



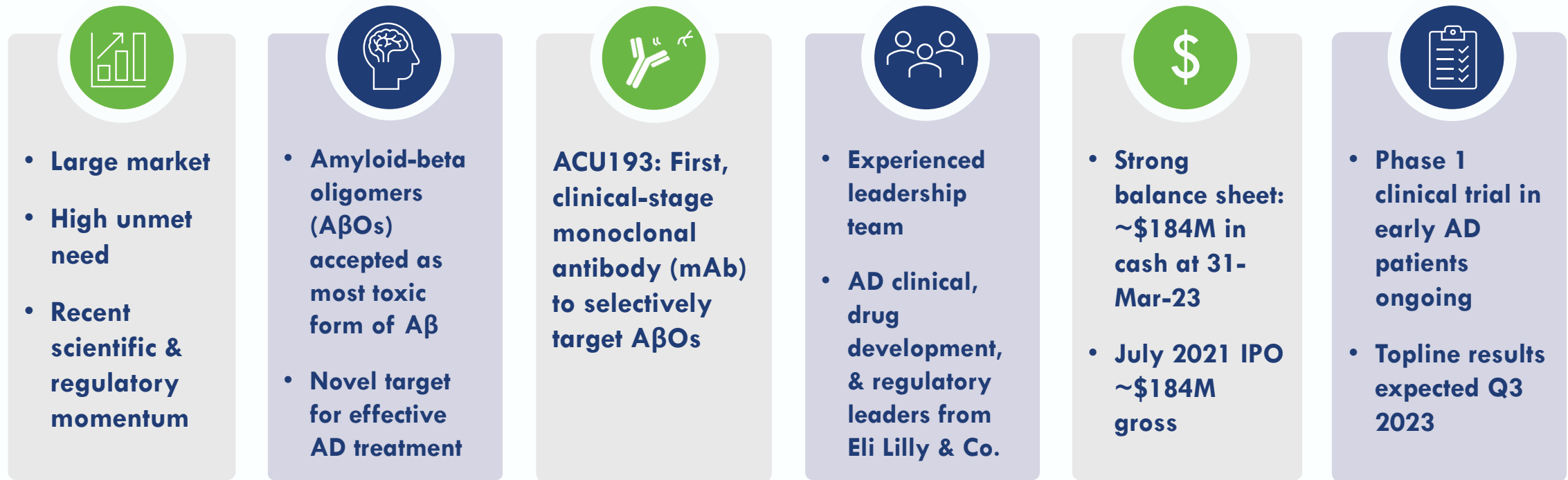
# Corporate Presentation

May 2023

# Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Any statement describing Acumen's goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Words such as "believes," "expects," "anticipates," "could," "would," "seeks," "aims," "plans," "potential," "will" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements include statements concerning Acumen's business, Acumen's ability to achieve its strategic and financial goals, including its projected use of cash, cash equivalents and marketable securities and the sufficiency of its cash resources, and the therapeutic potential of Acumen's product candidate, ACU193, including its potential for improved safety and efficacy as compared to other monoclonal antibodies in development, as well as the expectations concerning the INTERCEPT-AD trial and Acumen's planned Phase 2/3 clinical trial, including the expected timing of initiation, enrollment and reporting data, and risks and uncertainties relating to the progression and duration of the COVID-19 pandemic and responsive measures thereto and related effects on Acumen. These statements are based upon the current beliefs and expectations of Acumen management, and are subject to certain factors, risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing safe and effective human therapeutics. Such risks may be amplified by the impacts of the COVID-19 pandemic. These and other risks concerning Acumen's programs are described in additional detail in Acumen's filings with the Securities and Exchange Commission ("SEC"), including in Acumen's most recent Annual Report Form 10-K and future filings and reports by Acumen. Copies of these and other documents are available from Acumen. Additional information will be made available in other filings that Acumen makes from time to time with the SEC. These forward-looking statements speak only as of the date hereof, and Acumen expressly disclaims any obligation to update or revise any forward-looking statement, except as otherwise required by law, whether, as a result of new information, future events or otherwise. In this presentation, references to cash also include cash equivalents.

## Advancing a Potential Best-/First-In-Class Antibody Product for Early Alzheimer's disease (AD)



We believe that Acumen has the organizational expertise and fiscal resources to advance ACU193 through 2025

## Acumen Business Strategy: 2023 - 2025

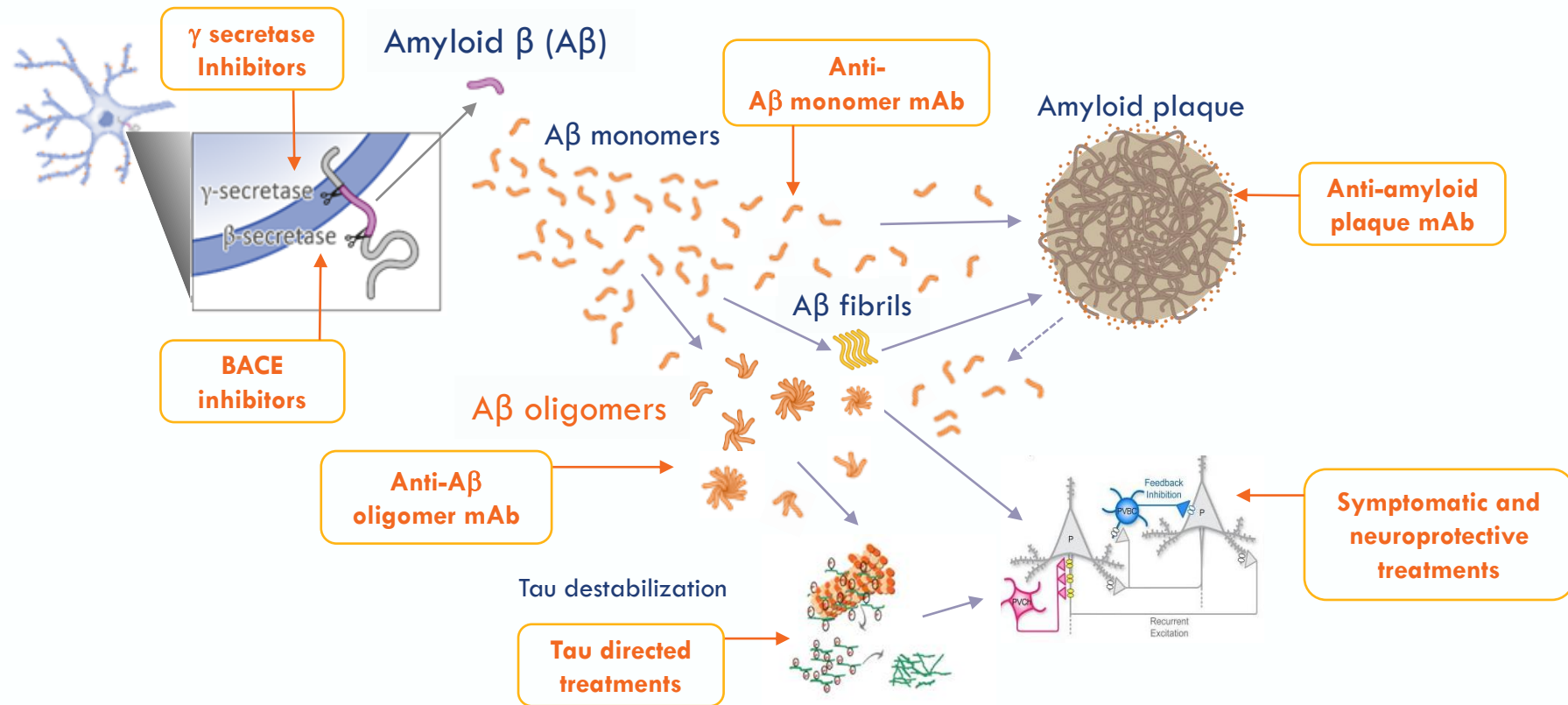
- Rapidly advance ACU193 through clinical development in patients with early AD;
- Evaluate combination approaches to complement our core ACU193 monotherapy strategy;
- Expand our product portfolio by in-licensing and/or developing additional candidates and/or alternative formulations for, or derivatives of, ACU193; and
- Optimize value of ACU193 and future drug candidates in major markets.

