

# Xencor R&D Strategy Call

September 9, 2024



# Today's Agenda

- Overview

- Rationale for bispecific antibodies in autoimmune & inflammatory diseases

- New pipeline programs: B-cell depleting T-cell engagers

  - Plamotamab (CD20 x CD3)

  - XmAb657 (CD19 x CD3)

- New pipeline programs: TL1A portfolio

  - XmAb942 (Xtend™ TL1A)

  - XmAb TL1A x IL-23

- Potential first-in-class T-Cell engagers in solid tumor oncology

  - XmAb819 (ENPP3 x CD3)

  - XmAb808 (B7-H3 x CD28)

## Forward Looking Statements

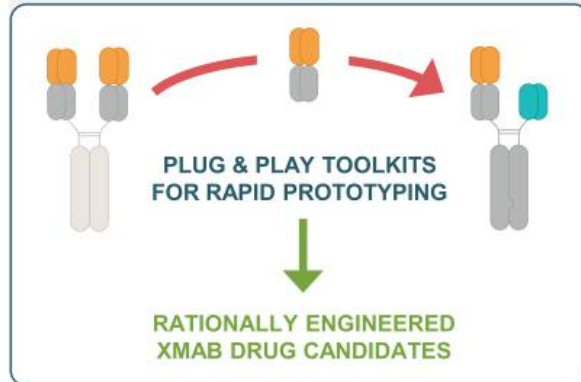
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# Proven Power of XmAb® Engineering: Proteins By Design®

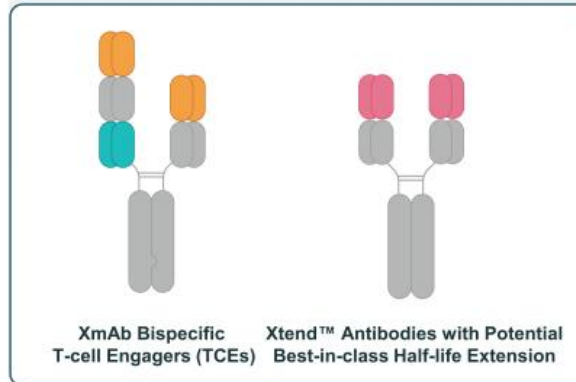
## Small changes, big functional impacts

- XmAb Fc Domains augment native immune functions in molecules and/or control their structure, while preserving desired attributes
- XmAb engineered antibodies are designed to solve complex biologic problems
- Strong patent portfolio with over 1,600 patents issued and pending worldwide



## Advancing an optimized portfolio of XmAb drug candidates

- **Oncology:** 3 novel TCEs advancing in Phase 1 studies; narrow focus for vudalimab in mCRPC and 1L NSCLC
- **Autoimmune:** Upcoming study initiation plans
  - 4Q'24: XmAb942 (Xtend™ TL1A)
  - 1H'25: Plamotamab (CD20xCD3) in RA
  - 2H'25: XmAb657 (CD19xCD3)



## Partnerships leverage modular XmAb technology

- More than 15 technology license partnerships greatly broadens scope with little-to-no effort
- Multiple commercialized XmAb antibodies

ULTOMIRIS®

MONJUVI®/MINJUVI®

### COLLABORATION PORTFOLIO INCLUDES

Johnson & Johnson  
Innovative Medicine

AMGEN

ALEXION®  
AstraZeneca Rare Disease

Incyte

Genentech  
A Member of the Roche Group

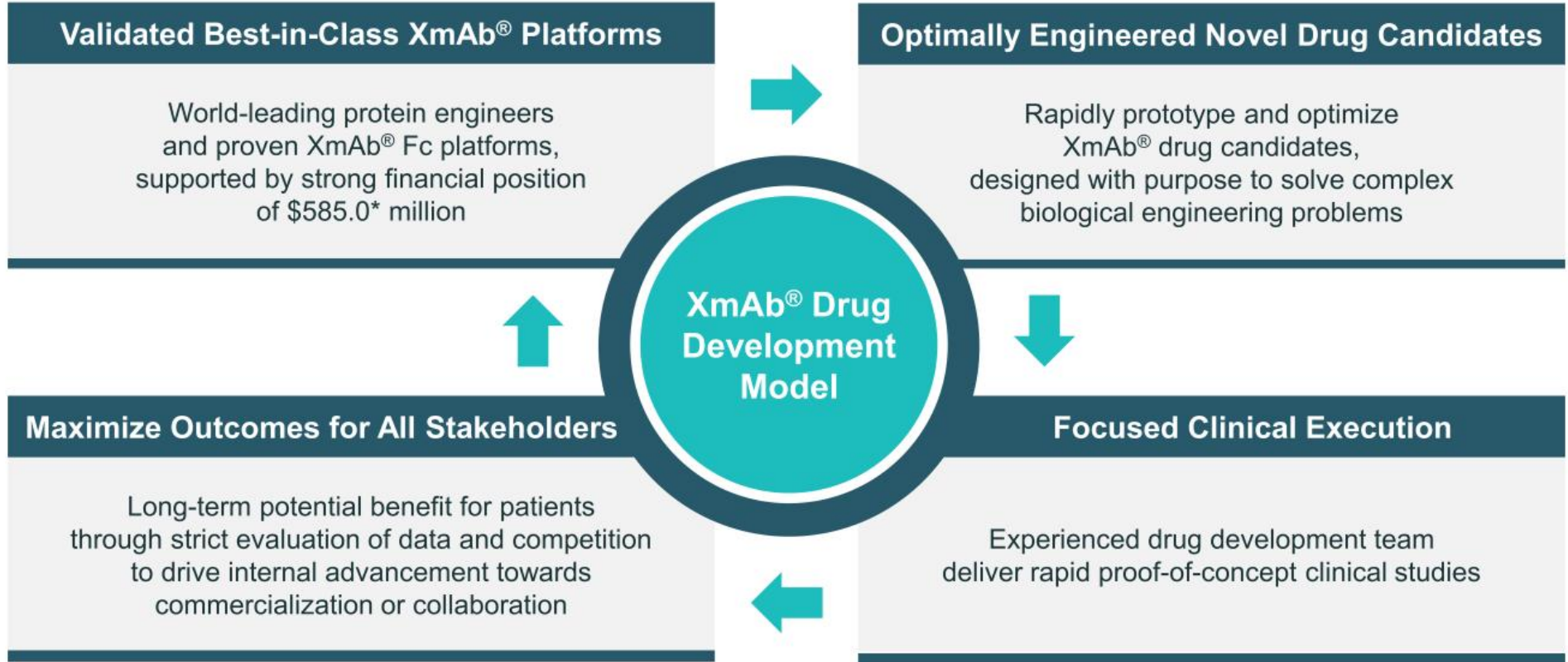
GILEAD

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# Xencor's Disciplined Drug Development Strategy



\* As of 6/30/2024. Includes cash, cash equivalents & marketable debt. Updated 8/5/2024.

# Next-Gen XmAb® Drug Design in Oncology & Autoimmune Diseases

Pipeline focus on T-cell engagers and bispecific mechanisms

Program	Targets	XmAb® Platforms	Indications	Discovery	Preclinical	Phase 1	Phase 2	Phase 3
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## Solid Tumor Oncology: T-cell Engagers (CD3 & CD28)

XmAb819	ENPP3 x CD3	2+1 Bispecific	ccRCC					
XmAb808	B7-H3 x CD28	2+1 Bispecific, Xtend™	Prostate cancer, oncology					
XmAb541	CLDN6 x CD3	2+1 Bispecific, Xtend	Ovarian cancer, oncology					
XmAb Program	Undisclosed TCE	Bispecific, Xtend	Solid tumor oncology					

## Solid Tumor Oncology: T-cell Selective, Dual Checkpoint Inhibitor

Vudalimab	PD-1 x CTLA-4	Bispecific, Xtend	mCRPC					
			1L NSCLC					

## Immunology Programs

Plamotamab	CD20 x CD3	Bispecific	Rheumatoid Arthritis					
XmAb942	TL1A	Xtend, FcKO	Inflammatory Bowel Diseases (IBD)					
XmAb657	CD19 x CD3	2+1 Bispecific, Xtend	Autoimmune Diseases					
XmAb Program	TL1A x IL23	Bispecific, Xtend	Autoimmune Diseases					

ccRCC clear cell renal cell carcinoma NSCLC non-small cell lung cancer  
mCRPC metastatic castration-resistant prostate cancer FcKO Fc knock out

Key

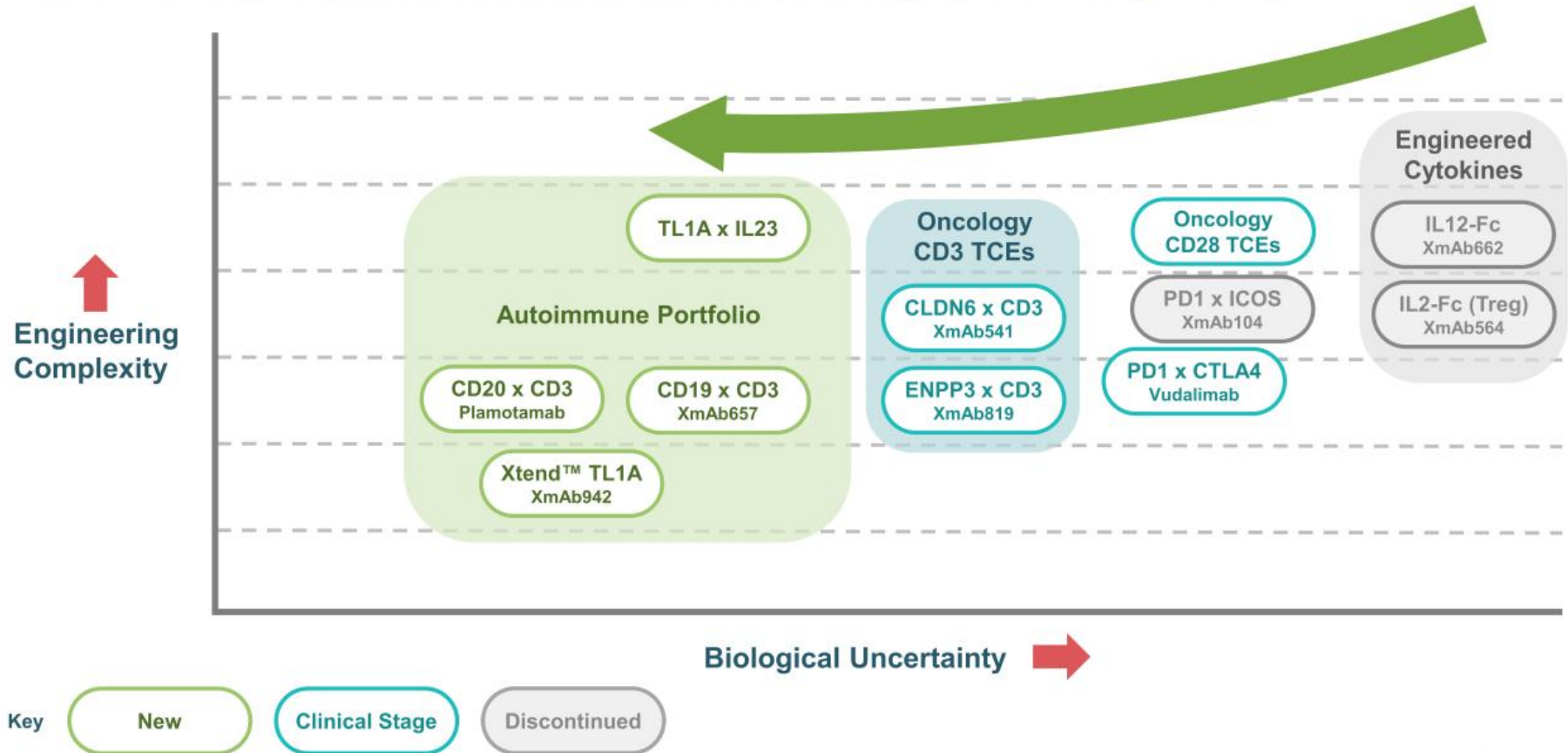
Solid tumors

Immunology

Planned Study Initiation

# Rebalanced Portfolio Optimized for XmAb® Drug Development

Validated targets across autoimmune disease, leveraging XmAb engineering









**Rationale for bispecific  
antibodies in autoimmune and  
inflammatory (A&I) diseases**





# New Era Emerging for Bispecific Antibody Drug Development in Autoimmune and Inflammatory Diseases

<b>SCIENTIFIC RATIONALE</b> Multiple related signaling pathways involved in A&I support dual inhibition (BsAbs) and depth of inhibition (TCEs) 	<b>PROOF OF CONCEPT</b> Recent clinical and academic studies have highlighted exciting clinical potential of both mechanisms 	<b>REGULATORY</b> Recent U.S. FDA insight encourages BsAb development <sup>1</sup> beyond oncology 
<b>MANUFACTURING</b> Efficient manufacturing process to produce one drug molecule versus multiple drugs in combination or cellular therapies 	<b>DOSING</b> Avoids complicated clinical dosing algorithms, with dual therapy and/or problematic co-formulation 	<b>ACCESS</b> More favorable formulary access for a single drug product versus multiple drugs used in combination 

BsAb bispecific antibody TCE T-cell engager 1 <sup>1</sup>The agency has been encouraging drug development in this area. In 2021, FDA finalized a guidance on BsAb development programs." (U.S. FDA, 2024)

