Corporate Presentation

JANUARY 2025



Forward Looking Statements

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including without limitation statements regarding: future expectations, plans and prospects for Climb Bio, Inc. ("Climb Bio"); expectations regarding the therapeutic benefits, clinical potential and clinical development of budoprutug and CLYM116; the trial design for planned clinical trials of budoprutug; plans to optimize the administration of budoprutug; the anticipated benefits of Climb Bio's license agreement with Mabworks; anticipated timelines for preclinical data and initiating clinical trials of budoprutug and CLYM116; the sufficiency of Climb Bio's cash resources for the period anticipated and other statements containing the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would," "will," "working" and similar expressions. Forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in, or implied by, such forward-looking statements. Climb Bio may not actually achieve the plans, intentions or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. These risks and uncertainties include, but are not limited to, important risks and uncertainties associated with: the ability of Climb Bio to timely and successfully achieve or recognize the anticipated benefits of its acquisition of Tenet Medicines, Inc. and its license agreement with Beijing Mabworks Biotech Co., Ltd. ("Mabworks"); changes in applicable laws or regulation; the possibility that Climb Bio may be adversely affected by other economic, business and/or competitive factors; Climb Bio's ability to advance budoprutug and CLYM116 on the timelines expected or at all and to obtain and maintain necessary approvals from the U.S. Food and Drug Administration and other regulatory authorities; obtaining and maintaining the necessary approvals from investigational review boards at clinical trial sites and independent data safety monitoring boards; replicating in clinical trials positive results found in early-stage clinical trials; competing successfully with other companies that are seeking to develop treatments for systemic lupus erythematosus, immune thrombocytopenia, membranous nephropathy, IgA nephropathy and other immune-mediated diseases; maintaining or protecting intellectual property rights related to budoprutug, CLYM116 and/or its other product candidates; managing expenses; and raising the substantial additional capital needed, on the timeline necessary, to continue development of budoprutug, CLYM116 and any other product candidates Climb Bio may develop. For a discussion of other risks and uncertainties, and other important factors, any of which could cause Climb Bio's actual results to differ materially from those contained in the forward-looking statements, see the "Risk Factors" section, as well as discussions of potential risks, uncertainties and other important factors, in Climb Bio's most recent filings with the U.S. Securities and Exchange Commission. In addition, the forward-looking statements included in this presentation represent Climb Bio's views as of the date hereof and should not be relied upon as representing Climb Bio's views as of any date subsequent to the date hereof. Climb Bio anticipates that subsequent events and developments will cause Climb Bio's views to change. However, while Climb Bio may elect to update these forward-looking statements at some point in the future, Climb Bio specifically disclaims any obligation to do so, except as required by law.





Together We Can Reach Higher Ground

At Climb Bio, we believe elevating relationships leads to more meaningful insights, better answers, and ultimately, to more inspired medicines for patients living with immune-mediated diseases



1 in 7 Americans suffer from an immunemediated disease



Committed to enhancing the patient experience

Driven to becoming a leader in development for immune-mediated diseases



Building A Leading Immune-Mediated Disease Focused Company



Immune-Mediated Disease Focus

Committed to developing better treatments for patients with immune-mediated disease



Broad Potential

Programs focused on clinically validated biology and have potential for development in multiple indications



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Well Resourced

Funded through 2027 enabling delivery of key value inflection points across multiple programs

Experienced Team

Track record of identifying potential best-in-class assets, operational excellence and delivering results

Team Highlights

Building a highly-credentialed and experienced development organization focused on execution



Aoife Brennan President and CEO



William Bonificio Interim CBO



Brett Kaplan COO



Emily Pimblett SVP, Finance



Kate Hecht SVP, Program Management



Jan Hillson Senior Clinical Advisor



Gang (Gary) Hao VP, CMC



Janaki M. Subramanyam VP, Regulatory Affairs



Jay Mitchell VP, Clinical Operations



Growing Pipeline Focused on Immune-Mediated Diseases

Developing best-in-class treatments for patients with immune-mediated diseases

	INDICATION(S)	PRE-CLINICAL	IND-ENABLING	PHASE 1	PHASE 2	PHASE 3	CLIMB RIGHTS
	Membranous Nephropathy						WORLDWIDE
Budoprutug IV Anti-CD19	Immune Thrombocytopenia*						WORLDWIDE
	Systemic Lupus Erythematosus						WORLDWIDE
Budoprutug SC Anti-CD19	Autoimmune Disease						WORLDWIDE
CLYM116 Anti-APRIL	IgA Nephropathy						WORLDWIDE OUTSIDE GREATER CHINA** PARTNER:



