →
cytokines, 2+1, CD28

Early clinical testing

Clinical data drives decisions

- Advance internally to late phase and plan to launch
- Partner if necessary: risk/reward, competitive density, resource constraints
- Stop if warranted

Registration-enabling

Invest in trials for differentiated product profile

Build organization for launch

Guide earlier pipeline to align with therapeutic area

Select a program for late-phase commit, if compelling data and competitive landscape

Broad platform enables strategy with renewable pipeline and cash flows

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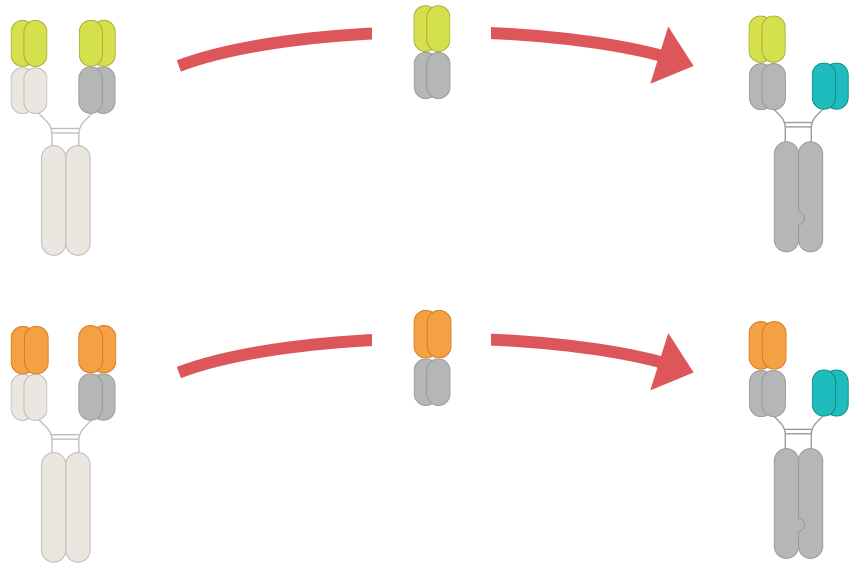
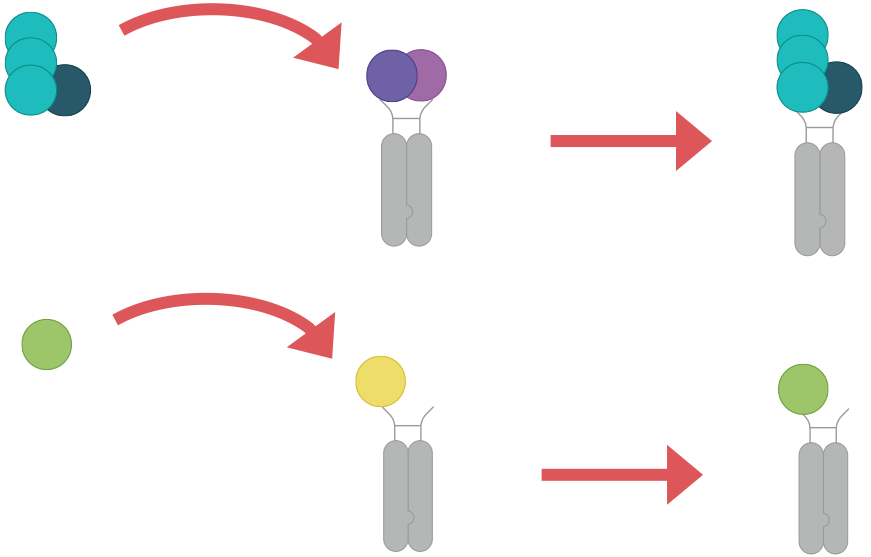
Plug-and-play Fc Domain Enables Rapid Prototyping of Target Combinations and Pipeline Generation

XmAb® Bispecific Antibodies



XmAb® Cytokines



XmAb® Bispecific Fc Domains Retain Beneficial Antibody Properties

- Highly stable, modular scaffold
- Antibody-like half-life *in vivo*
- Compatible with standard manufacturing and development processes

Enable Multiple Classes of New Biologics

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Pipeline Focus on T-Cell Engagers and Vudalimab

XmAb technology enables selective target engagement and increases addressable target space

Program (Targets/Design)	Fc Domain	Indications	Preclinical	Phase 1	Phase 2	Phase 3	Commercial Rights
T Cell Selective, Dual Checkpoint Inhibitor							
Vudalimab PD-1 x CTLA-4	Bispecific Xtend	1L NSCLC mCRPC	+ chemotherapy +/- chemotherapy combination				xencor
T Cell Engagers (CD3 & CD28)							
XmAb819 ENPP3 x CD3 (2+1)	Bispecific	Renal cell carcinoma					xencor
XmAb808 B7-H3 x CD28 (2+1)	Bispecific Xtend	Prostate cancer, Oncology	+ pembrolizumab				xencor
XmAb541 CLDN6 x CD3 (2+1)	Bispecific Xtend	Ovarian cancer, Oncology					xencor
Engineered Cytokines							
XmAb662 IL12-Fc	Bispecific Xtend	Oncology					xencor
XmAb564 IL2-Fc	Bispecific Xtend	Autoimmune					xencor

Key: Solid tumors | Opportunistic

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XmAb® Technologies Create Numerous Differentiated Antibodies for Technology Partners

Technology licensing expands pipeline with very little opportunity cost

Selected Programs	Fc Domain	Indications	Preclinical	Phase 1	Phase 2	Phase 3	Marketed	Commercial Rights
Ultomiris®	Xtend™	PNH, aHUS, gMG, NMOSD						Alexion, AstraZeneca Rare Disease
Monjuvi®	Cytotoxic	DLBCL						Incyte
Xevudy®	Xtend	COVID-19				NOT CURRENTLY AUTHORIZED IN U.S.		VIR
Obexelimab	Immune Inhibitor	IgG4-RD, wAIHA						Zenas BioPharma
Tobevibart (VIR-3434)	Cytotoxic Xtend	Hepatitis B Hepatitis D						VIR
Xaluritamig (AMG 509) STEAP1 x **CD3**	2+1 Bispecific	Prostate cancer						Amgen
Efbalropendekin alfa (XmAb306) IL15/IL15Rα-Fc	Bispecific Xtend	r/r multiple myeloma + daratumumab						Genentech, A Member of the Roche Group [1]
		r/r multiple myeloma + cevostamab						
		Oncology + atezolizumab						
Plamotamab CD20 x **CD3**	Bispecific	B-cell malignancies						Johnson&Johnson Innovative Medicine [2]
ASP2138 CLDN18.2 x **CD3**	2+1 Bispecific	Oncology						Astellas
JNJ-9401 PSMA x **CD28**	Bispecific	Prostate cancer						Johnson&Johnson Innovative Medicine
JNJ-1493 CD20 x **CD28**	Bispecific	Heme-Onc						Johnson&Johnson Innovative Medicine

[1] Co-development with Genentech, through May 2024
[2] Co-development with J&J Innovative Medicine

Key: **XmAb Bispecific** | **XmAb Tech (Non-BsAb)**

Registered trademarks: Ultomiris® (Alexion Pharmaceuticals, Inc.), Monjuvi® (MorphoSys AG).

