Eledon Pharmaceuticals

Targeted Immunology CD40/CD40L Therapeutics

Transplantation | Autoimmunity | ALS

January 2023

Forward-Looking Statements

This presentation contains forward-looking statements that involves substantial risks and uncertainties. Any statements about the company's future expectations, plans and prospects, including statements about its strategy, future operations, development of its product candidates, and other statements containing the words "believes," "anticipates," "plans," "expects," "estimates," "intends," "predicts," "projects," "targets," "could," "may," and similar expressions, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, although not all forward-looking statements include such identifying words. Forward-looking statements include, but are not limited to statements regarding: expectations regarding the timing for the commencement and completion of product development or clinical trials; the rate and degree of market acceptance and clinical utility of the company's products; the company's commercialization, marketing and manufacturing capabilities and strategy; the company's intellectual property position and strategy; the company's ability to identify additional products or product candidates with significant commercial potential; the company's estimates regarding expenses, future revenue, capital requirements and needs for additional financing; developments relating to the company's competitors and industry; and the impact of government laws and regulations.

Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: the ability to develop commercially viable product formulations; the sufficiency of the company's cash resources; the ability to obtain necessary regulatory and ethics approvals to commence additional clinical trials; whether data from early clinical trials will be indicative of the data that will be obtained from future clinical trials; whether the results of clinical trials will warrant submission for regulatory approval of any investigational product; whether any such submission will receive approval from the United States Food and Drug Administration or equivalent foreign regulatory agencies and, if we are able to obtain such approval for an investigational product, whether it will be successfully distributed and marketed. These risks and uncertainties, as well as other risks and uncertainties that could cause the company's actual results to differ significantly from the forward-looking statements contained herein, are discussed in our annual report on Form 10-K for the year ended December 31, 2021, and other filings with the SEC which can be found at www.sec.gov. Any forward-looking statements contained in this presentation speak only as of the date hereof and not of any future date, and the company expressly disclaims any intent to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Photo: Gertrude "Trudy" Elion.

Eledon Pharmaceuticals

Single Company Focus: Leveraging Validated Biology to Develop Best-in-Class Immune-Modulating Therapeutics

Optimized & Differentiated Lead Asset

- CD40/CD40L **pathway validated by extensive historical proof-of-concept data**
- Tegoprubart was engineered to increase potency, half-life and manufacturability vs. other anti-CD40 approaches
- Targeting areas of high unmet need including organ transplantation and ALS

Strong Financial Profile

- **$65.9M in cash** and cash equivalents (as of September 30, 2022)
- Expected **sufficient to fund operations into 2024**
- ~29.9 M fully diluted shares outstanding

Near-Term Milestones

- Multiple interim **clinical data** readouts expected beginning **in Q1'23** in **Kidney Transplantation & IgA Nephropathy** (safety)
- **Initiation of Phase 2 BESTOW trial** of tegoprubart in **kidney transplantation** expected in **mid-2023**

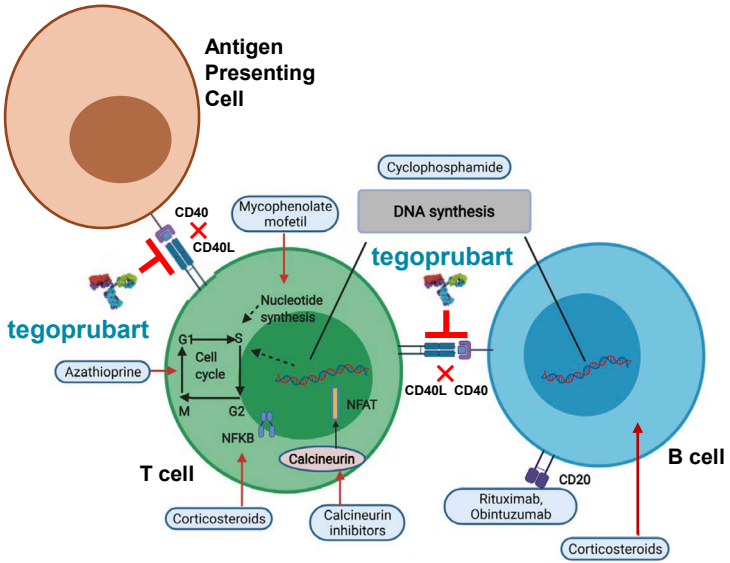
Tegoprubart: Tegoprubart: Pipeline in a Product Opportunity With Transplantation as the Primary Focus

Product Candidate	Indication	Development Stage				Notes
		Pre-clinical	Phase 1	Phase 2	Phase 3	
Tegoprubart	Kidney Transplantation					• Phase 1b enrolling with interim data readout expected Q1 2023 • Phase 2 expected to launch mid-2023
	Liver Transplantation					• Academic collaboration
	Xenotransplantation					• eGenesis collaboration
	Amyotrophic Lateral Sclerosis (ALS)					• Phase 2 top-line reported May 2022
	IgA Nephropathy					• Program deprioritized • Interim safety data readout Q1 2023
AT-2001	Autoimmune Indications					

Note: Development plans and timelines may change, including based on US and global regulatory interactions.