Mabwo

License Expands Pipeline with a Potential Best-in-class anti-APRIL mAb

Furthers goal to become a leader in developing new treatment options for immune-mediated diseases

Strategic Rationale

- Complementary to Climb's anti-CD19 antibody, budoprutug
- Leverages Climb's clinical and regulatory capabilities and Mabworks' development and manufacturing capabilities
- Inhibition of APRIL is a clinically validated mechanism and potentially disease modifying approach for IgAN
- CLYM116 is a highly potent anti-APRIL mAb with half-life extension and enhanced APRIL degradation

Meaningful Opportunity

- IgAN is the most common primary glomerular disease worldwide; est. >110,000 cases in the US
- Growing market, expected to reach > \$10B annually over coming 10 years
- Opportunity to address limitations of APRIL-targeted therapies currently in development

Key Deal Terms

- Exclusive worldwide license outside of Greater China*
- Upfront of \$9m, additional payments upon the achievement of specified development, regulatory and commercial milestones, and low- to mid-single digit royalites



CLYM116: Fc-Engineered Anti-APRIL mAb

Designed to address limitations of APRIL-targeted therapeutics currently in development

Unique attributes driving differentiation & positioning

NOVEL MECHANISM

Blocking APRIL binding and enhancing degradation of APRIL

HIGH AFFINITY

pH-dependent binding to APRIL

FC-ENGINEERED

Clinically validated Fc mutations to increase serum half-life and diminish effector function

✓ Potential for best-in-class efficacy

Rapid, deep, and durable inhibition of APRIL signaling

✓ Favorable tolerability profile

Avoids potential immunosuppression associated with BAFF inhibition Engineered to silence effector function

✓ Optimized dosing

Subcutaneous administration with potential for less frequent dosing, reducing patient burden



CLYM116 is a highly potent anti-APRIL mAb designed to prevent APRIL signaling

through a novel mechanism

CLYM116: Mechanism of Action

Novel mechanism of action employs a pH-dependent bind-andrelease design, coupled with Fc-engineering



Variable Region exhibits **pHdependent binding to APRIL**, resulting in both potent blocking of APRIL to its receptors *and* promotion of lysosomal APRIL degradation

Fc Region engineered to promote antibody recycling and reduce clearance of CLYM116, resulting in longer half-life

CLYM116: Engineered For Potency and Rapid Clearance of APRIL

pH-dependent binding of CLYM116 to APRIL led to deep and durable clearance of APRIL in vivo



- CLYM116 potently bound APRIL at pH 7.4; poor binding at pH 5.8
- Benchmark anti-APRIL mAb did not demonstrate this pH-dependent binding profile

APRIL degradation in mice after administration of anti-APRIL antibodies*



Time after APRIL-Biotin administration (h)

• CLYM116 depleted circulating APRIL and demonstrated enhanced clearance vs. benchmark anti-APRIL mAb



*Wild type C57 mice; antibodies 10mg/kg, single dose sc at time 0; Human APRIL 15mg/kg, single dose sc at 36 h; APRIL concentration assessed every 2 h thereafter APRIL = a proliferation-inducing ligand, ELISA = enzyme-linked immunosorbent assay, h = hours, mAb = monoclonal antibody, OD = optical density, sc = subcutaneous

CLYM116: Potential Best-in-Class Anti-APRIL mAb for IgAN



APRIL is a clinically validated target for IgA Nephropathy CLYM116 was designed to have reduced dosing frequency, faster response, and strong efficacy Aiming to advance potentially best-in-class mAb through IND enabling studies



IgA Nephropathy (IgAN): Indication Overview

Pathophysiology	 IgA Nephropathy (IgAN), also known as Berger's Disease is an autoantibody mediated disease caused by deposition of immune complexes, comprising IgA and IgG, in the glomeruli Median age of diagnosis in western patients is 40-45 years old
Symptoms & Diagnosis	 Symptoms: hematuria, proteinuria, high blood pressure, edema Diagnosis: kidney biopsy
Epidemiology	 IgAN is the most common primary glomerular disease worldwide with an estimated >110,000 cases in the US and higher prevalence in Europe & Asia Growing market, expected to reach > \$10B annually over coming 5-10 years
Natural History	 30-40% of untreated patients will develop kidney failure within 10 years of diagnosis Accelerated approval based on reduction in proteinuria with full approval based on stabilization of eGFR
Standard of Care	 Treatment is aimed at preserving kidney function through reduction of blood pressure and proteinuria Target maintain urine protein excretion < 0.5g/24 hours and ideally normalization of protein excretion, i.e. < 0.3g/24 hours Updated KDIGO guidelines likely to recommend additional treatment when proteinuria > 0.5g/24 hours



