

# **Alector Company Overview**

August 2022

# **Forward-Looking Statement**

This presentation contains forward-looking statements that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this presentation are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "pan," "plan," "potentially," "predict," "should," "will" or the negative of these terms or other similar expressions. Forward-looking statements contained in this presentation also include, but are not limited to, statements regarding: our future financial condition, results of operations, business strategy and plans, plans, timelines and expectations related to our product candidates and our other clinical and pre-clinical programs, including with respect to the availability of data, the initiation of future clinical trials and plans and expectations regarding planned regulatory filings with respect to such programs; and objectives of management for future operations, as well as statements regarding industry trends.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things: Alector's plans relating to the development and manufacturing of its product candidates and research programs; the ability of Alector, Inc.'s ("Alector") clinical trials to demonstrate safety and efficacy of its product candidates, and other positive results; the timing and focus of Alector's future clinical trials, and the reporting of data from those trials; Alector's plans relating to commercializing its product candidates, if approved, including the geographic areas of focus and sales strategy; the expected potential benefits of strategic collaborations with third parties and Alector's ability to attract collaborators with development, regulatory and commercialization expertise; Alector's estimates of the number of patients in the United States who suffer from the diseases it is targeting and the number of patients that will enroll in its clinical trials; the size of the market opportunity for Alector's product candidates in each of the diseases it is targeting; Alector's ability to expand its product candidates into additional indications and patient populations; the success of competing therapies that are or may become available; the beneficial characteristics, safety, efficacy, and therapeutic effects of Alector's product candidates; the timing or likelihood of regulatory filings and approvals, including Alector's expectation to seek special designations, such as orphan drug designation, for its product candidates for various diseases; Alector's ability to obtain and maintain regulatory approval of its product candidates; Alector's plans relating to the further development and manufacturing of its product candidates; Alector's product can

This presentation also contains results based on data from our clinical trials. These clinical trials are ongoing and this presentation does not speak to, and you should make no assumptions about, any additional data. In addition, the information we have chosen to publicly disclose regarding our product candidates has been selected from a more extensive amount of available information. You or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise. If the initial data that we report differ from updated, late, final or actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize our other product candidates may be harmed, which could harm our business, financial condition, results of operations and prospects.

Except as required by law, we undertake no obligation to update any statements in this presentation for any reason after the date of this presentation.

We have filed Current Reports on Form 8-K, Quarterly Reports on Form 10-Q, Annual Reports on Form 10-K, and other documents with the SEC. You should read these documents for more complete information about us. You may obtain these documents for free by visiting EDGAR on the SEC website at www.sec.gov.

This presentation discusses certain investigational therapeutic agents, which have not yet been approved for marketing by the U.S. Food and Drug Administration. No representation is made as to the safety or effectiveness of our product candidate for the therapeutic use for which it is being studied.

This presentation contains statistical data based on independent industry publications or other publicly available information, as well as other information based on our internal sources. We have not independently verified the accuracy or completeness of the data contained in these industry publications and other publicly available information. Accordingly, we make no representations as to the accuracy or completeness of that data.



# **Experienced Leadership and Advisors Guide Clinical and Corporate Execution**

#### **MANAGEMENT**

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**Sara Kenkare-Mitra, PhD**President, Head of R&D



**Gary Romano, MD, PhD** CMO



Peter Heutink, PhD Incoming CSO



Marc Grasso, MD





Robert King, PhD CDO





**Kristina Vlaovic**SVP, Regulatory and Pharmacovigilance



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# Translating Scientific Insights into a Broad Portfolio of First-in-Class Programs

NOVEL APPROACH Founded to pioneer a new field of research: **Immuno-neurology** 

Informed by neuroscience, human genetics and immunology

**Substantial IP portfolio** established: *20 issued patents, 450+ patent applications* 

MULTIPLE CLINICAL TRIALS **Phase III Clinical Program** for FTD-PGRN

**Clinical Programs** for AD, FTD-GRN, FTD-C9ORF72, ALS

**Pre-Clinical Programs** for AD, PD, Solid tumors

WORLD CLASS PARTNERS

\$700M upfront \$1.5B+ milestone 50-50 U.S. profit share Tiered double-digit royalties ex-U.S.

\$205M upfront payment \$20M equity investment abbvie \$986M milestone payments Global 50-50 profit share

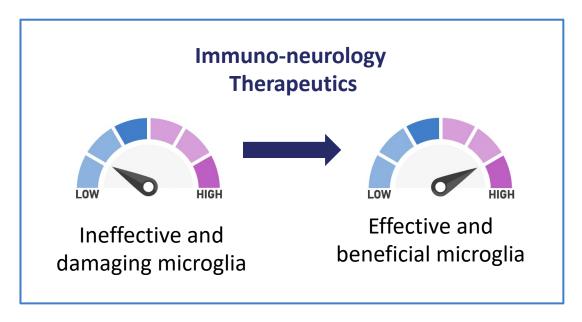
STRONG FINANCIALS

\$809 MILLION IN CASH



### Immuno-Neurology: Alector's Therapeutic Strategy for Degenerative Brain Disorders

Recruiting microglia, the brain's immune system, to potentially cure neurodegeneration



Using the immuno-oncology concept of harnessing the immune system as a broad, effective and long-lasting therapy

Multiple programs are in or entering the clinic for multiple neurodegenerative diseases

#### **Human Genetics**

Develop drugs targeting risk genes for neurodegeneration to functionally enhance protective functions of these risk genes

### **Immunology**

Target checkpoint regulators on microglia and harness microglia as broad therapy for neurodegeneration

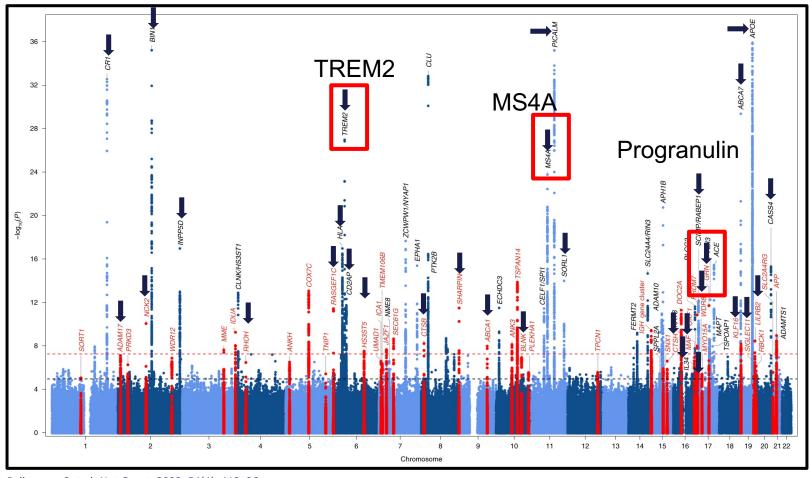
#### **Neuroscience**

Rejuvenate microglia and harness their physiological role as guardians of brain health

