

Corporate Presentation

March 2024

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, and Acumen's ability to achieve its strategic and financial goals, including its projected use of cash, cash equivalents and marketable securities and the expected sufficiency of its cash resources into the first half of 2027, the therapeutic potential of Acumen's product candidate, sabirnetug (ACU193), including against other antibodies, and the anticipated timeline for initiating a Phase 2 clinical trial of sabirnetug and a Phase 1 trial to support a subcutaneous dosing option of ACU 193. 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-In-Class Antibody Targeting Toxic Amyloid Beta Oligomers (ABOs) for Early Alzheimer's Disease (AD)



Large market in need of additional treatment options



Sabirnetug
(ACU193):
monoclonal
antibody
(mAb)
highly selective
for toxic ABOs



Positive
Phase 1
clinical trial
results
presented in
2H 2023



leadership
team with
extensive AD
drug
development
experience



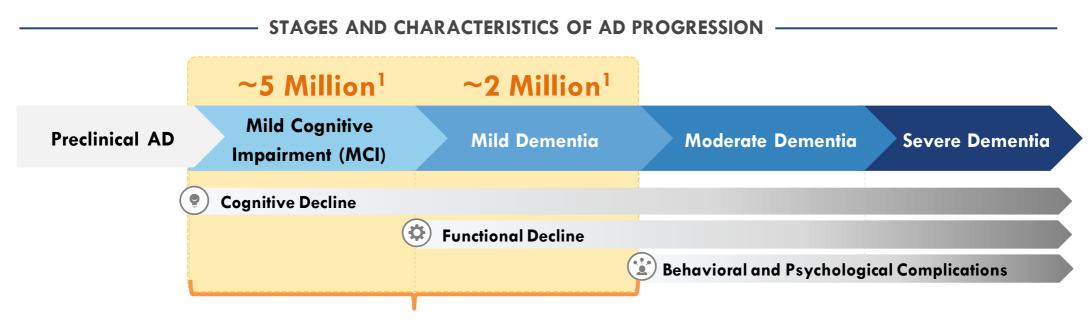
Strong
balance sheet
supporting
clinical
development
plans for
sabirnetug



Expect to initiate Phase 2 (IV) and Phase 1 (subcutaneous) studies in 2024



Early AD Patient Population Represents Significant Market Opportunity



Early Alzheimer's Disease in the U.S.