# AD, Amyloid & Abeta Oligomers

# Alzheimer's Pathophysiology

Build-up of amyloid-beta ( $A\beta$ ) is believed to lead to neurodegeneration and dementia

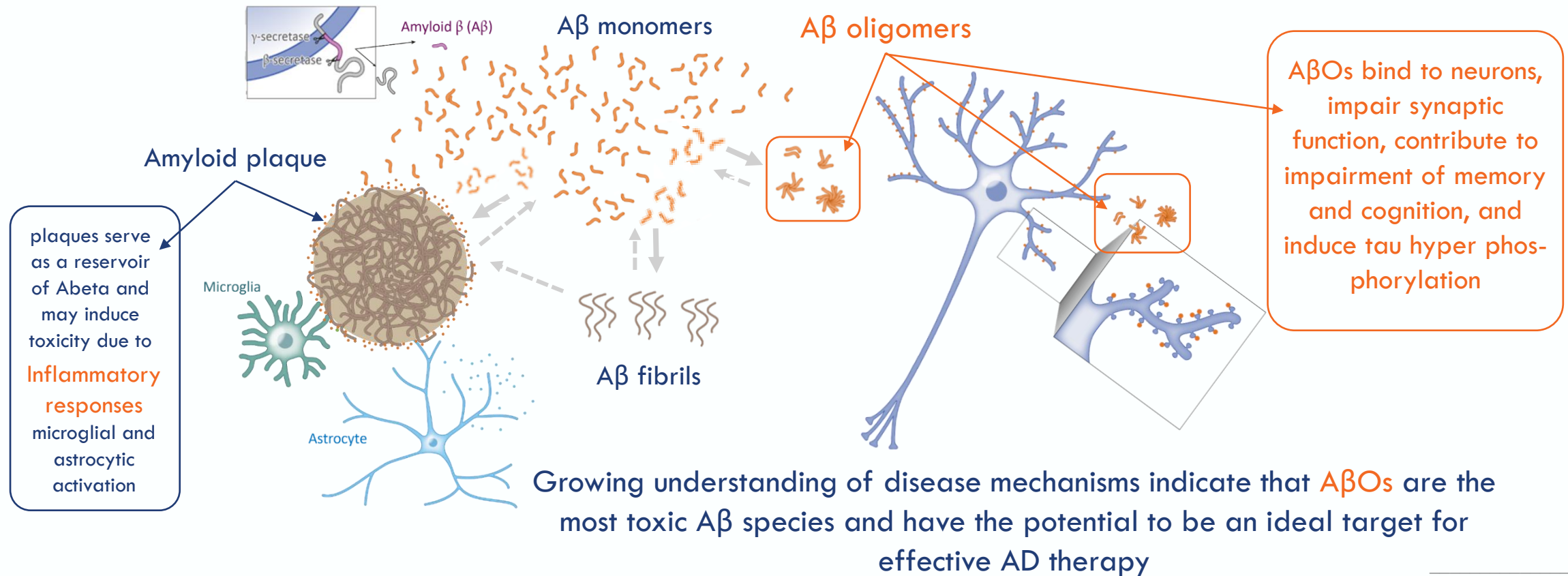
Previous and current anti-amyloid and related drug targets have attempted to intervene



Data indicate that soluble amyloid  $\beta$  oligomers ( $A\beta$ O<sub>s</sub>) are the most toxic species and should be preferentially targeted for removal

# Scientific Evidence Supports A $\beta$ O Hypothesis

Predominant forms of A $\beta$  in AD: A $\beta$  monomers (non-toxic), A $\beta$ O<sub>s</sub>, A $\beta$  fibrils, and amyloid plaques

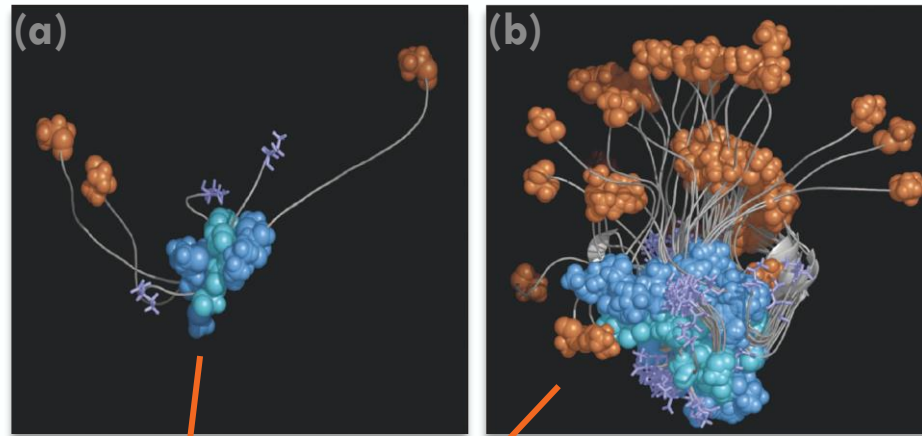


Sources: Adopted From: Selkoe, Hardy EMBO Molecular Medicine, 2016  
Cline, Journal of Alzheimer's Disease, 2018

The majority of peer monoclonal antibodies target amyloid plaques with only limited effects on A $\beta$ O<sub>s</sub>; Acumen's drug candidate ACU193 targets A $\beta$ O<sub>s</sub>

# What is an A $\beta$ Oligomer? A $\beta$ Os May Consist of 2 to >200 A $\beta$ Peptides

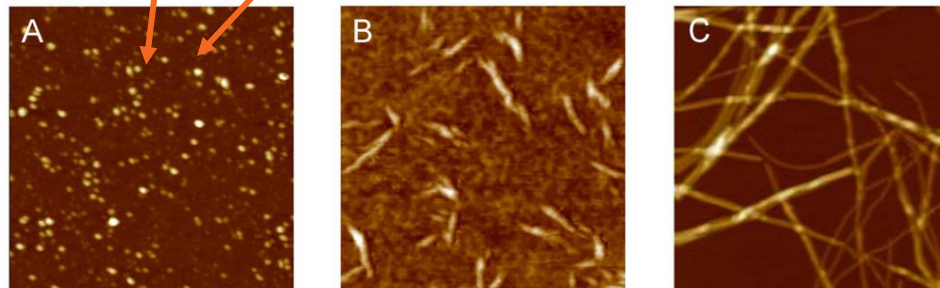
Figure 1. A $\beta$ Os composed of 3 (a) and 18 (b) A $\beta$  peptides are depicted below.



Source: Kelley et al. *J Chem Physics* 2008.

## Quaternary structures of A $\beta$ oligomers, protofibrils, and fibrils

Figure 2. Atomic force microscopy images of representative steps of amyloid aggregation: (A) oligomers; (B) protofibrils; (C) mature fibrils. Scan size 1.0  $\mu$ m. Z range (A) 8.0 nm; (B) 15 nm; (C) 20 nm.



Source: Relini et al. *Biomolecules* 2014.



# Toxic A $\beta$ O<sub>s</sub> Represent an Ideal Alzheimer's Disease Drug Target

A $\beta$ O<sub>s</sub> are widely recognized as key pathogenic structures in AD:

## 1 *Impair synaptic function*<sup>1</sup>

Pyramidal neurons in rat organotypic slices had markedly decreased density of dendritic spines and numbers of electrophysiologically active synapses after exposure to picomolar levels of soluble oligomers<sup>2</sup>

## 2 *Contribute to impairment of memory and cognition*<sup>3</sup>

Soluble A $\beta$ O<sub>s</sub> (but not monomers) have been found to block hippocampal long-term potentiation (LTP), a synaptic correlate of memory and learning<sup>4</sup>

## 3 *Induce tau hyperphosphorylation*<sup>5</sup>

It was demonstrated in 2008 that A $\beta$ O<sub>s</sub> were capable of inducing tau hyperphosphorylation in cultured neurons in the absence of fibrils<sup>5</sup>

<sup>1</sup>Cleary et al., 2005; Townsend et al., 2006; Poling et al., 2008; Reed et al., 2011; Batista et al., 2018.

<sup>2</sup>Shankar et al., 2007.

<sup>3</sup>Ferreira, S. T., and Klein, W. L., 2011.

<sup>4</sup>Lambert et al., 1998; Walsh et al., 2002; Wang et al., 2002; Klyubin et al., 2005; Townsend et al., 2006; Shankar et al., 2007, 2008.

<sup>5</sup>De Felice et al., 2008; Zempel et al., 2010; Ochalek et al., 2017.