Immuno-neurology: targeting the brain immune system as a novel therapeutic strategy for dementia and neurodegeneration

# **Genetic Rationale for Immuno-Neurology**

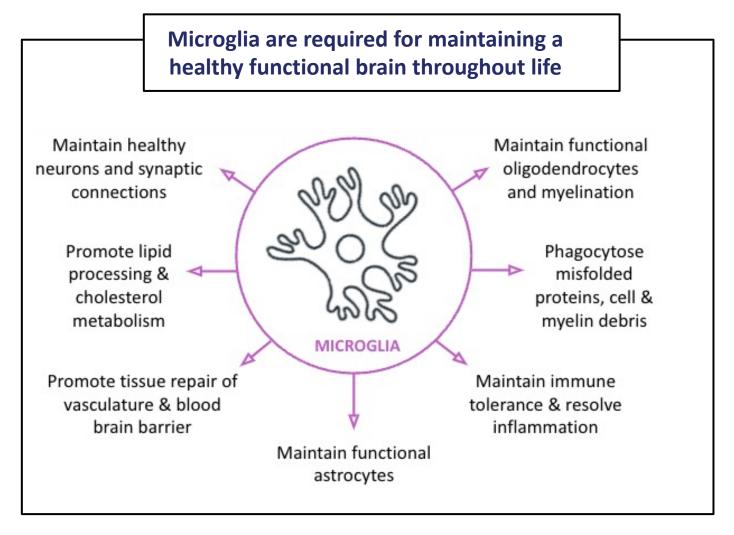
# Many AD risk genes are regulators of the microglia brain immune cells (Arrows in black) Alector's programs are boxed







# Biological Rationale for Immuno-Neurology: The Microglia Brain Immune System is Essential for Brain Function and Health

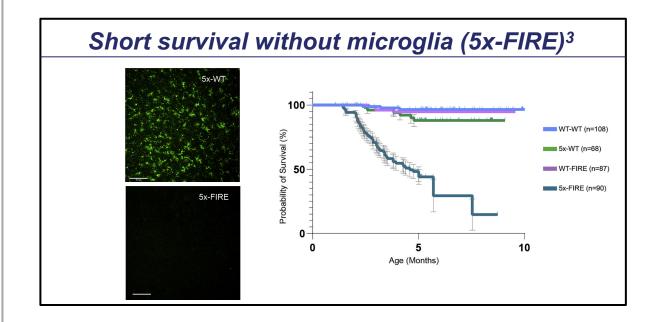


Targeting microglia immune checkpoints and harnessing microglia to cure neurodegeneration



### Microglia Are Essential for Brain Health in Mouse Models

- "Microglia jointly degrade fibrillar alpha-synuclein cargo by distribution through tunneling nanotubes"<sup>1</sup>
- "Negative feedback control of neuronal activity by microglia"<sup>2</sup>
- Absence of microglia in AD mice lead to cerebral amyloid angiopathy, hemorrhages, calcification, and lethality<sup>3</sup>
- Transplantation of microglia reverses these pathological changes<sup>3</sup>





### Microglia Are Essential for Brain Health in Humans

Loss of microglia due to CSF1R mutations leads to neurodegeneration "Adult- Onset Leukoencephalopathy"

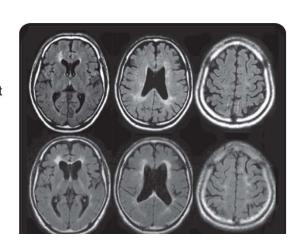
Patients experience range of psychiatric, neurocognitive, and motor symptoms; Average age of onset is ~43

#### Rapid brain tissue loss

Patient VI (c.2442+1G>T)

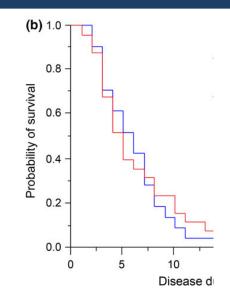
48 yo 5 Years before onset

54 yo 1 Year after onset

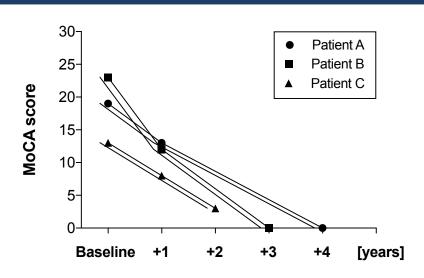


MRI shows brain ventricles dilation

### ~ 6 Year Survival Rate

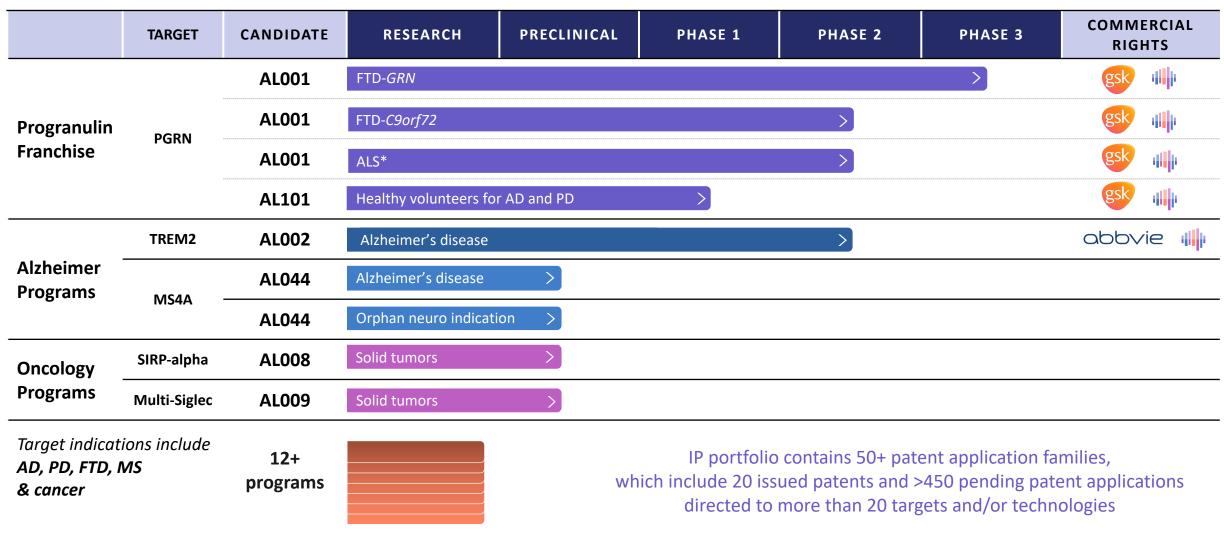


#### **Rapid Cognitive Decline**





# Portfolio of Product Candidates Targeting Genetic Causes of Neurodegeneration as well as Promising Innate Immune System Targets for Oncology