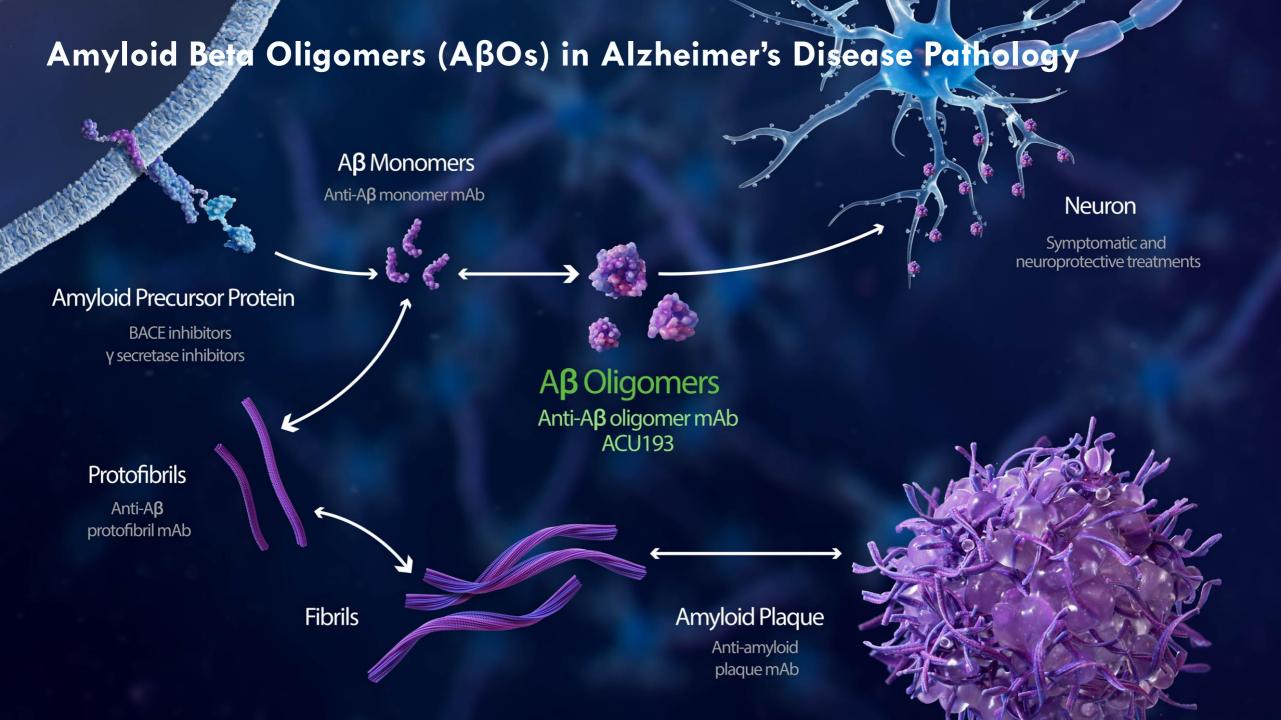
Acumen's commercial priority

Uptake of first-generation, disease modifying, anti-amyloid beta treatment options is expected to increase, while significant unmet need and room for improvement will persist



AD, Amyloid & Abeta Oligomers





Amyloid Beta Oligomers (ABOs) are Widely Recognized as Highly Toxic Agents in AD Pathophysiology

Impair synaptic function¹

- Contribute to impairment of memory and cognition²
- Induce tau hyperphosphorylation³

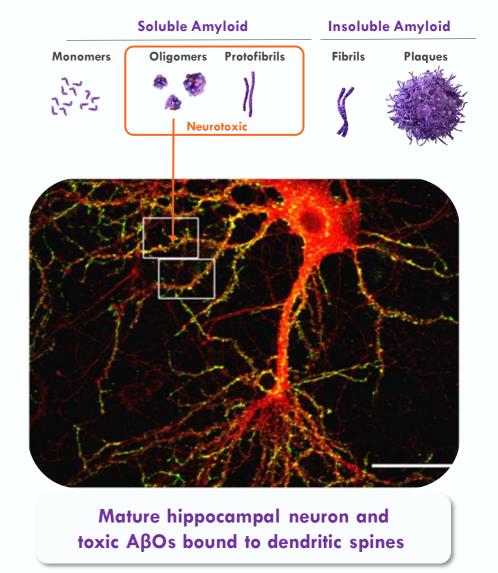


Image Lacor et al., 2004.



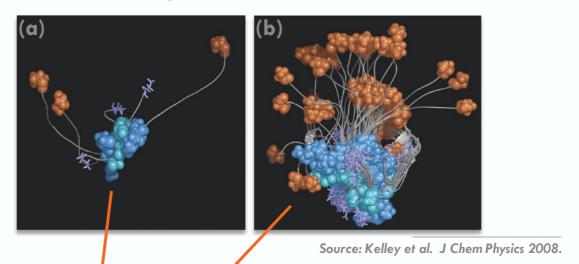
^{1.} Lacor et al., 2004 & 2007; Townsend et al., 2006; Batista et al., 2018

^{2.} Cleary et al., 2005; Poling et al., 2008; Cline et al., 2019

^{3.} De Felice et al., 2008; Zempel et al., 2010

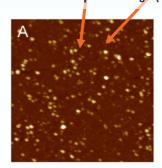
What is an A β Oligomer? A β Os May Consist of 2 to >200 A β Peptides

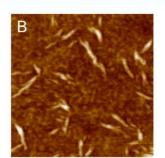
Figure 1. A β Os composed of 3 (a) and 18 (b) A β peptides are depicted below.

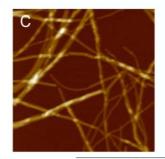


Quaternary structures of $A\beta$ oligomers, protofibrils, and fibrils

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







Source: Relini et al. Biomolecules 2014.