Increasing  
Evidence for the  
Role of A $\beta$ O<sub>s</sub>  
in AD  
Pathogenesis<sup>+</sup>

### The Therapeutic and Diagnostic Potential of Amyloid $\beta$ Oligomers Selective Antibodies to Treat Alzheimer's Disease

Kirsten L. Viola<sup>1\*</sup>, Maira A. Bicca<sup>1</sup>, Adrian M. Bebenek<sup>2</sup>, Daniel L. Kranz<sup>1</sup>, Vikas Nandwana<sup>3</sup>, Emily A. Waters<sup>4</sup>, Chad R. Haney<sup>1</sup>, Maxwell Lee<sup>1</sup>, Abhay Gupta<sup>2</sup>, Zachary Brahmabhatt<sup>2</sup>, Weijian Huang<sup>1</sup>, Ting-Tung Chang<sup>5,6</sup>, Anderson Peck<sup>5,6</sup>, Clarissa Valdez<sup>1</sup>, Vinayak P. Dravid<sup>2</sup> and William L. Klein<sup>1,7</sup>

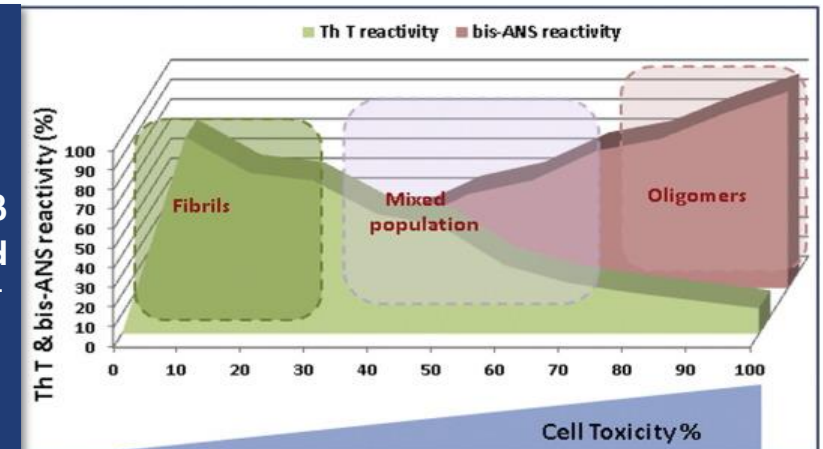
<sup>1</sup> Department of Neurobiology, Northwestern University, Evanston, IL, United States, <sup>2</sup> Illinois Mathematics and Science Academy, Aurora, IL, United States, <sup>3</sup> Department of Materials Science and Engineering, Northwestern University, Evanston, IL, United States, <sup>4</sup> Center for Advanced Molecular Imaging, Northwestern University, Evanston, IL, United States, <sup>5</sup> Small Animal Imaging Facility, Van Andel Research Institute, Grand Rapids, MI, United States, <sup>6</sup> Laboratory of Translational Imaging, Van Andel Research Institute, Grand Rapids, MI, United States, <sup>7</sup> Department of Neurology, Northwestern University, Chicago, IL, United States

OPEN ACCESS

Edited by:  
Jacob Raber,  
Chicago Health & Science University

Improvements have been made in the diagnosis of Alzheimer's disease (AD), manifesting mostly in the development of *in vivo* imaging methods that allow for the detection

Relationship  
Between the A $\beta$   
Assemblies and  
Their Toxicity<sup>++</sup>

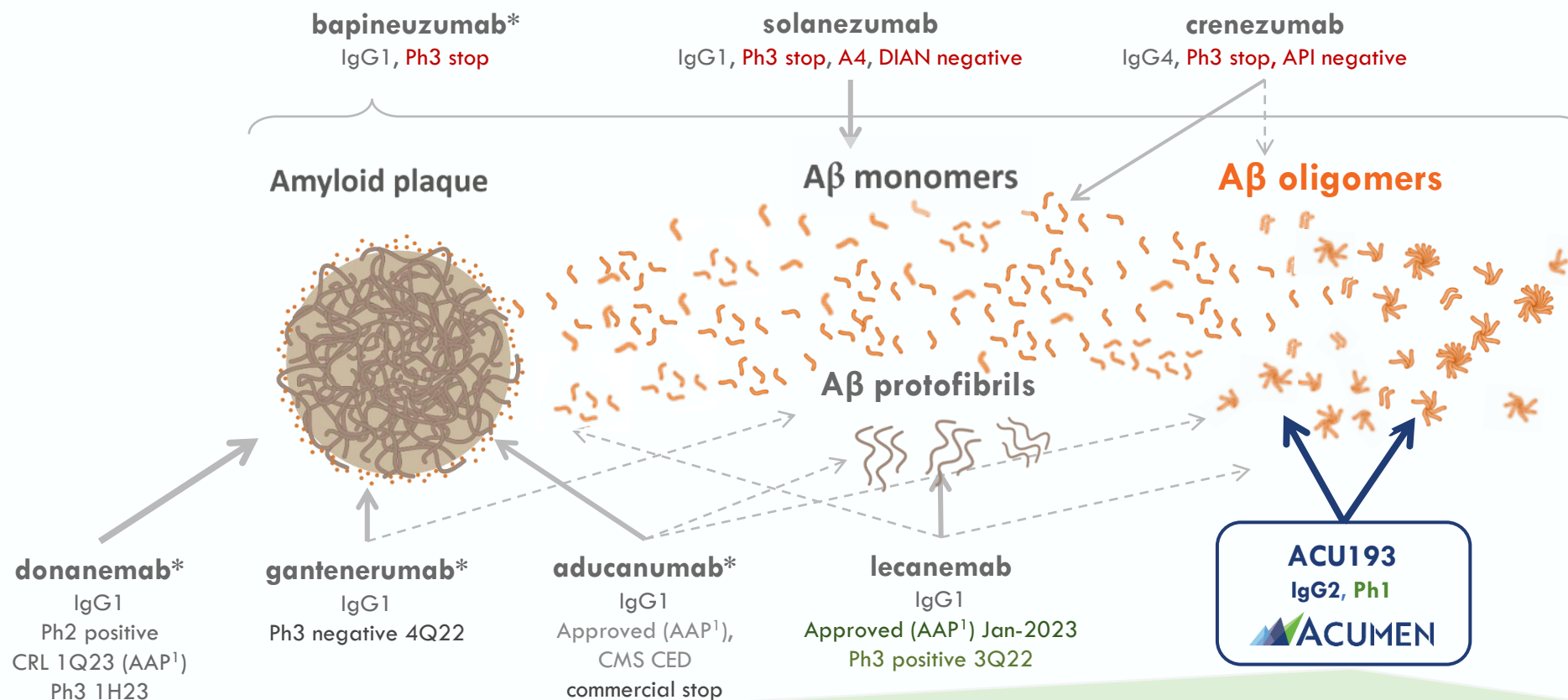


Targeting the right form of amyloid may be a key to slowing disease progression in early AD

<sup>+</sup> Viola, et al. The Therapeutic and Diagnostic Potential of Amyloid  $\beta$  Oligomers Selective Antibodies to Treat Alzheimer's Disease, 2022.

<sup>++</sup> Sengupta, U. et al. The Role of Amyloid- $\beta$  Oligomers in Toxicity, Propagation, and Immunotherapy, 2016

# ACU193 Positioning Relative to Late-Stage and Approved Anti-A $\beta$ /Plaque mAbs




ACU193's high selectivity for A $\beta$ O<sub>s</sub> combined with an expected lower rate of ARIA is anticipated to provide better safety and efficacy compared to anti-plaque mAbs

\* IgG1 monoclonal antibodies that bind amyloid plaque are associated with high rates of ARIA-E. See e.g., Plotkin, *Neurobiology of Disease*, 2020.

• There have been no head-to-head clinical trials between any of the product candidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.

¹ AAP: Accelerated approval

# Comparative Profiles of Recent and Current anti-A $\beta$ Antibodies in Development

Company	Asset	mAb epitope / isotype <sup>(4)</sup>	A $\beta$ Target Selectivity <sup>(1)(2)</sup>				Safety Profile	Efficacy Profile
			monomers	plaque	fibrils	oligomers	ARIA-E <sup>(4)</sup>	
 ACUMEN	ACU193	N-term, Confirmational IgG2	-	-	+	+++++	Expected Low	TBD
Eisai / Biogen	Leqembi™	N-term, Confirmational IgG1	-	+++	++++ Protofibrils	+++	Low	Positive Ph2 and Ph3 CLARITY-AD
Lilly	donanemab	N3pG IgG1	-	+++++	+++	-	High	Positive Ph2 and Ph.3 TRAILBLAZER
Biogen	Aduhelm™	N-term IgG1	-	+++++	++ Protofibrils	++	High	Ph3 Emerge Positive, Engage Negative
Roche	gantenerumab <sup>(3)</sup>	N-term + Mid domain IgG1	-	+++++	+++	++	High	Ph3 Negative
Lilly	solanezumab <sup>(3)</sup>	Mid domain / IgG1	+++++	-	-	-	None	Ph3 Negative, trends; A4 negative
Roche / Genentech	crenezumab <sup>(3)</sup>	Mid domain / IgG4	++++	-	++	+++	None	Ph3 Negative, no trends
Pfizer / Janssen	bapineuzumab <sup>(3)</sup>	N-term IgG1	++	+++	++	++	High	Ph3 Negative

(1) There have been no head-to-head trials between any of the product candidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.

(2) Goure et al. (2014). Targeting the proper amyloid-beta neuronal toxins: a path forward for Alzheimer's disease immunotherapeutics. *Alzheimer's Research & Therapy*. 6:42. DOI: <http://alzres.com/content/6/4/42>.

(3) Phase 3 discontinued for primary AD indication.

(4) van Dyck, C. (2017). Anti-Amyloid- $\beta$  Monoclonal Antibodies for Alzheimer's Disease: Pitfalls and Promise. *Biological Psychiatry*. 83:4, 311-319. DOI: <https://doi.org/10.1016/j.biopsych.2017.08.010>.