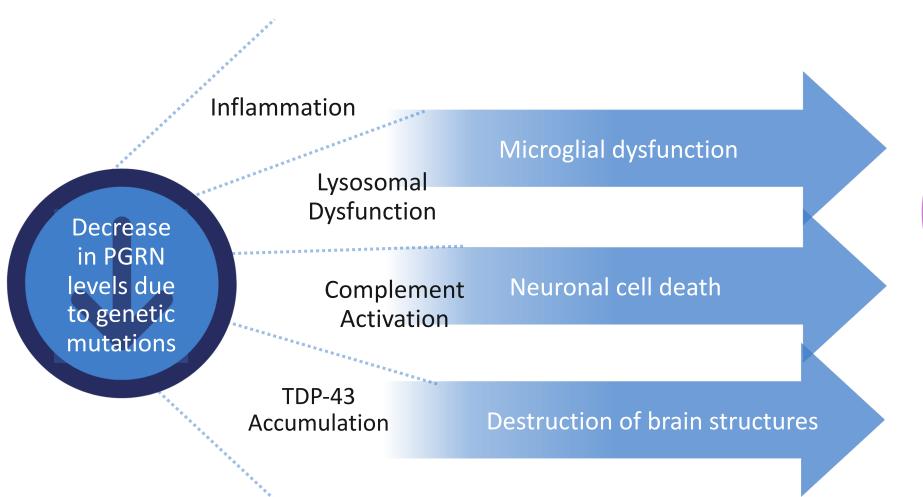


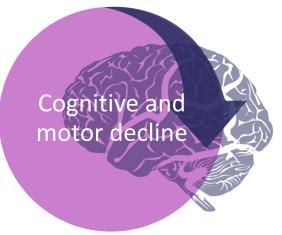
MS = Multiple sclerosis

# Progranulin Franchise Programs AL001 / AL101



# The Role of Progranulin in Neurodegeneration

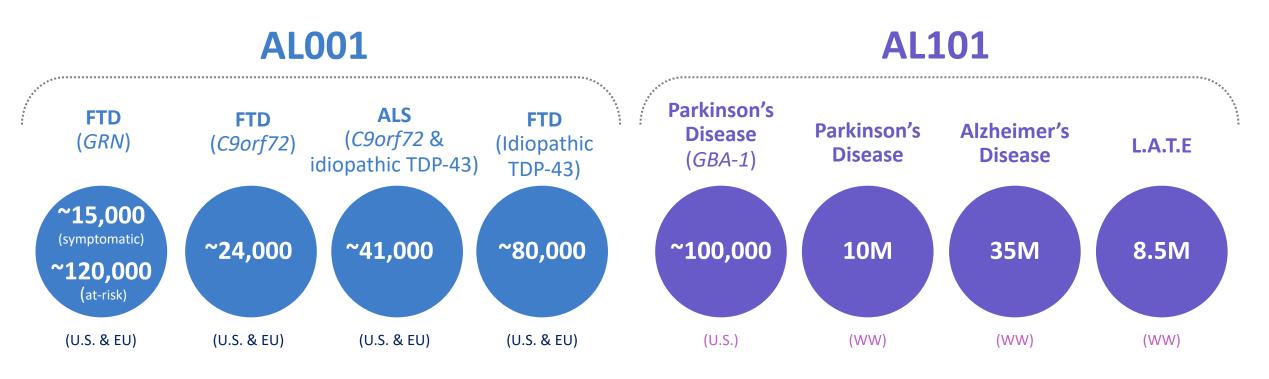




Mutations resulting in progranulin deficiencies are causal for FTD, and are a known risk factor for ALS, Alzheimer's and Parkinson's diseases and L.A.T.E.



# **Broad Therapeutic Potential Grounded in Genetic Evidence and Animal Models**



Causal GENETIC EVIDENCE

Known Risk Factor/ Positive Correlation



# AL001 and AL101: Targeting Progranulin to Restore Function of Microglia

#### **MECHANISM**

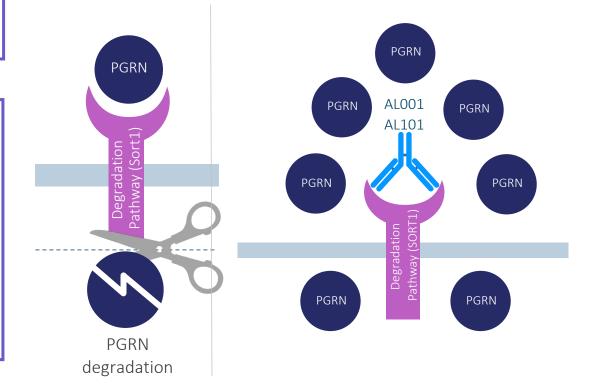
Increases the half-life of PGRN by blocking Sortilin, a degradation receptor, in order to restore PGRN to normal levels

#### **AL001 STATUS**

- Orphan Drug and Fast Track Designation
- Phase 1 studies in healthy volunteers complete
- Data presented from ongoing Phase 2 study in FTD-GRN and FTD-C9orf72
- Currently evaluating study design options for Phase 2b study in patients with all forms of ALS, including the *C9orf72* mutation
- Pivotal Phase 3 study in FTD-GRN actively enrolling

#### **AL101 STATUS**

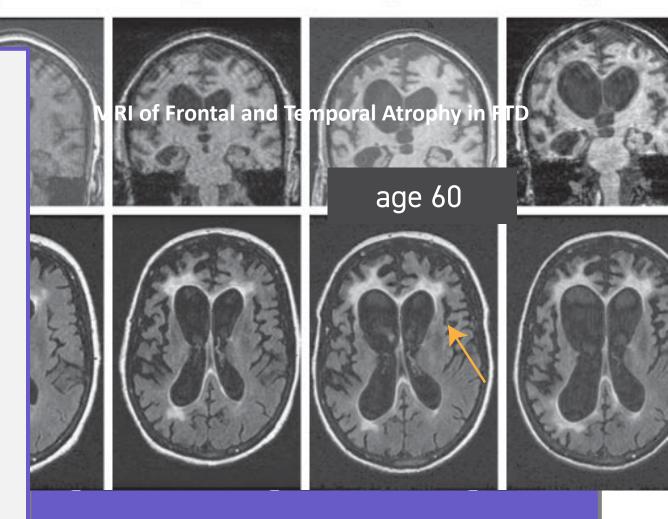
Ongoing Phase 1 study in healthy volunteers





# Frontotemporal Dementian Age 57 Age 58 Age 59 Age 60 Age 61

- Most common form of dementia under the age of 60
- Patients present with compulsive behavior, lack of restraint, apathy, anxiety, and aphasia
- Life expectancy after diagnosis is 7 10 years
- 15,000 symptomatic + ~120,000 at-risk people with progranulin mutations (FTD-GRN) in the U.S. and E.U.
  - FTD-GRN caused by coding mutations in progranulin
  - Lead to a complete loss of function in the mutated gene





# **INFRONT-2: Phase 2 in Frontotemporal Dementia Populations**



#### PRIMARY ENDPOINT

Safety and Tolerability

#### SECONDARY ENDPOINT

PK, PD

#### **EXPLORATORY ENDPOINTS**

CSF and Plasma Biomarkers

Clinical Outcome Assessment (CDR® plus NACC FTLD-SB2)