Sabirnetug: Potential Best-in-Class Immunotherapy for Early AD

Sabirnetug's High Selectivity for Toxic ABOs May Provide Meaningful Cognitive Efficacy and Improved Safety

Rationally Designed for Improved Efficacy & Safety

Humanized, affinity matured mAb developed to target toxic Aβ oligomers

- > 500-fold greater selectivity for ABOs over AB monomers
- > 85-fold greater selectivity for ABOs over AB fibrils

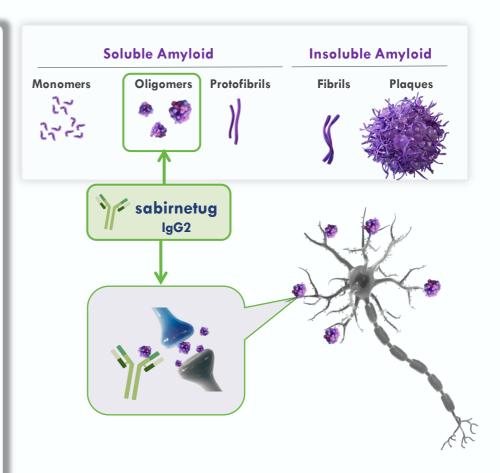
IgG2 subclass mAb with reduced effector function

Large Pharma Discovery Sabirnetug discovered in collaboration with Merck & Co.

Acumen holds exclusive program rights with no future financial or other obligations due to Merck

Encouraging FDA Interactions FDA Fast Track designation for the treatment of early Alzheimer's disease

FDA End of Phase 2 meeting in 4Q 2023





Sabirnetug: Value Proposition

Market will likely remain consolidated with $A\beta$ therapies emerging as the primary treatment option over the next few years

The Alzheimer's disease market is at a

key inflection point with

recent and expected approvals paving a

new path for the treatment of AD ...

... and sabirnetug is well-positioned to

emerge as a potential treatment of choice.

Stakeholders are encouraged about the advancements in the AD treatment landscape and are working together to enable broader patient access

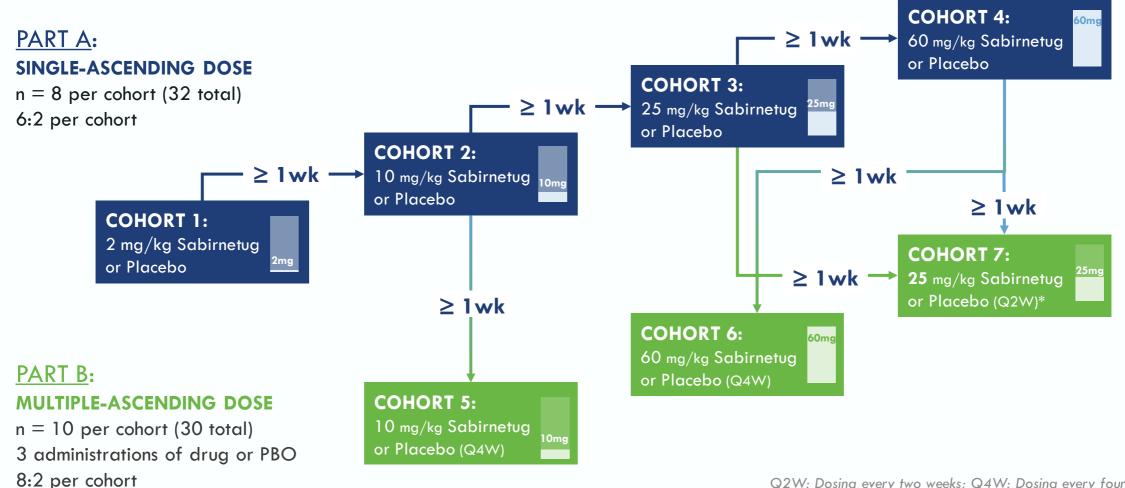
With potential clinical and safety benefits conferred by $A\beta O$ selectivity, sabirnetug has the opportunity to be a treatment of choice in the broader early AD population