ACU193's high selectivity for toxic A $\beta$ O<sub>s</sub>, combined with its expected lower rate of ARIA, is anticipated to provide superior efficacy and safety compared to peers

# ACU193: Our Differentiated Approach

# ACU193 Target Product Profile: Best-in-Class, 1st Line, Anti-A $\beta$ O, Disease-Modifying Immunotherapy for Early AD

## DRUG:

ACU193 is a humanized, affinity-matured, mAb with high selectivity for toxic A $\beta$ O<sub>s</sub> vs. A $\beta$  monomers (>500x) and limited to no binding to amyloid plaques.

**ACU193 is an IgG2 subclass mAb** which has a reduced effector function.

## POPULATION:

Early AD - Mild Cognitive Impairment and Mild Dementia due to AD (amyloid positive by PET)

## DOSING:

IV infusion every 4 weeks

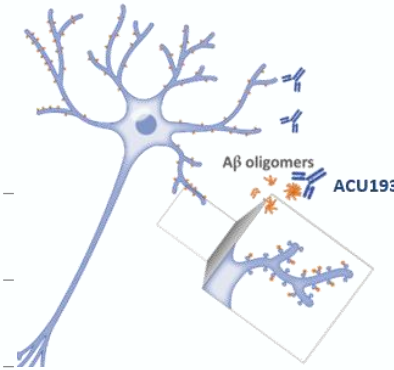
## DURATION:

Chronic therapy for duration of Early AD

## VALUE PROPOSITION:

**Selectivity for toxic A $\beta$ O<sub>s</sub> is expected to provide superior cognitive efficacy and improved safety and tolerability** relative to non-selective anti-A $\beta$ /plaque mAbs, including:

- Slowing the decline of memory and cognition in Early AD
- Decreasing A $\beta$ O induced synaptic and neuronal network toxicity
- Slowing disease progression and downstream effects on tau, neurodegeneration, and neuro-inflammation
- With expected low rate of ARIA
- **Potentially effective as stand-alone therapy or in combination with other symptomatic, anti-inflammatory, and/or tau directed therapies**



# ACU193: Extensive Data Package Supporting Development

## SELECTIVITY

- Nanomolar affinity for A $\beta$ O $_s$ , >500-fold greater selectivity for A $\beta$ O $_s$  over A $\beta$  monomer, with limited or no discernable binding to vascular amyloid or dense core amyloid plaques
- Binds broad range of endogenous A $\beta$ , from dimers to high molecular weight A $\beta$ O $_s$

## PHARMACOLOGY

- Dose-dependent effects in multiple in vitro neuroprotection assays
- Positive memory and behavioral effects in multiple in vivo transgenic mouse models for AD

## PK/PD

- Brain penetration and biodistribution demonstrated in multiple species
- Performs like other peripherally administered CNS mAbs

## SAFETY

- IgG2 subclass lacks inflammatory effector function signaling (Fc $\gamma$ R binding)
- Nonclinical microhemorrhage studies show no increased risk of microhemorrhage
- GLP studies demonstrated acceptable safety margin for clinical dosing plans including Ph 2/3

 **frontiers** | Frontiers in Neuroscience published: 26 April 2022  
doi: 10.3389/fnins.2022.848215

### **ACU193: An Immunotherapeutic Poised to Test the Amyloid $\beta$ Oligomer Hypothesis of Alzheimer's Disease**

*Grant A. Krafft\*, Jasna Jerecic, Eric Siemers and Erika N. Cline*

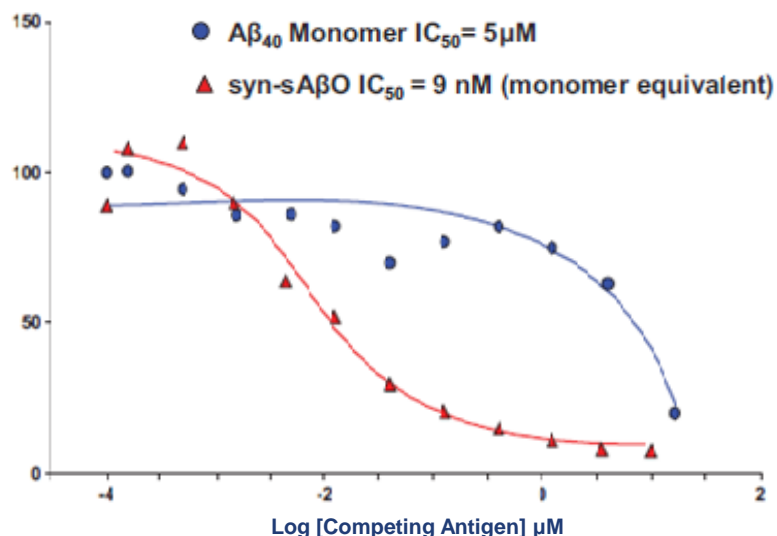
*Acumen Pharmaceuticals, Inc., Charlottesville, VA, United States*

ACU193 is a promising immunotherapy for early AD expected to provide meaningful cognitive and functional benefits, slow disease progression, and offer an attractive safety profile.

# ACU193 is the First mAb Developed to Selectively Target A $\beta$ O<sub>s</sub>

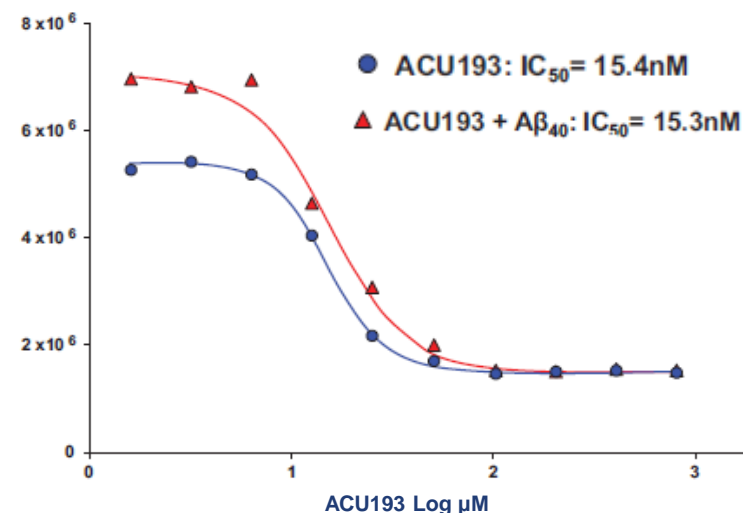
Highly selective for A $\beta$  oligomers versus A $\beta$  monomers

ACU193 Selectivity



Binding of ACU193 to A $\beta$ O<sub>s</sub> >500x  
binding to A $\beta$  monomer