Volumetric MRI (vMRI)

Twelve-month biomarker and clinical data presented at 2021 AAIC and CTAD conferences from the symptomatic FTD-GRN cohort



<sup>1.</sup> Asymptomatic and symptomatic FTD-GRN enrollment closed; FTD-C9orf72 cohort currently enrolling

CDR® plus NACC FTLD-SB: Clinical Dementia Rating (CDR) dementia staging instrument plus National Alzheimer's Coordinating Center (NACC) behavior and language domains frontotemporal lobar degeneration (FTLD) sum of boxes (SB)

# Latozinemab Impacts Key Markers of the Disease Cascade in Symptomatic FTD-GRN Patients

Key biomarkers and clinical outcome assessments reflect underlying disease activity in FTD-GRN patients

TARGET ENGAGEMENT	BIOMARKERS OF DISEASE ACTIVITY			CLINICAL BENEFIT	
PGRN (plasma and CSF)	Lysosomal dysfunction	Complement activation	Astrogliosis	Neuronal health	Clinical Outcome Assessments
PGRN	e.g. CTSD, LAMP1	e.g. C1QB	GFAP	NfL	CDR® plus NACC FTLD-SB
> 50% reduction in PGRN levels causal for FTD	Dysfunctional lysosomes are hallmark of FTD-GRN	Pathological increases in complement proteins in FTD correlate with cognitive decline	GFAP is increased in conditions characterized by astrogliosis	NfL is a measure of axonal damage	FDA approvable endpoint for measuring clinical decline in FTD

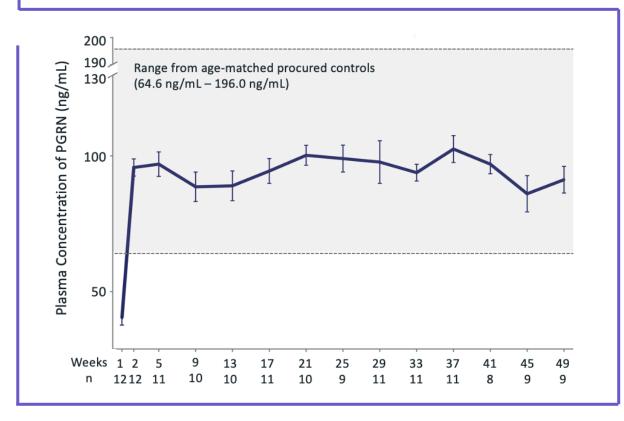


CTSD = cathepsin D; LAMP1 = lysosomal associated membrane protein 1; C1QB = complement C1q B chain; GFAP = glial fibrillary acidic protein NfL = neurofilament light chain;

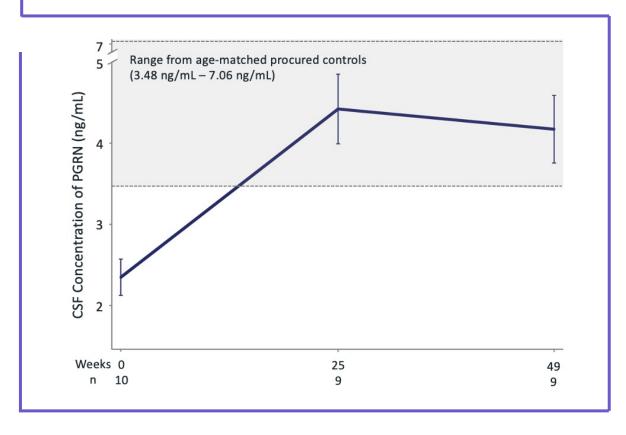
### **INFRONT-2: AL001 Restores PGRN in Plasma and CSF to Normal Levels**

#### TARGET ENGAGEMENT

#### **PGRN Plasma Concentration**



#### **PGRN CSF Concentration**



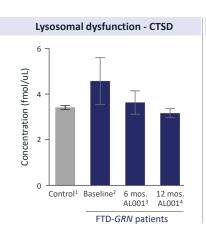


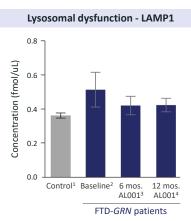
### **INFRONT-2: Latozinemab Demonstrated Consistent Effects on Disease Biomarkers**

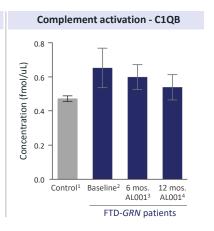
#### FLUID BIOMARKERS OF DISEASE ACTIVITY

Symptomatic FTD-GRN patients at 12 months

#### Normalization of lysosomal and inflammatory biomarkers







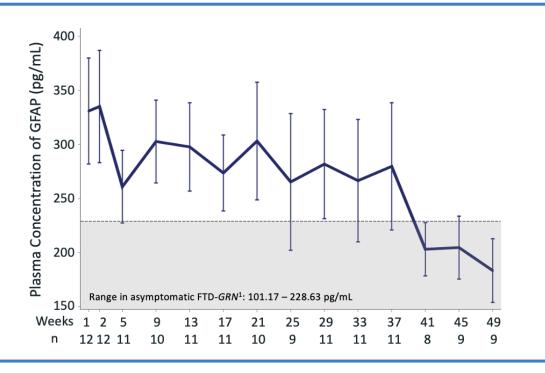
Markers	Latozinemab Baseline (N=9)	Latozinemab 6 months (N=8)	Latozinemab 12 months (N=8)	Age- matched procured control (N=44)
CTSD (fm/μL)	5.2 (1.16)	3.8 (0.57)	3.1 (0.21)	3.4 (0.08)
LAMP1 (fm/μL)	0.6 (0.12)	0.4 (0.06)	0.4 (0.043)	0.4 (0.01)
C1QB (fm/μL)	0.7 (0.12)	0.6 (0.07)	0.5 (0.02)	0.5 (0.02)



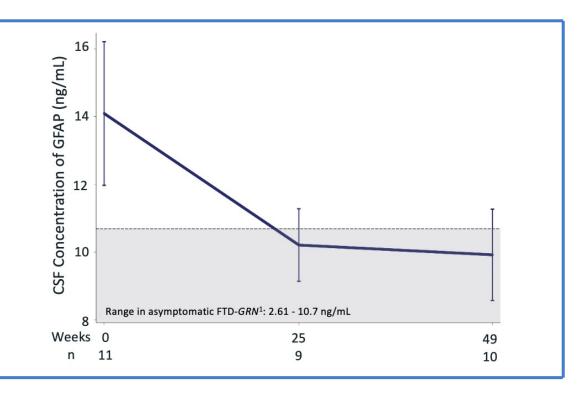
# INFRONT-2: AL001 Treatment Decreases Glial Fibrillary Acidic Protein (GFAP) Levels Towards Normal Levels

