# Targeted Immunology CD40/CD40L Therapeutics

TransplantationAutoimmunityALS

February 2021



## 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 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, 2019 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.



# Novus-Anelixis Merger Creates Eledon

Structure	<ul> <li>All stock transaction completed on September 14</li> <li>Anelixis (private) equity exchanged for a combination of Novus (NVUS) common shares and shares of a new convertible preferred</li> <li>Concurrent private placement of over \$108 million</li> <li>Name change to Eledon effective January 5, 2021</li> </ul>
New nvestors	• BVF, Cormorant, Ecor1, Logos, Fidelity, Adage, Woodline, Ridgeback, Janus Henderson, and Samsara
Financials	<ul> <li>Nasdaq Ticker: ELDN as of January 5, 2021</li> <li>Proforma fully diluted shares outstanding: ~28.2 million</li> <li>Proforma cash: ~\$123.5 million in cash (unaudited as of September 30, 2020)</li> </ul>
Cash Runway	Cash should be sufficient to complete up to four Phase 2 clinical trials of AT-1501



# Single Focus: Developing Best-in-Class Immune-Modulating Therapeutics with Validated Biology



#### **Optimized & Differentiated Lead Asset: AT-1501**

- Targeting CD40/CD40L pathway validated by extensive historical proof-of-concept data
- Engineered to increase potency, half-life and manufacturability vs. other anti-CD40 approaches
- Targeting both potential first-in-class and best-in-class indications



### 4 Shots on Goal in Conditions with Few or No Approved Medicines and High Morbidity

- Financed to support up to four Phase 2 trials in: Renal Transplantation, Islet Cell Transplantation (Type 1 Diabetes), Autoimmune Nephritis, and Amyotrophic Lateral Sclerosis (ALS)
- Composition of matter to 2036 (excluding potential extensions)
- Next generation antibody in pre-clinical development and future combination therapies possible



#### **Rapid Progression and Near-Term Milestones**

- ALS Phase 2 launched October 2020
- Islet Cell Transplantation, Renal Transplantation & Autoimmune Nephritis to begin recruiting in 2021
- Multiple interim and top-line data read outs beginning in 1H 2022



# Novus's Preclinical Efforts and CD40L Historical Data have Guided Our Choice of Clinical Development Programs

Kidney Transplant		Blocking CD40L prevents acute and long-term solid organ transplant rejection in multiple preclinical species and models AT-1501 and historical anti-CD40L antibodies have been shown to prevent allograft transplant rejection as monotherapies in multiple models, compared to anti-CD40 antibodies
Islet Cell Transplant	)	In nonhuman primate models of islet cell transplant, blocking CD40L results in prolonged graft function compared to immunosuppressive cocktails containing tacrolimus AND both improved islet cell survival and reduced renal toxicity AT-1501 induced long-term metabolic control in the absence of exogenous insulin in nonhuman primates
Autoimmune Nephritis	)	Blocking CD40L signaling in preclinical models of Autoimmune Nephritis, including FSGS & Lupus Nephritis, ameliorates proteinuria, reduces autoantibodies, decreases immune cell infiltrations, and improves survival in preclinical models <sup>1, 2</sup> Blocking CD40L in patients with SLE improved levels of autoantibodies to dsDNA & improved clinical outcomes <sup>3</sup>
ALS		Over 70% of ALS patient blood samples exhibit a clear costimulatory activation signature <sup>4</sup> Soluble CD40L levels in circulation of ALS patients correlate with rate of disease progression <sup>5</sup> Blocking CD40 ligand delays disease onset and extends survival in preclinical models of ALS <sup>4</sup>



## Pipeline Overview

Product Candidate	Indication		Developm	ent Stage	Anticipated Milectores	
Product Candidate	indication	Pre-clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
	Renal Transplantation					Initiate Phase 2 trial in 2Q/mid 2021
AT-1501	Islet Cell Transplantation					Initiate Phase 2 trial in Canada Interim data readout expected in 1H 2022
AI-1501	Autoimmune Nephritis					Initiate Phase 2 trial in 2021
	Amyotrophic Lateral Sclerosis (ALS)					Phase 2 results expected in 1H 2022
AT-2001	Autoimmune Indications					Lead optimization

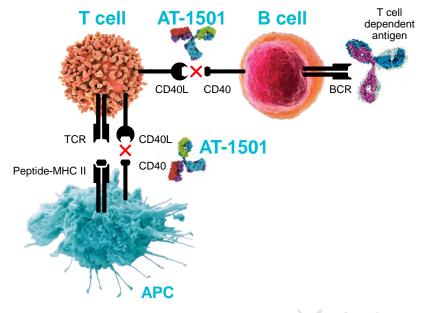
Note: Development plans may change, including based on US and global regulatory interactions.