Mechanism Overview of CD40L Inflammatory Signaling

CD40/CD40L Pathway and Tegoprubart Site of Action



- Interaction of CD40 with CD40L on immune cells **mediates activation of the co-stimulatory immune pathway**, controlling "cross talk" between the adaptive and innate immune systems
- Maximal activation of inflammatory system is a 3-step process requiring co-stimulatory signaling
  - **Step 1:** Major histocompatibility complexes (MHC) and CD3/TCR engagement
  - **Step 2:** CD40 and CD40L binding resulting in cell division and clonal expansion
  - **Step 3:** Pro-inflammatory response by polarized T cells expressing inflammatory chemokines and cytokines
- **Blocking CD40L shifts polarization away from pro-inflammatory signaling** to T cell anergy, apoptosis, and polarization **to a Treg environment**
  - Blocking CD40L thus **does not generally result in lymphopenia** often seen with immunosuppressive agents

Source: Adapted from Kant, 2022.

Eledon Pharmaceuticals

Tegoprubart: Potential Best-in-Class Anti-CD40/CD40L Antibody

Targeting CD40 Ligand vs. CD40 Receptor		IgG1 vs. fusion protein or pegylated FAB
CD40L and CD40	**CD40L only**	
Targeting both anti-CD40L and anti-CD40 inhibits B cell polarization and class switching, as well as inhibits the pro-inflammatory polarization of $CD4^+$ Helper T cells	✓ Blocking anti-CD40L also inhibits CD11 costimulatory receptors on antigen presenting cells, thus blocking the pro-inflammatory polarization of $CD8^+$ Cytotoxic T cells	✓ Up to over 2x times longer half-life
	✓ Blocking CD40L also polarizes $CD4^+$ lymphocytes to $FoxP3^+$ Regulatory T cells (Tregs), thus creating a potentially more tolerogenic environment	✓ Manufacturing advantages
	✓ CD40L is more selectively expressed, providing the potential for additional safety and PK/PD/dosing advantages	✓ Less anti-drug antibodies

Note: Potential advantages versus selected other CD40/CD40L clinical programs; not based on head-to-head studies. Differences versus any individual competitive program may vary.

Tegoprubart Experience

Tegoprubart Phase 1a/1b Single Ascending Dose Trial Completed in Healthy Subjects and ALS Patients

Healthy Volunteers or ALS Patients Receiving Either tegoprubart (mg/kg, IV) or Placebo

Subjects	Healthy	Healthy	ALS	Healthy	Healthy	Healthy	Tego-prubart	Placebo
Dose (mg/kg)	0.5	1	**1**	2	4	8	NA	NA
n=	6	3	**3**	3	3	6	24	8
Number of Subjects (%) Experiencing TEAEs by Maximum Toxicity Grade								
Grade 1 (% Subjects Experiencing Events)	3 (50.0%)	2 (66.7%)	2 (66.7%)	2 (66.7%)	1 (33.3%)	1 (16.7%)	11 (45.8%)	5 (62.5%)
Grade 2 (% Subjects Experiencing Events)	–	–	1 (33.3%)	–	–	1 (16.7%)	2 (8.3%)	–
Grade 3	–	–	–	–	–	–	–	–
Grade 4	–	–	–	–	–	–	–	–
Grade 5	–	–	–	–	–	–	–	–

Phase 2a ALS: Trial Design, Safety & Tolerability

Trial design:

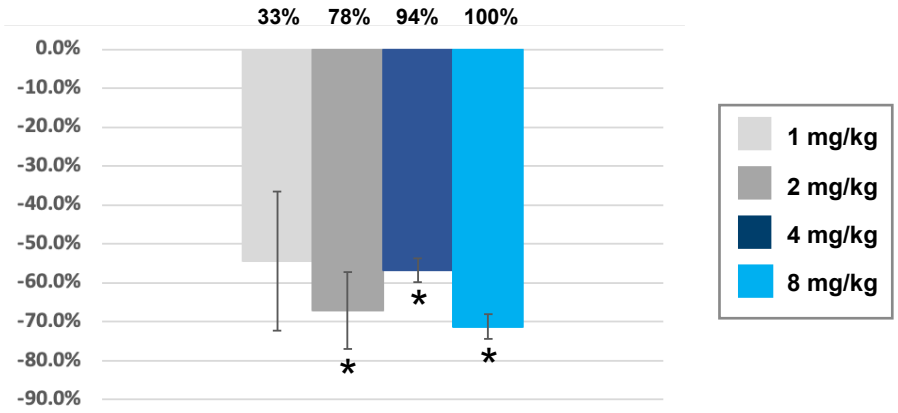
- 12-week, open label, multiple ascending dose level study
- Four sequential dose cohorts of 9 participants (1 and 2 mg/kg) and 18 participants (4 and 8 mg/kg) each
- Each participant serves as own control by comparing biomarker changes over time from initial baseline assessment

Safety & Tolerability:

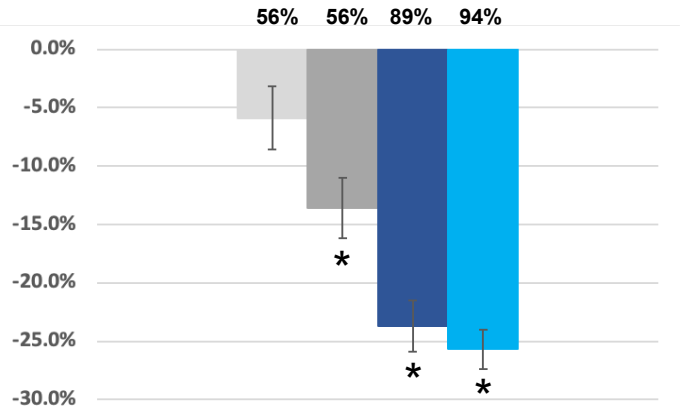
- 35.2% of participants had 1 or more drug-related adverse events (AEs)
  - No drug-related serious or severe AEs
  - Occurrence of drug-related adverse events was balanced across dose cohorts
  - No thrombosis or signs of platelet activation
  - 2 participants experienced adverse events leading to withdrawal
    - 1 participant withdrew because of worsening depression in the 1 mg/kg cohort
    - 1 participant withdrew because of malaise in the 2 mg/kg cohort
- Anti-Drug Antibodies detected in ~4.2% of samples
  - ADAs were of low titer and did not effect tegoprubart levels

Phase 2a ALS: Tegoprubart Demonstrates Dose Dependent T and B Cell Target Engagement

CD40L Change at Week 12 (%)



CXCL13 Change at Week 12 (%)

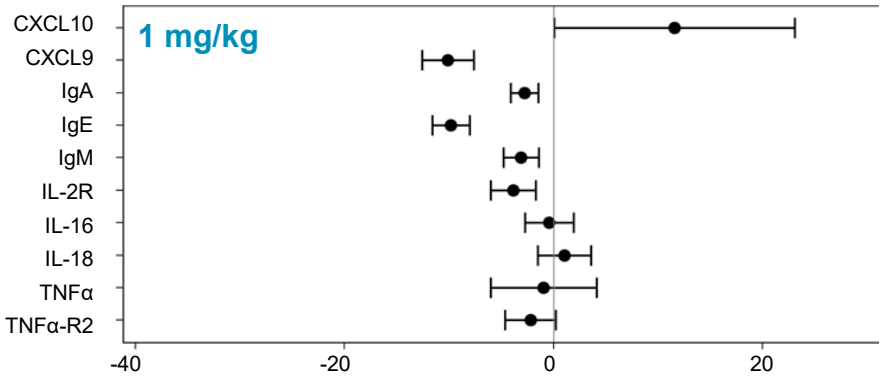


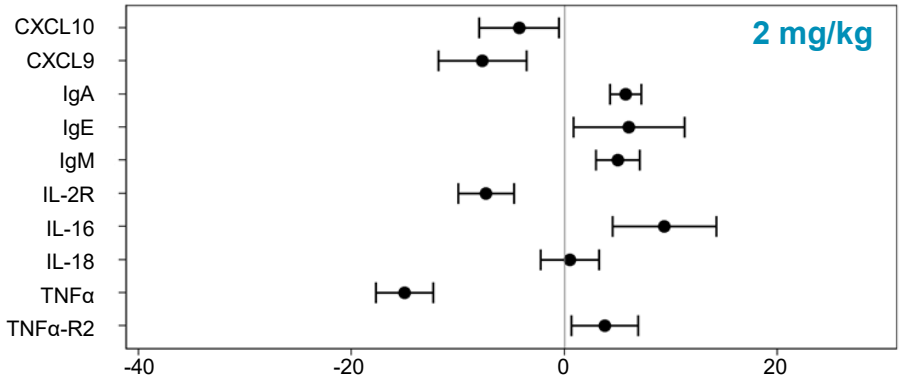
- **Tegoprubart exposure decreased inflammatory biomarker levels in a dose dependent manner**
- **20 biomarkers detected were statistically significantly reduced at one or both of the higher dose levels, including: IgA, IgE, IgM, C3, CXCL9 & CXCL10**
- **Target engagement at 12 weeks increased with dose**

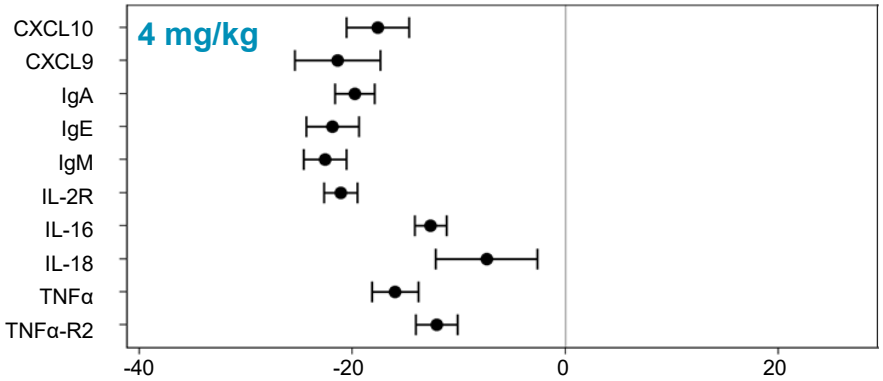
Note: Percentage of subjects with ≥10% reduction from baseline in a target biomarker shown above. Positive Target Engagement defined as participants with ≥10% decrease in CXCL13