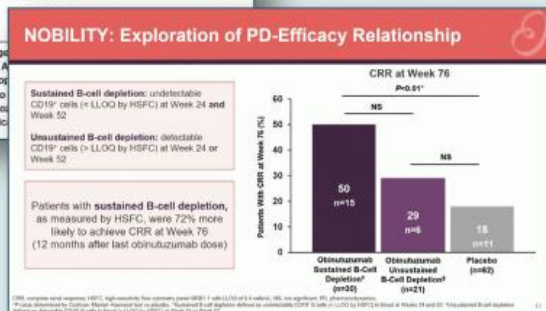
# Well Validated Targets and Bispecific Antibody Formats Could Enable New Biology to Create Breakthrough Medicines

Newly published data shows potential for multiple types of bispecific antibodies in autoimmune disease

Highly potent B-cell depletion demonstrated promise for patients with severe rheumatic and inflammatory autoimmune disorders in small academic studies, and depth of B-cell depletion has been linked to better clinical outcomes in larger randomized controlled trials

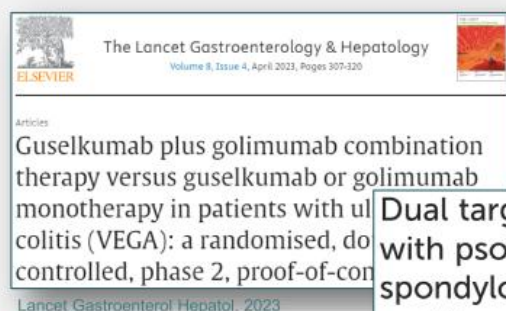


EULAR 2024



Nat Med. 2024

Combination therapy using two approved antibodies showed additive efficacy in Phase 2 in colitis (Janssen) and new real-world multicenter studies



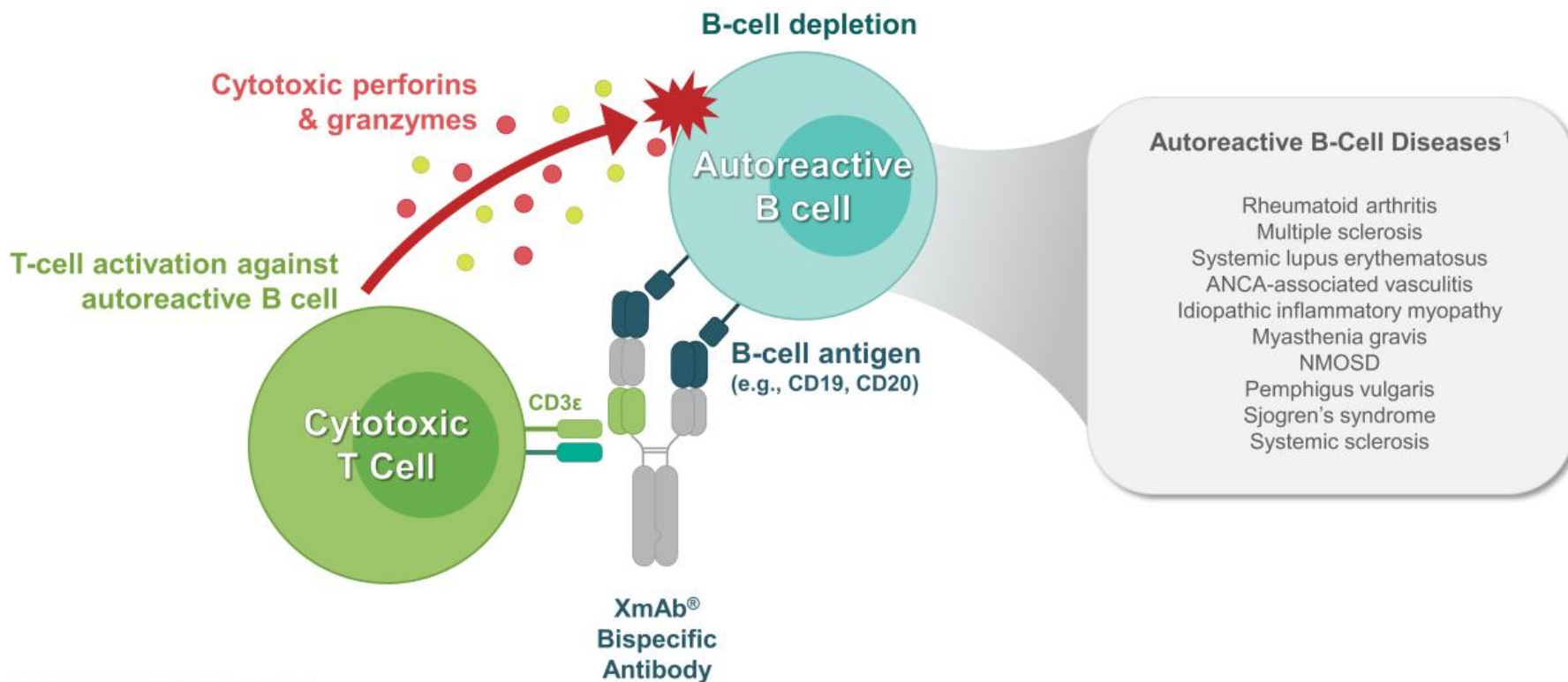
Front. Immunol. 2023

**Dual targeted therapy in patients with psoriatic arthritis and spondyloarthritis: a real-world multicenter experience from Spain**

Cristina Valero-Martínez<sup>1</sup>, Judit Font Urgelles<sup>2</sup>, Meritxell Sallés<sup>3</sup>, Beatriz E. Joven-Ibáñez<sup>4</sup>, Alexia de Juanes<sup>4</sup>, Julio Ramírez<sup>5</sup>, Xavier Juanola<sup>6</sup>, Raquel Almodóvar<sup>7</sup>, Ana Laiz<sup>8</sup>, Mireia Moreno<sup>9</sup>, Manel Pujol<sup>10</sup>, Emma Beltrán<sup>11</sup>, José Antonio Pinto-Tasende<sup>12</sup>, Laura Crespo<sup>13</sup>, Luis Sala-Icardo<sup>14</sup>, Santos Castañeda<sup>1,15</sup> and Rosario García-Vicuña<sup>1,16\*</sup>

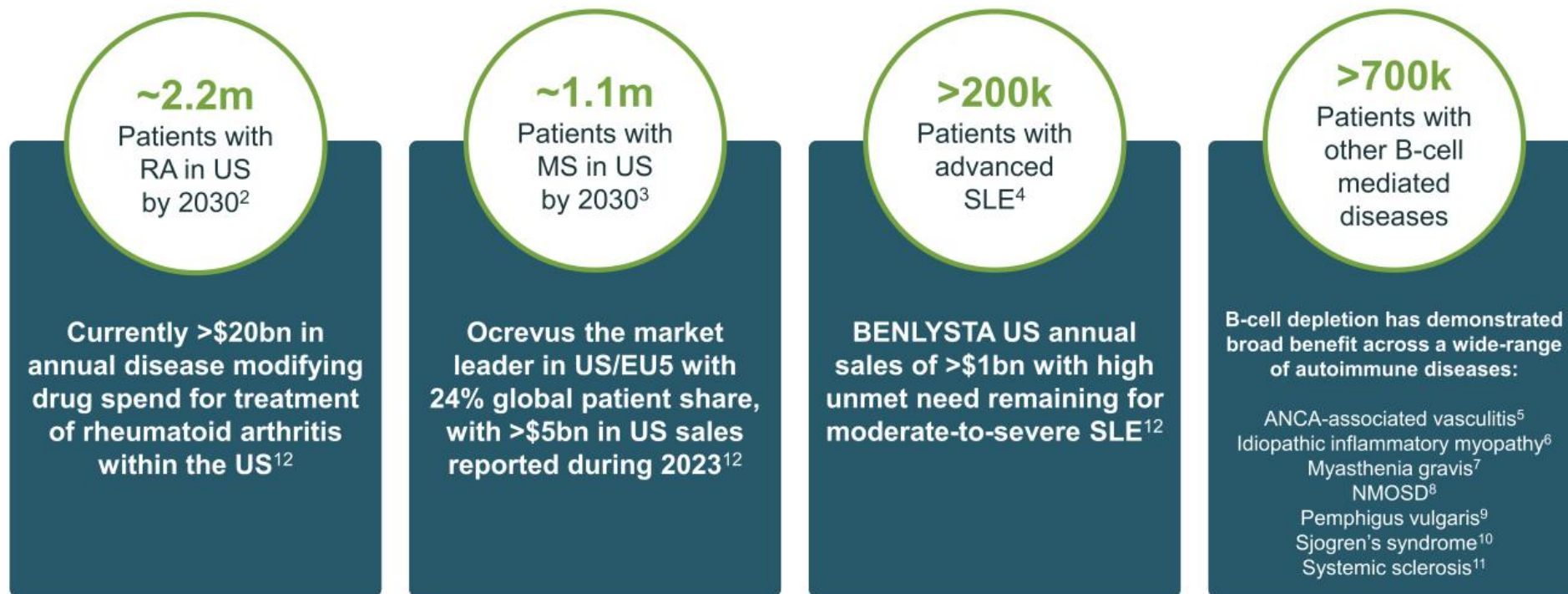


# Deep B-Cell Depletion with T-cell Engagers Could Help “Reset” the Immune System for Patients with Autoimmune Disease



<sup>1</sup> Schett G, et al. Ann Rheum Dis 2024;0:1-12.

# XmAb® CD20 & CD19 TCEs Can Address Significant Unmet Needs for Autoimmune Disease Responsive to Targeted B-Cell Depletion<sup>1</sup>



<sup>1</sup> Based on randomized controlled trials with positive primary endpoints (Schett G, et al. Ann Rheum Dis 2024;0:1–12. <sup>2</sup> J Manag Care Spec Pharm. 2018; 24(10):1010-1017. <sup>3</sup> JAMA Neurol. 2023; 80(7):693-701. <sup>4</sup> Arthritis Rheumatol. 2021 Jun; 73(6): 991–996. <sup>5</sup> J Clin Med. 2022;11(9):2573. <sup>6</sup> BMC Musculoskelet Disord. 2012; 13: 103. <sup>7</sup> Front Neurol. 2024; 15:1339167. <sup>8</sup> Mult Scler. 2024; 13524585231224683. <sup>9</sup> JAMA Dermatol. 2019; 155(5): 627-629. <sup>10</sup> Arthritis Care Res (Hoboken). 2017; 69(10):1612-1616. <sup>11</sup> J Manag Care Spec Pharm. 2020 Dec;26(12):1539-1547. <sup>12</sup> GlobalData.

# Rheumatoid Arthritis: Where are we and where do we need to go?

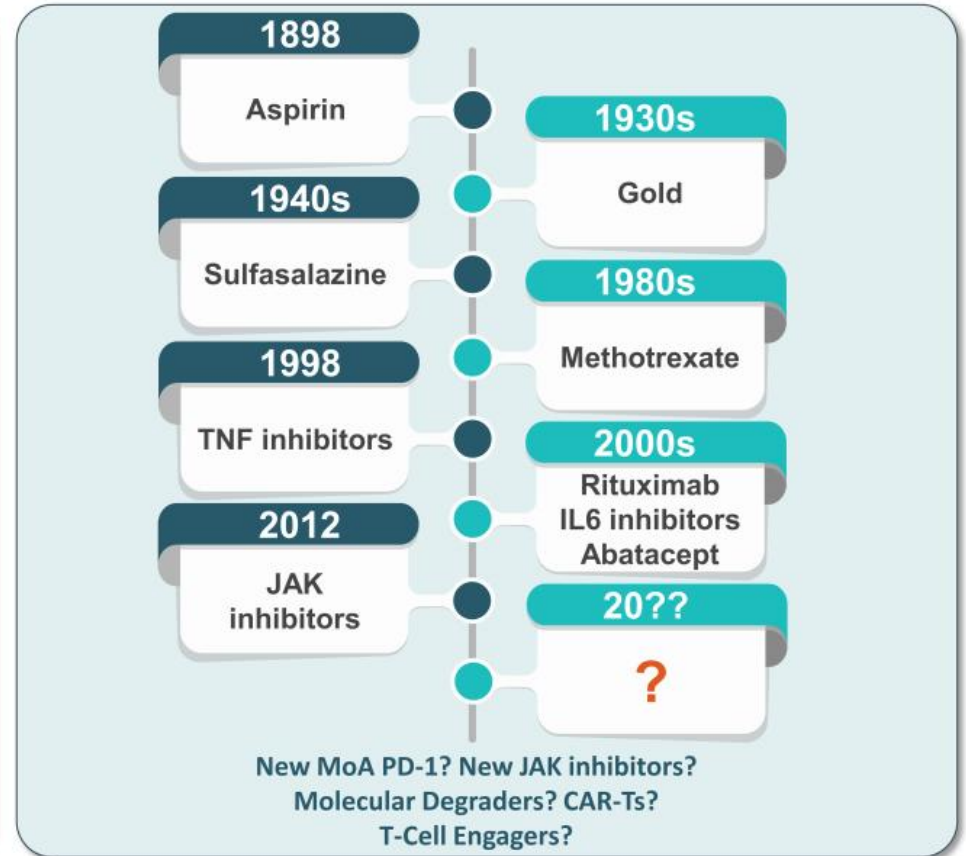
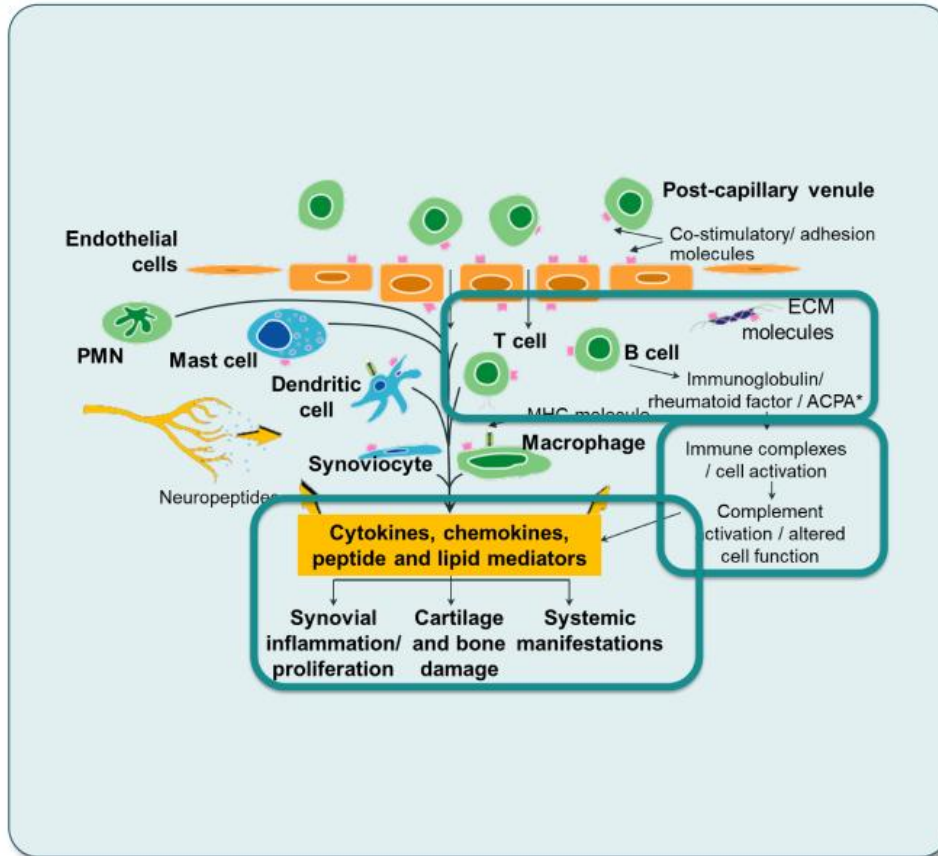
**Roy Fleischmann, MD MACR**