# AT-1501 Mechanism of Action: CD40/CD40L Signaling

- While both CD40 and CD40L (also called CD154) impact the same central role in pro-inflammatory responses, targeting CD40L has been shown to also:
  - Inhibit CD11 and CD40 signaling, and increase polarization of Th1 cells to Regulatory T Cells, creating a more tolerogenic environment & providing potential for better efficacy
  - Be more selectively expressed than CD40 receptor providing potential for improved safety and pharmacokinetic, pharmacodynamic and dosing advantages
- AT-1501 has demonstrated up to over 2x longer half-life than fusion protein and pegylated FAB approaches, and as a traditional antibody may provide greater manufacturability
- Designed around safety:
  - Mechanism not associated with lymphopenia seen in many immunosuppressive drugs
  - Crippled Fc effector function to avoid platelet activation

#### Role of CD40/CD40L Pathway Immune Cell Responses



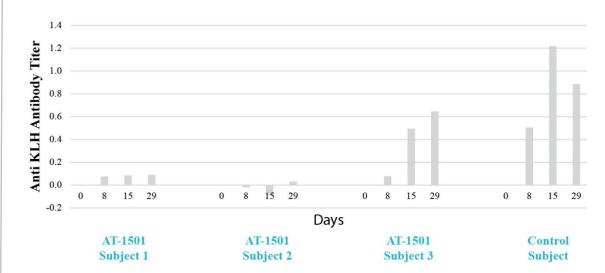


# Phase 1a/1b Single Ascending Dose Trial Completed in Healthy Subjects and ALS Patients Demonstrated Strong Safety Profile

Healthy Volunteers or ALS Patients Receiving Either AT-1501 (mg/kg, IV) or Placebo											
Subjects	Healthy	Healthy	ALS	Healthy	Healthy	Healthy	1501	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 1 KLH Challenge Demonstrates AT-1501 Functional Activity

- 4 subjects received keyhole limpet hemocyanin (KLH), a potent immune challenge
- Subjects 1-3 also received 8mg/Kg IV AT-1501
- AT-1501 fully inhibited immune response to KLH in two subjects (subjects 1 and 2) and partially inhibited immune response to KLH in one subject (subject 3)



## Renal Transplant Market Opportunity



## Over 23,000 U.S. kidney transplants per year and ~193,000 Americans have a functioning kidney transplant

- Over 20% incidence of new onset diabetes in first 6 months post-transplant in CNI treated patients
- Fewer than 50% of transplanted kidneys from deceased donors function 10 years
- 2- to 4-fold elevated cancer risk



Up to **15% of transplants per year are re-transplants** further limiting organ availability for new patients

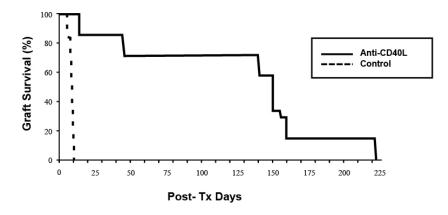
~450% increase in annual medical cost to treat transplant patients who experience renal graft failure

AT-1501 has potential to reduce drug-associated morbidity and improve graft survival associated with SoC regimens such as those including calcineurin inhibitors

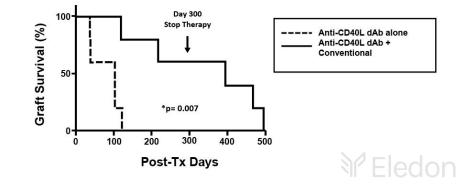


# Anti-CD40L Antibodies Prevent Renal Allograft Transplant Rejection in Nonhuman Primate Models

Short term exposure of an anti-CD40L antibody inhibits acute renal allograft transplant rejection in nonhuman primates



Short term exposure of an anti-CD40L antibody in conjunction with induction immunotherapy, chronic steroids, and mycophenolate mofetil acute renal allograft transplant rejection in nonhuman primates



## Islet Cell Transplant Market Opportunity



~1.3 M Americans live with Type 1 diabetes (T1D)





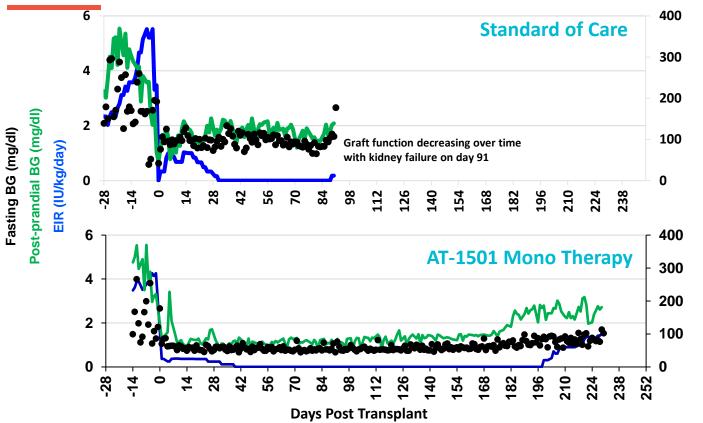
BT1D patients have difficult-to-manage glucose levels with severe blood glucose fluctuations despite treatment and higher risk of diabetes related death