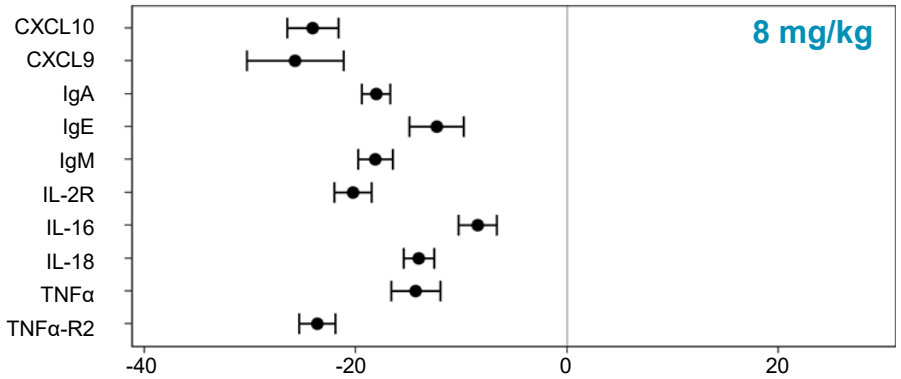
Eledon Pharmaceuticals

Phase 2a ALS: Tegoprubart Demonstrates Dose Dependent Reduction in Pro-Inflammatory Biomarkers









Eledon Pharmaceuticals

Kidney Transplantation Opportunity & Clinical Development Plan

Kidney Transplantation Overview

Unmet Need

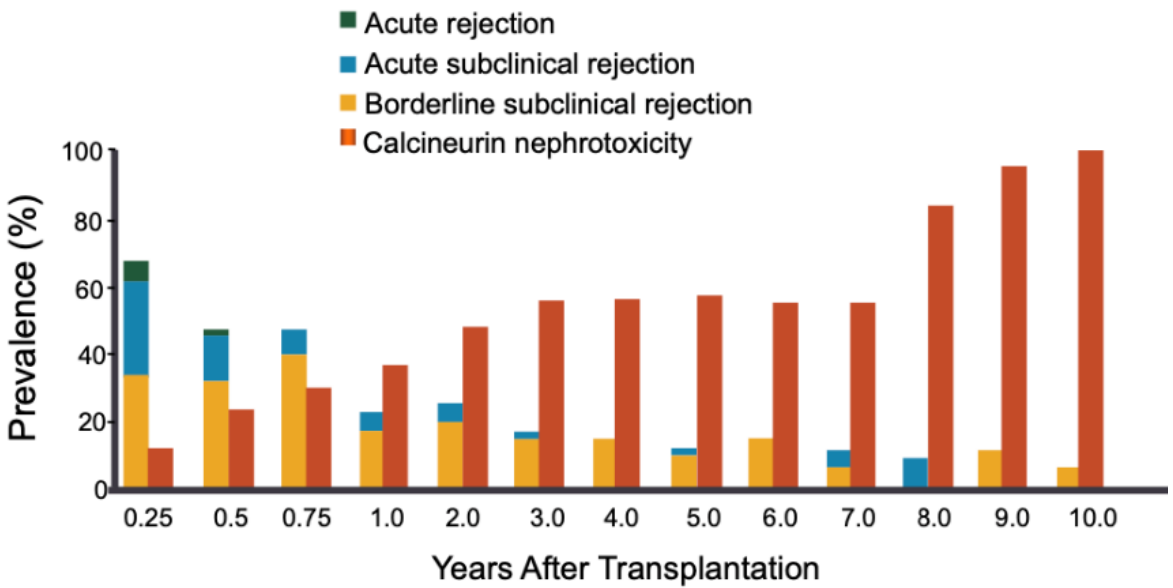
- In the 1990s, Calcineurin inhibitors (CNIs) revolutionized the field of transplantation, allowing transplant medicine to grow across transplant types, and providing meaningful treatment to thousands of people
- CNIs provide excellent 1 year patient and graft outcomes, but:
  - They are less effective against long term antibody mediated rejection
  - They are nephrotoxic and slowly harm the graft over time
  - They are associated with significant adverse effects including post-transplant new onset diabetes, tremors, and hair loss
- On average, transplanted kidneys from deceased donors function about 10 years

Market Size

- 24,000+ U.S. kidney transplants per year
- 240,000+ Americans living with a kidney graft
- ~90,000 Americans face a 3-5 year wait for a kidney
  - ~5,000 Americans per year on the transplant waiting list die without getting a transplant
- Pre-transplant dialysis costs over $100,000 per year
  - Hemodialysis has a 15-20% first-year mortality rate with a 5-year survival rate of under 50% (vs. ~80% 5-year survival post kidney transplant)
- Annual medical cost to treat transplant patients who experience renal graft failure increase 450%

Source: Donate Life America; NIDDK & Shapiro 2017; USRDS 2019; DHHS OPTN; Ghisdal 2012; Kidney.org; UCSF.