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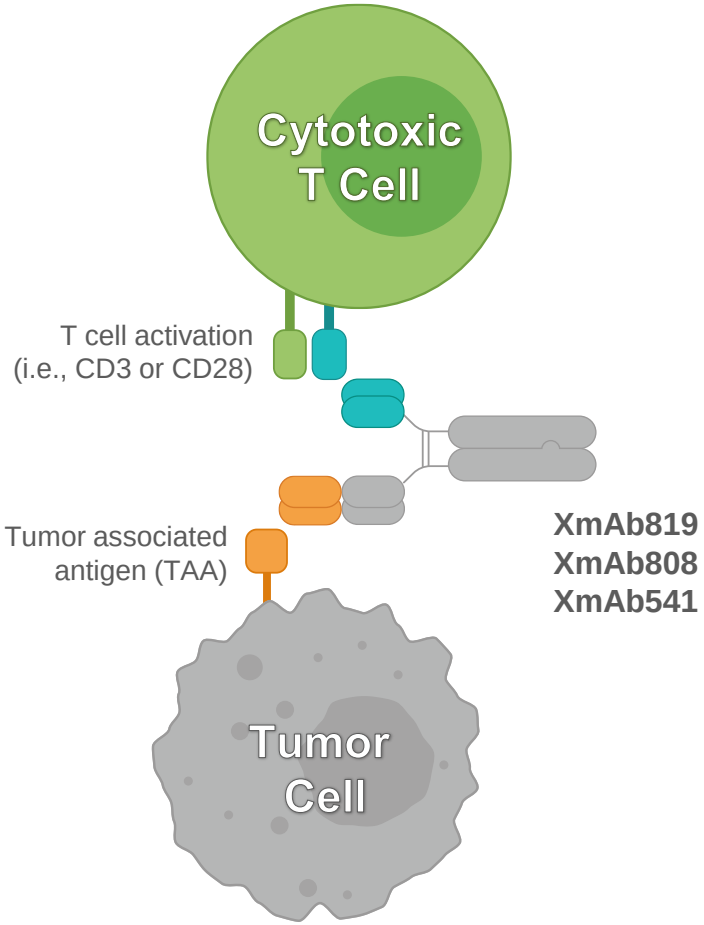
XmAb® Bispecific Fc Domain

Enabling New Classes of Biologics and Therapeutic Mechanisms of Action

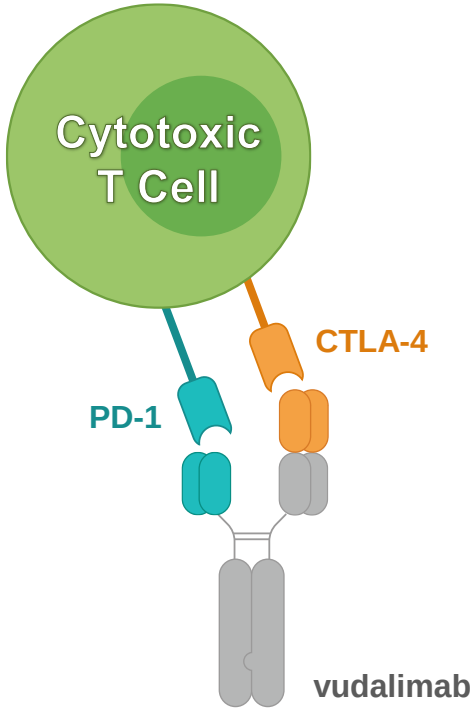
Distinct and Novel Mechanisms-of-Action Enabled By Xencor's XmAb® Bispecific Fc Domain

CD3 and CD28 T Cell Engagers



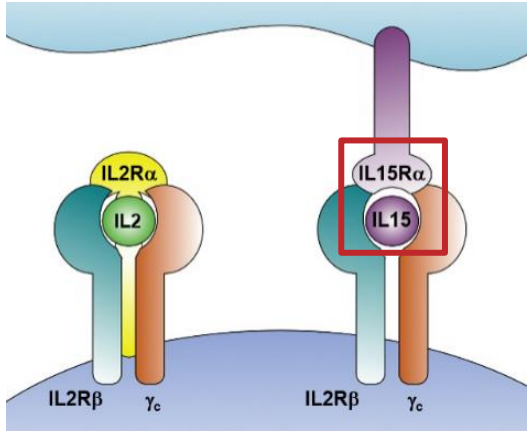
XmAb819
XmAb808
XmAb541

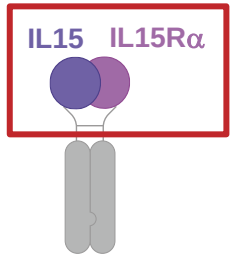
T Cell Selective Dual Checkpoint Inhibition



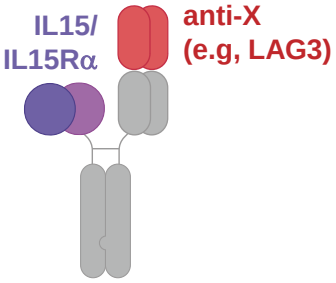
vudalimab

Engineered Cytokine-Fc Fusions





Efbalropendekin alfa (XmAb306)



Targeted Cytokines

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XmAb® Bispecific T Cell Engagers

*XmAb **2+1** Bispecific Antibody Format*

XmAb819 (ENPP3 x CD3)

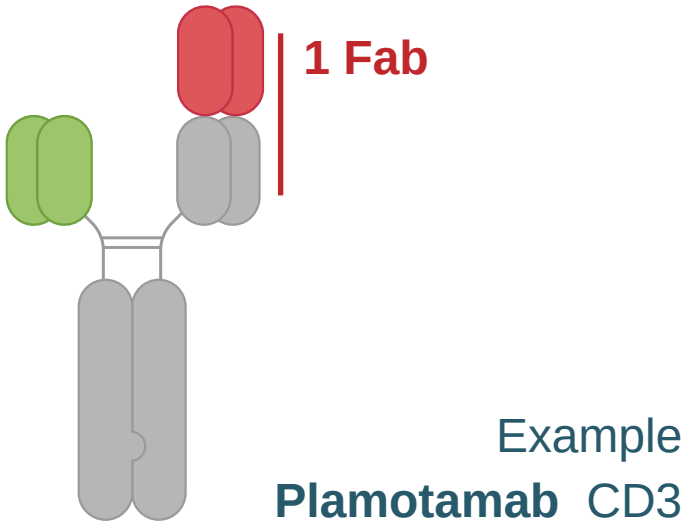
XmAb541 (CLDN6 x CD3)