CD19: Important Target for B-cell Mediated Diseases

CD19-targeted therapy potentially enables rapid onset and durability of effect in B-cell mediated diseases



Budoprutug: Fc-Enhanced Anti-CD19 mAb

Designed to treat immune-mediated diseases



Budoprutug is a highly potent anti-CD19 mAb containing a low-fucosylated Fc region, leading to enhanced effector function and highly potent ADCC

Unique attributes driving differentiation & positioning

HIGH AFFINITY

18 pM

binding affinity to CD19 to counter low antigen density

ADCC-ENHANCED

>100x potency

vs. wild-type IgG1 to drive deep & durable B-cell depletion

HIGH CONCENTRATION

≥175 mg/mL with low viscosity for low volume, SC injection

Potential for best-in-class efficacy

Rapid, deep, and durable B-cell depletion at doses as low as 100 mg

Opportunity for patient-tailored approach to treatment

Potential to provide IV and/or SC offerings where favorable to patient and point-of-care

Optimized dosing and tolerability

Potential for induction and maintenance dosing paradigm with favorable safety, tolerability profile

✓ Pipeline-in-a-molecule potential

3 distinct opportunity sets: IgG4-Mediated, Complex Systemic, & Primarily Single Organ IgG1 – 3

Budoprutug: Anti-CD19 mAb Designed to Treat a Broad Range of B-Cell Mediated Diseases





AAb = autoantibody, Fc+ = Fc-engineered, IV = intravenous, mAb = monoclonal antibody, MoA = mechanism-of-action, SC = subcutaneous *Subject to investigational new drug application clearance

Budoprutug Strategy & Vision

Climb is well-positioned to advance budoprutug across three distinct opportunity sets



Primarily IgG4-Mediated

Clear pathophysiology supporting targeting of CD19-expressing B-cells

Lead indication Primary Membranous Nephropathy

Opportunity to Differentiate

Potential for "immune reset", improved efficacy



Primarily Single Organ IgG1 - 3

Orphan diseases with compelling clinical proof-of-concept using B-cell depletion

Lead indication Immune Thrombocytopenia

Opportunity to Differentiate

Demonstrate efficacy in relapsing and/or refractory patients



Complex Systemic

Multi-organ, systemic diseases with heterogenous patient populations

Lead indication

Systemic Lupus Erythematosus

Opportunity to Differentiate

Improve efficacy while balancing safety, tolerability, and convenience



Budoprutug: Pipeline In A Molecule

Multiple potential next wave indications

CLIMBBIO



MG MuSK= Myasthenia Gravis muscle-specific tyrosine kinase; SLE = Systemic Lupus Erythematosus, MN = Membranous Nephropathy, ITP = Immune Thrombocytopenia NMOSD = Neuromyelitis optica spectrum disorder, BP = Bullous pemphigoid, ANCA-AAV = antineutrophil cytoplasmic antibody-associated vasculitides, SSc = Systemic sclerosis; CIDP = Chronic inflammatory demyelinating polyradiculoneuropathy, IgG4-RD = IgG4 related disease, RA = Rheumatoid arthritis, MS = Multiple sclerosis, MG (AChR) = Myasthenia Gravis acetylcholine receptors, PV = Pemphigus Vulgaris Prevalence references: SLE (Izmirly 2021), ITP (internal research), MN (internal research), MG (Ye 2024), SSc (Fan 2020), ANCA-AAV (Berti 2017), CIDP (Laughlin 2009), BP (Wertenteil 2018), NMOSD (Briggs 2024), IgG4-RD (Wallace 2023), RA (Hunter 2017), Sjogren's (Maciel 2017), MS (Wallin 2019)

Budoprutug: Primarily IgG4-Mediated

Primary Membranous Nephropathy



Primarily IgG4-Mediated

Clear pathophysiology supporting targeting of CD19-expressing B-cells

Lead indication

Primary Membranous Nephropathy

Opportunity to Differentiate

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Primary Membranous Nephropathy (pMN): Indication Overview