CNI Nephrotoxicity Over Time is a Leading Cause of Long-Term Kidney Transplant Graft Failure



At 6 months post transplant:

- ~24% of CNI treated patients demonstrate kidney impairment
- Up to 1/3 of CNI treated patients experience New Onset Diabetes After Transplant (NODAT) or impaired fasting glucose levels, which may also negatively impact kidney grafts over time

Source: Nankivell 2003; ATC 2018; Vincenti 2007.

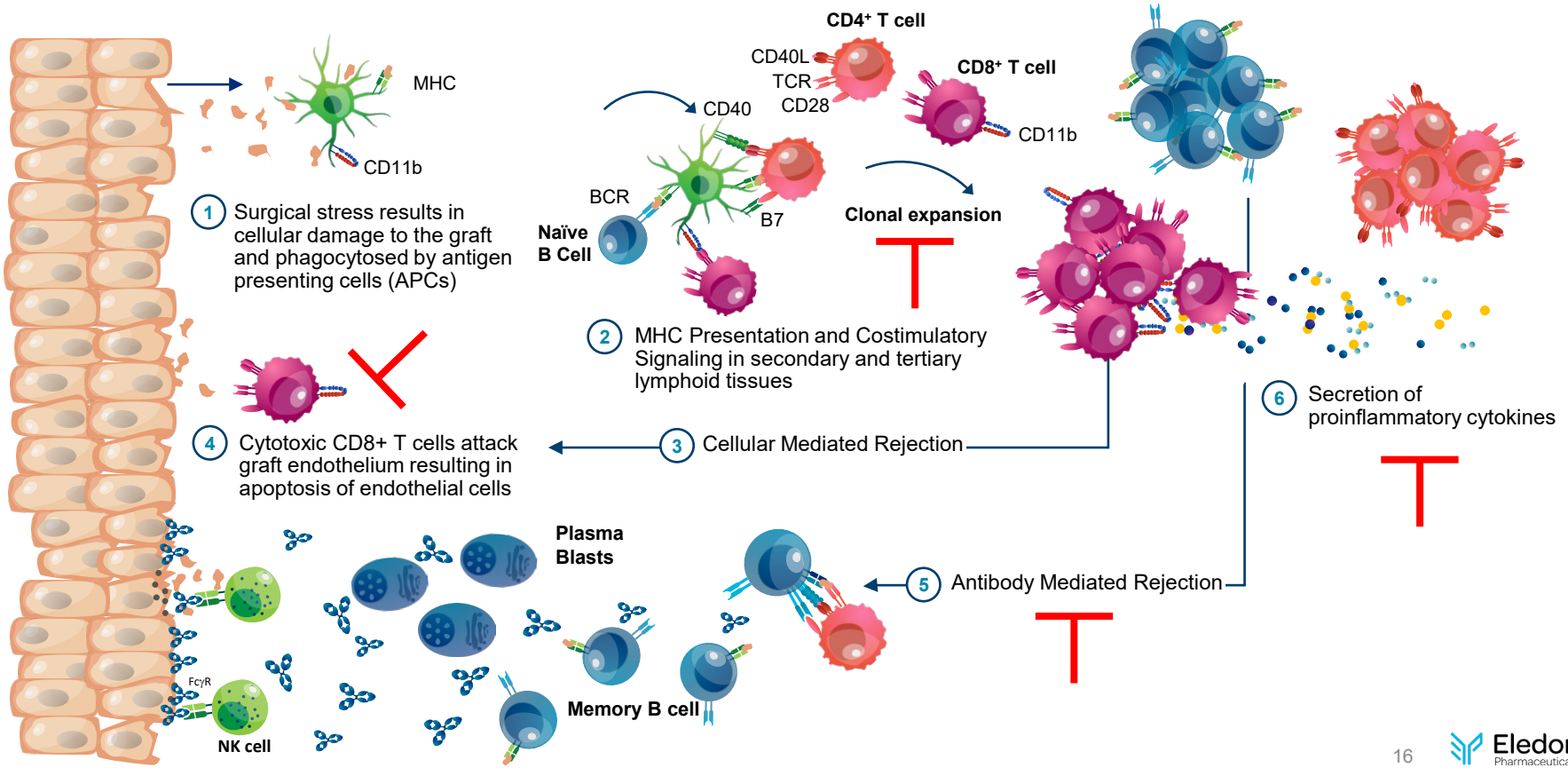
Eledon Pharmaceuticals

Incidence of CNI Related Nephrotoxicity Increases with Time Post Transplant Across Organ Types

Organ Transplant	Duration of CNI Exposure (Years)	CNI Nephrotoxicity (defined as decreased kidney function / histology)
Kidney-Pancreas	1 5 10	30% 55% 100%
Liver	4 5	16% 18%
Bone Marrow	8	67%
Heart	5 10	9% 9% ESRD
Lung	5	14%
Intestine	5	21%

Source: Kemper, 2014.