#### BIOMARKERS OF DISEASE ACTIVITY - ASTROGLIOSIS

# **GFAP Plasma Concentration**



#### **GFAP CSF Concentration**





# INFRONT-2: A two-step Matching Strategy to Eliminate Potential Confounding Factors in Constructing the GENFI2 Historical Control Cohort

#### Step 1

GENFI2 FTD-GRN

participants with at least

one post-baseline CDR® plus

NACC FTLD-SB (n=102)



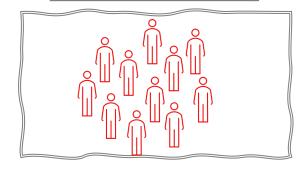
Propensity score matching by baseline CDR® plus NACC FTLD-SB Potential GENFI2 matches using propensity score matching based on CDR® plus NACC FTLD-SB (n=25)



Step 2

Blinded clinical adjudication matching by NfL at baseline, age, diagnosis and gender

# GENFI2 matched historical control cohort (n=10)



- Propensity scores were computed using a logistic regression including the most important covariate, cognition, measured at baseline using the CDR® plus NACC FTLD-SB
- Matching was done by comparing the logit propensity score

- To further increase the chances that the matched historical control cohort would mimic a placebo group in a randomized experiment, clinical adjudication of secondary covariates, including NfL at baseline, age, diagnosis and gender were used to refine and construct the final matched historical control cohort
- This step was done on a blinded basis without knowing the progression rate.



### INFRONT-2: Contextualizing vMRI and Clinical Results with GENFI2 Matched Controls

INFRONT-2 vMRI and clinical results compared against comparable, matched GENFI2 controls

Comparable baseline characteristics established between INFRONT-2 FTD-GRN symptomatic cohort and GENFI2 controls in two-steps:

- Propensity score matching<sup>1</sup> based on CDR<sup>®</sup> plus NACC FTLD-SB at baseline
- Matching refined by age, gender, baseline plasma NfL levels, and FTD disease variant at baseline<sup>2</sup>

Baseline characteristics		INFRONT-2 (N=12)	GENFI2 Matched Controls (N=10)
CDR® plus NACC FTLD-SB	Mean (SD)	5.9 (3.74)	5.2 (3.60)
	Min, Max	0.5, 11	0.5, 11.5
AGE (Years)	Mean (SD)	63.2 (9.71)	62.1 (6.74)
	Min, Max	49, 79	52, 72
GENDER	Male	8 (67%)	3 (30%)
PLASMA NfL (pg/mL)	N	12	9
	Mean (SD)	62.8 (47.00)	40.3 (27.28)
	Min, Max	11.2, 148.8	9.3, 99.9
FTD DISEASE VARIANT	bvFTD	5 (42%)	5 (50%)
	PPA	3 (25%)	3 (30%)
	Both	3 (25%)	0
	Other	1 (8%)	1 (10%)



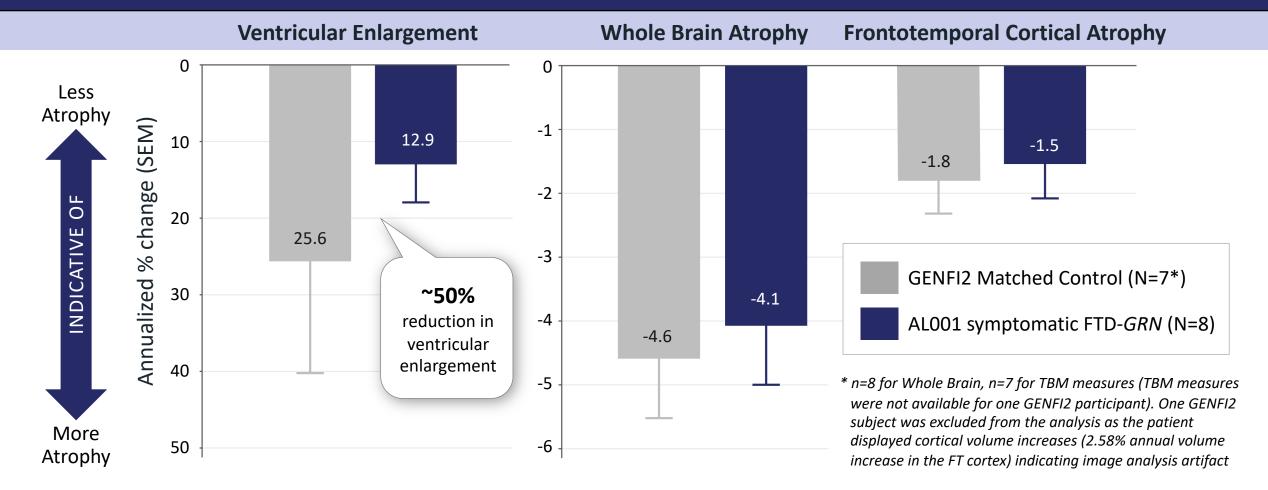
GENFI = The Genetic Frontotemporal Initiative GENFI2 refers to the longitudinal FTD registry dataset

<sup>1.</sup> Propensity score matching is a well-established statistical method intended to mimic randomization

<sup>2.</sup> Clinical reviewers blinded to outcome data

# INFRONT-2: vMRI Data Suggest Slowing of Ventricular Enlargement and Brain Atrophy in AL001-Treated Patients vs. Historic Matched Control

#### BIOMARKERS OF DISEASE ACTIVITY - BRAIN VOLUME CHANGES

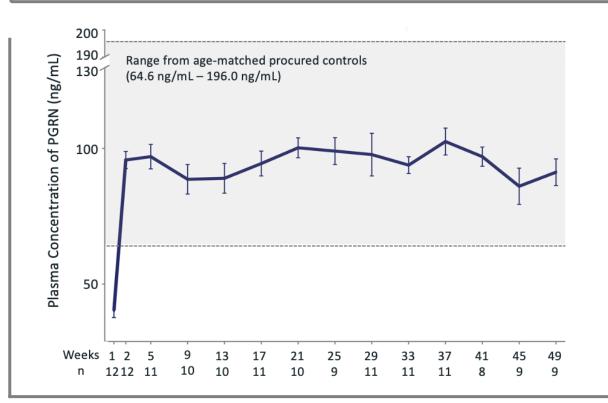




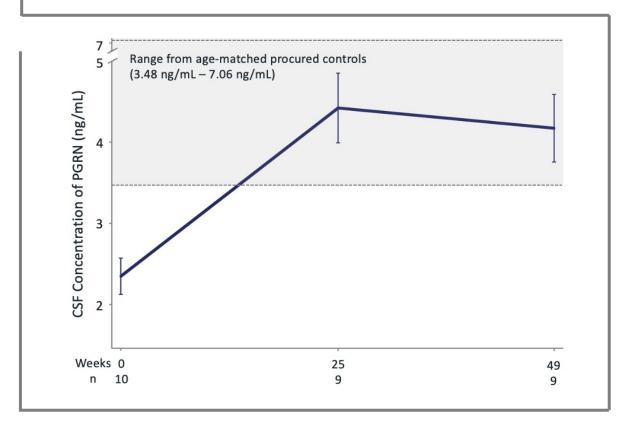
### **INFRONT-2: Al001 Restores PGRN in Plasma and CSF to Normal Levels**