XmAb808 (B7-H3 x CD28)

XmAb® T Cell Engagers Use Multiple Formats and Affinity Designs to Customize for Each Tumor Target

XmAb® 1+1

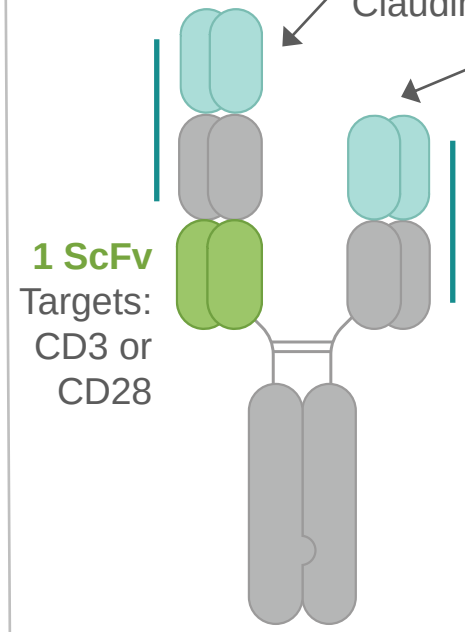
Targets: tumor antigen (e.g., CD20, CD38)



Example
Plamotamab CD3

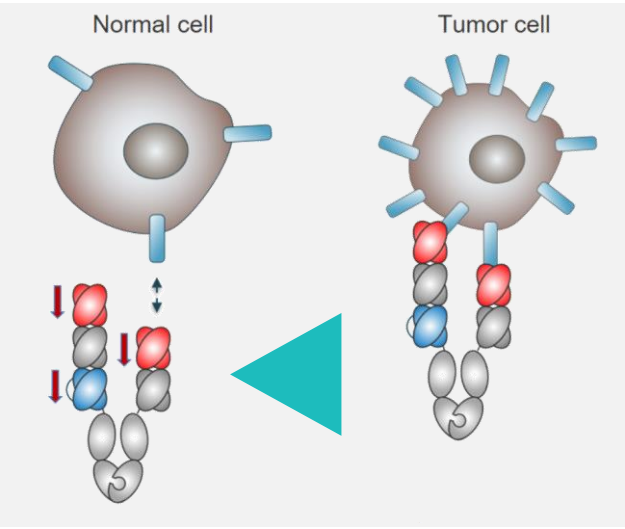
XmAb® 2+1

Targets: tumor antigen (e.g., ENPP3, STEAP1, Claudin 18.2, B7-H3)



Examples
Xaluritamig CD3
ASP2138 CD3
XmAb819 CD3
XmAb541 CD3
XmAb808 CD28

Tuned 2+1 Format = Selective Reactivity



CD3 affinity tuned for reduction of cytokine release syndrome and off-tumor cell killing

Tumor antigen binding affinity tuned for tumor expression density and to match format

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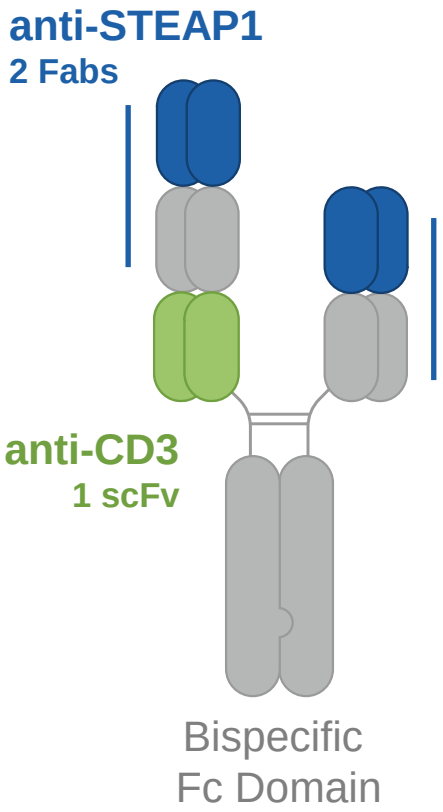
XmAb® 2+1 T-cell Engager Clinical Experience: Xaluritamig (AMG 509; STEAP1 x CD3)

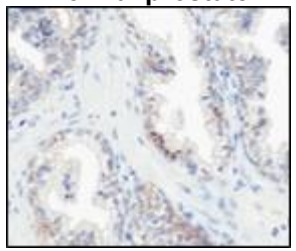
XmAb 2+1 Design



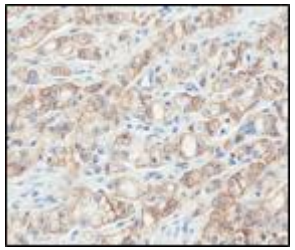
Amgen's Phase 1 Study of Xaluritamig in mCRPC; Interim Results at ESMO 2023

- First TCE to target STEAP1, a challenging membrane target with limited extracellular exposure
- Phase 1 expansion & optimization ongoing; Amgen plans to initiate additional studies in earlier treatment lines
- Safety profile clinically manageable with generally low-grade CRS, primarily in Cycle 1 of treatment