Minimally invasive islet cell transplantation underutilized in part because of **need for multiple transplant grafts** (usually within 90 days) in part due to immunosuppressive regimens with **CNIs**, that may be toxic to transplanted **insulin producing islet cells**  AT-1501 has potential to unlock islet cell transplant market by improving islet cell graft survival and reducing side effects associated with SoC regimens such as those including calcineurin inhibitors



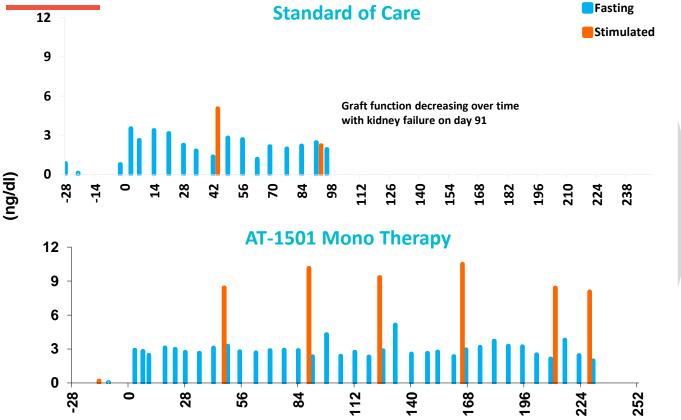
# Non-Human Primate Islet Cell Transplant Model: SOC Versus AT-1501



In animals whose islet cells were ablated and then underwent islet cell transplantation, AT-1501 provided for better blood glucose level stabilization and less drug related animal morbidity and mortality than standard of care



# Non-Human Primate Islet Cell Transplant Model: SOC Versus AT-1501



- C-peptide levels are a surrogate biomarker of insulin production, islet cell viability and function
- In response to meal stimulation, functioning islets produce more insulin and thus C-peptide
  - Animals receiving AT-1501 showed better islet cell function than those receiving Standard of Care

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## Autoimmune Nephritis Market Opportunity

#### Lupus Nephritis (LN)

- Inflammation of the kidneys caused by systemic lupus erythematosus (SLE) and ~40% of SLE patients develop LN
  - US prevalence estimated between 65,000 120,000
- Leakage of blood proteins into the urine (proteinuria) is clinical sign of LN; early responses correlate with long-term outcomes
- Debilitating and costly often leading to ESRD, dialysis, renal transplant, and even death
- Up to 30% of LN patients have been reported to progress to ESRD

#### Focal Segmental Glomerulosclerosis (FSGS)

- Affects children and adults with US prevalence estimated over 40,000
  - ~20% of patients with glomerulonephropathy reported to progress to End Stage Renal Disease (ESRD)
- Peak decade for FSGS ESRD incidence is 40s among black persons and 70s among white and Asian individuals. Men have up to 2-fold greater risk of ESRD
- Immunotherapy, including glucocorticoids and/or calcineurin inhibitors, improves outcomes, but 25-35% of FSGS patients still progress to ESRD

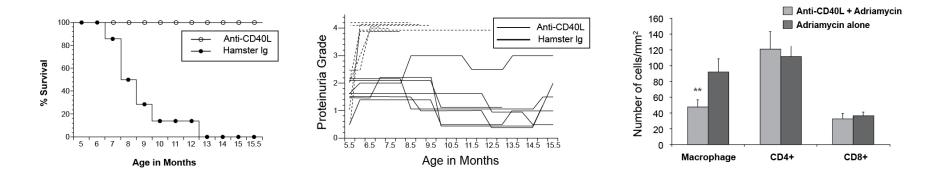
#### No FDA or EMA approved therapies for FSGS and only two approved for LN