#### TARGET ENGAGEMENT

#### **PGRN Plasma Concentration**



#### **PGRN CSF Concentration**



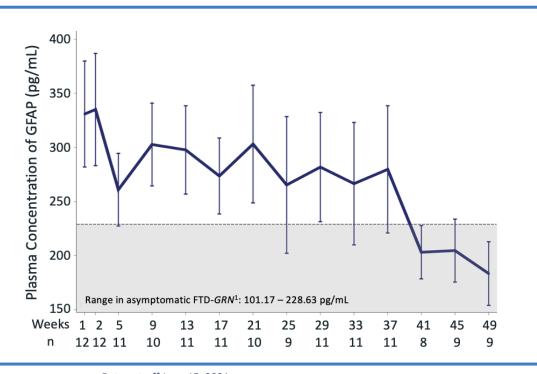
Data cut-off June 15, 2021

Error bars regressent mean +/- SEM Phase 2 data presented at CTAD 202 NCT03987295

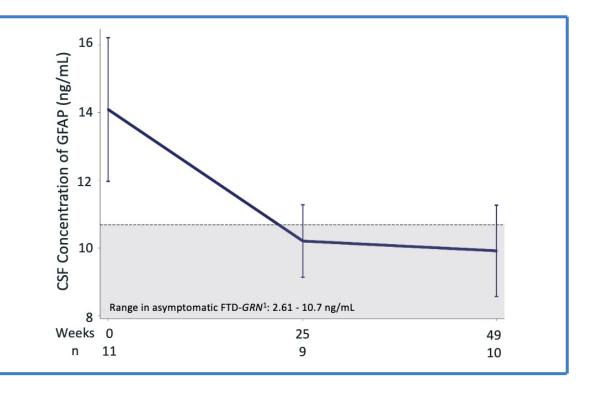
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#### BIOMARKERS OF DISEASE ACTIVITY - ASTROGLIOSIS

#### **GFAP Plasma Concentration**



#### **GFAP CSF Concentration**





NCT03987295

Data cut-off June 15, 2021

Error bars represent mean +/- SEM

<sup>1</sup>Range is of baseline GFAP levels in asymptomatic FTD-GRN patients enrolled in INFRONT-2

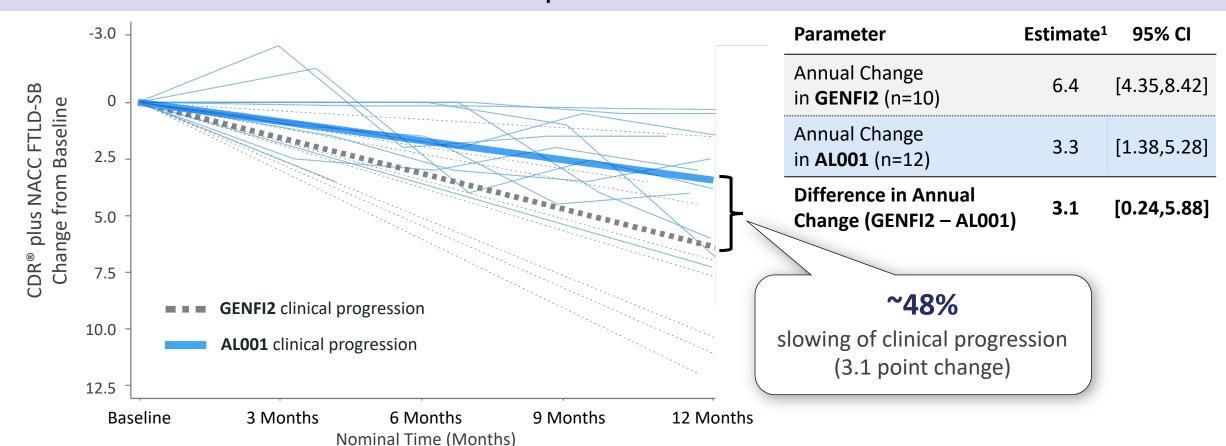
Phase 2 data presented at CTAD 2021

# Latozinemab-Treated FTD-GRN Parcipipants Experience a ~48% Annual Delay in Disease Progression Compared to Matched Historical Controls

Similar findings of ~54% delay in disease progression for C9-orf72 FTD patients: Latozinemab was well tolerated in INFRONT-2

#### **CLINICAL BENEFIT**

#### **CDR® plus NACC FTLD-SB**





# **Enrollment Ongoing for Pivotal INFRONT-3 Phase 3 Study of AL001**

Randomization

0

Randomized, Double Blinded, Placebo-Controlled Study
Target enrollment of 180 FTD-GRN carriers at risk for or symptomatic

AL001 60 mg/kg IV q4w for 96 weeks

Study Treatment Study Completion Visit



0

8 weeks follow-up

Open-label extension

PRIMARY ENDPOINT:

CDR® plus NACC FTLD-SB

SECONDARY CLINICAL OUTCOMES ASSESSMENTS:

CGI-S, CGI-I, FRS, RBANS

**EXPLORATORY ENDPOINTS:** 

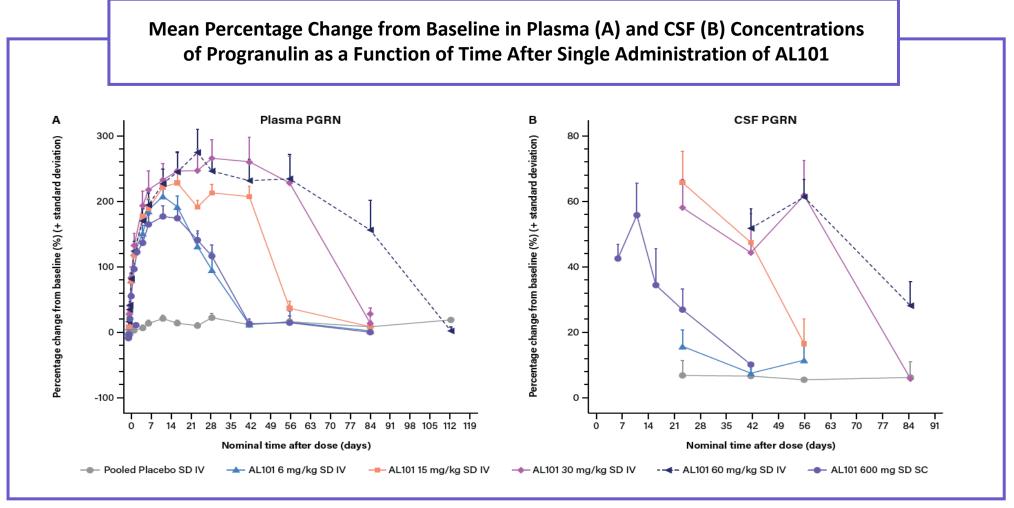
vMRI, CSF and Plasma Biomarkers

Study taking place at approximately 45 clinical centers in US, Canada, Europe and Australia Initial data read out after 96-week treatment period