Normal prostate

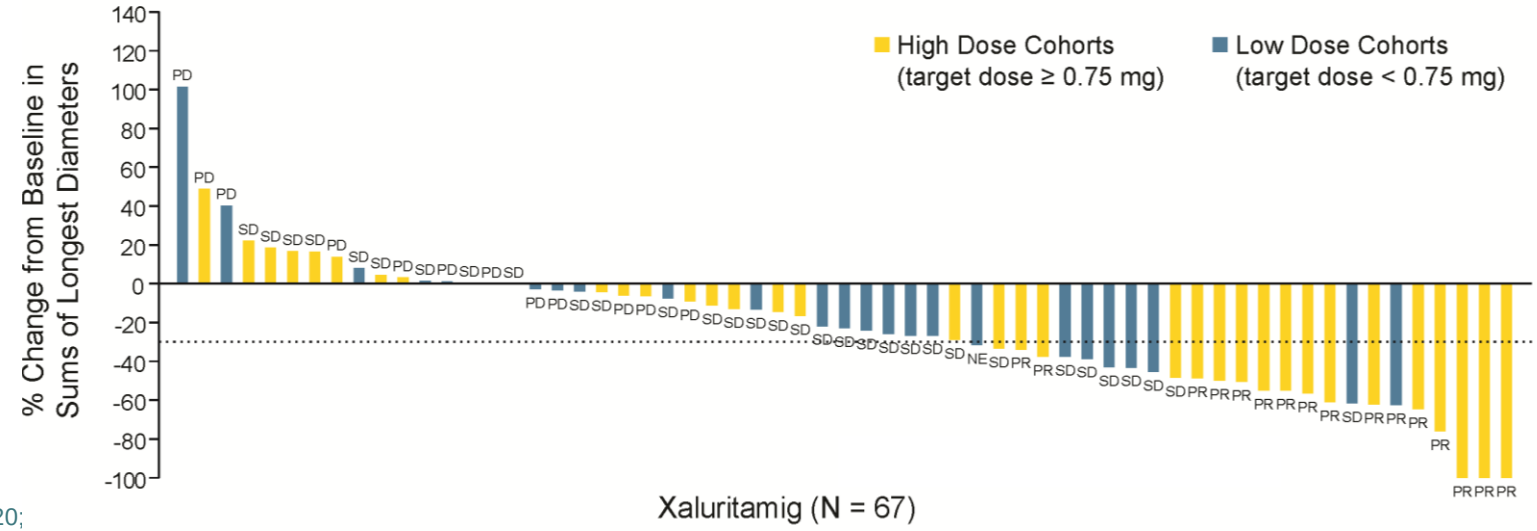


STEAP1 IHC: mCRPC



Nolan-Stevaux O, Cancer Res 2020; 80(16 Suppl):Abstract nr DDT02-03

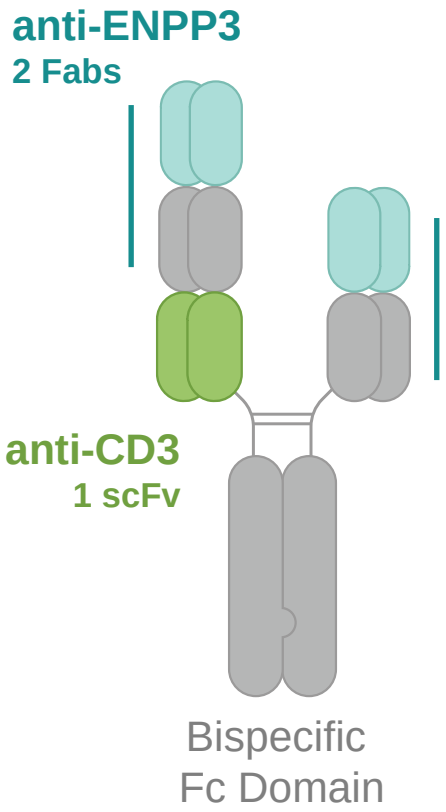
- **41% ORR in high dose cohorts**; 24% total (RECIST 1.1)
- Preliminary durability encouraging but early: mDOR 9.2 months (n=16, 10/16 still in response)



Kelly, et al. ESMO 2023.

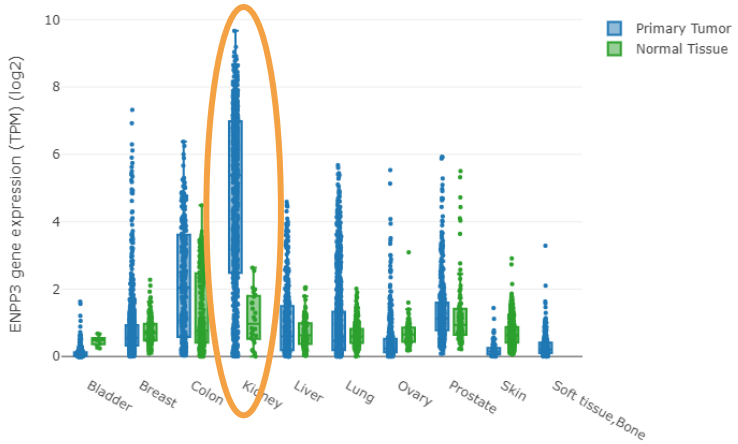
XmAb®819: CD3 T-cell Engager for Renal Cell Carcinoma in Phase 1

XmAb 2+1 Design

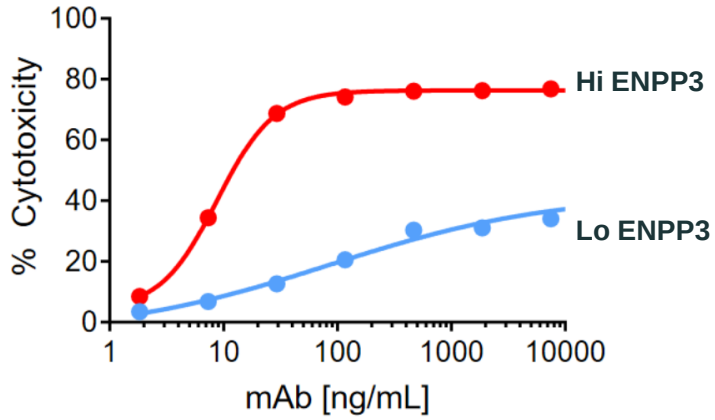


XmAb819 (ENPP3 x CD3)

ENPP3: high RCC; low healthy tissues



Selective T cell directed cytotoxicity



Phase 1 Dose Escalation Study

- Relapsed/refractory clear cell RCC (ccRCC)
  - Nearly uniformly high ENPP3 expression
- Dose escalation ongoing
- Administration: IV and subcutaneous cohorts dosing weekly, with priming and step-up doses
- Following determination of RP2D, expansion cohorts planned in ccRCC and other histologies with high ENPP3 expression
- Companion diagnostic under development for potential patient selection in other histologies