Adjunct Professor of Medicine  
University of Texas Southwestern Medical Center

Medical Director, Metroplex Clinical Research Center  
Dallas, Texas



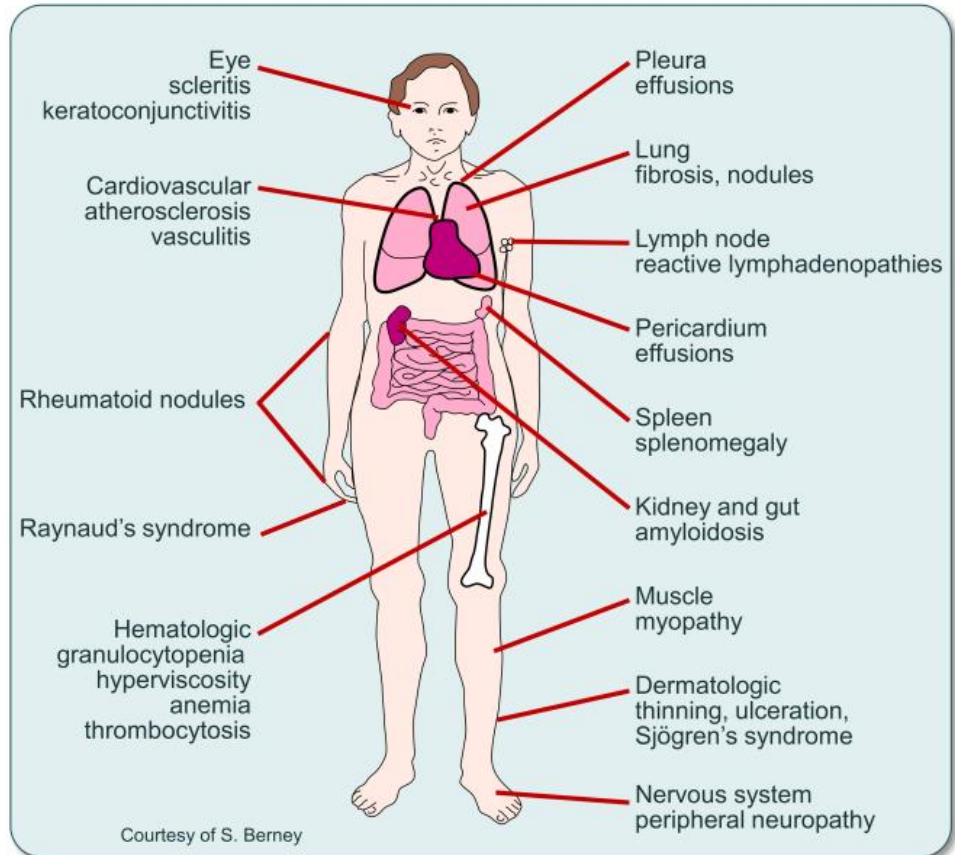
# Immunopathogenesis of Rheumatoid Arthritis



\*ACPA = anti-citrullinated protein antibody. Detected as anti-CCP Ab. Citrulline is a post-translational modification of arginine, e.g. at inflammatory sites

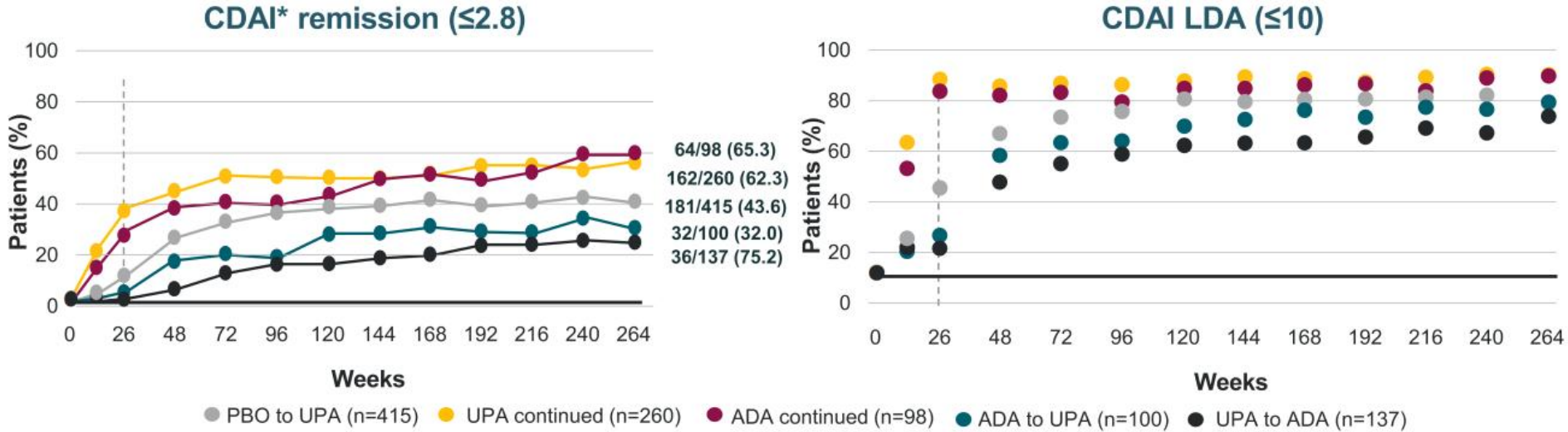
# Rheumatoid Arthritis Manifestations

- Systemic, inflammatory polyarthritis that leads to joint destruction, deformity, and loss of function.
- Pathology involves synovial membranes and peri-articular structures of joints, typically resulting in uncontrolled inflammation with pannus formation and clinical symptoms of pain, swelling and stiffness which may lead to irreversible damage and deformity with functional limitation.



ACR Subcommittee on RA Guidelines. Arthritis Rheum. 2002;46:328; Goronzy JJ, Weyand CM. In: Klippel JH, et al, eds. Primer on the Rheumatic Diseases 2001; 12<sup>th</sup> ed. Atlanta, GA: Arthritis Foundation; 2001. p 209-16. Anderson R.J. *ibid.* 218; Arnett FC, et al. Arthritis Rheum. 1988;31:315

# Even with the Most Effective Medications, 40% of RA Patients Do Not Reach Remission Even If They Continue with the Medication (AO)



**What degree of disease activity can be reached with effective medications for RA?**

SELECT-COMPARE: UPA + MTX vs ADA + MTX. Vertical line at Week 26 indicates the end of the PBO-controlled period. AO As Observed PBO placebo UPA Upadacitinib ADA adalimumab CDAI Clinical Disease Activity Index LDA low disease activity \* CDAI remission is a stricter clinical metric than DAS28. Fleischmann R et al. EULAR 2023. Poster POS0849.



# Consequences of Inadequately Treated RA

## Cardiovascular Disease (CVD)

RA patients have an increased risk of CV events<sup>1,2</sup>. Risk of CVD death 50% higher vs. general population, which correlates with CV risk factors and inflammation<sup>3,4</sup>. DMARDs reduce CV event risk<sup>5,6</sup> if disease activity reduced<sup>7</sup>.

## Serious Infection (SIE)

RA is associated with a 2-fold increased risk of SIE, thought to be due to defective immune system and comorbidities such as diabetes, pulmonary or renal disease and functional disability<sup>8</sup>. TNF $\alpha$  inhibitors increase the risk 2-fold and glucocorticoids 4-fold.

## Venous and Pulmonary Thrombosis

Active RA is associated with a > 2-fold increase in the development of deep venous thrombosis and pulmonary embolus compared to the general population<sup>9</sup>.

## Lymphoma

Severe disease activity in RA patients is correlated with a 70-fold increased risk of developing malignant lymphomas, particularly diffuse large B cell lymphoma<sup>10</sup>.

<sup>1</sup> Avina-Zubieta JA, et al. Risk of cardiovascular mortality in patients with rheumatoid arthritis: a meta-analysis of observational studies. *Arthritis Rheum* 2008;59:1690-7. <sup>2</sup> Solomon DH, et al. Cardiovascular morbidity and mortality in women diagnosed with rheumatoid arthritis. *Circulation* 2003; 107:1303-7. <sup>3</sup> Del Rincon I, et al. Escalante A. Association between carotid atherosclerosis and markers of inflammation in rheumatoid arthritis patients and healthy subjects. *Arthritis Rheum* 2002;48:1833-40. <sup>4</sup> Myasoedova E, et al. Lipid paradox in rheumatoid arthritis: the impact of serum lipid measures and systemic inflammation on the risk of cardiovascular disease. *Ann Rheum Dis* 2011;70:482-7. <sup>5</sup> Micha R, et al. Systematic review and metaanalysis of methotrexate use and risk of cardiovascular disease. *Am J Cardiol* 2011;108:1362-70. <sup>6</sup> Barnabe C, et al. Systematic review and metaanalysis: anti-tumor necrosis factor a therapy and cardiovascular events in rheumatoid arthritis. *Arthritis Care Res (Hoboken)* 2011;63:522-9. <sup>7</sup> Solomon DH, et al. Disease Activity in Rheumatoid Arthritis and the Risk of Cardiovascular Events. *Arthritis and Rheumatology*. Vol. 67, No. 6, June 2015, pp 1449-55. <sup>8</sup> Listing J, et al. *Rheumatology*, 2013 52(1): 53-61. <sup>9</sup> Choi HK, et al. *Ann Rheum Dis* 2013;72:1182-87. <sup>10</sup> Baecklund E, et al. *Arthritis Rheum* 2006;54:692-701.

# Unmet Needs in the Treatment of RA

## Current Landscape

- ~ 1,300,000 patients with RA in the US<sup>2</sup>



**~15-18%** of patients do not respond adequately or are unable to tolerate the currently approved medications<sup>1</sup>

- This means that ~ 200,000 - 230,000 patients in the U.S. alone require new therapeutic options
- We do not have the necessary tools to predetermine which patient will have a complete clinical response without adverse events to a specific mechanism or action or specific molecule.

## Trends

### Survey of 25 rheumatologists<sup>1</sup>:

What do they suspect will be the significant changes over the next 5 years in the treatment of RA?

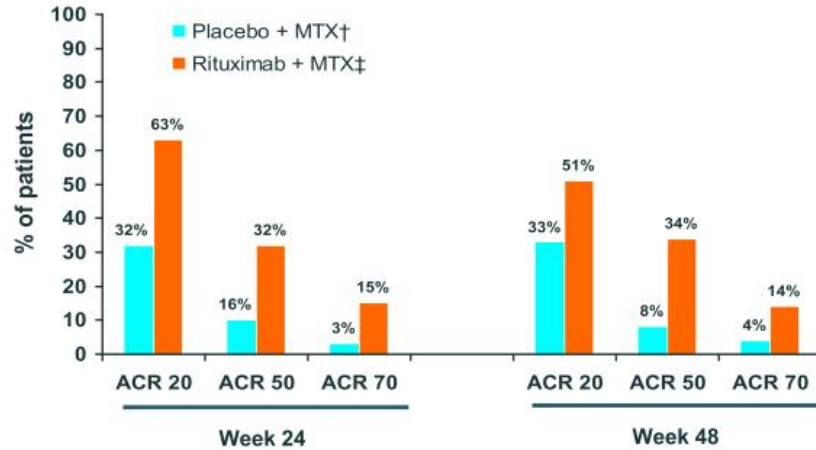
- Convinced that bDMARDs and Jakinibs should be initiated earlier
- Emerging novel MoA offering improved efficacy, safety and tolerability
- Novel B-cell depleting therapies, CAR-T cell therapy, combination biologics, and more targeted, effective treatment options

<sup>1</sup> Xencor survey of investigators <sup>2</sup> Helmick and Lawrence et al; Estimates of the prevalence of arthritis and other rheumatic conditions in the United States. Part I. Arthritis Rheum. 2008;58(1):15-25

# Clinical Experience of Rituximab in RA

**A**

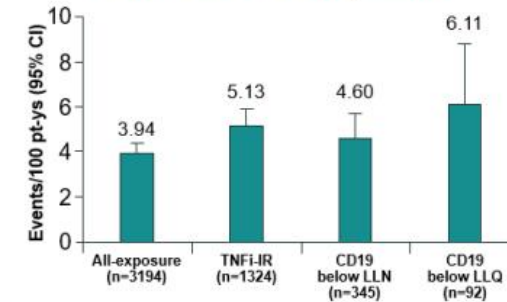
**ACR Responses at Weeks 24 and 48 in TNF-IRs**



**A** REFLEX Study; Cohen S, et al. 2006 Arthritis Rheum 54(9): 2793-2806B) TNF-IR: TNF inhibitors Inadequate Responders; **B** Patients with up to 9.5 years of follow-up analyzed  $\geq 2$  years after any RTX treatment for limited return (LLN;  $<80$  cells/ $\mu$ L) of CD19 B cells and CD19 cell counts below lower limit of quantification (LLQ;  $<20$  cells/ $\mu$ L). CD19 cell counts were measured from peripheral blood; No measurements from other tissue compartments reported; van Vollenhoven, R. et al. 2015 J. Rheum. 42(10):1761-1766 **C** Cross-trial comparison of serious infection rates (24-week endpoint except for SELECT-COMPARE: 26 weeks).