Positive INTERCEPT-AD Phase 1 Results for Sabirnetug



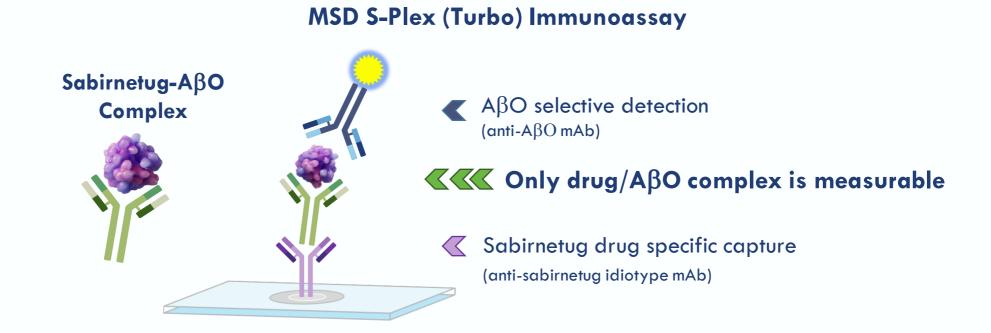
INTERCEPT-AD: A Randomized Placebo Controlled Phase 1 in Early AD **Patients**



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



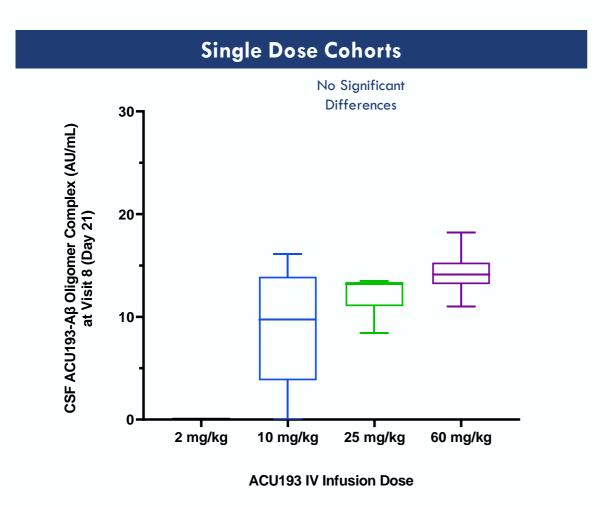
Target Engagement Assessed by Measuring Sabirnetug-ABO Complex in CSF

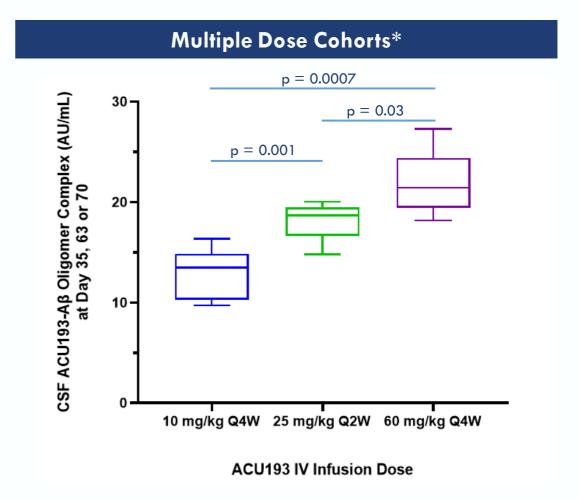


Novel assay configuration tailored to selectively detect sabirnetug-ABO complex in CSF as direct measure of target engagement



Target Engagement of Sabirnetug with ABOs is Dose Proportional





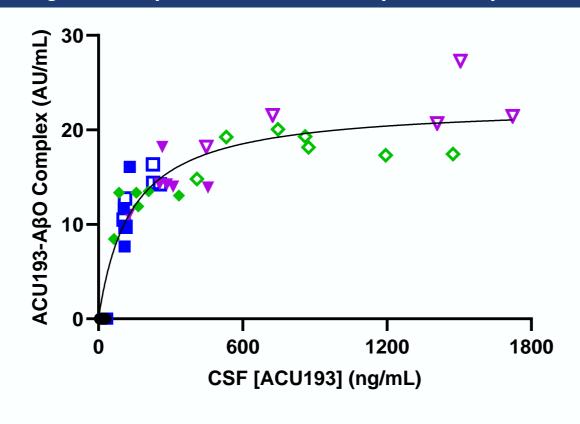


^{*}One patient from Cohort 5 (10 mg/kg Q4W) excluded because only received one administration of drug (study drug discontinued after lacunar infarct).