NCT05433142

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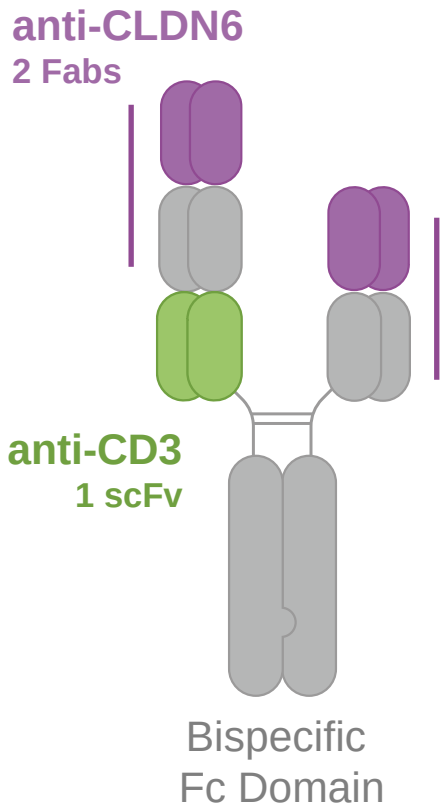
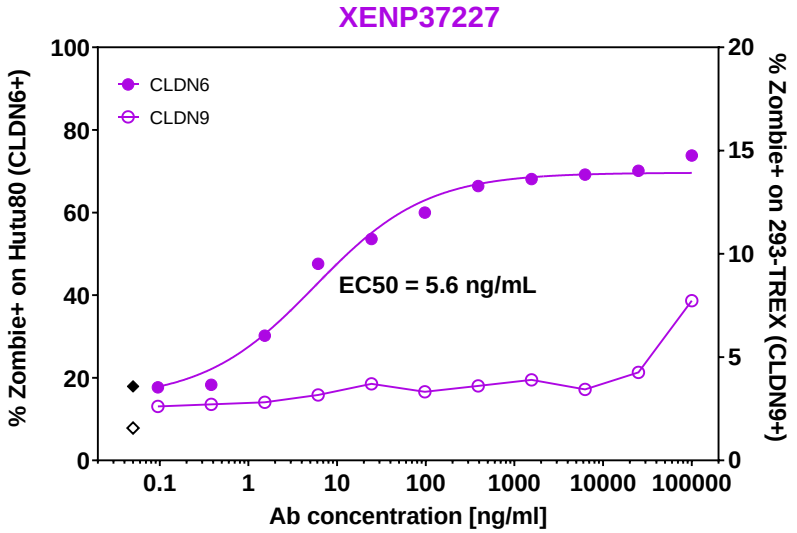
XmAb®541: CD3 T-cell Engager for Ovarian Cancer & Solid Tumors

XmAb 2+1 Design



XmAb541 (CLDN6 x CD3)

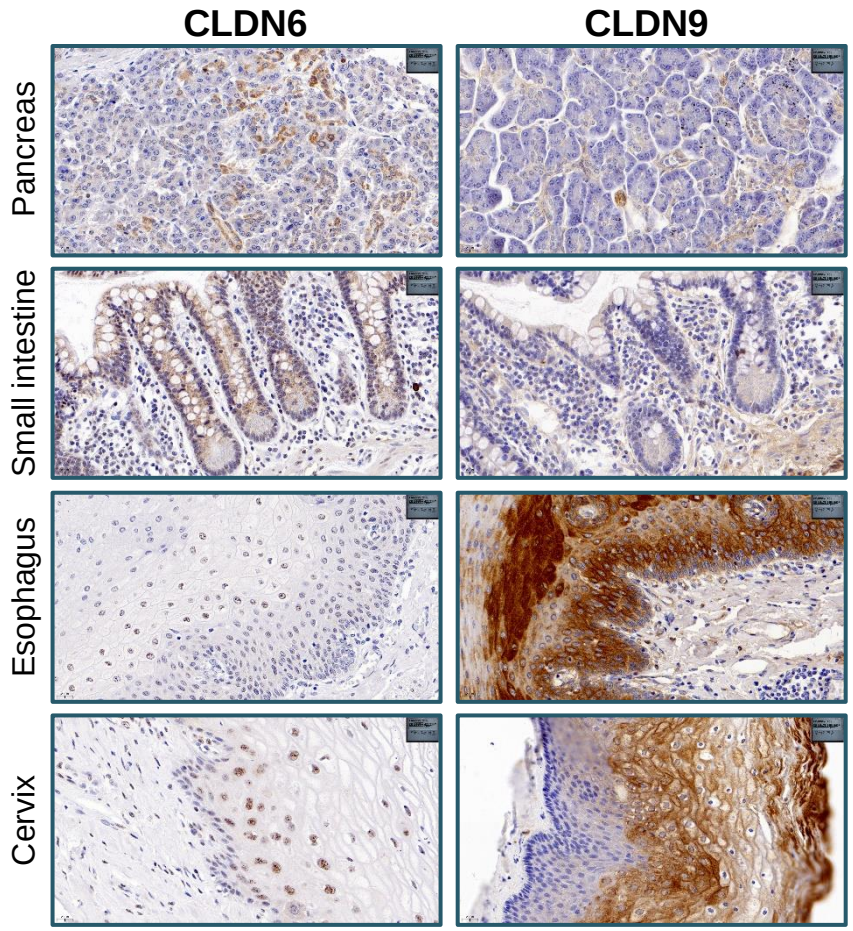
CLDN6 selective over CLDN9



- Differential expression in cancerous tissue presents CLDN6 as an intriguing target
- CLDN family members, which are small membrane proteins, have high sequence identity, complicating antibody design
- XmAb541 engineered for CLDN6 selectivity over similar CLDN9, CLDN3 and CLDN4
- **Clinical status: IND open; planned dosing 1H24**