ACU193 Selectivity in presence of  
5  $\mu$ M monomeric A $\beta$

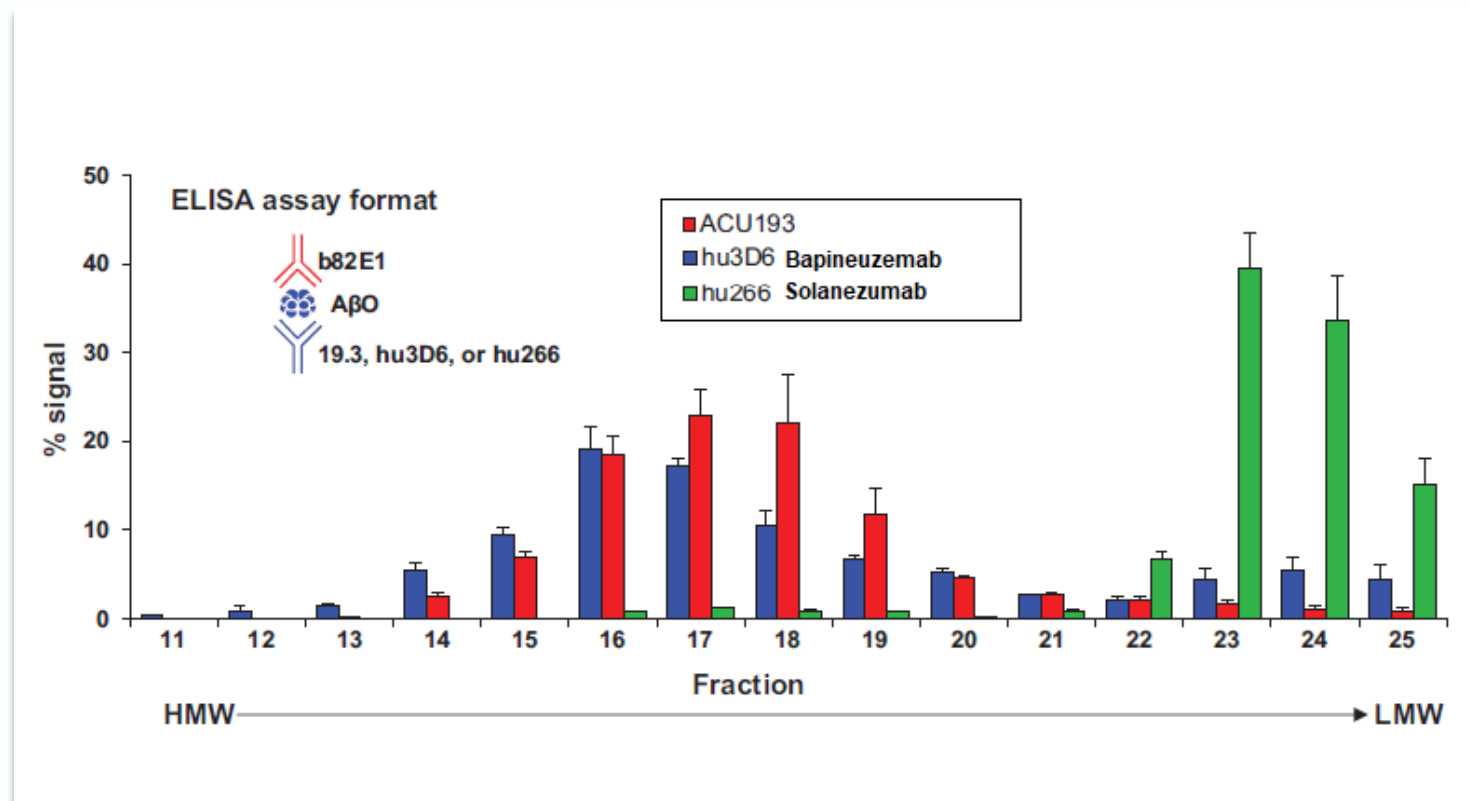


Even in the presence of a large excess of A $\beta$  monomer,  
binding of ACU193 to A $\beta$ O<sub>s</sub> is unchanged

ACU193 selective for binding to A $\beta$ O<sub>s</sub> is preserved even in the presence of a large excess of A $\beta$  monomers – such as what is present in the brain, thus limiting ‘target distraction’

# ACU193 Binds to a Wide Range of Oligomeric Species of A $\beta$

Comparison of A $\beta$  species-mAb complex signals across SEC fractions

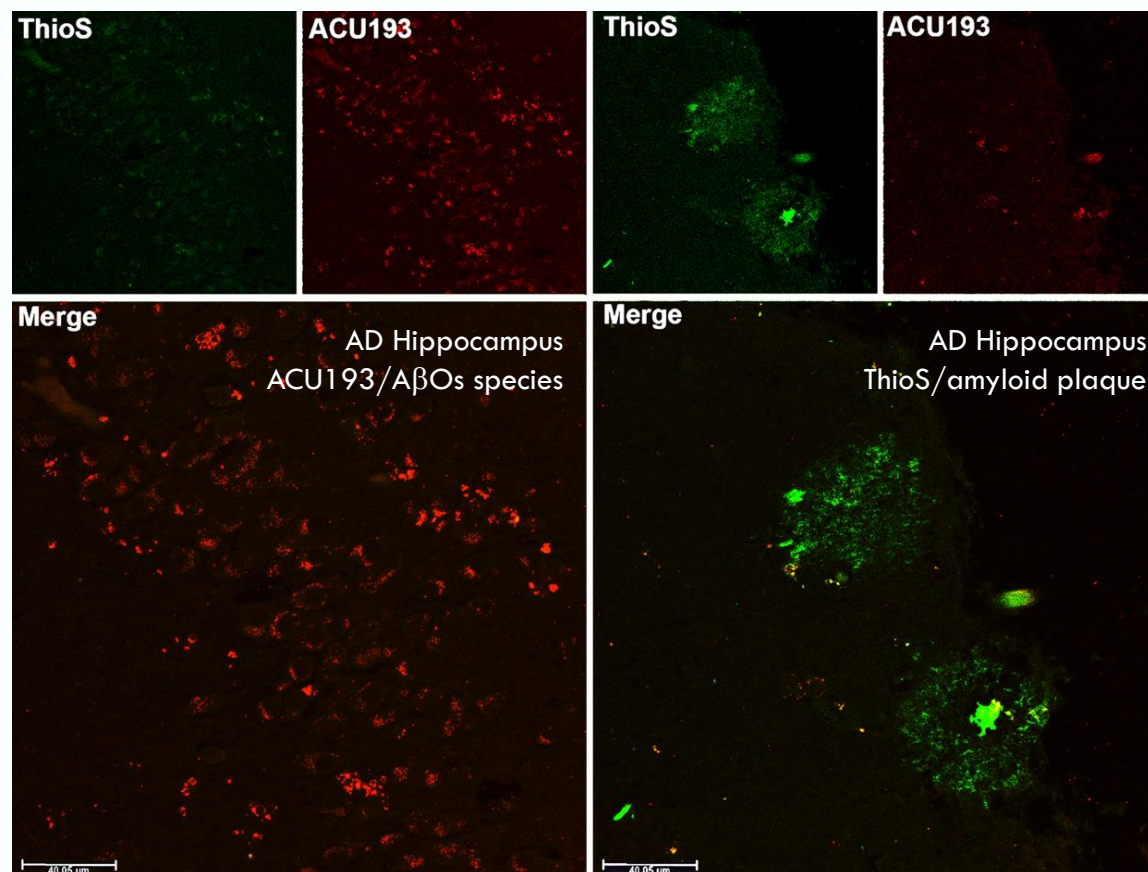


ACU193 binds to oligomeric species of A $\beta$  that are differentiated from those bound by hu266 (solanezumab) or hu3D6 (bapineuzumab)



# ACU193 is Highly Selective for A $\beta$ O<sub>s</sub> Versus A $\beta$ Plaques

ACU193 staining in human AD brain slices ACU193 (red) binds non-Thioflavin S positive A $\beta$  (green)



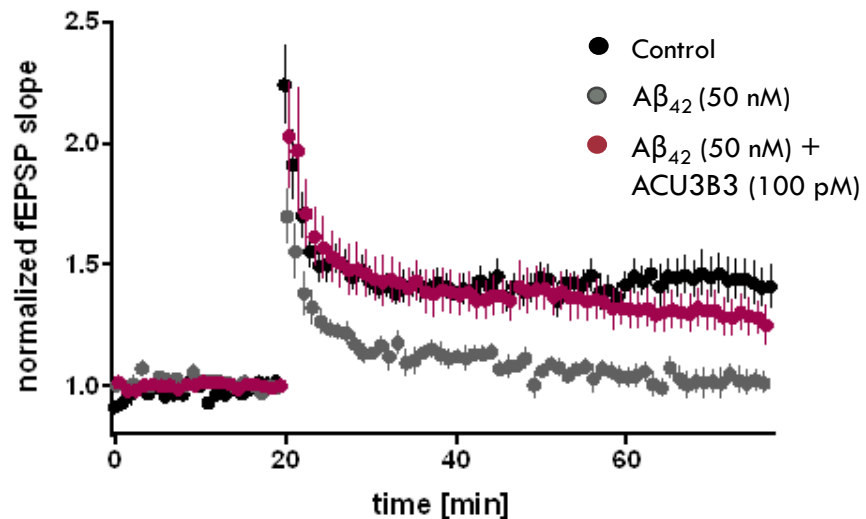
ACU193 has little or no binding to thioflavin S positive fibrillar A $\beta$  plaque in human AD brain tissue

Sources: E. Cline et al. CTAD 2019.

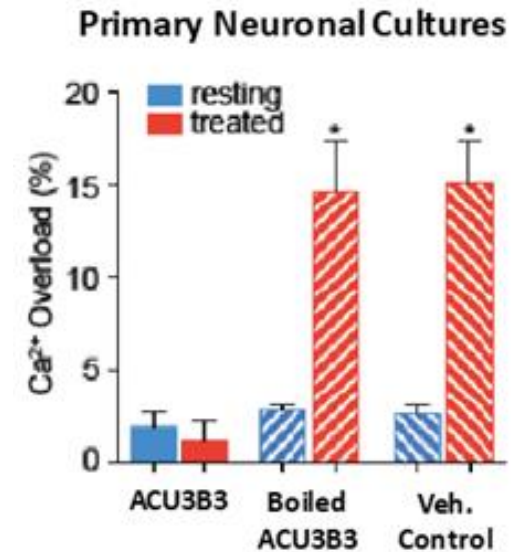
# A $\beta$ O<sub>s</sub> Bind to Neurons and are Toxic; Mouse Analogue of ACU193 Prevents Toxicity

After binding to neurons, A $\beta$ O<sub>s</sub> disrupt Long Term Potentiation (LTP) and cause pathologic increases in intracellular calcium that is destructive to cells.