Pathophysiology	 Primary MN (pMN) is caused by autoantibody-mediated destruction of podocytes at the glomerular basement membrane (GBM) Anti-PLA2R antibodies occur in 60% to 80% of patients with pMN
Symptoms & Diagnosis	 Symptoms: proteinuria, hypoalbuminemia, edema, dyspnea, fatigue, hyperlipidemia, nephrotic syndrome Diagnosis: kidney biopsy and/or serum anti-PLA2R antibody assays
Epidemiology	 MN incidence: 1/100K and 80% are pMN; conservatively ~100K patients in US and EU 20-40% of patients are refractory to currently available lines of treatment
Natural History	 Severity of proteinuria is associated with poor outcomes and severe proteinuria (i.e., >10g/day) leads to end stage renal disease in ~50% of patients by 5 years Patients are at increased risk for kidney failure and life-threatening thromboembolic events Remission of proteinuria is an approvable endpoint in nephrotic patients
Standard of Care	 Treatment is aimed at reducing proteinuria, though all therapies are off-label KDIGO guidelines recommend treatment based on risk, primarily based on eGFR and PLA2R levels Rituximab (RTX) is considered 1st line therapy; MENTOR trial showed complete remission w/ RTX superior to calcineurin inhibitors (CNIs) at 24 months



Budoprutug Phase 1b Study Design

Proof-of-concept, open label, dose escalating study in adult subjects with pMN



Budoprutug Administration was Associated with Resolution of Proteinuria and Immunological Remission

Data for pMN subjects (n = 5) who have completed ≥48-weeks



Complete remission achieved in 60% (3/5) of patients at Week 48

IMBBIO

- Partial remission (>50% reduction in UPCR + UPCR <3.5 g/g) achieved in all (5/5) subjects
- Complete B-cell depletion (CD20⁺ count <5 cells/μL) achieved in all (5/5) subjects
- Anti-PLA2R Ab negativity (<14 RU/mL) achieved in all (3/3) evaluable subjects
- 2 subjects on study that have not entered complete remission have achieved PLA2R negativity (serological remission)

Note: Interim data presented at ASN 2022

MN = Membranous Nephropathy, PLA2R = phospholipase A2 receptor, UPCR = urine protein creatinine ratio

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Safety

Budoprutug was generally well tolerated at doses of up to 200mg

8 Patients received at least one injection of budoprutug and are included in the safety analysis population

- ✓ There were no deaths on study
- There were 3 SAEs, none of which were considered to be related to budoprutug by the investigator
- ✓ No discontinuations due to AE
- ✓ No dose limiting toxicities (DLTs) were observed
- 4 patients reported infections on study of which 3 were cases of COVID-19 and 1 was bacterial pneumonia



Budoprutug: Primarily Single Organ IgG1 - 3

Immune Thrombocytopenia



Primarily IgG4-Mediated

Clear pathophysiology supporting targeting of CD19-expressing B-cells

Lead indication Primary Membranous Nephropathy

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Immune Thrombocytopenia (ITP): Indication Overview

Pathophysiology	 ITP is an autoimmune disease characterized by low platelets resulting in bruising and hemorrhage Antiplatelet autoantibodies lead to accelerated removal of platelets by macrophages with bone marrow compensation
Symptoms & Diagnosis	 Symptoms: bruising (petechiae and purpura), bleeding episodes, and fatigue Diagnosis: Low platelet count, supported by additional blood tests i.e., CBC and blood smear, antiplatelet antibody test, bone marrow aspiration if needed
Epidemiology	 The estimated global prevalence of ITP is around 200,000 patients worldwide In the US, there are 81,000 adults with chronic ITP with >24,000 refractory to 2nd line treatment
Natural History	 Most children have spontaneous remission within a few weeks or months While adults often stabilize on 1st line therapy, the majority eventually relapse or become refractory, necessitating treatment with 2nd and at times 3rd line therapies, splenectomy in hard-to-treat situations can be considered



ITP Patients Likely Fail Rituximab due to the Presence of CD19+CD20- B-cells

CD19⁺/CD20⁻ plasma cells expand within B-cell niches post anti-CD20 treatment





ITP Phase 2 Trial Design & Objectives*

Planned single arm, open-label study focused on platelet response and B-cell depletion

POPULATION

- Insufficient response to 1 or more prior therapies
- Platelet count <30,000/μL
- B-cells > 40 /μL

PRIMARY OBJECTIVE

- To evaluate the safety and tolerability of budoprutug in subjects with ITP
- To evaluate the efficacy of budoprutug on platelet counts

KEY SECONDARY/EXPLORATORY OBJECTIVES

- To evaluate subject reported outcomes/quality of life (QoL) measures
- To evaluate PK/PD (dose relationship) profile in subjects with ITP