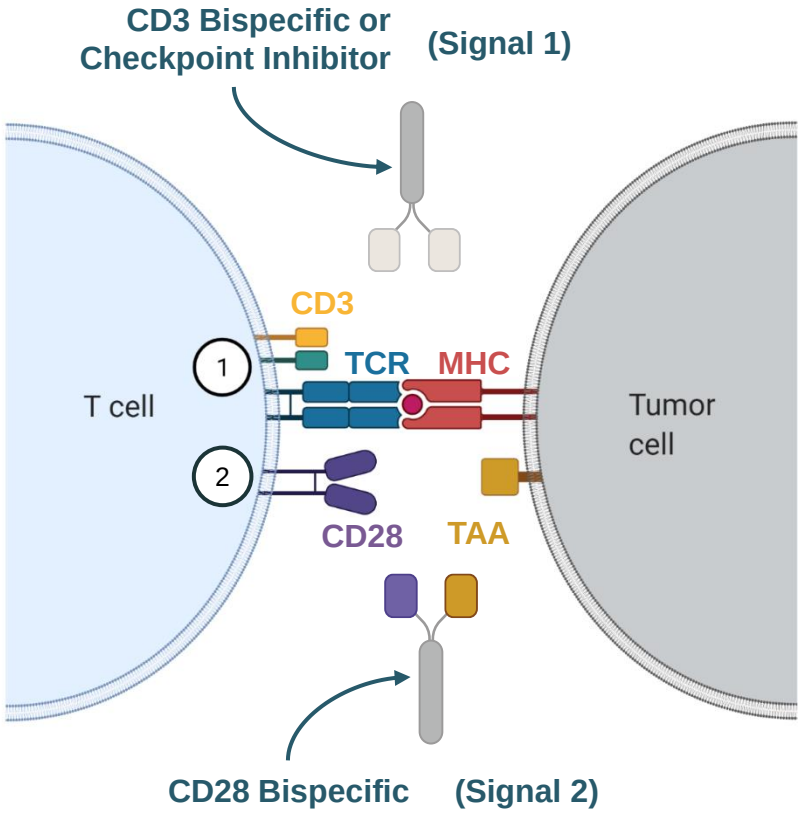
CLDN6 Avoids Normal Tissue

FDA999w normal tissue staining



CD28 Bispecific Antibodies Provide a Boost to T Cell Activation

CD28 provides "Signal 2" activation



XmAb® CD28 T cell engagers feature low affinity, monovalent binding

- Avoid historic CD28 safety concerns (superagonism)
- Well behaved: stable, silent FcγR interactions, with Xtend™ Fc technology
- Potential to combine with anti-PD1 and/or CD3 T cell engagers

Multiple wholly owned early-stage and actively advancing programs

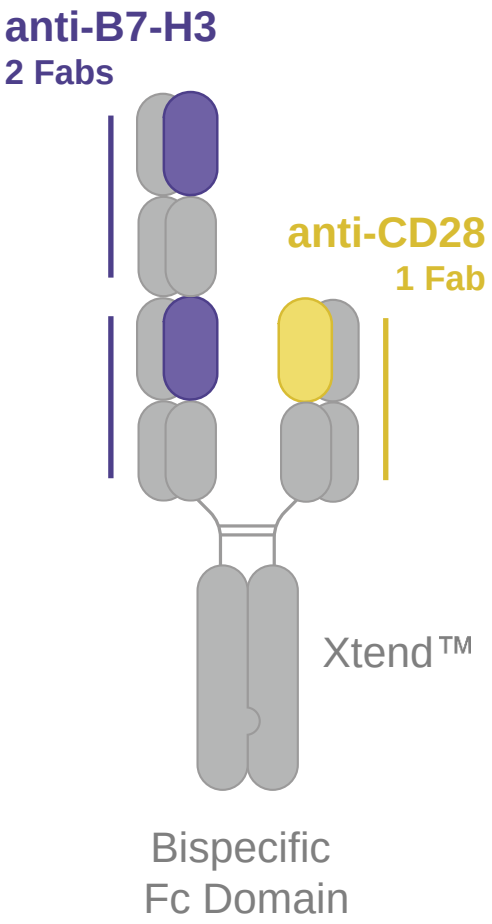
- Ongoing Phase 1 study of XmAb808 (B7-H3 x CD28) in combination with pembrolizumab in solid tumors
- Presented preclinical data from multiple research-stage programs targeting CEACAM5, STEAP1, ENPP3, Trop2 and MSLN

Two narrow, target-limited collaborations with J&J for CD28 bispecifics

- JNJ-9401 (PSMA x CD28; Phase 1) for combination with J&J CD3 bispecifics; collaboration includes access to J&J prostate-cancer franchise for clinical combinations across Xencor's portfolio
- JNJ-1493 (CD20 x CD28; Phase 1) for J&J's use in combination with plamotamab and other agents, such as CD3 bispecifics

XmAb808: Tumor-specific CD28 T-cell Engager Targeted to Broadly Expressed Tumor Antigen B7-H3 in Phase 1

XmAb 2+1 Design



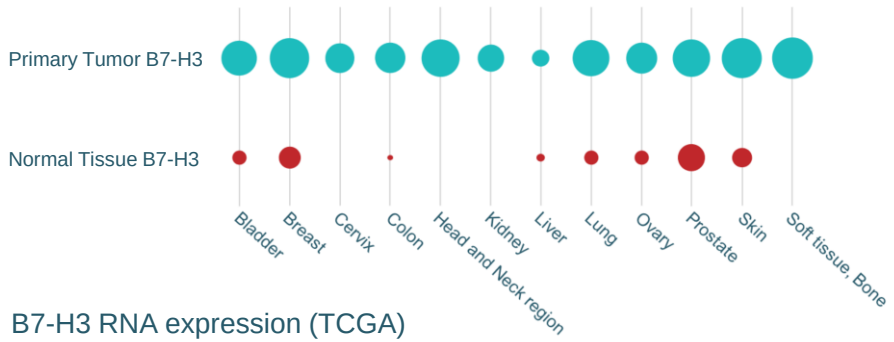
XmAb CD28 T Cell Engagers

Designed to enhance selective T cell activation through CD28 (Signal 2) when in the presence of tumor cells

- Feature low affinity, monovalent binding to CD28
- Avoid CD28 safety concerns (superagonism)
- Well behaved: stable, silent FcγR interactions, with Xtend™ Fc technology
- Potential to combine with anti-PD1 and/or CD3 T cell engagers (Signal 1)

B7-H3 is Broadly Expressed in Solid Tumors

High expression in prostate cancer and others (kidney, breast, lung, etc.)



B7-H3 RNA expression (TCGA)

Clinical Programs

XmAb808: Phase 1 dose-escalation in solid tumors

- Combination with anti-PD1 (Signal 1); pembrolizumab added on third dose, included in all dose escalation cohorts
- Enrolling patients with prostate cancer, ovarian cancer, HNSCC, urothelial cancer and others

NCT05585034

Two narrow, target-limited collaborations with J&J for XmAb CD28 bispecifics; 2 programs in Phase 1

- JNJ-9401: PSMA x CD28
- JNJ-1493: CD20 x CD28

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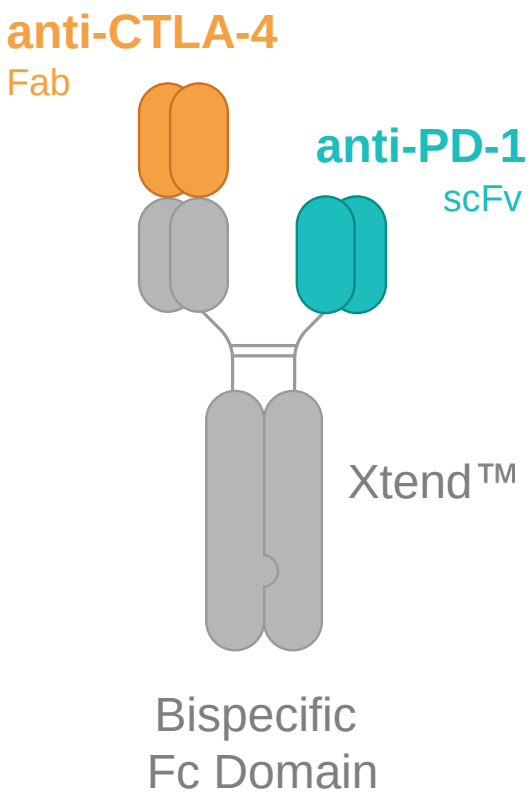
T Cell Selective,
Dual Checkpoint Inhibitor