**ACU3B3 prevents A $\beta$ O inhibition of hippocampal LTP ex vivo**



**ACU3B3 prevents A $\beta$ O mediated Ca<sup>2+</sup> elevation in cell cultures**

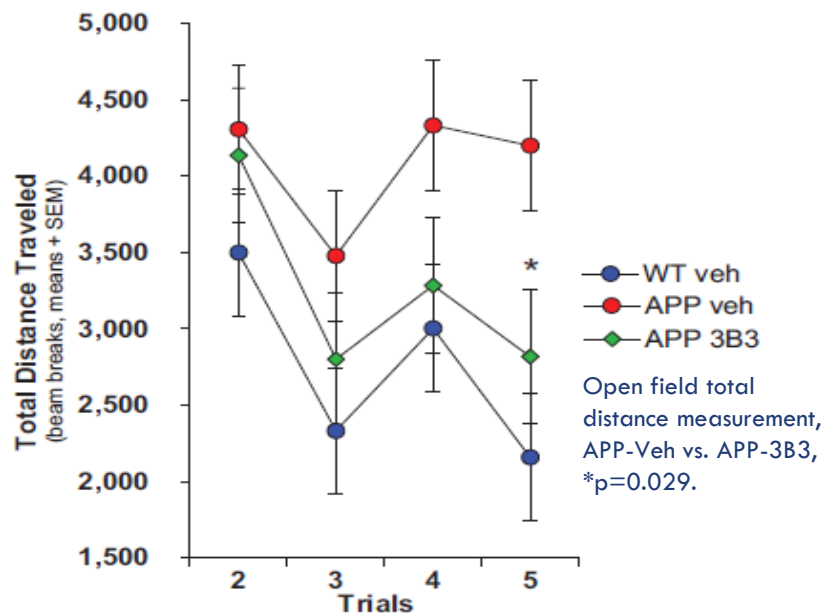


Note: (1) ACU3B3 is the mouse monoclonal antibody precursor to and equivalent of humanized ACU193

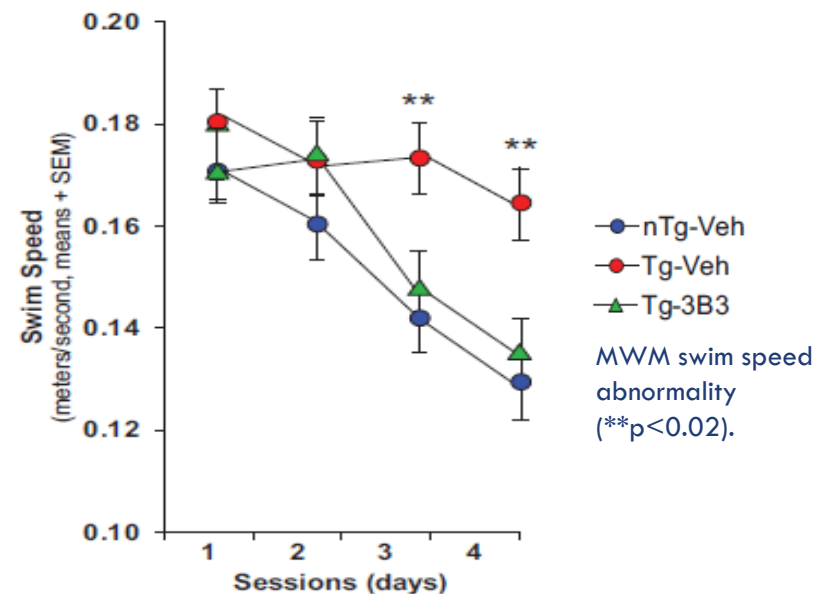
ACU3B3 prevents changes in aberrant neuronal activity thought to underlie memory loss in AD and prevents A $\beta$ O mediated disruption of calcium homeostasis in neuronal cultures

# Treatment of a Transgenic Mouse Model of AD Results in Behavioral Improvements

Murine parent version of ACU193 (ACU3B3) was used to treat younger mice with depositing plaque or older mice with abundant plaque

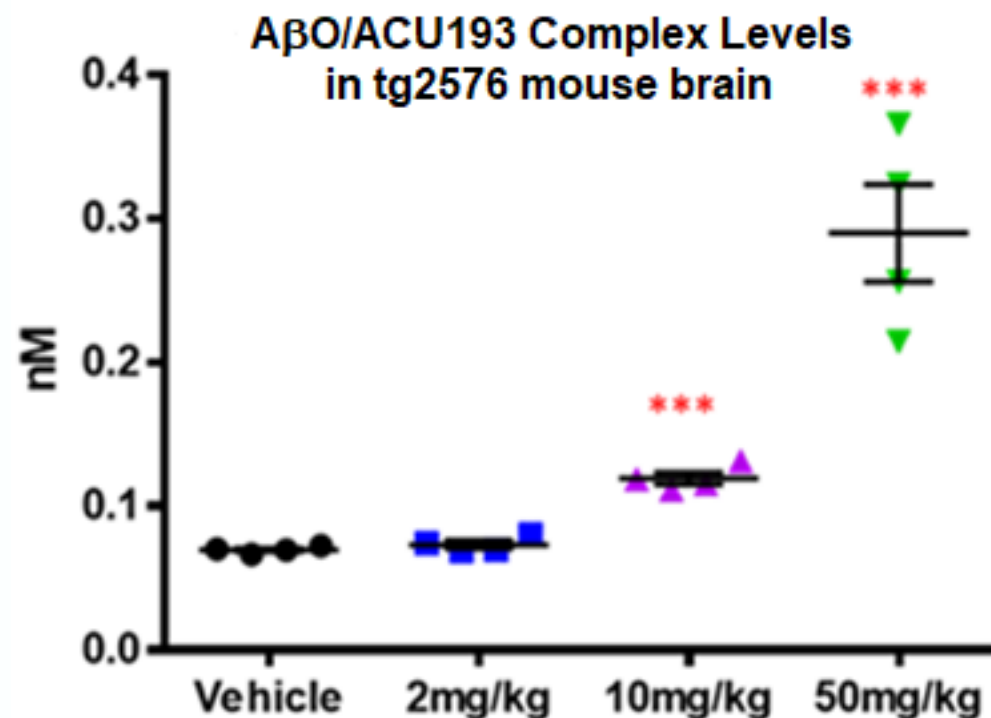


Deficits in younger (5-7 months) transgenic mice are markedly reduced with treatment



Deficits in older (9-10 months) transgenic mice are markedly reduced with treatment

## ACU193 Enters the CNS and Binds to A $\beta$ O in Transgenic Mice in Dose Dependent Manner



ACU193 engages target A $\beta$ O in transgenic mouse brain (tg2576) in dose dependent manner; Ability to administer higher doses in patient clinical trials may provide increased target coverage

# Clinical Development Plans

# (ACU-001) INTERCEPT-AD Trial: Phase 1 Overview

## TRIAL DESIGN:

### Randomized Placebo Controlled Phase 1

- Part A : Single-Ascending Doses
- Part B : Multiple-Ascending Doses

## ENROLLMENT CRITERIA:

### Early AD

- Mild Cognitive Impairment and Mild Dementia due to AD (amyloid positive by PET)

## TRIAL OBJECTIVES:

### Proof of Mechanism (PoM)

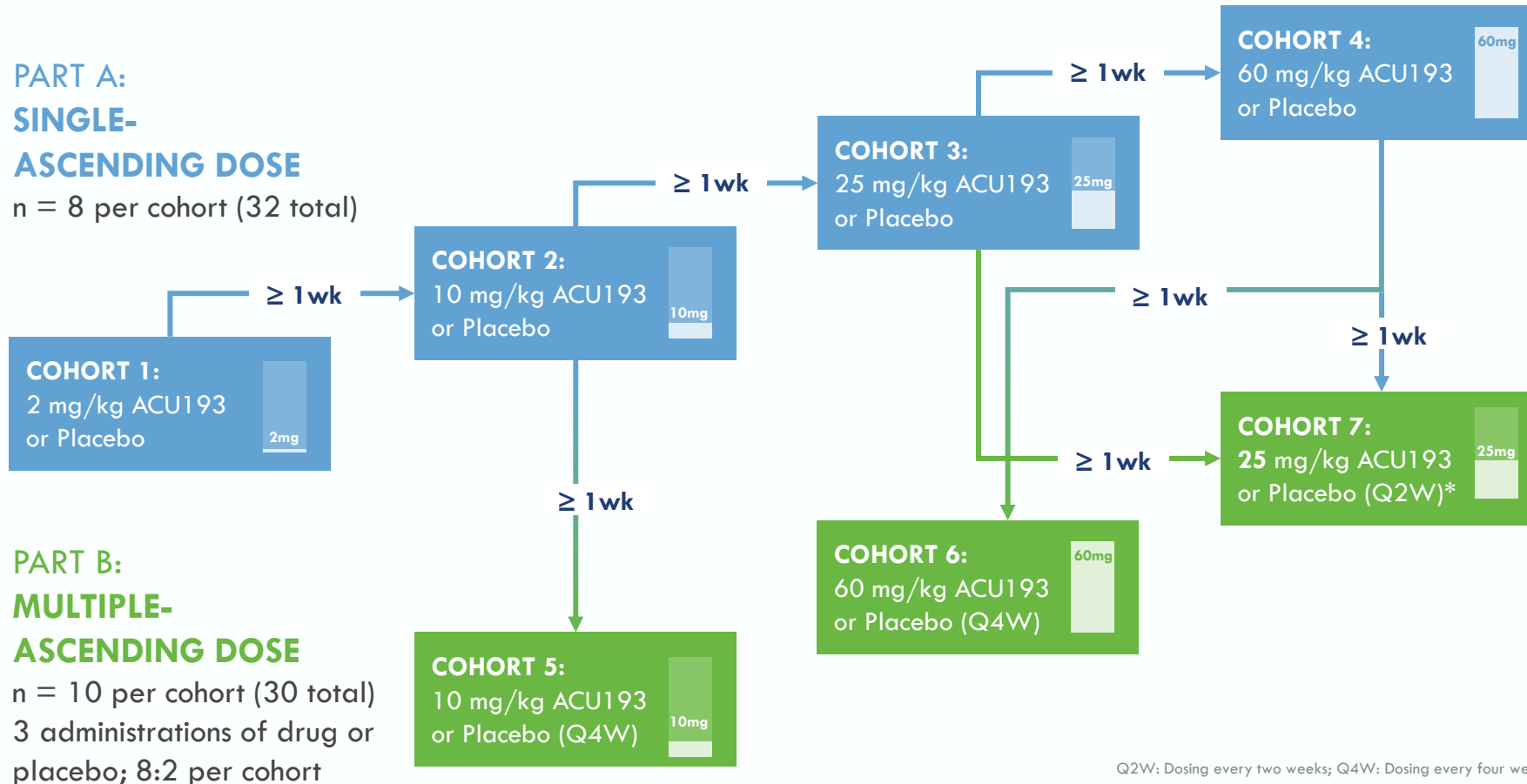
- Safety and tolerability
- Pharmacokinetics
- Target engagement
- Biomarkers; cognition (exploratory)