# Blocking CD40L Ameliorates Glomerulosclerosis and Proteinuria in Historical Autoimmune Nephritis Rodent Models

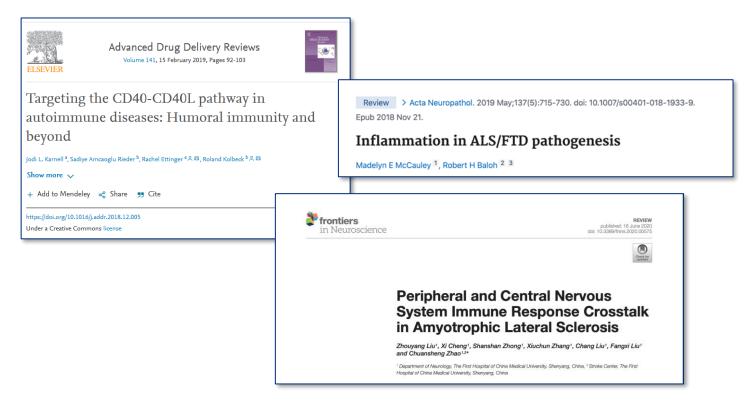
#### Blocking CD40L improved survival in a Lupus Nephritis mouse model

Blocking CD40L improved proteinuria in a Lupus Nephritis mouse model Treatment with anti-CD40L reduced tissue damage and macrophage infiltration in Adriamycin induced glomerulosclerosis mouse model





## Autoimmune Pathogenesis of ALS is Increasingly Recognized





## ALS Overview & Market Opportunity

- **Characterized by** gradual, progressive muscle weakness
- Affects ~30,000 Americans
- ~5,000 new cases diagnosed annually in the US and ~600,000 cases globally
- Average age of 55 at time of diagnosis
- Only **10%** of ALS cases are hereditary

People with ALS ultimately **lose the ability to ambulate**, lose the ability to swallow, and when breathing muscles become affected, need permanent ventilatory support to assist with breathing

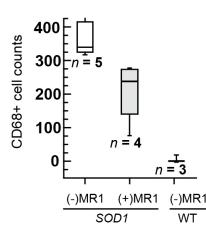
**50% and 80%** of ALS patients die within **3 and 5** years from diagnosis, respectively. Most people die from respiratory failure or cachexia

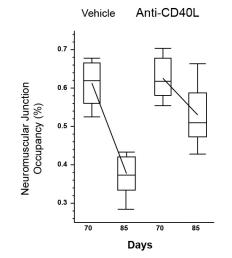
Very high 5-year ALS morbidity and mortality despite two FDA approved treatments

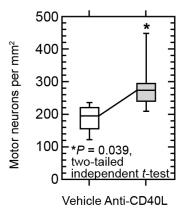


## Anti-CD40L Historical Antibody Improves Motor Neuron Survival & Decreases Inflammation in Peripheral Nerves of ALS Mice

Anti-CD40L (MR1) treatment reduces macrophage infiltrate and "attack" of denervated peripheral nerves in skeletal muscle Anti-CD40L treatment reduces macrophage infiltrate resulting in increased neuromuscular junction occupancy Anti-CD40L treatment reduces neuroinflammation in the spinal cord resulting in improved motor neuron survival







Treatment

Source: Lincecum, 2010

### Phase 2 ALS Development Plan

### Design

- 12-week, open label, multiple ascending dose safety and biomarker study
- Dose cohorts of up to ~18 patients each

### **Planned Data Generation**

#### 12-Week Analyses:

- Safety & tolerability
- Pharmacokinetics
- **Biomarkers of inflammation** (e.g., TNFα, IL6, Enrage)
- Biomarkers of neurodegeneration (e.g., NFL & NFH)

## Strong Financial Profile

\$108+ M

Proceeds from PIPE (September 14, 2020)

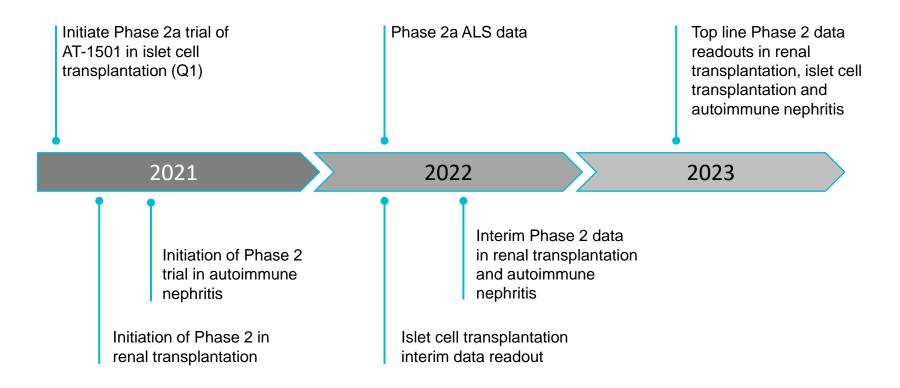
# ~\$123.5 M

Cash and cash equivalents (unaudited, pro-forma, as of September 30, 2020) Cash runway into at least late **2023** 

**~28.2 M** Fully diluted shares outstanding



# Company Financed Through Multiple Potential Value Catalysts



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



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