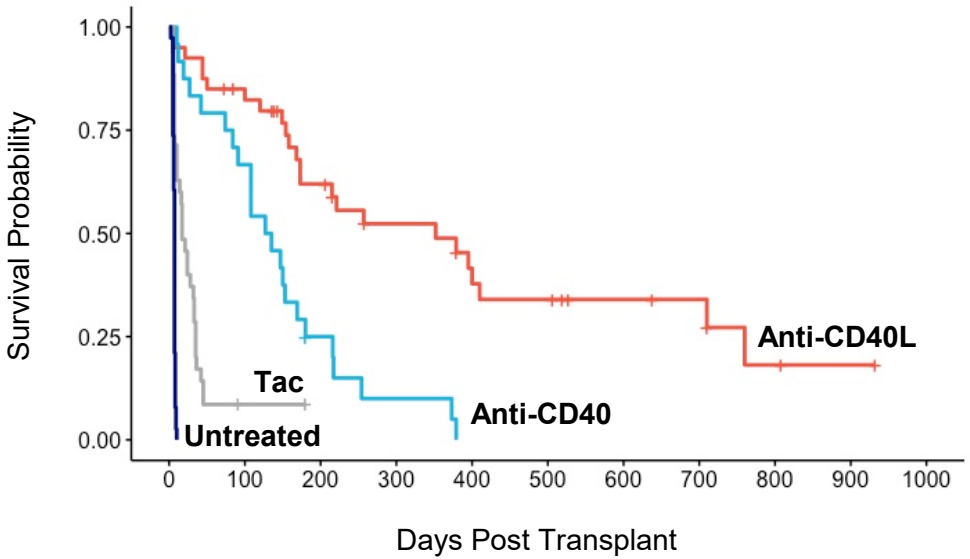
Anti-CD40L in the Prevention of Transplant Rejection



Eledon Pharmaceuticals

Inhibition of CD40L Improved Survival vs. CD40 Inhibition in Non-Human Primate (NHP) Kidney Transplantation Monotherapy Studies

NHP Survival Post Kidney Transplant



In aggregated data from published studies, **NHPs receiving anti-CD40L** (e.g., 5c8, AI794, IDEC-131) immunomodulation monotherapy post kidney transplantation **had longer average survival** than those receiving anti-CD40 monotherapy (e.g., 4D11, cH5D12, Chi220, ASKP1240, tacrolimus monotherapy or untreated controls

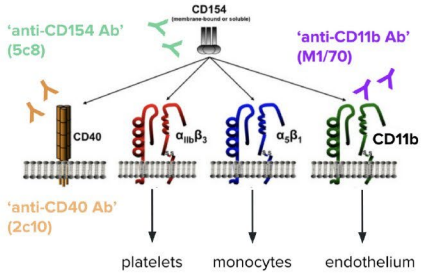
Sources: Perrin, 2022. Song, 2014; Song, 2016; Duan, 2017.
Note: **Meta-analysis not based on head-to-head studies.** Differences between any individual programs may vary. Tac = tacrolimus.

Eledon Pharmaceuticals

Recent NHP Experience has Demonstrated Advantage of Blocking CD40L vs. CD40R in Xenotransplantation

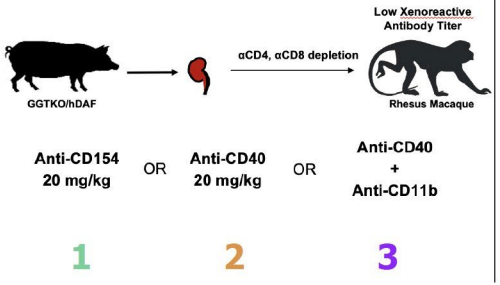
Combined CD11b/CD40 Blockade is Superior to CD40 Blockade Alone in Prolonging Survival in Pig-to-Nonhuman Primate Renal Xenotransplantation

How does combination CD11b/CD40 blockade affect graft survival in a pig-to-NHP model of renal xenotransplantation?

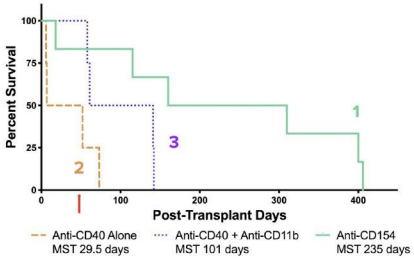


Pig-to-NHP renal xenotransplantation performed to one of three groups:

(1) anti-CD154; (2) anti-CD40 alone; (3) anti-CD40 plus anti-CD11b



- Treatment with anti-CD11b mitigates early xenograft rejection seen with anti-CD40 therapy
- CD11b acts as an additional ligand of CD154 through which rejection signals can bypass CD40 blockade