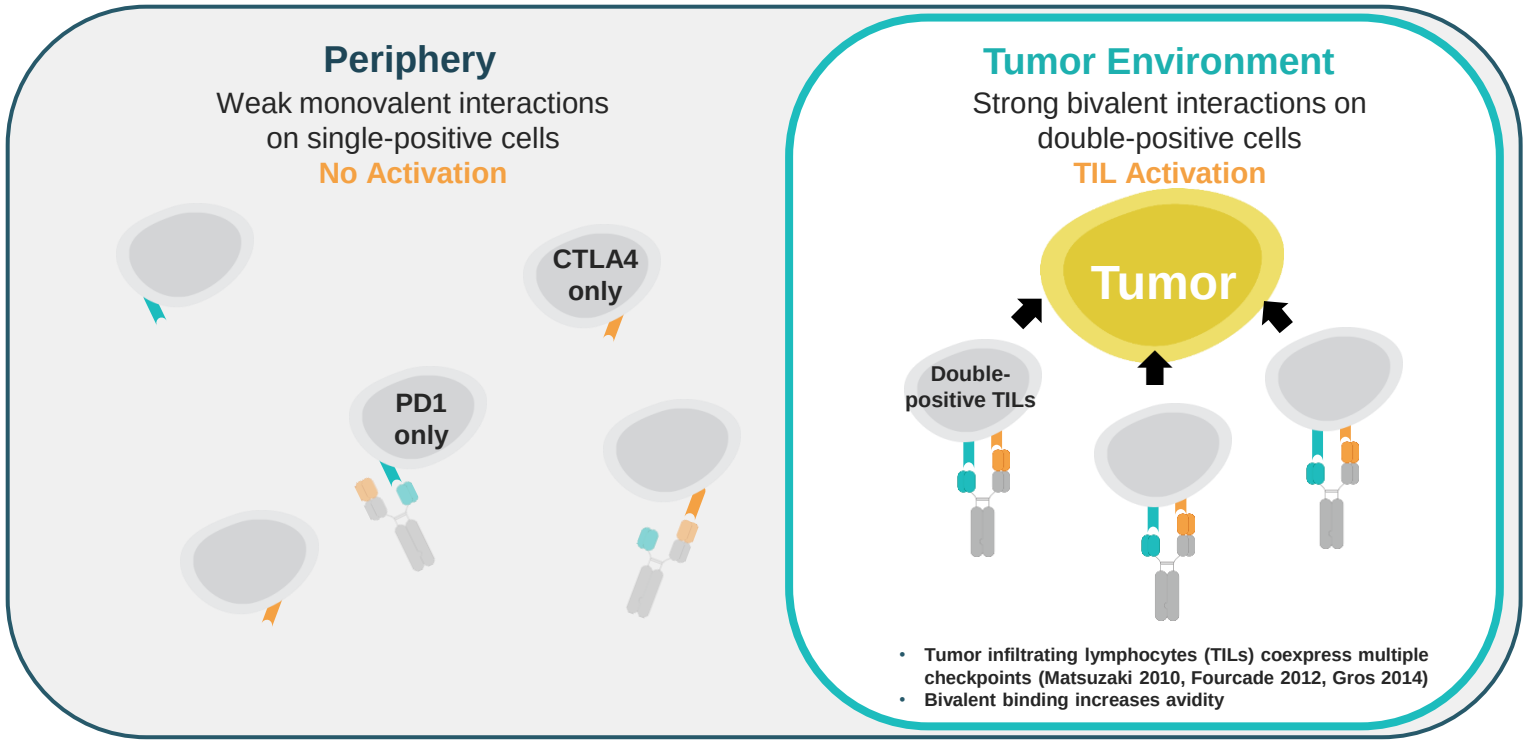
Vudalimab (PD-1 x CTLA-4)

Vudalimab: Selective PD-1 x CTLA-4 Bispecific Antibody

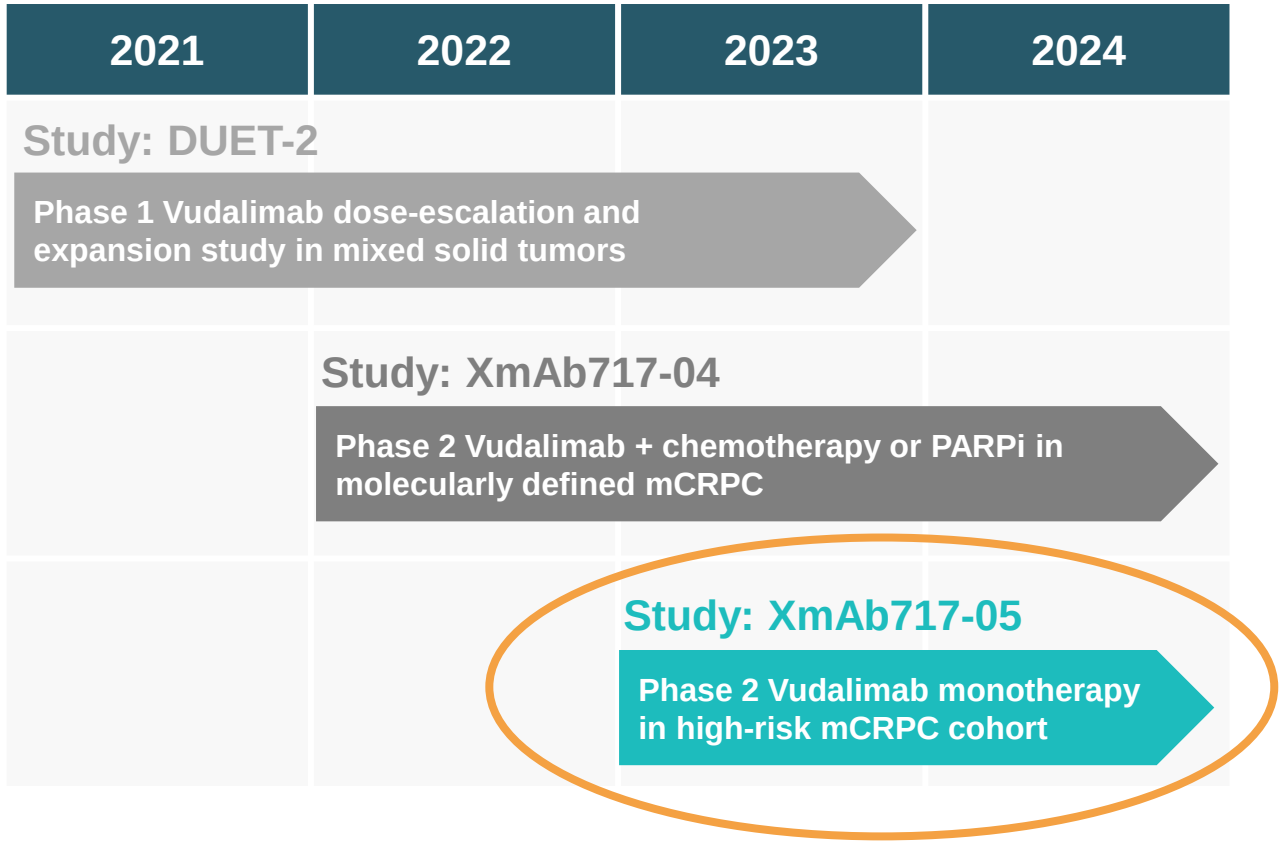
- Monotherapy generally well tolerated, with a potentially differentiated profile from two-antibody combination therapy (PD-1 + CTLA-4)
- Xencor's initial focus on tumors with poor PD-1 inhibitor activity: e.g., prostate cancer