# **AL101 Elevated Progranulin Levels in Periphery and CSF in Phase 1**

Generally well tolerated in healthy volunteers; initial Phase 1 data suggest less frequent dosing may be possible



Phase 1 ongoing with additional cohorts being enrolled to evaluate subcutaneous dosing



# Clinical-Stage Alzheimer's Disease Candidate: AL002



# AL002: Designed to Activate TREM2 in Order to Enhance Microglia Function

#### **RATIONALE**

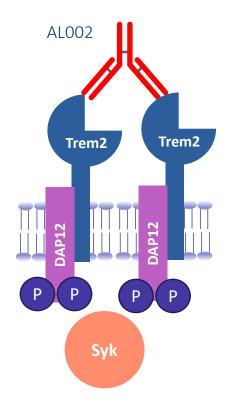
- TREM2 signaling controls critical microglial activity
- TREM2 is a prominent risk gene for Alzheimer's disease
  - Homozygous mutations cause dementia (NHD, FTD)
  - Heterozygous mutations increase risk for Alzheimer's disease by 3x
  - Ligands include APOE, an Alzheimer's risk gene

#### **MECHANISM**

 Activates TREM2 signaling to improve functionality of microglia to clear pathology and protect neurons

#### **STATUS**

- Phase 1 study complete
- INVOKE-2 Phase 2 clinical trial on-going

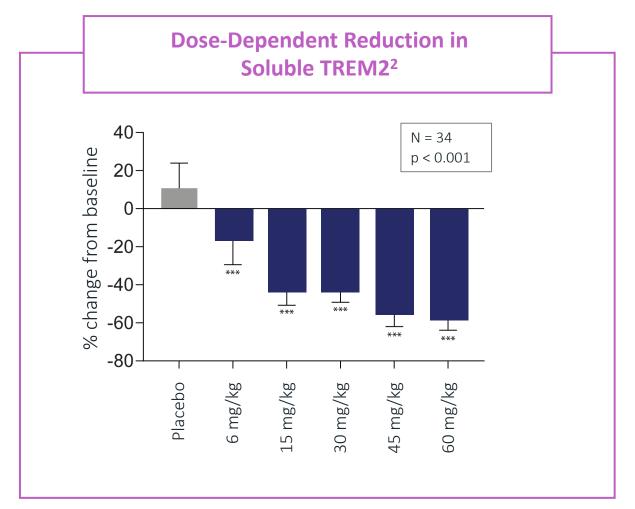


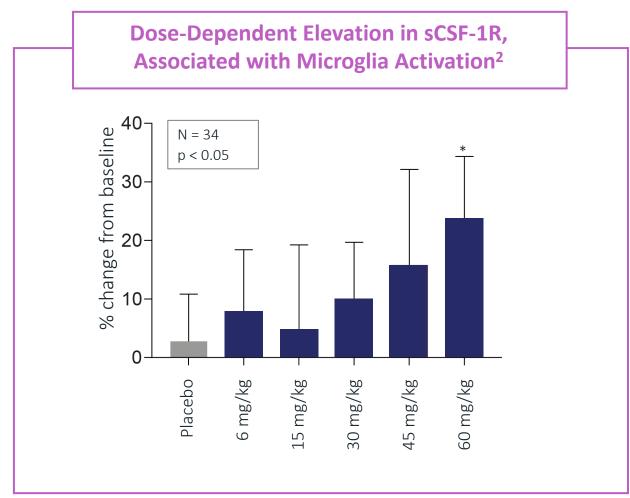
Intended to improve survival, proliferation, function of microglia



### **AL002 Target and Microglia Engagement Achieved in Phase 1**

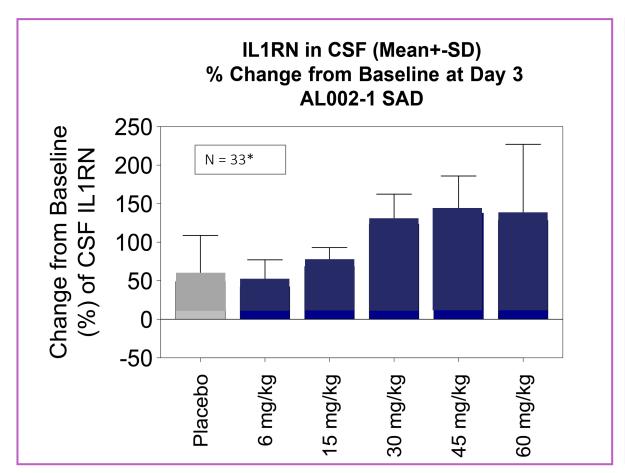
Generally well-tolerated in healthy volunteers<sup>1</sup>

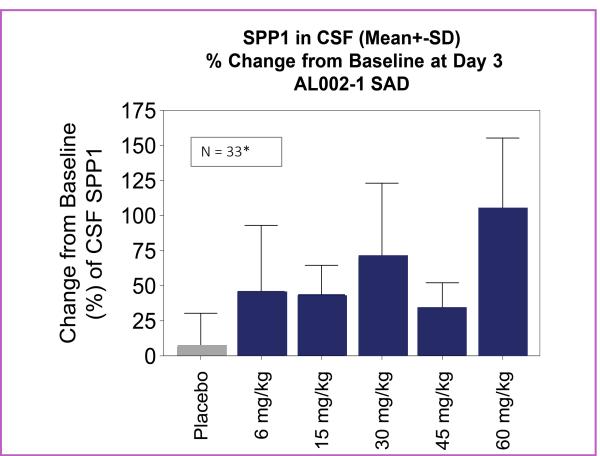






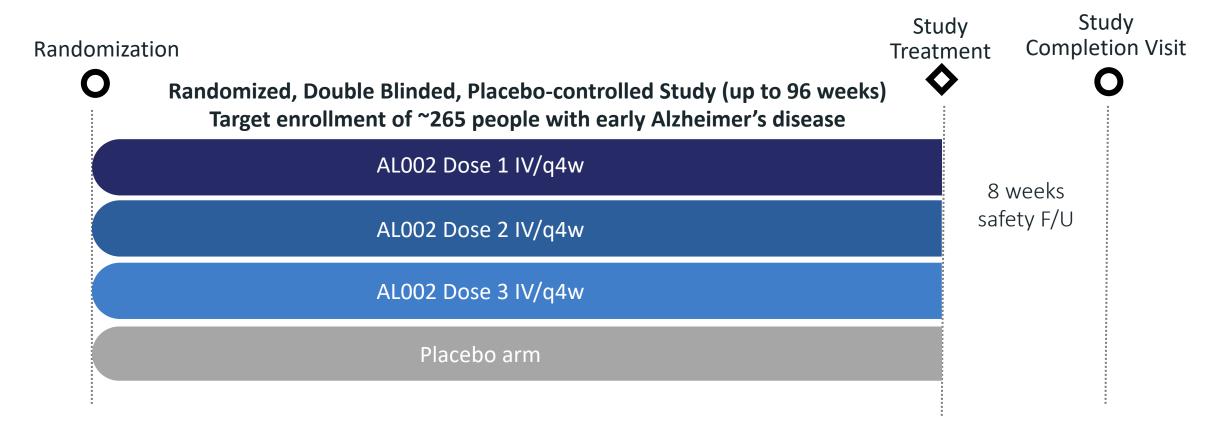
# AL002 Treatment in Phase 1 Also Caused An Increase in CSF Levels of IL1RN and SPP1, Indicating Further Evidence of Microglial Activation