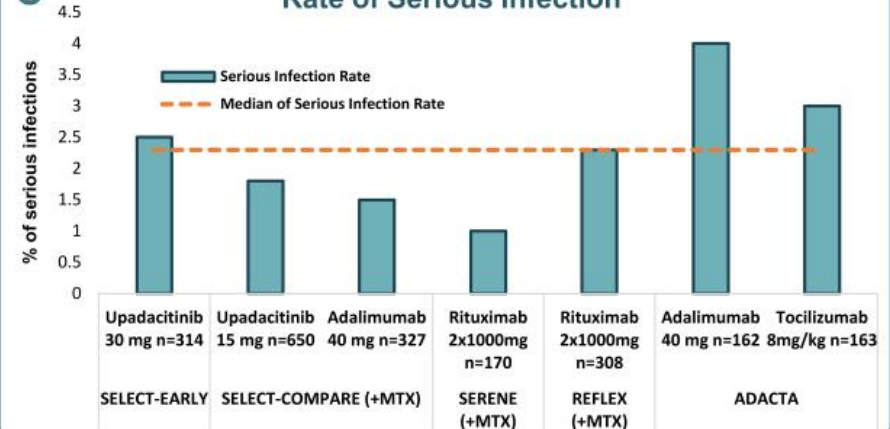
**B**

**Rate of Serious Infection with Peripheral B-cell Depletion**

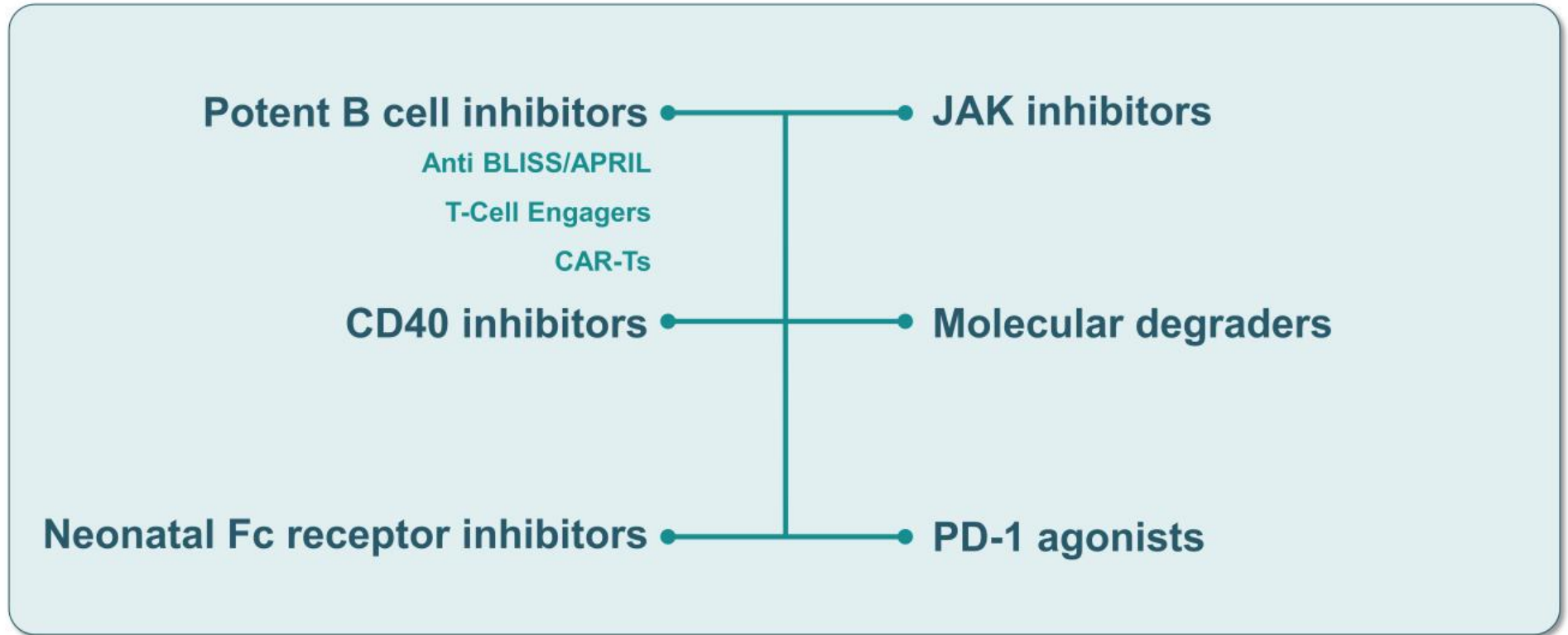


**C**

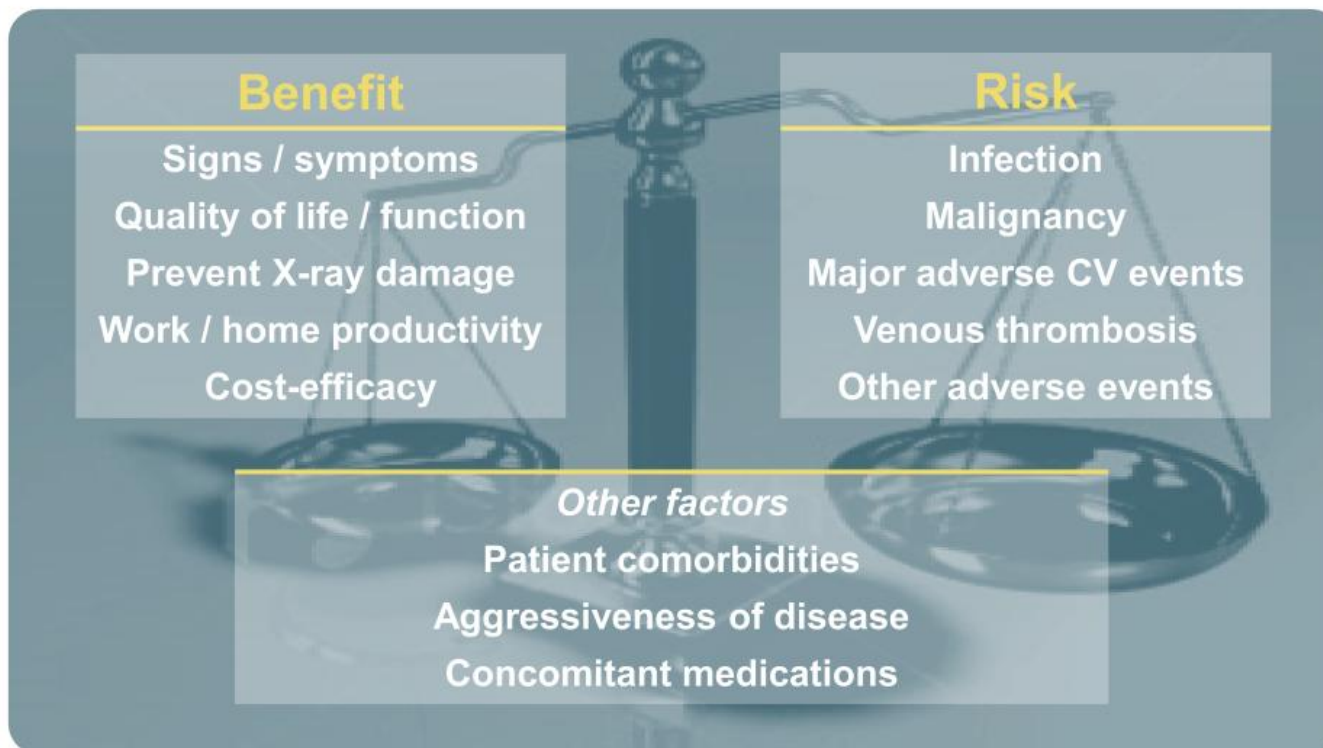
**Rate of Serious Infection**



## New Therapies on the Horizon in RA



# A Highly Effective Medication with a Risk Profile That Can Be Mitigated, Has a Very Favorable Benefit/Risk Profile for Patients with Rheumatoid Arthritis



**New Pipeline Programs:  
B-cell Depleting T-cell Engagers**

**Plamotamab (CD20 x CD3)**

**XmAb657 (CD19 x CD3)**

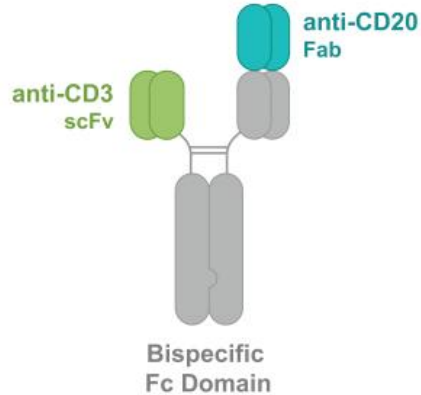


# Plamotamab

## Phase 2 Ready, Subcutaneous CD20 x CD3 BsAb

Planned proof-of-concept for the T-cell engager class in autoimmune and inflammatory disease

### XmAb® CD20 x CD3 Bispecific Design



- Plamotamab designed in a 1+1 format and selected for extended activity and favorable tolerability observed in NHPs
- Human half-life ~18 days; estimated 80% SC bioavailability
- Robust manufacturing process with high yield and excellent formulation stability data

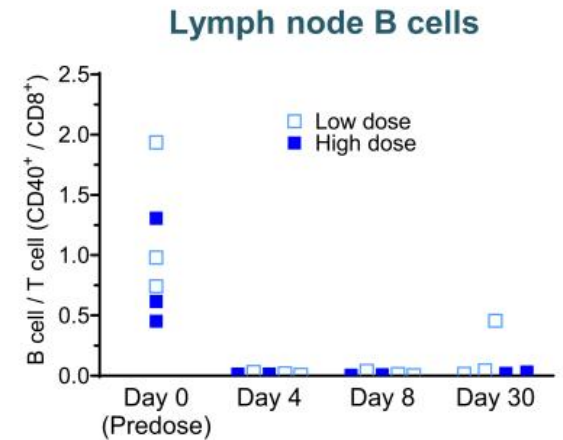
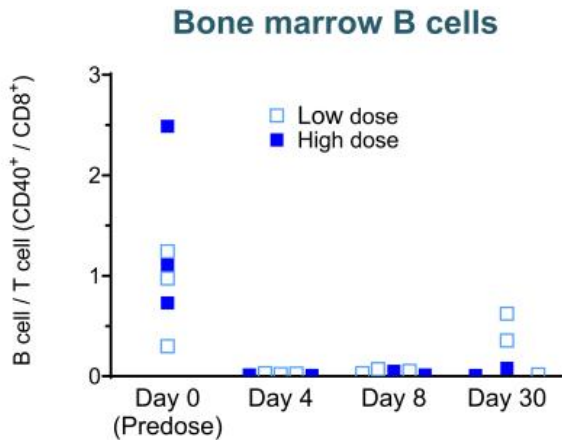
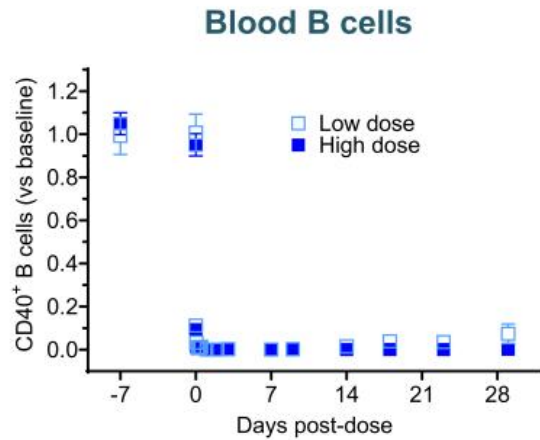
### Positioned for Success

- N=154 from dose escalation and expansion cohorts with both IV and SC formulations in B-cell cancers
- Comparable preliminary efficacy data to leading commercial CD20 x CD3 in patients with prior CAR-T
- IV & SC dosing regimens with improved CRS data vs. leading commercial CD20 x CD3<sup>1</sup>
- Existing inventories of drug product and drug substance for seamless integration into the next phase of clinical development

**BsAb** bispecific antibody **IV** intravenous, **SC** subcutaneous **NHP** non-human primate **CRS** cytokine release syndrome 1 No head-to-head trial has been conducted evaluating plamotamab against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates themselves, and caution should be exercised when comparing data across trials.