Doses Approaching Maximal Target Engagement Support Sabirnetug $A\beta O$ Mechanism and Helped Guide Dose Selection for Next Study Phase

Single & Multiple Dose Cohorts - Exposure Response Relationship (Emax Model)





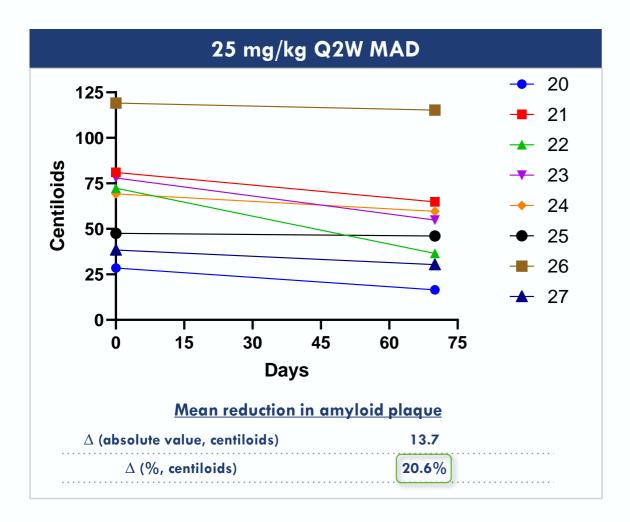
- SAD 2 mg/kg
- SAD 10 mg/kg
- SAD 25 mg/kg
- SAD 60 mg/kg
- MAD 10 mg/kg Q4W
- MAD 25 mg/kg Q2W
- 7 MAD 60 mg/kg Q4W

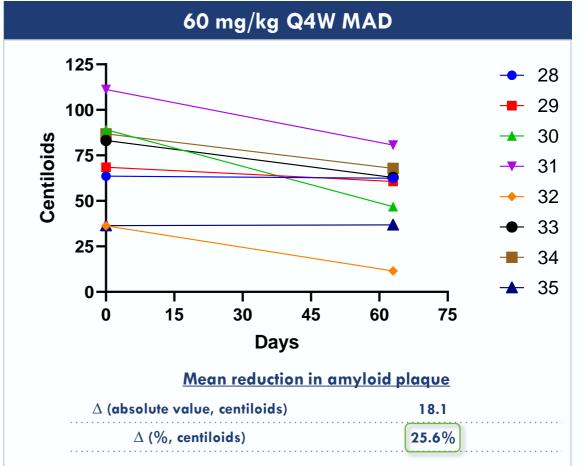
Emax: 22.71 AU/mL Complex **EC50:** 136 ng/mL sabirnetug



^{*}One patient from Cohort 5 (10 mg/kg Q4W) excluded because only received one administration of drug (study drug discontinued after lacunar infarct).

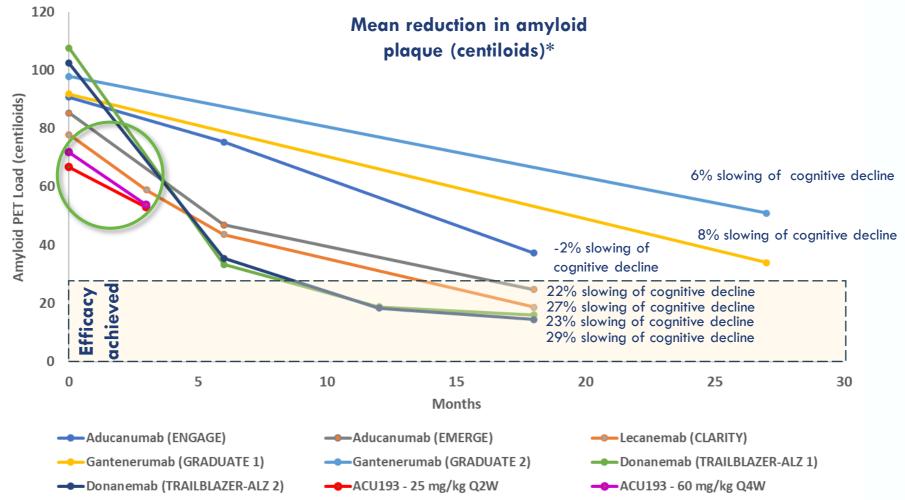
Nearly All Sabirnetug-Treated Patients in High Dose MAD Cohorts Showed Reductions in Plaque Load After Three Doses at 63 or 70 days







Highest Doses of INTERCEPT-AD Reduced Amyloid Plaque at Similar Rate and Magnitude to Lecanemab at Comparable Timepoints



Acumen Pharmaceuticals, data on file; van Dyck (2023), NEJM (amyloid PET reduction estimated from graphs).