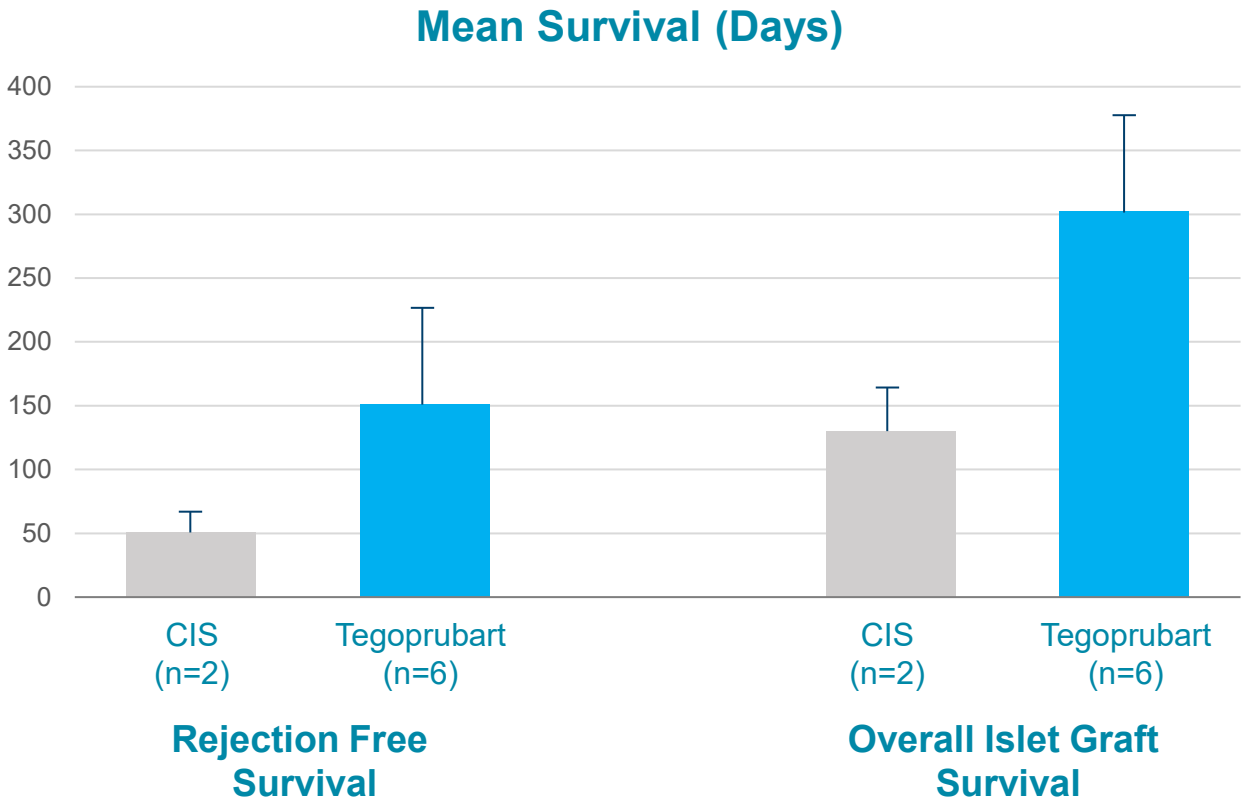
Emory University, University of Minnesota;
Faber, Lovasik, Matar, Breeden, Kim, Adams

Abstract number 2

Source: Adams @ ACT 2021

Eledon Pharmaceuticals

Tegoprubart Prolonged Graft Survival vs. CNI Containing Regimen (CIS) in a Non-Human Primate Islet Cell Transplant Model…

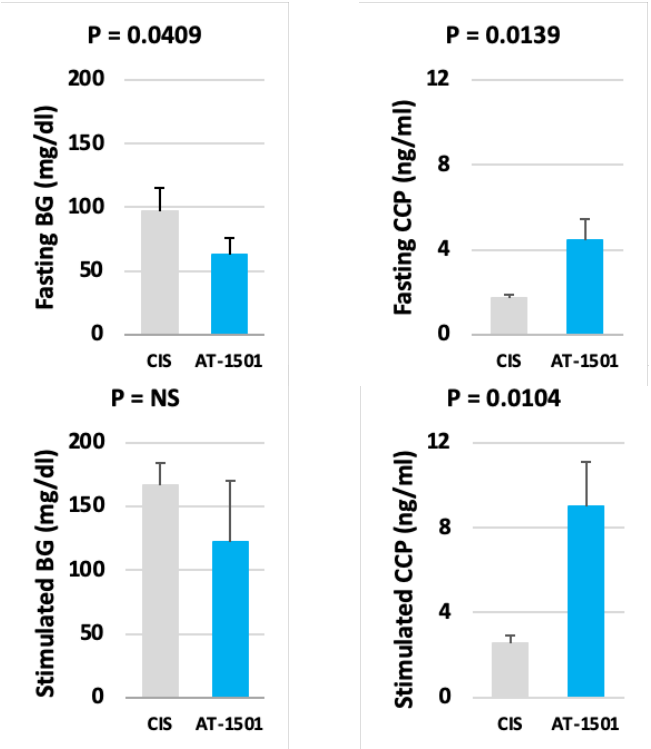


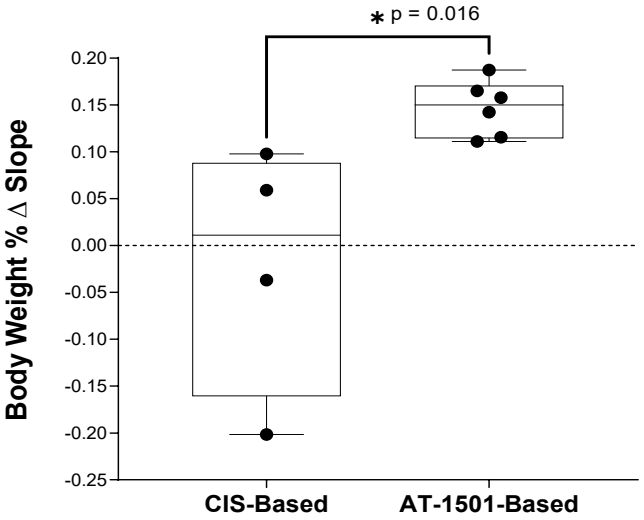
Source: Kenyon, 2021.