# Single Dose of Plamotamab in NHPs

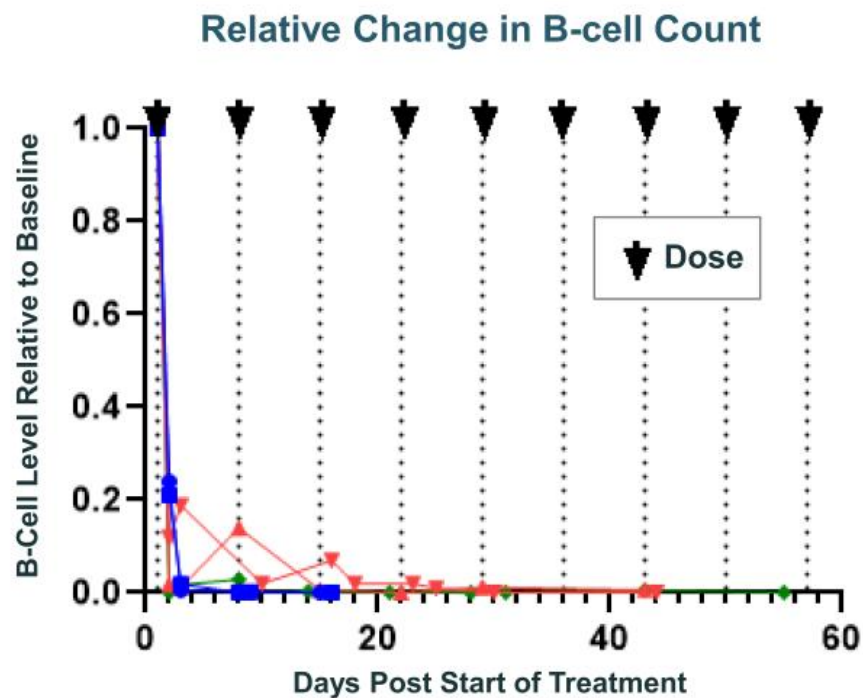
## Durable B-cell Depletion Observed in Blood and Lymphoid Organs





## >95-99% Peripheral B-cell Depletion Observed in Lymphoma Patients with IV & SC Plamotamab in Phase 1 Monotherapy Study

- Patients were identified (N=5) that had baseline absolute B-cell count > 30 cells/ $\mu$ L in the blood
- >90% reductions in B-cell count also observed at lower doses



# Phase 1 Monotherapy Study of Plamotamab

Heavily Pre-Treated Population with High Rates of Prior CAR-T

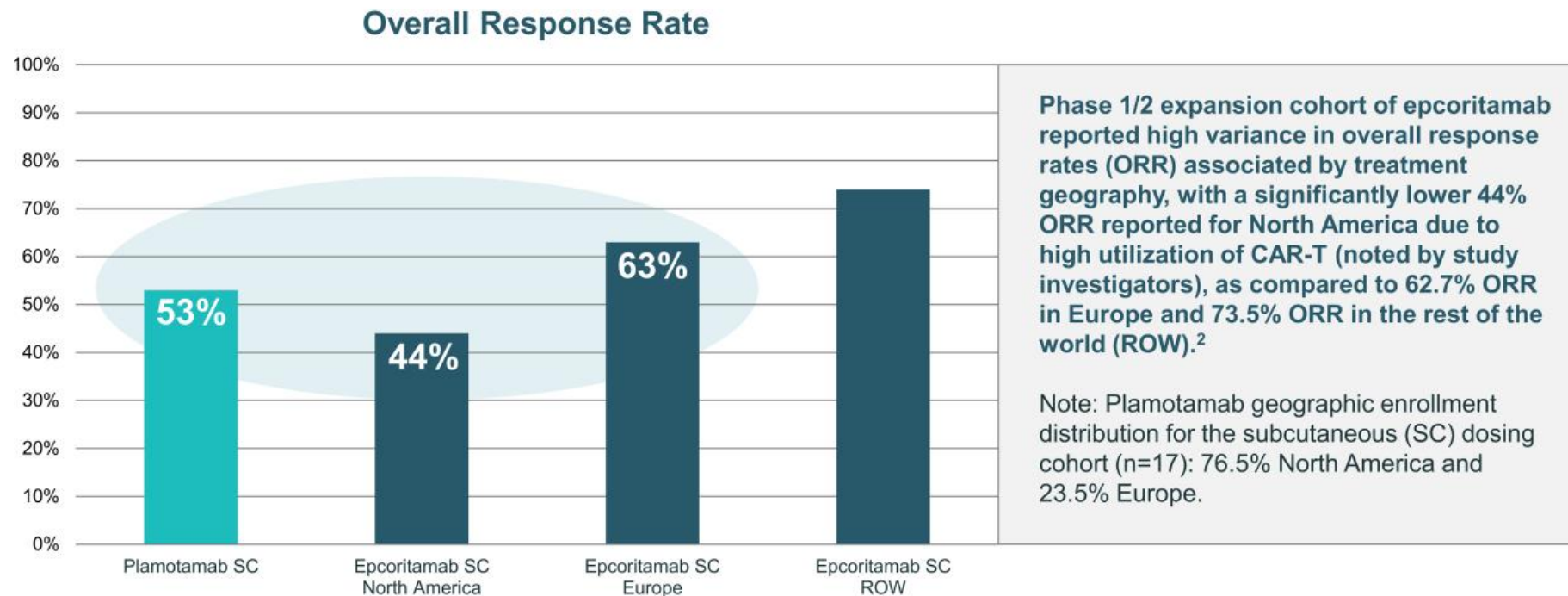
## DLBCL + HGBCL Patient Characteristics

Characteristics	RD (IV) (n = 35)	SC all cohorts (n = 20)
Age, median (range)	69 (36-86)	67 (27-90)
Baseline ECOG		
0, n (%)	13 (37.1)	7 (35.0)
1	19 (54.3)	13 (65.0)
2	3 (8.6)	0
Bulky disease at study entry, n (%)		
> 6 cm	10 (28.6)	5 (25.0)
> 10 cm	5 (14.3)	0
<b>Median number of prior systemic therapies</b>	<b>4.0 (2-11)</b>	<b>4.0 (2-10)</b>
<b>Refractory to last therapy, n (%)</b>	<b>25 (71.4)</b>	<b>10 (50.0)</b>
<b>Prior transplantation, n (%)</b>	<b>3 (8.6)</b>	<b>4 (20.0)</b>
<b>Prior CAR-T, n (%)</b>	<b>21 (60.0)</b>	<b>17 (85.0)</b>

RD (IV) recommended IV dose DLBCL diffuse large B-cell lymphoma HGBCL high-grade B-cell lymphoma ECOG Eastern Cooperative Oncology Group

# Plamotamab ORR Compared to Commercial CD20 x CD3<sup>1</sup>

Regional differences in lymphoma prior therapy markedly impact outcomes

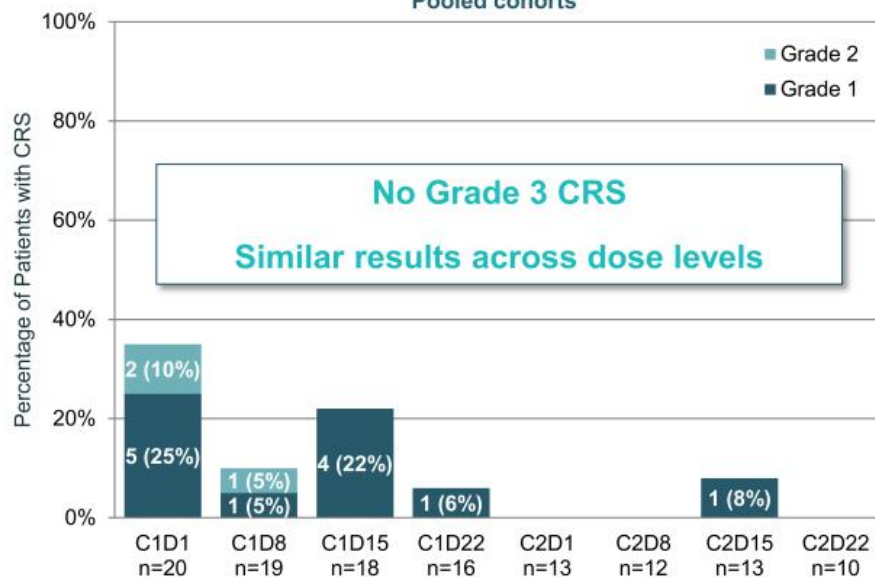


<sup>1</sup> No head-to-head clinical trial has been conducted evaluating plamotamab against epcoritamab. Differences exist between trial design and patient populations, and caution should be exercised when comparing data across unrelated trials. <sup>2</sup> Thieblemont and Lugtenburg et al.; J Clin Oncol 41:2238-2247.

# No Grade 3 CRS and Lower Grade CRS Observed, Compared to Commercial CD20 x CD3<sup>1</sup>

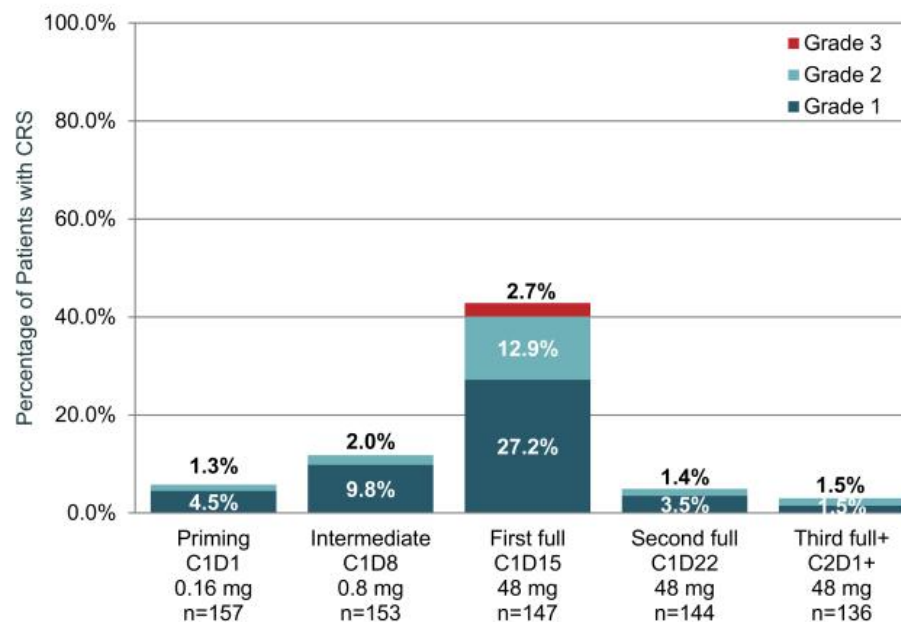
## Plamotamab SC CRS

Pooled cohorts



**Summary of CRS at Recommended IV Dose regimen:  
< 50% incidence overall, no Grade 3, Cycle 1 limited**

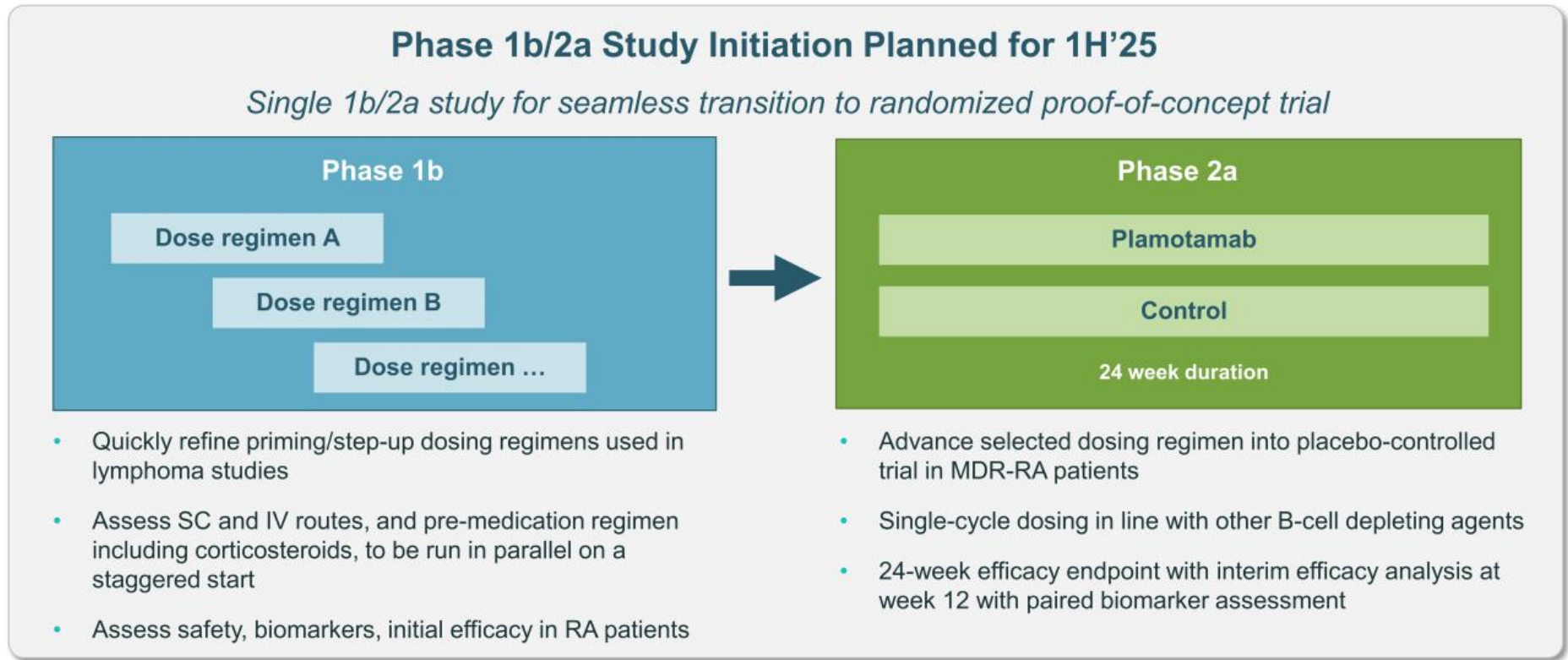
## Epcoritamab SC CRS<sup>2</sup>



<sup>1</sup> No head-to-head clinical trial has been conducted evaluating plamotamab against epcoritamab. Differences exist between trial design and patient populations, and caution should be exercised when comparing data across unrelated trials. <sup>2</sup> Epcoritamab, a Novel, Subcutaneous CD3xCD20 Bispecific T-Cell-Engaging Antibody, in Relapsed or Refractory Large B-Cell Lymphoma: Dose Expansion in a Phase I/II Trial; Thieblemont and Lugtenburg et al.; J Clin Oncol 41:2238-2247. Data cutoff: January 31, 2022.