For more information on the INTERCEPT-AD trial, see <https://clinicaltrials.gov/ct2/show/NCT04931459>.

# INTERCEPT-AD a Randomized Placebo Controlled Phase 1 in Early AD patients

## PART A: SINGLE- ASCENDING DOSE

n = 8 per cohort (32 total)



Q2W: Dosing every two weeks; Q4W: Dosing every four weeks.

\*On January 30, 2023, Acumen submitted a protocol amendment to FDA to reduce the dose in Cohort 7 to 25 mg/kg Q2W from 60 mg/kg Q2W. This was based on a blinded review of preliminary pharmacokinetic data, inclusive of plasma and CSF levels, that indicate a dose of 60 mg/kg Q2W should not be needed to attain central target engagement, and preliminary safety data, inclusive of two asymptomatic cases of ARIA-E. While ACU193 is early in clinical development, the incidence of ARIA-E to date is consistent with our previous expectations regarding the safety profile of ACU193. The dose of ACU193 in Cohort 6 (60 mg/kg Q4W) has been maintained as planned.

# INTERCEPT-AD Trial Update – February 2023

- **INTERCEPT-AD: Phase 1 clinical trial of ACU193 in patients with early Alzheimer's disease (AD) (RCT)**
  - Topline results, safety and clinical proof-of-mechanism following full database lock expected in Q3 2023
  - Enrollment completed in February 2023
  - Cohort 7 dose level amended to 25 mg/kg every two weeks (Q2W) from 60 mg/kg Q2W prior to start
    - Preliminary, blinded plasma pharmacokinetic (PK) data demonstrated higher-than-expected ACU193 exposures at all dose levels
    - Preliminary Cohort 3 (SAD 25 mg/kg) dose results in Day 21 cerebrospinal fluid (CSF) ACU193 levels in excess of reported soluble amyloid beta oligomer (A $\beta$ O) levels
    - Two blinded observations of asymptomatic ARIA-E factored into decision to amend Cohort 7 dose; one in Cohort 4 (after single 60 mg/kg dose) and one in Cohort 5 (after third 10 mg/kg dose)
    - Cohort 6 is fully enrolled with planned dose (60 mg/kg every four weeks (Q4W))

Safety profile to date remains supportive of targeting soluble amyloid beta oligomers and, combined with the selectivity of ACU193, is expected to offer a favorable benefit-to-risk ratio for patients with early AD



# Phase 1 Objectives: Proof of Mechanism – Ability to Move to Phase 2/3

## 1. SAFETY AND TOLERABILITY

- Assessment of ARIA-E
- Absence of problematic immunogenicity

## 2. PHARMACOKINETICS

- Peripheral and Central

## 3. EVIDENCE OF TARGET ENGAGEMENT

- CSF level of ACU193: A $\beta$ O complexes (bound)

## 4. FLUID BIOMARKER EFFECTS

- Phospho-tau, Neurofilament light, et. al.

## 5. CLINICAL MEASURES (exploratory)

- Assessment of clinical cognitive measures, computerized tests (Cogstate Ltd.)

## 6. MRI EFFECTS (exploratory)

- Potential improvements in cerebral blood flow shown with MRI ASL pulse sequence



## PROOF OF MECHANISM

### Requirements for Phase 2/3

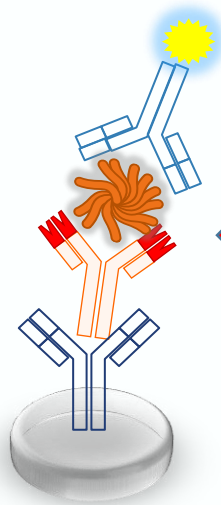
- ✓ Acceptable safety and tolerability
- ✓ Show ACU193 gets across the blood brain barrier and into central compartment
- ✓ Target engagement

Topline results anticipated in Q3 2023: primary outcomes safety/ARIA-E, PK and target engagement; Detailed study results anticipated to be presented at an Alzheimer's medical meeting

# CSF Target Engagement Assay (CSF-TE) Expected to Show Presence of ACU193-A $\beta$ O Complex



Unique assay configuration tailored to detect ACU193-A $\beta$ O complex in CSF  
MSD S-PLEX (Turbo) Immunoassay



← A $\beta$ O selective detection  
(anti-A $\beta$ O mAb)

←←← **Only drug/oligomer complex is measurable**

← ACU193 drug specific capture  
(anti-ACU193 idotype mAb)

A $\beta$ O concentration in CSF is very low ( $\leq 10$  pg/ml; 2 pM)  
Preliminary data in 25 mg/kg cohort shows ACU193 in excess of reported endogenous A $\beta$ O

## Cogstate computerized test battery (exploratory)

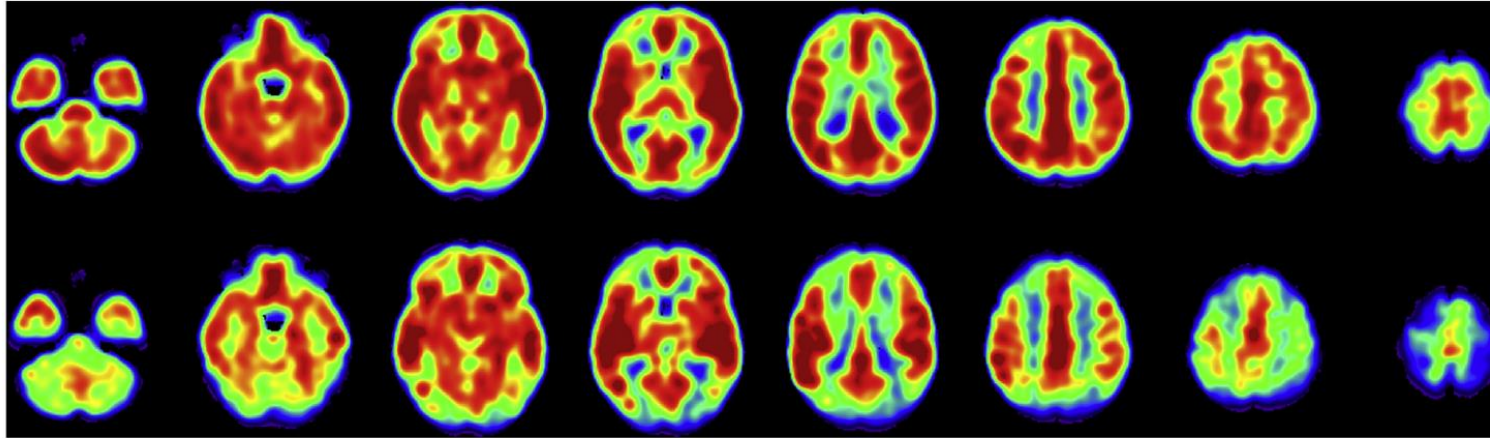
Test	Domains tested	Time (minutes)
International shopping list test (immediate)	Immediate recall	5
Cogstate brief battery	Attention, working memory, learning	15
International shopping list test (delayed)	Delayed recall	1
Groton maze learning test	Executive function	7
International digit-symbol substitution test	Processing speed	3
		Total = 31

Frequency of administration and sensitivity of battery offers improved possibility to observe effects

# Arterial Spin Labelling (ASL) as an MRI Measure of Cerebral Blood Flow

170

N. Zhang et al. / Neuroscience and Biobehavioral Reviews 72 (2017) 168–175



**Fig. 1.** Processed CBF images measured with ASL of a young and an old healthy control from our database. The top row images are from a 32 year-old woman, and the bottom row images are from an 80 year-old man. The reduction of CBF can be readily observed in widespread brain areas of the older subject compared with the younger subject.