^{*}There have been no head-to-head clinical trials between the product candidates listed above. Study designs and protocols for each product candidate were different, and as a result, results may not be comparable between product candidates.



Sabirnetug Serum Exposure is Dose Proportional Without Accumulation

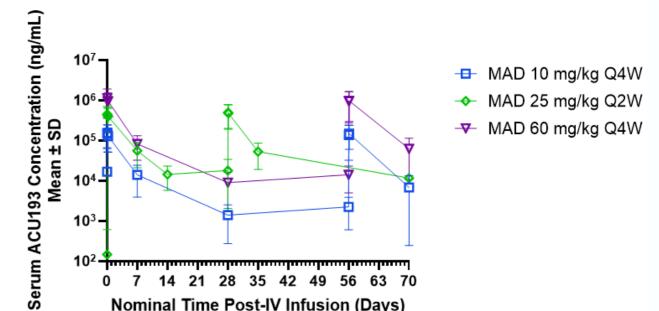
 10^{3}

Single Dose Cohorts

Serum ACU193 Concentration (ng/mL) Mean ± SD 10⁷ SAD 2 mg/kg SAD 10 mg/kg 10⁶ → SAD 25 mg/kg → SAD 60 mg/kg 10³

21 Nominal Time Post-IV Infusion (Days)

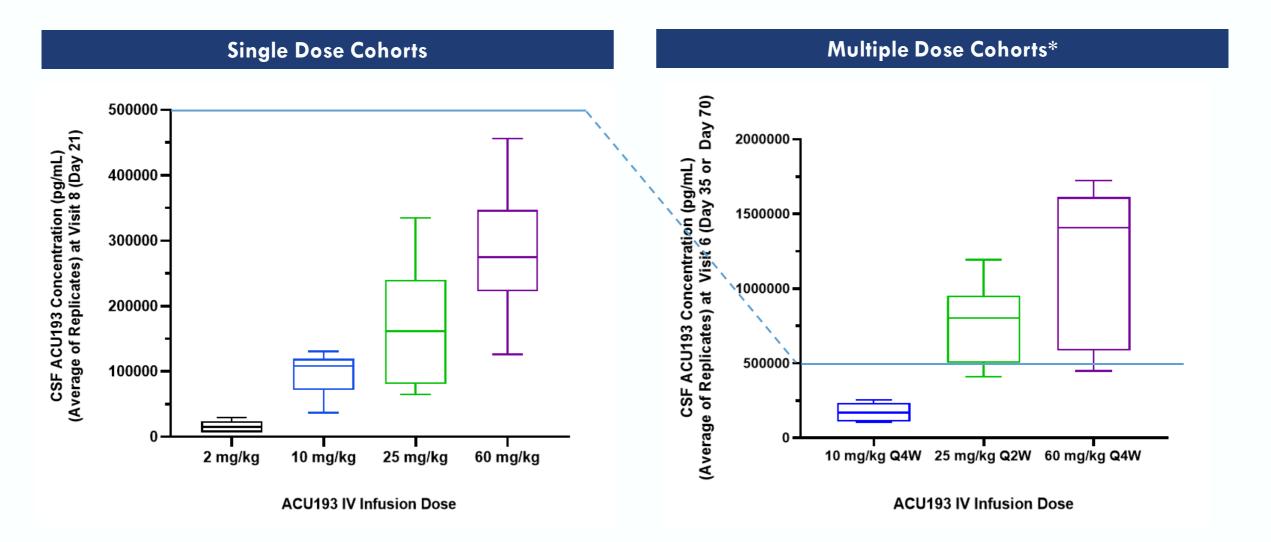
Multiple Dose Cohorts



14 21 28 35 42 49 56 63 70

Nominal Time Post-IV Infusion (Days)