Potential for treat to target approach

 = Budoprutug dose N = up to 20 Day 1, Day 15





Budoprutug: Complex Systemic

Systemic Lupus Erythematosus



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Systemic Lupus Erythematosus (SLE): Indication Overview

Pathophysiology	 SLE comprises a group of disorders characterized by the generation and persistence of autoreactive lymphocytes and autoantibodies that directly interfere with critical functions, target cells for destruction, and damage tissues through immune complex depositions
Symptoms & Diagnosis	 Diagnosis is clinical, based on serology and organ system involvement without other cause Symptoms and severity vary widely across patients. Nephritis is the most common organ system threat; fatigue and cognitive dysfunction are the most common disabling manifestations
Epidemiology	 US burden is ~240,000 active patients; ~80,000 with lupus nephritis Global prevalence is ~1-2 per 100,000 adults, with 9:1 female predominance
Standard of Care	 Corticosteroids to rapidly control inflammation Antimalarials for rash and to reduce flares Small molecule immune suppressants to reduce corticosteroid use Belimumab (B-cell activating factor blockade), Anifrolumab (type 1 interferon receptor blockade) for refractory disease Rituximab used off label
Unmet Need	 10% – 20% are refractory to current therapies; much larger numbers are dependent on corticosteroids Relapses, especially of nephritis, vasculitis, thrombosis, lead to cumulative damage and organ failure Fatigue and cognitive dysfunction respond poorly, impairing participation and quality of life Treatment-associated burden of cardiovascular mortality, infection, and neoplasm risk



Targeting B-Cells Has Shown Promise in SLE

DRUG	co.	TARGET	ROUTE	STAGE	SLE CLINICAL DATA
Rituximab	Roche	CD20	IV, SC	Phase 3 SLE and LN (failed)	Phase 3 (vs. placebo, n=257) <u>Week 52 SRI-4</u> 27.2% (vs. 22.7%)
Obinutuzumab	Roche	CD20	IV	Phase 3 LN (completed; results pending)	Phase 2 (vs placebo, n=125) <u>Week 52 CRR</u> 35% (vs 23%) <u>Week 104 CRR</u> 41% (vs 23%)
Belimumab	GSK	BAFF	SC	SLE and LN (marketed)	Phase 3 (vs. placebo, n=836) <u>Week 52 SRI-4</u> 61% (vs. 48%)

Patients with poor response to depletion of CD20+ B cells are characterized by any among:

- Inadequate CD20+ B cell depletion
- Persistence of CD19+ self-reactive B-cell subsets
- Continued production of pathogenic autoantibodies by plasma cells
- Rapid recovery of pathogenic Bcell subsets



Arnold 2022; Furie 2022; Scherlinger 2019; Benlysta FDA label

BAFF = B-cell activating factor, CCR = complete renal response, IV = intravenous, LN = lupus nephritis, SC = subcutaneous, SLE = systemic lupus erythematosus; SRI = systemic lupus erythematosus responder index

Targeting B-Cells Has Shown Promise in SLE



CD19 CAR-T potentially 'curative' at 6 months

SLE patient data from Müller 2024, Mackensen 2022, SLEDAI-2K = Systemic Lupus Erythematosus Disease Activity Index 2000

Response is associated with rapid depletion of circulating B cell and autoantibodies, followed by recovery of relatively benign B cell subsets



Depletion of CD19+ B cells with CD19+ CAR-T cells addresses some of the shortcomings of existing therapy. Limitations include:

- Challenging to make autologous cells from highly pre-treated patients
- Toxicity associated with required conditioning therapy
- Risk of cytokine release syndrome and immune effector cell associated neurotoxicity syndrome
- Access limited by complexity and cost

SLE Trial Design & Objectives

Planned open-label, dose escalation with augmented B cell and antibody analyses



• To determine the kinetics of re-population of B-cell subsets and antibodies after depletion

Subject to investigational new drug application clearance



Multiple Milestones Anticipated Over Coming 12 Months

Budoprutug		
Initiation of SLE global clinical trial with first patient in	H1 2025	~\$212.9M*
Initiation of ITP global clinical trial with first patient in $^{\rm +}$	H1 2025	
Additional non-clinical data from subcutaneous program	H1 2025	
Advance pMN program to late phase development	2025	
Initiate clinical development of subcutaneous program	2025	67.3M*
		SHARES OUTSTANDING
CLYM116		
Initial preclinical data	H2 2025	



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