- Mild cognitive impairment patients show hypoperfusion in parietal cortex, precuneus, posterior cingulate cortex and medial temporal lobe
- AD patients show global hypoperfusion, but especially cingulate, precuneus, parietal lobes and inferior frontal regions
- Perfusion correlates with several neuropsychological tests
- Hypoperfusion can be improved in middle and posterior cingulate cortex with cholinesterase inhibitors and was associated with improvement in ADAS-cog scores

# ACU193 Development Summary

- ⇒ Differentiated profile: Nonclinical data consistent with toxicity of A $\beta$  oligomers and selective binding of ACU193 to A $\beta$  oligomers
- ⇒ Topline results from Phase 1 study assessing safety, PK, and target engagement expected in Q3 2023
- ⇒ Although unlikely with this small sample size, the possibility of improvement in cognitive scales, computerized cognitive testing, and cerebral blood flow will also be assessed as exploratory outcomes in the Phase 1 study
- ⇒ Anticipate next clinical study, with success in Phase 1, starting as Phase 2 study with potential to expand to Phase 3 registration study based on interim expansion analysis<sup>1</sup>

<sup>1</sup>Completion of a Phase 2 trial, with or without an expansion to Phase 3, will likely require us to raise capital in an amount sufficient to extend our cash runway into the second half of 2026.

# Business Considerations

# Acumen Leadership Team

Experienced in AD/Neuro Drug Development



**DANIEL O'CONNELL**  
President & CEO  
 **ACUMEN**  
neuroventures



**ERIC SIEMERS, MD**  
Chief Medical Officer  
 **ACUMEN**



**JANICE HITCHCOCK, PhD**  
VP, Regulatory Affairs  
 **ACUMEN**



**MATT ZUGA**  
Chief Financial Officer &  
Chief Business Officer  
 **ACUMEN**



**RUSSELL BARTON**  
Chief Operating Officer  
 **ACUMEN**



**ROBERT DEAN, MD, PhD**  
Sr. Development Advisor,  
Biomarkers and Analytical  
Methods  
 **ACUMEN**



**LIEAN SCHENK**  
VP, Head of CMC  
 **ACUMEN**  
 **Lonza**  
**NOVAVAX**



**SIEW TIN GAN**  
Head of Clinical  
Operations  
 **ACUMEN**



**JASNA JERECIC, PhD**  
Analytical Methods  
Leader, Research Scientist  
 **ACUMEN**



**DEREK MEISNER, JD**  
Chief Legal Officer  
 **ACUMEN**



**JULIE BOCKENSTETTE**  
Executive Vice President,  
Head of HR  
 **ACUMEN**

Acumen team has decades of experience in Alzheimer's drug discovery and development

# ACU193 IP & Market Exclusivity

- Exclusive, perpetual, irrevocable, worldwide, royalty-free license from Merck to its Amyloid Derived Diffusible Ligand (ADDL) IP including issued ACU193 patents
- ACU193 Global IP estate:
  - ✓ Issued patents in 19 countries
  - ✓ Composition of matter patents and methods of use run into July 2031
  - ✓ Patent term extensions may be available, 3-5 years depending on jurisdiction
- Biologics market exclusivity is expected for ACU193 as a novel biologic drug
  - ✓ US provides 12 years market exclusivity for novel biologics
  - ✓ Europe provides 10 years of market exclusivity for novel biologics



# Acumen is Well Capitalized, With Expected Cash Runway Through 2025

MILESTONES	STATUS/ EXPECTED TIMING
Initiated Ph1 clinical trial INTERCEPT-AD	✓
INTERCEPT-AD enrollment complete	✓
Proof-of-mechanism topline results	Q3 2023

~\$184M

Cash, cash equivalents and  
marketable securities as of  
March 31, 2023

We believe that Acumen has the organizational expertise and cash and marketable securities on hand to advance ACU193 through 2025

# ABOS: Key Takeaways



Massive unmet need in AD, recent favorable trends and cumulative learnings position field for future successes



Upcoming sector catalysts throughout 2023



Differentiated product candidate targeting toxic A $\beta$ Os



Experienced AD drug development team



Blue chip investors, very strong balance sheet and cash runway with multiple milestones through 2025



Value-inflection clinical data Q3 2023

# Appendix

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# Positive Signals and Proof of Concept From Recent Phase 3 Anti-Amyloid mAb AD Studies

## Percent Slowing of Cognitive/Functional Decline\*

Measured Outcome**	solanezumab EXPEDITION 3 (Phase 3)	aducanumab EMERGE (Phase 3)	aducanumab ENGAGE (Phase 3)	lecanemab Clarity-AD (Phase 3) <sup>+</sup>	donanemab TRAILBLAZER-2 (Phase 3) <sup>++</sup> <i>(Intermediate &amp; High Tau)</i>	donanemab TRAILBLAZER-2 (Phase 3) <sup>++</sup> <i>(Intermediate Tau)</i>
ADAS-cog	-11%	-27%	-12%	-26%	-20%	-32%
ADCS-ADL	-15%	-40%	-18%	-37%	-28%	-40%
CDR-SB	-15%	-23%	2%	-27%	-29%	-36%
MMSE	-13%	-15%	3%	N.A.	N.A.	N.A.
iADRS	-11%	N.A.	N.A.	N.A.	-22%	-35%

\* Percent Slowing =  $P[1 - ((\text{endpoint score} - \text{baseline score})_{\text{active}} / (\text{endpoint score} - \text{baseline score})_{\text{placebo}})] * 100\% * (-1)$

\*\* ADAS-cog: Alzheimer's Disease Assessment Scale – Cognitive Subscale  
 ADCS-ADL: Alzheimer's Disease Cooperative Study – Activities of Daily Living  
 CDR-SB: Clinical Dementia Rating – Sum of Boxes  
 MMSE: Mini-Mental State Examination  
 iADRS: Integrated Alzheimer's Disease Rating Scale

Note: ENGAGE Post-Protocol Version 4 – at least 14 doses of 10 mg/kg, High Dose cohort achieved 27% improvement on CDR-SB compared to placebo

"We're looking for a biological foothold against Alzheimer's that we can build on. And so, these effects are small, but I think they are meaningful, and I hope they're the beginning of a process that we can add to." – *Stephen Salloway, MD of Brown University*<sup>++</sup>

+ Source: Eisai/Biogen press release September 28, 2022.

++ Source: Eli Lilly press release May 3, 2023.

++Source: Wall Street Journal, Biogen Details Case for Controversial Alzheimer's Drug, published December 5, 2019. See e.g., Plotkin, *Neurobiology of Disease*, 2020.

There have been no head-to-head clinical trials between any of the product candidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.

# Anti-Plaque mAbs Demonstrate Dose-Related ARIAs That Will Likely Limit Their Use

## Percent of ARIA Events for Anti-A $\beta$ /plaque mAbs\*

	TARGETING AB MONOMERS		TARGETING AMYLOID PLAQUES										TARGETING PROTOFIBRILS			
	solanezumab EXPEDITION 3 (Phase 3)		aducanumab EMERGE (Phase 3)			aducanumab ENGAGE (Phase 3)			donanemab (Phase 2)		donanemab (Phase 3) <sup>++</sup> (Intermediate & High Tau)		lecanemab (Phase 2)		lecanemab (Phase 3) <sup>+</sup>	
	PC	Treated	PC	Low	High	PC	Low	High	PC	Treated	PC	Treated	PC	High	PC	Treated
ARIA-E	0.2%	0.1%	2.2%	26.1%	34.4%	3.0%	25.6%	35.7%	0.8%	27.5%		24%	0.8%	9.9%	1.7%	12.6%
Symptomatic												6%				3%
ApoE ε4 carriers			1.9%	29.8%	42.5%	2.4%	28.7%	41.8%	3.6%	44.0%			1.2%	14.6%	2.3%	15.8%
ApoE ε4 non-carriers			2.9%	18.1%	17.9%	4.3%	17.5%	27.7%					0.0%	8.0%	0.3%	5.4%
Any ARIA E or H			10.3%	32.8%	41.2%	9.8%	30.7%	40.3%	8.0%	38.9%		31%			9.5%	21.5%

\* PC = Placebo, Low = Low Dose; High = High Dose

Shows the absence of ARIA after treatment with antibodies targeting A $\beta$  monomers (solanezumab) in comparison to the increasing presence of ARIA after treatment at increasing dose levels with antibodies targeting amyloid plaques (aducanumab, BAN2401, and donanemab), indicate that ARIA results from the removal of amyloid plaques around blood vessels and likely does not result from treatment with antibodies that target other species of A $\beta$ , i.e. A $\beta$  monomers and A $\beta$ Os.

ARIA-E represents a dose limiting adverse effect for mAbs with amyloid plaque binding; We believe antibodies that exhibit lower ARIA should be safer and more feasible to administer, possibly at higher doses

There have been no head-to-head clinical trials between any of the product candidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.

+ Source: Eisai/Biogen press release September 28, 2022.

++ Source: Eli Lilly press release May 3, 2023.