Eledon Pharmaceuticals

… And Tegoprubart was Associated With Better Metabolic Control as Well as Healthier Animals Overall as Demonstrated by Body Weight

Tegoprubart (AT-1501) vs. CNI Regimens (CIS) in NHP Islet Cell Transplantation Model





Source: Kenyon @ IPITA 2021.

Eledon Pharmaceuticals

Phase 1b Kidney Transplantation Study Design

DESIGN

- 52-week, open label, single dose level study
- Up to 12 participants undergoing kidney transplantation at multiple sites in Canada, the United Kingdom and Australia
- Kidney transplant using standard induction therapy plus maintenance therapy with tegoprubart as a replacement for CNIs (tacrolimus)

PLANNED DATA GENERATION

- **Safety & tolerability**
- **PK/PD**
- **Graft survival & function**
- **Biopsy proven acute rejection**
- **Immune cell infiltrate of graft biopsy**
- **Biomarker measures of kidney injury and rejection risk**

This study will run in parallel to the Phase 2 clinical trial of tegoprubart in kidney transplantation

Note: Development plans may change, including based on US and global regulatory interactions.

Phase 2 BESTOW Kidney Transplantation Study Design

DESIGN

- 52-week, head-to-head, superiority trial, open label, 2-arm, active comparator safety, PK, and efficacy study
- Approximately 120 participants (60/arm) undergoing kidney transplantation at multiple sites in the United States and other countries
- Participants will receive tegoprubart or the active comparator, tacrolimus, as part of an immunosuppressive regimen including corticosteroids and mycophenolate mofetil (MMF) or mycophenolate sodium (MPS)

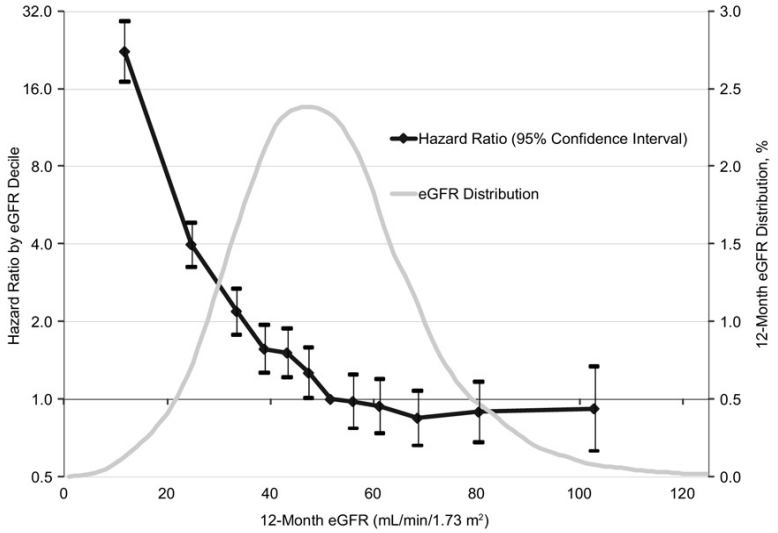
PLANNED DATA GENERATION

- **Safety & tolerability**
- **Graft function (eGFR)**
- **Rates of graft functional impairment**
- **Biopsy proven acute rejection (BPAR)**
- **Rate of new onset diabetes mellitus (NODAT)**
- **Rate of participant and graft survival**
- **PK and immunogenicity**

Note: Development plans may change, including based on US and global regulatory interactions.

Kidney Allograft Function is an Early Predictor of Future Graft Failure

eGFR at 12 months is associated with subsequent death-censored graft failure



- Graft function measured using eGFR at 12 months post transplant is associated independently with subsequent graft failure
- Of multiple covariates, **12-month eGFR is the strongest predictor of graft failure**

Source: Am J Kidney Dis. 2011 Mar; 57(3):466-75.

Eledon Pharmaceuticals

Single Company Focus: Leveraging Validated Biology to Develop Best-in-Class Immune-Modulating Therapeutics

Optimized & Differentiated Lead Asset

- CD40/CD40L **pathway validated by extensive historical proof-of-concept data**
- Tegoprubart was engineered to increase potency, half-life and manufacturability vs. other anti-CD40 approaches
- Targeting areas of high unmet need including organ transplantation and ALS

Strong Financial Profile

- **$65.9M in cash** and cash equivalents (as of September 30, 2022)
- Expected **sufficient to fund operations into 2024**
- ~29.9 M fully diluted shares outstanding

Near-Term Milestones

- Multiple interim **clinical data** readouts expected beginning **in Q1'23** in **Kidney Transplantation & IgA Nephropathy** (safety)
- **Initiation of Phase 2 BESTOW trial** of tegoprubart in **kidney transplantation** expected in **mid-2023**

Eledon Pharmaceuticals

19900 MacArthur Blvd., Suite 550
Irvine, California 92612, USA
info@eledon.com
+1 949-238-8090

Eledon Pharmaceuticals