# Plamotamab: Plan for Phase 1b/2a Rheumatoid Arthritis Study Start

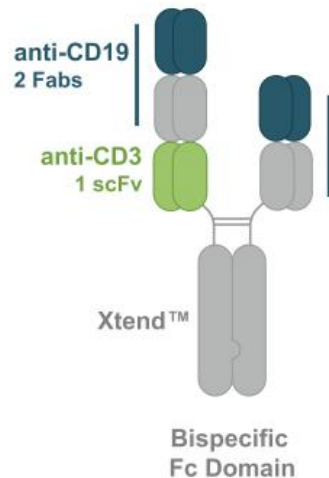
*Maximal efficiency to clinical proof of concept in multi-drug resistant rheumatoid arthritis (MDR-RA)*



# XmAb657

## CD19 x CD3 Optimized for Autoimmune Disease

### Rational XmAb® Design



- High affinity and stability anti-CD19 binder
- Bivalent to efficiently target B cells expressing very low levels of CD19 (e.g., plasma cells and plasmablasts)
- Affinity-tuned and highly stable anti-CD3 binder
- Uses Xencor's clinically validated 2+1 format
- Heterodimeric Fc domain engineered to abrogate effector function and improve half-life
- Xtend™ Fc for long half life

### Positioned for Success

#### Ongoing NHP studies have shown effective B-cell depletion with single dose

- Broad opportunity set of disease indications supports multiple development pathways for success
- EULAR 2024 and subsequent updates of CD19 CAR-T clinical data highlighted potential issues with CAR-T approach on efficacy and safety
- Rational design of XmAb657 supports best-in-class potential for clinical outcomes
- **Current timeline to FIH study in 2H'25 puts Xencor on-track to be a leading CD19 x CD3 program within autoimmune disease**

# Single Dose of XmAb657 in NHPs

## Deep B-cell Depletion Sustained for at Least 28 Days

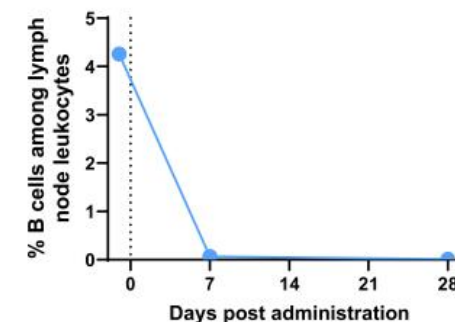
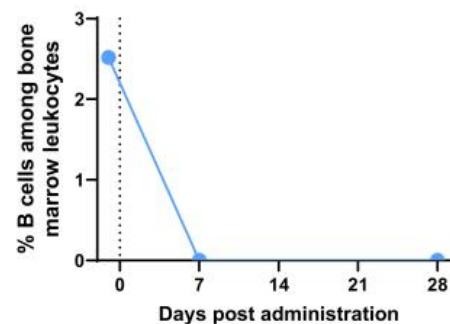
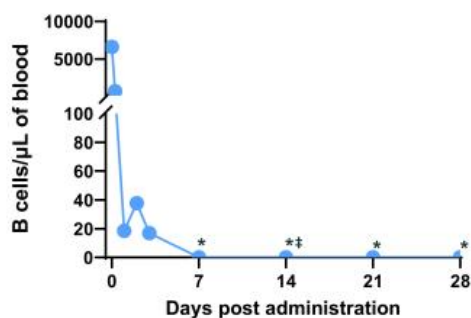
Peripheral blood

Bone marrow

Lymph nodes

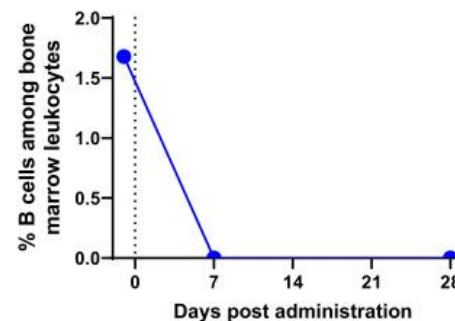
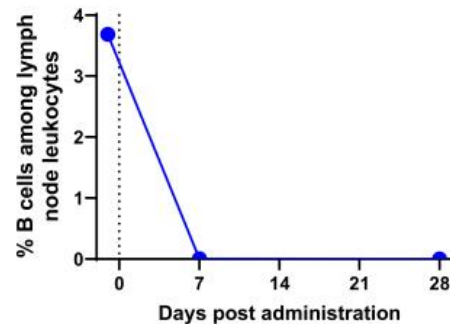
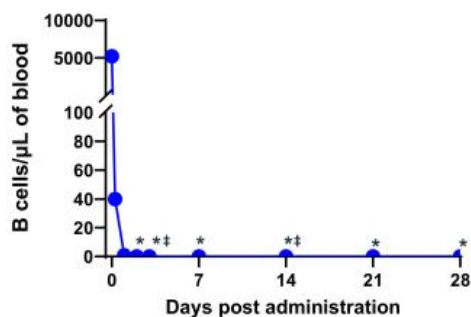
XmAb 657

Single IV  
Dose  
(low)



XmAb657

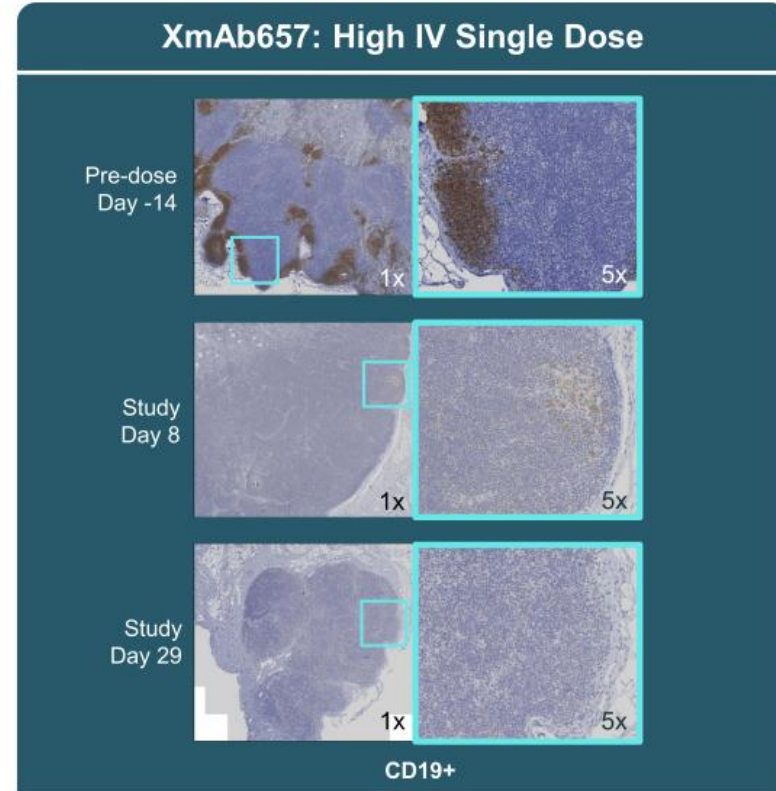
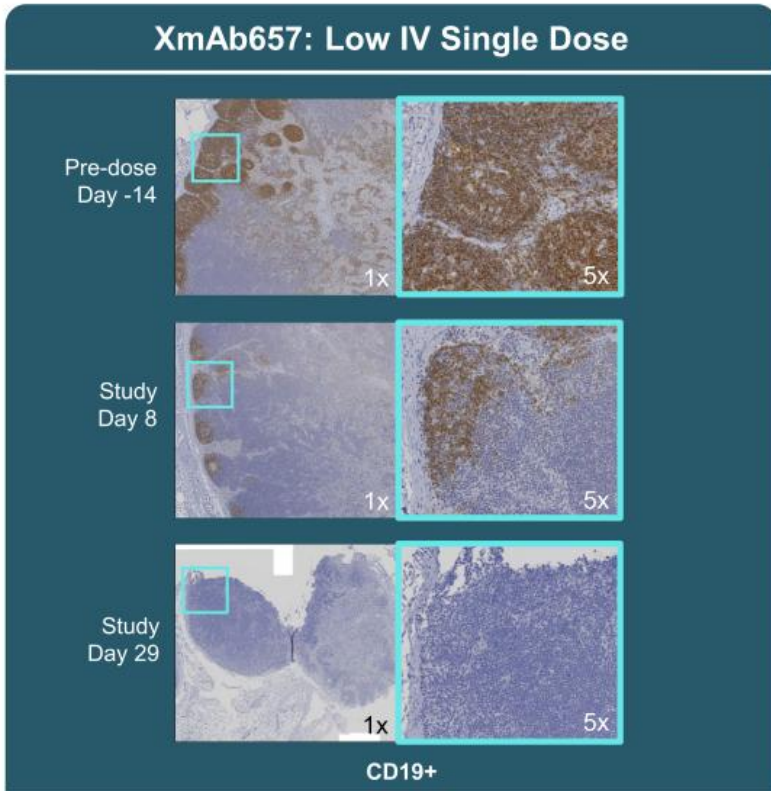
Single IV  
Dose  
(high)



\*peripheral B cells <1 B cell per μL;  
‡this data point is zero B cells per μL

B cells were gated as CD45+CD2-/lowCD20+CD4-CD8a-CD159a-

# Deep B-Cell Depletion in Lymph Nodes in NHPs Confirmed by CD19+ IHC



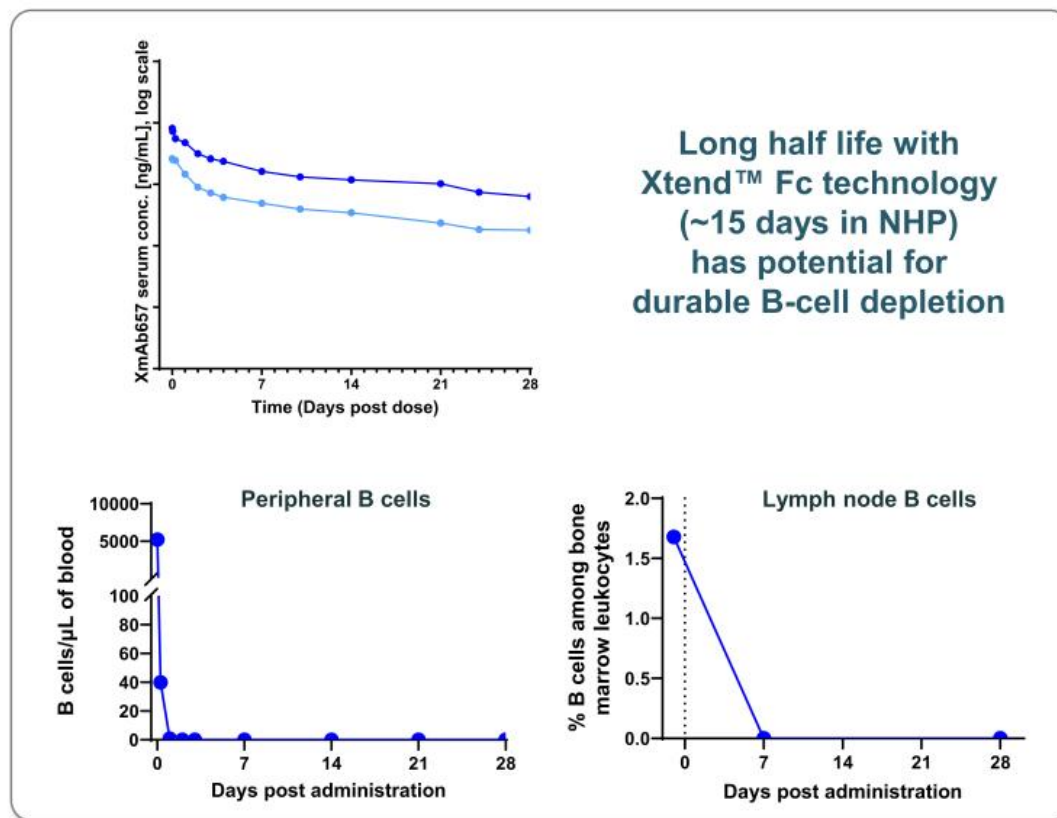
CD19 IHC reagent antibody non-interfering with XmAb657



# XmAb657: Rationally Designed for Autoimmune Disease

## FIH Planned 2H'25

- Has been observed to demonstrate deep and durable B-cell depletion in NHPs, enabled by potentially best-in-class pharmacokinetics
- Has been well tolerated in NHP with no clinical signs of CRS
- GMP production campaign initiated
- Further plans to investigate subcutaneous dosing and priming
- **First-in-human study planned to initiate in 2H'25**