Sabirnetug CSF Exposure is Dose and Dose-Regimen Proportional

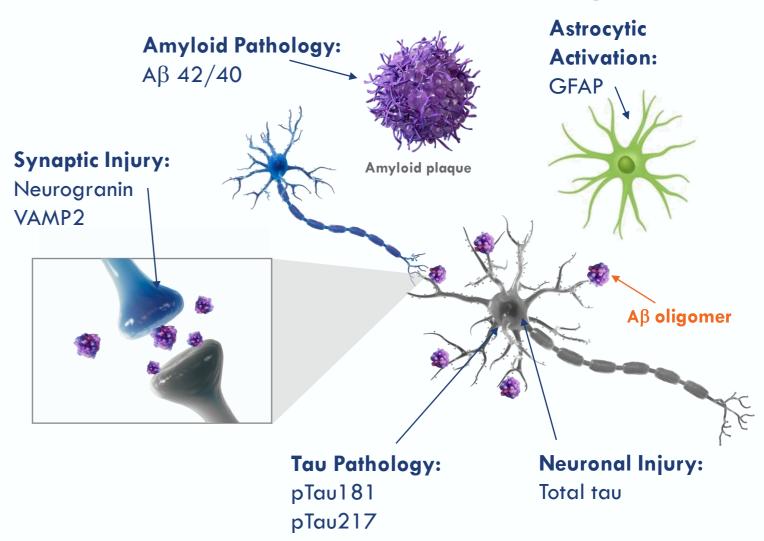


^{*}One patient from Cohort 5 (10 mg/kg Q4W) excluded because only received one administration of drug (study drug discontinued after lacunar infarct).



Importance of Key Fluid Biomarkers Associated with AD Pathology

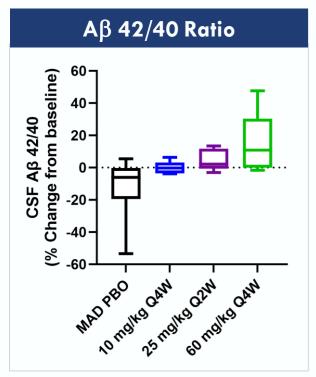
- Biomarkers from cerebrospinal fluid and plasma capture neuronal, synaptic, and axonal injury and reflect the cumulative outcome of different pathological substrates in AD¹
- Evidence suggests that biomarkers are likely to be better predictors of the underlying pathology of AD than imaging alone²
- After just three administrations of sabirnetug, patients with early AD demonstrated improvements in biomarkers associated with AD pathology

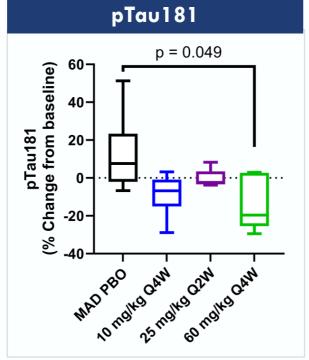


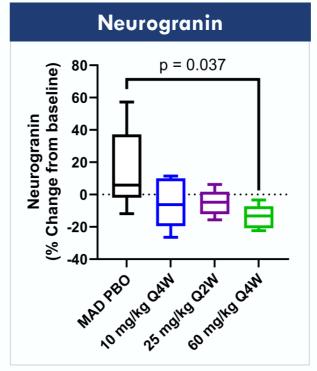
^{1.} Tarawneh, R. Biomarkers: Our Path Towards a Cure for Alzheimer Disease. Biomarker Insights Volume 15: 1–15. 2020; 2. Blennow K, Zetterberg H. The Past and the Future of Alzheimer's Disease Fluid Biomarkers. J Alzheimers Dis. 2018;62(3):1125-1140.