# **INVOKE-2 Phase 2 AL002 Study in Individuals with Early Alzheimer's Disease**



#### **PRIMARY ENDPOINT:**

CDR-SB

# SECONDARY CLINICAL OUTCOMES ASSESSMENTS:

RBANS, ADAS-Cog13, ADCS-ADL-MCI

#### **EXPLORATORY ENDPOINTS:**

vMRI, CSF and Plasma Biomarkers,
PET scans



# Preclinical Program for Alzheimer's Disease: AL044

# Background on AL044 Targeting a Candidate Master Regulator of Microglia

#### **Key Features of MS4A and AL044**

- MS4A Member of ~22 membrane-tetra spanning 4A family, structurally related to CD20
- Expressed on microglia, CNS perivascular macrophages
- Modulate multiple aspects of AD disease risk, age of onset, progression and survival
- AL044 our drug candidate functionally phenocopies and exceeds activities of the protective MS4A variant
- ALO44 Regulates the levels of key signaling systems in microglia; Trem2/sTrem2, CSF1R, Dectin1
- ALO44 regulate microglia, proliferation, survival migration lysosomal function, immune response and energetics, genes and/or proteins
- IND filed following pre-IND alignment

#### **Effects of MS4A on AD**

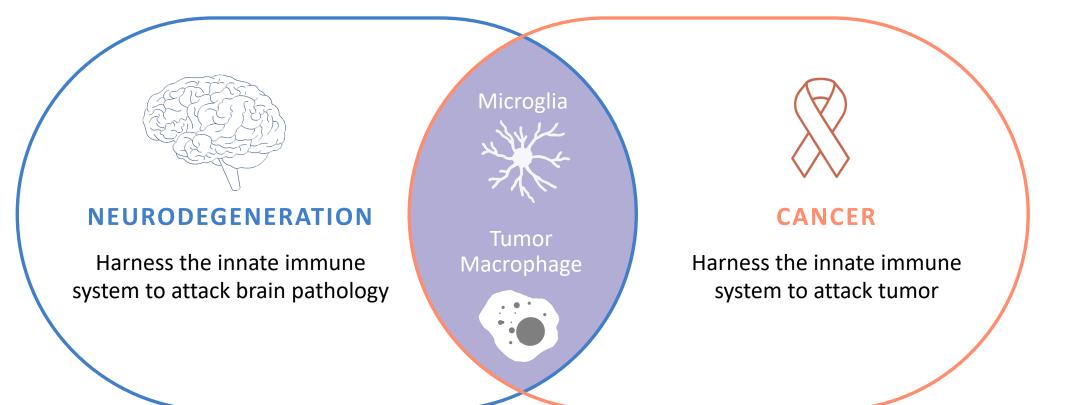
Protective Allele	Effects on AD	Risk Allele
	AD Risk	
	Age of onset and survival	
	Rate of cognitive decline	
	CSF Soluble TREM2	-
	Aβ Plaques & CSF Tau	1
	Rate of Cortical and hippocampal Shrinkage	
	Rate of Conversion from MCI to AD	
	Protective Interactions with APOE4	-



# Alector Oncology Overview



# **Neurodegeneration and Cancer Converge at the Innate Immune System**





# AL009: Marshalling the Innate Immune System to Combat Tumor Growth

#### **TARGET**

Siglec-Sialic acid innate checkpoint pathway

#### **SCIENTIFIC RATIONALE**

Human genetics and tumor model data show Siglecs drive immune suppression

#### **STATUS**

IND Submission expected later this year

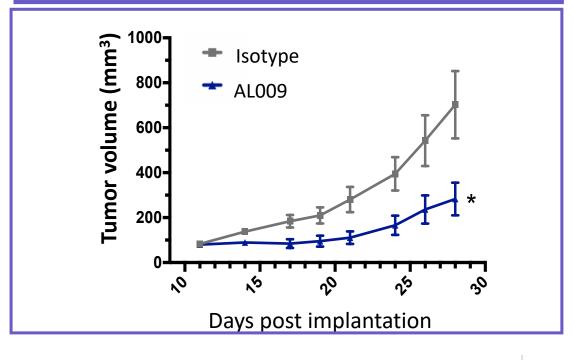
#### **PRODUCT CANDIDATE**

- Engineered Fc fusion protein
- Blocks multiple Siglecs to activate innate and adaptive immunity
- Engages activating Fcγ receptors

#### PRECLINICAL ACTIVITY

- Repolarizes suppressive macrophages, activates T cells and enhances ADCC/ADCP function
- Demonstrates robust anti-tumor activity in multiple models (single agent and combined with checkpoint inhibitors)

#### **Monotherapy Activity in Breast Cancer Model**





# AL008: Potential Best-in-Class Dual Function SIRPα-CD47 Pathway Activator

#### **TARGET**

 $SIRP\alpha$  - CD47 pathway

#### **SCIENTIFIC RATIONALE**

Tumors leverage pathway to hide from immune system

#### **STATUS**

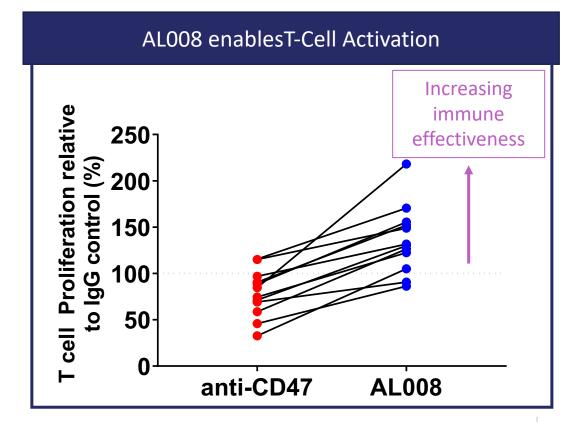
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#### **PRODUCT CANDIDATE**

- Selectively binds to multiple SIRPlpha variants
- Does not inhibit T-cell activator SIRPα

#### **PRECLINICAL ACTIVITY**

- Promotes T-cell proliferation more effectively than anti-CD47
- Demonstrates robust anti-tumor activity in multiple models (single agent and with checkpoint inhibitors)
- No decrease in red blood cells or platelets







Thank You