## New Pipeline Programs: TL1A Portfolio

**XmAb942 (Xtend™ TL1A)**

**XmAb TLA1 x IL-23**



# Inflammatory Bowel Disease (IBD) is a Devastating Disease with Significant Unmet Medical Need

**~3m**  
Estimated diagnoses in the US<sup>1</sup>

Two common forms:  
**Crohn's disease**  
**Ulcerative colitis**

Economic burden estimated at \$5.4B in 2023<sup>2</sup>

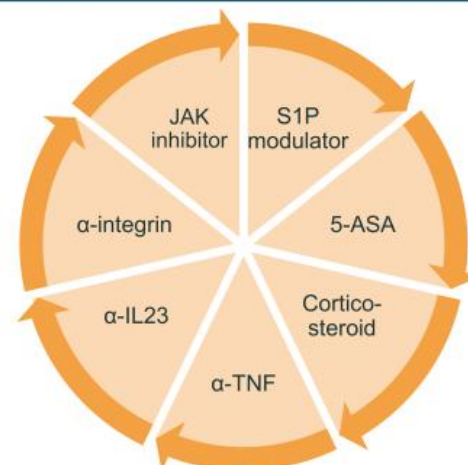
## Significant Health Burden

- Impaired quality of life
- Lower life expectancy
- Surgeries, hospitalization
- Increased risk for intestinal resection
- Increased risk for colorectal cancer

## Severe Symptoms of IBD

- Fatigue
- Fever
- Reduced appetite
- Mental health

## Current Standards of Care are Lacking

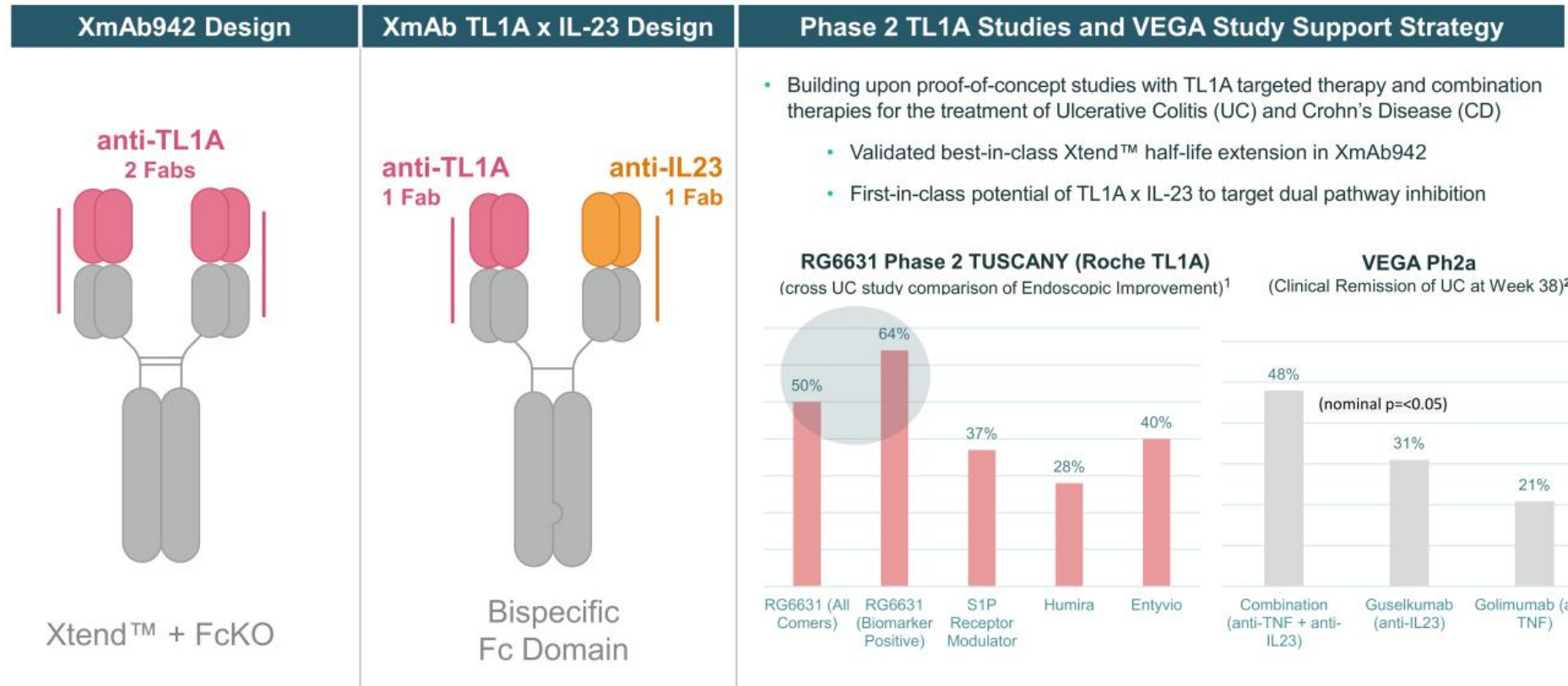


Patients cycle through suboptimal treatments

- **Suboptimal efficacy:** ~10-20% disease remission<sup>3</sup>
- **Adverse events:** Infection, malignancy, thromboembolism, cardiac
- **Burdensome regimens:** poor patient compliance

<sup>1</sup> Clarivate <sup>2</sup> GlobalData <sup>3</sup> Prescient whitepaper

# Development of XmAb942 and XmAb TL1A x IL-23 for IBD

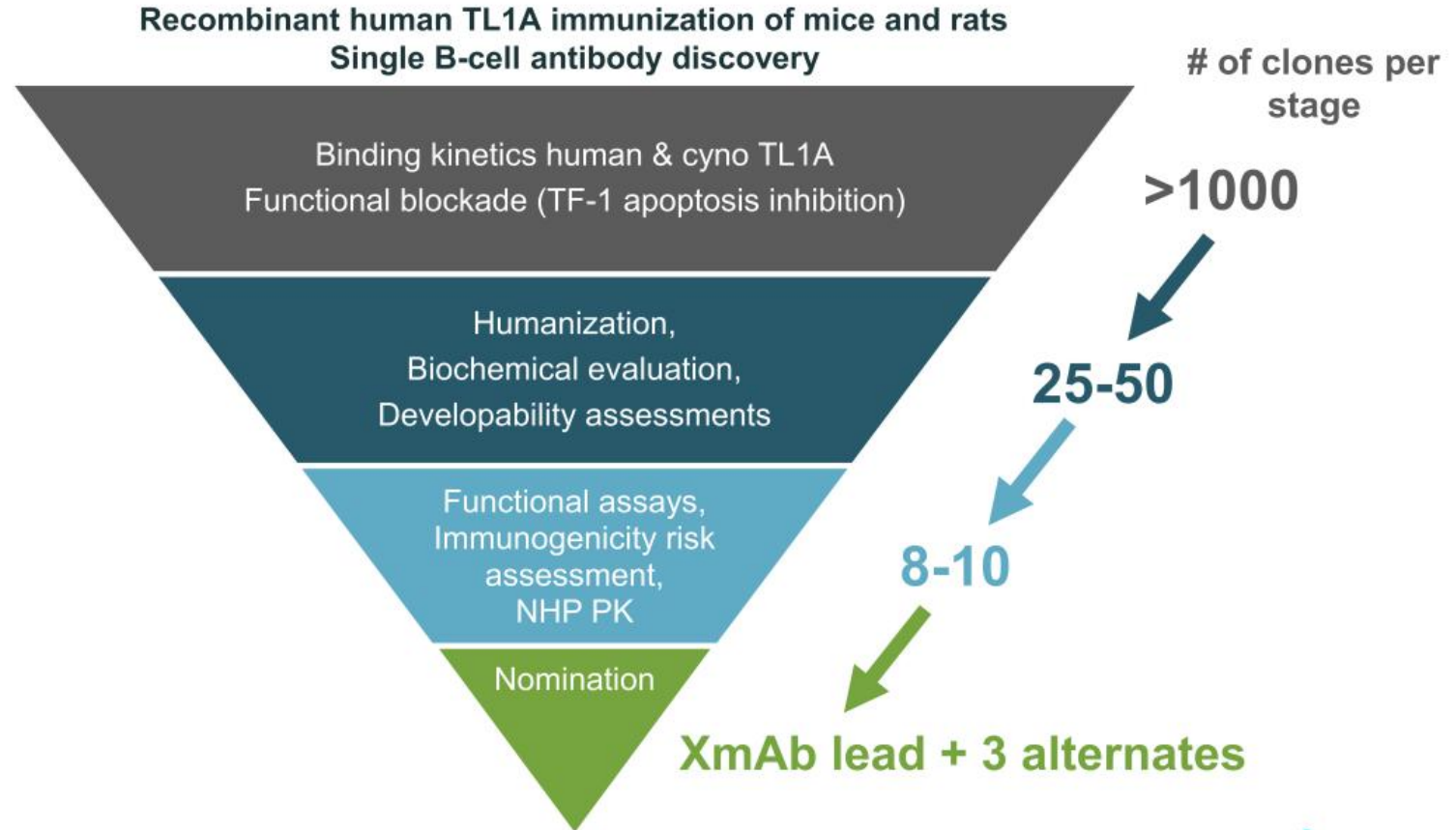


<sup>1</sup> Sourced from Roivant presentation of TUSCANY, Entyvio (anti-integrin) and Humira (anti-TNF) data from VARSITY P3 study, S1P receptor modulator data from ELEVATE 52 P3 study

<sup>2</sup> Guselkumab plus golimumab combination therapy versus guselkumab or golimumab monotherapy in patients with ulcerative colitis (VEGA); Feagan and Shao et al.; The Lancet G&H; Feb 2023

# Discovery Campaign for Anti-TL1A Generation

*Design of lead and backups in less than 6 months*



# Xtend™ Fc: Validated Half-Life Extension (HLE) Technology Enabling Potential Best-in-Class Anti-TL1A

## Clinically validated with significantly improved half-life and dose frequency

- Ultomiris half-life extended >4x as compared to Soliris; maintenance dose frequency reduced by 4X<sup>1</sup>
- VRC01LS half-life extended >4X as compared to parental (71 days vs 15 days)<sup>2</sup>

## Similar safety and immunogenicity risk as parental antibodies in studied antibodies using Xtend Fc domains<sup>3,4,5</sup>

## Antibody thermostability maintained in studied antibodies using Xtend Fc domains<sup>6,7</sup>

## Superior or comparable to other HLE technologies (e.g., YTE) across multiple studies and parameters<sup>6,7,8</sup>

## Typical HLE scaling from cyno to human is ~3.5x<sup>9</sup>

## Clinical Half-Life and Maintenance Dosing Ultomiris vs. Soliris<sup>10</sup>

Product	Half-life (days) <sup>11</sup>	Dosing Interval <sup>1,12</sup>
Ultomiris (with Xtend™)	49.7-64.3	Q8W
Soliris	11.33-12.1	Q2W

**Proprietary Xtend™ Fc Domain has been incorporated into ≥ 21 molecules that have been tested in clinical studies**

Xtend is commonly referred to as 'LS' in academic literature

<sup>1</sup> Ultomiris & Soliris drug labels <sup>2</sup> Ledgerwood Clin Exp Imm 2015 <sup>3</sup> Lee et al. Blood 2019 <sup>4</sup> Gaudinski et al. PLOS Med 2018 <sup>5</sup> Vu et al. J Neurol 2023 <sup>6</sup> Ko et al. Exp Mol Med 2022 <sup>7</sup> Internal Data <sup>8</sup> Ko et al. Nature Letter 2014 <sup>9</sup> Haraya & Tachibana. BioDrugs (2023) 37:99–108 <sup>10</sup> Data adapted from FDA and EMA drug labels <sup>11</sup> Reported Half-life across approved indications <sup>12</sup> Maintenance dosing interval in adults

# XmAb942: Novel High-Affinity Anti-TL1A mAb Designed for Extended Half-Life, Under Development for the Treatment of IBD

- XmAb942 utilizes Xtend™ Fc domain technology with potentially class-leading potency
- Half-life in non-human primate studies >22 days supports Q8W to Q12W dosing in humans
- High concentration formulation for subcutaneous dosing
- **First-in-human clinical studies to begin 4Q'24**

*Discovery & characterization of XmAb942 accepted for presentation during UEG Week on Tues., Oct. 15*

Company	Program <sup>1</sup>	Potent	SC Dosing	Q8-12W Dosing	Half-life extension	Low Immunogenicity
Xencor	XmAb942	✓	✓	✓	✓	✓ Predicted
Merck (Prometheus) <sup>2,3</sup>	MK-7240	✗	✓	✗	✗	✓
Roche (Roivant) <sup>4,5</sup>	RG-6631	✓	✓	✗	✗	✗
Sanofi (Teva) <sup>6</sup>	TEV-48574	✓	✓	✗	✗	TBD

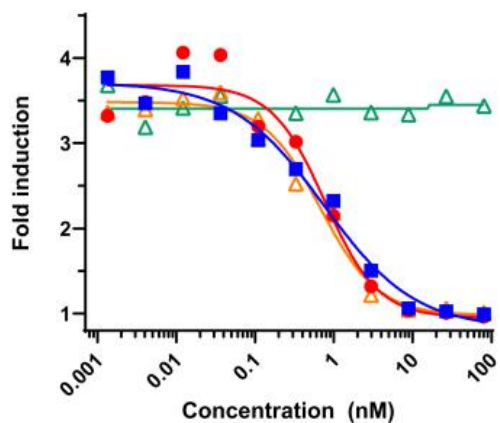
<sup>1</sup> No head-to-head trial has been conducted evaluating XmAb942 against other data included herein. Differences exist between clinical trial design, patient populations and the product candidates themselves, and caution should be exercised when comparing data across trials <sup>2</sup> PRA023 Progress Update (Prometheus presentation) <sup>3</sup> Feagan et al. The Anti-TL1A Antibody PRA023 Demonstrated Proof-of-Concept in Crohn's Disease: Phase 2a APOLLO-CD Study Results (DOP87) Abstract citation ID: jjac190.0127 <sup>4</sup> Banfield et al. Br J Clin Pharmacol. 2020;86:812–824 <sup>5</sup> Clarke et al. mAbs. 2018;10:4, 664-677 <sup>6</sup> Danese et al. Clin Gastroenterology and Hepatology. 2021;19:11, 2324-32.e6