Vudalimab is Designed to Promote Tumor-Selective T Cell Targeting



Evolution of Vudalimab Development Program for mCRPC



mCRPC Cohort in Study XmAb717-05

- Visceral, soft tissue, or lymph node metastases (“high-risk” mCRPC)
- Measurable disease by RECIST 1.1
- Progressed after all approved, medically appropriate therapies
- < 2 prior chemotherapy regimens
- No prior treatment with anti-CTLA-4 or PD-1

Study status (February 7, 2024)

- 14/30 mCRPC patients enrolled

Vudalimab Q3W flat dose schedule: 1000 (< 80 kg) or 1200 mg (≥ 80 kg) IV

Preliminary Data for Vudalimab Monotherapy in mCRPC

Vudalimab monotherapy has been associated with clinical response in 5 out of 12 evaluable mCRPC patients with visceral or lymph node metastases

- Findings consistent with observations of durable responses (41 and 27 weeks) in Phase 1 mCRPC cohort in 2 patients with visceral and lymph node (extrapelvic and/or intrapelvic) metastases

Vudalimab monotherapy safety profile has been consistent with other checkpoint inhibitor therapies

- Low rate of discontinuation of treatment due to adverse events

Additional data will inform future development efforts in monotherapy, and/or contribution of monotherapy to combination treatment

NCT05032040 Data cut February 7, 2024.

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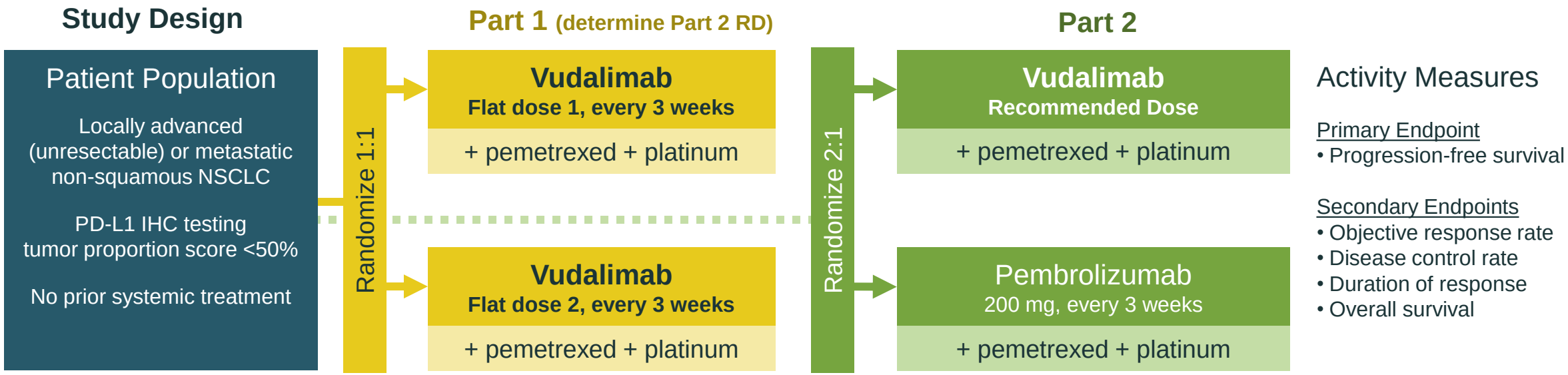
Phase 1b/2 Study in 1L NSCLC in combination with chemotherapy

Part 1 dose comparison, Part 2 randomized vs. pembro; ***First patient dosed in Q4 2023***



Encouraging proof-of-concept data in NSCLC supports evaluation of vudalimab in 1L

- Study of volrustomig (PD-1 x CTLA-4) in checkpoint-naïve NSCLC shows superior PFS over pembrolizumab
  - Volrustomig + chemo vs. pembrolizumab + chemo
- Vudalimab Phase 1 Cohort C (20 patients with NSCLC) activity in 3-4L patients
  - Heavily-pretreated population: 95% checkpoint experienced, 40% ≥ 2 prior checkpoints, median 3 prior therapies
  - 14% objective response rate (2 partial responses of 14 evaluable); 50% disease control rate (7/14)

NCT06173505

Progress Across XmAb® Portfolio Programs in 2024

XmAb Drug Candidate		2024 Priority
T cell selective, dual checkpoint inhibitor		
XmAb819	ENPP3 x CD3	Advance dose escalation toward target dose levels in 2024
XmAb808	B7-H3 x CD28	Advance dose escalation toward target dose levels in 2024
XmAb541	CLDN6 x CD3	Dose first patient during 1H 2024, enroll Phase 1 study
T Cell Engagers (CD3 & CD28)		
Vudalimab	PD-1 x CTLA-4	Data update and go-forward decision on vudalimab monotherapy (mCRPC) in 1H 2025
		Data update and go-forward decision on vudalimab combination with docetaxel (mCRPC) in 1H 2025
		Enroll Phase 1b portion of vudalimab in front-line metastatic non-small-cell lung cancer
Engineered Cytokines		
XmAb662	IL12-Fc	Complete internal data package from Phase 1 study during 1H 2024
XmAb564	IL2-Fc	Complete internal data package from Phase 1 multiple-ascending dose (MAD) study during 1H 2024

Therapeutic Area Key **Solid tumors** **Opportunistic**

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Corporate Overview

March 2024