# XmAb<sup>®</sup> TL1A x IL-23 to Have First-in-Class Potential

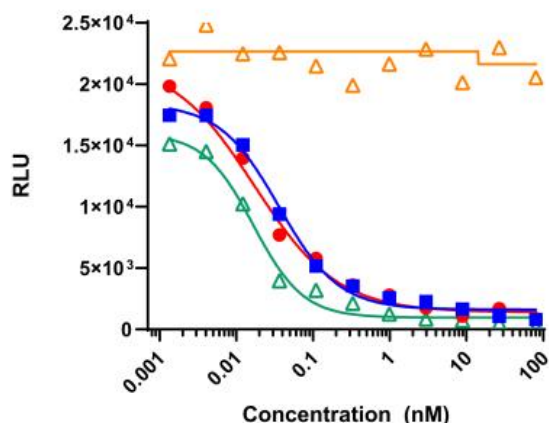
## First-in-Human Study Planned in 2026

Prototype TL1A x IL-23p19 bispecifics are functionally active on both axes

### TL1A Activity

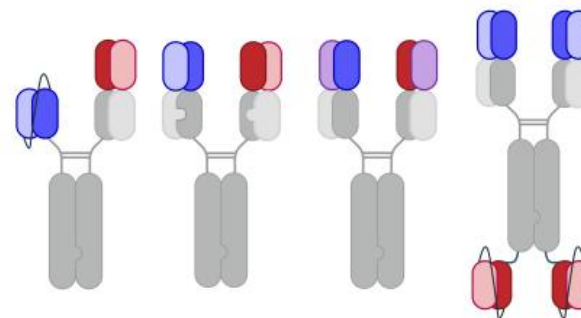


### IL-23 Activity



- TL1A x IL-23 Prototype 1
- TL1A x IL-23 Prototype 2
- △ TL1A Ab Control
- △ IL-23 Ab Control

XmAb protein engineering allows for a range of stable molecular structures

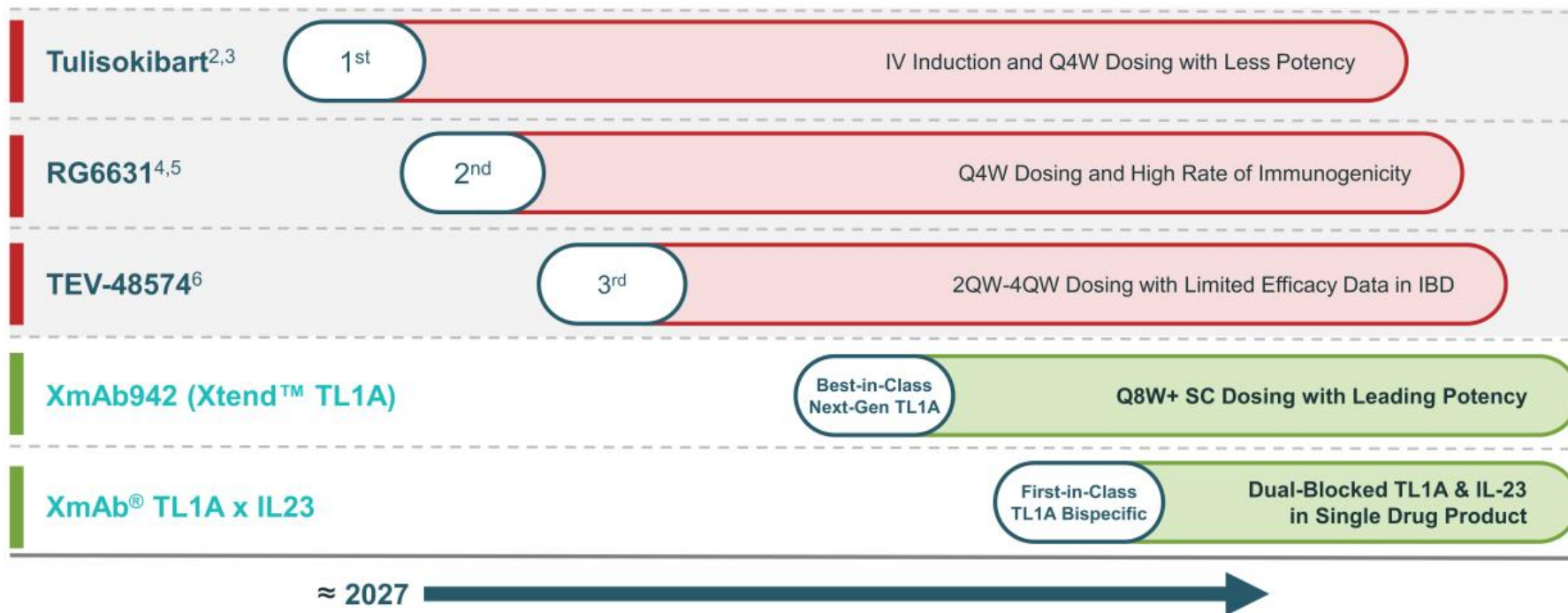


- Rapidly prototype in multiple formats
- Optimize and tune for biological activity



# Xencor Positioned for Best-in-Class TL1A Portfolio in \$23bn+ Global IBD Market<sup>1</sup>

## Potential Commercializations for First-Gen Programs and XmAb<sup>®</sup> TL1A Portfolio



Timelines are illustrative only and subject to FDA approvals <sup>1</sup> Estimate of US, UK, Spain, Japan, Italy, Germany, France and Canada market size in 2030 (GlobalData) <sup>2</sup> PRA023 Progress Update (Prometheus presentation) <sup>3</sup> Feagan et al. The Anti-TL1A Antibody PRA023 Demonstrated Proof-of-Concept in Crohn's Disease: Phase 2a APOLLO-CD Study Results (DOP87) Abstract citation ID: jjac190.0127 <sup>4</sup> Banfield et al. Br J Clin Pharmacol. 2020;86:812-824 <sup>5</sup> Clarke et al. mAbs. 2018;10:4, 664-677 <sup>6</sup> Danese et al. Clin Gastroenterology and Hepatology. 2021;19:11, 2324-32.e6

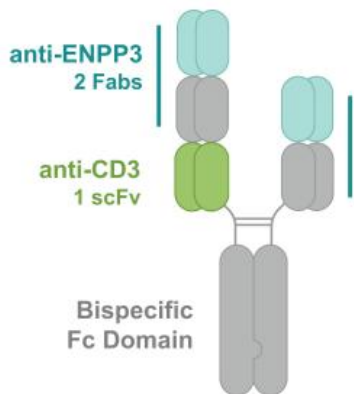
**Potential First-in-Class  
T-Cell Engagers  
in Solid Tumor Oncology**



# XmAb® T-Cell Engager Programs Designed to Address Unmet Need with Potential Across Multiple Tumor Types

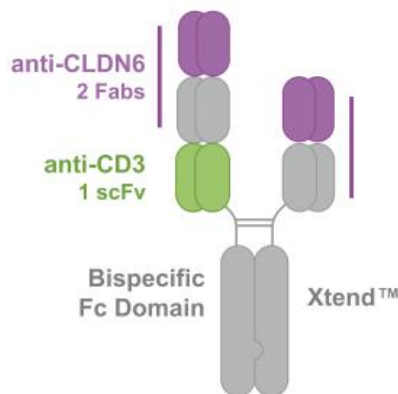
## XmAb819 (ENPP3 x CD3)

- Engineered for greater selectivity for ENPP3-expressing tumor cells compared to normal cells, which also express ENPP3 at lower levels
- In development for patients with relapsed/refractory clear cell RCC (ccRCC), which has nearly uniformly high ENPP3 expression
- Dose-escalation ongoing



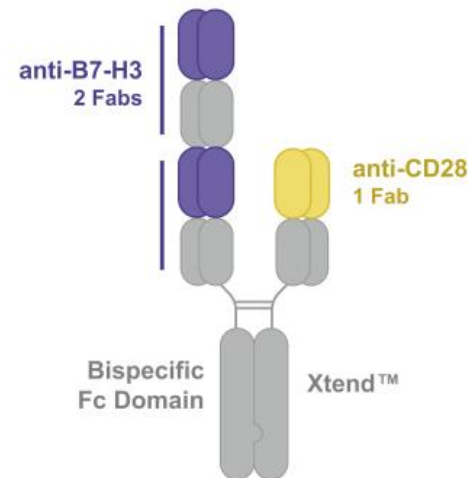
## XmAb541 (CLDN6 x CD3)

- Engineered for CLDN6 selectivity over similar CLDN9, CLDN3 and CLDN4
- In development for patients with CLDN6+ tumors, including ovarian cancer
- Dose-escalation ongoing



## XmAb808 (B7-H3 x CD28)

- Engineered to provide tumor-selective co-stimulation only when bound to tumor cells
- Combination with anti-PD1 (pembrolizumab)
- In development for patients with solid tumors
- Dose-escalation ongoing



# XmAb819 Status Update<sup>1</sup>: Encouraging Initial Data in Ongoing Dose Escalation in ccRCC

>\$2bn

peak sales  
potential in  
ccRCC<sup>2</sup>

## XmAb819

Potential first-in-class  
ENPP3 x CD3

Dose escalation on-track  
with RECIST responses in  
recent dose cohorts

## XmAb819 remains on-track to reach target dose levels by year-end

### Observed in escalation:

- Clear initial evidence of anti-tumor activity, including RECIST responses, in recent cohorts
- Duration of treatment for several patients in earlier dose cohorts has extended beyond one year
- Cytokine release syndrome (CRS) manageable
- No MTD reached; tolerability from recent dose cohorts continues to support dose escalation

- Investigators remain highly engaged, and enrollment into new dose cohorts has been rapid
- Intravenous and subcutaneous cohorts continue dose escalation in parallel
- Evaluation of expansion into additional tumor types is ongoing
- **Clinical update and first dose expansion cohort expected to start during 1H'25**

<sup>1</sup> Update provided 09-Sep-2024, based on 30-Aug-2024 data cutoff <sup>2</sup> Based upon internal Xencor projections of non-risk adjusted peak sales ccRCC clear cell renal cell carcinoma MTD maximum tolerated dose

# XmAb808 Status Update<sup>1</sup>: Continued Progress in Dose Escalation

>\$3bn  
peak sales  
potential<sup>2</sup>

## XmAb808

Potential first-in-class  
B7-H3 x CD28

Dose escalation on-track with  
PSA reductions observed for  
patients with mCRPC during  
monotherapy run-in period

## XmAb808 remains on-track to reach target dose levels by year-end

### Observed in escalation:

- Tolerability from recent dose cohorts remains supportive of continued combination with per label dosing of pembrolizumab
- Safety data have supported adding cohorts with Day 1 start for dosing the combination of XmAb808 and pembrolizumab, along with cohorts that use a four-week XmAb808 monotherapy run-in period
- Dose-escalation cohorts continue to enroll patients with multiple tumor types, majority with mCRPC
- For the subgroup of mCRPC patients, biologic activity of XmAb808 has been observed with PSA declines during the four-week monotherapy run-in period, but higher doses are expected to be needed to trigger more meaningful clinical activity
- **Clinical update and dose expansion expected to start during 1H'25**

<sup>1</sup> Update provided 09-Sep-2024, based on 16-Aug-2024 data cutoff <sup>2</sup> Based upon internal Xencor projections of non-risk adjusted peak sales mCRPC metastatic castration-resistant prostate cancer

# Guidance for Progress Across XmAb® Portfolio Programs in 2024

**XmAb Drug Candidate**      **2024 Priority**

## Solid Tumors: T-Cell Engagers (CD3 & CD28)

<b>XmAb819</b>	ENPP3 x CD3	Advance dose escalation toward target dose levels in 2024	
<b>XmAb808</b>	B7-H3 x CD28	Advance dose escalation toward target dose levels in 2024	
<b>XmAb541</b>	CLDN6 x CD3	Dose first patient during 1H 2024, enroll Phase 1 study	✓

## Immunology

<b>XmAb942</b>	Xtend™ TL1A	Present preclinical data during UEG Week 2024 on October 15	
		Initiate first-in-human Phase 1 study in Q4 2024	
<b>Plamotamab</b>	CD20 x CD3	Define clinical development plan	✓
<b>XmAb657</b>	CD19 x CD3	GMP campaign and IND preparation	✓

# Potential Inflection Points for Xencor's Clinical Portfolio in 2025

XmAb Drug Candidate		Indication	1H'25	2H'25
<b>Oncology Portfolio</b>				
<b>XmAb819</b>	ENPP3 x CD3	ccRCC	Initiation of dose expansion	
<b>XmAb808</b>	B7-H3 x CD28	Solid tumor	Initiation of dose expansion	
<b>XmAb541</b>	CLDN6 x CD3	Ovarian+		Advance toward target dose levels
<b>Vudalimab</b>	PD-1 x CTLA-4	mCRPC	Mono & combo cohort expansion readout	
		NSCLC	Evaluate chemo combination safety	
<b>Immunology Portfolio</b>				
<b>XmAb942</b>	Xtend™ TL1A	IBD+	SAD readout	MAD readout and Phase 2 start
<b>Plamotamab</b>	CD20 x CD3	Rheumatoid arthritis	Initiate Phase 1/2 study	
<b>XmAb657</b>	CD19 x CD3	Autoimmune		Initiate FIH study

SAD Single ascending dose MAD multiple ascending dose FIH first-in-human

# Xencor R&D Strategy Call

September 9, 2024