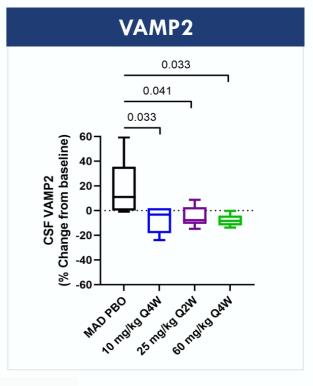


Consistent Improvement in CSF Amyloid, Tau and Synaptic Biomarkers Indicate Downstream Pharmacology of Sabirnetug After Only Three Doses









Amyloid pathology

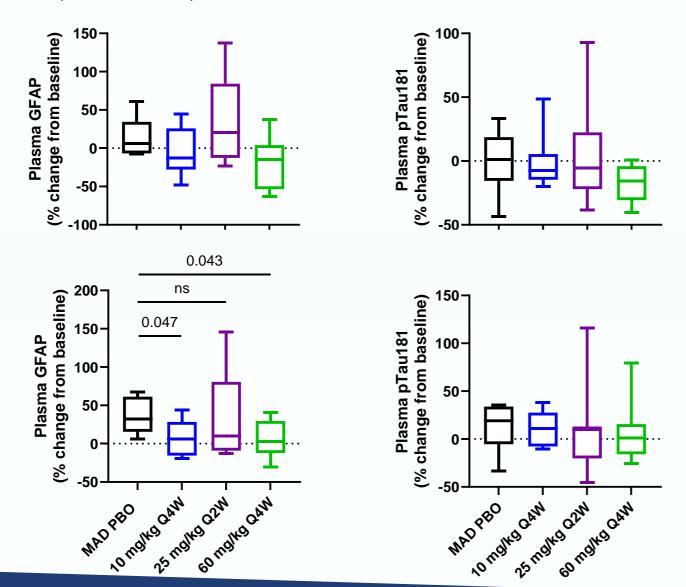
Tau pathology

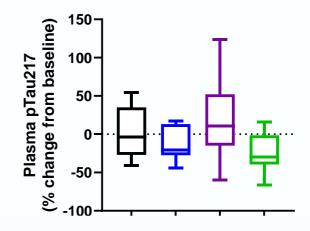
Synaptic injury

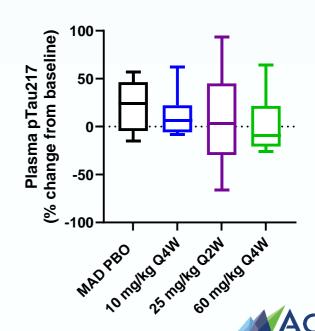


Trend Toward Normalizing Plasma Biomarkers with 10 mg/kg and 60 mg/kg Q4W

- After longer drug wash-out (10-20 weeks) placebo-treated patients showed an increase in GFAP, pTau181, and pTau 217
- For 10 mg/kg and 60 mg/kg dose groups sabirnetug-treated patients directionally remained lower than placebo







Sabirnetug Demonstrates Potential for Best-in-Class Safety

Compelling Overall Safety Profile, with Low Incidence of ARIA-E

INTERCEPT-AD Phase 1 Safety Data

Total ARIA-E cases, or ~10%

- Cases of ARIA-E in
 ApoE4 homozygotes
 N=6
- Deaths, SAEs Related to Study Drug

- ✓ Limited incidence of ARIA-E
 - 10 mg/kg Q4W: 1 asymptomatic case
 - 25 mg/kg Q2W: 1 asymptomatic case
 - 60 mg/kg Q4W: 2 asymptomatic cases; 1 symptomatic case
- ✓ No ARIA-E observed in ApoE4 homozygotes (n=6), despite comprising 13% of study
 - Differentiated from other antibodies that have ARIA-E rates \sim 30% to \sim 40% in participants who are E4-homozygotes
- ✓ Broad therapeutic index with convenient monthly dosing
 - Safety profile may support attractive benefit/risk option for large portion of patients



INTERCEPT-AD Phase 1 Data Support Potential for Sabirnetug to Offer Best-in-Class Efficacy and Safety

Potential for Differentiated Efficacy

Potential for Differentiated Safety

Key Takeaways from INTERCEPT-AD

- \checkmark First mAb to demonstrate selective target engagement of AβOs (most toxic form of Aβ)
- ✓ Rapid, significant plaque reduction comparable to the current market front-runners at similar timepoints
- ✓ Improvement of AD biomarkers in CSF and plasma are a strong indication of downstream effects
- ✓ Compelling safety profile with low incidence of ARIA-E
- ✓ Absence of ARIA-E observed in ApoE4 homozygotes
- ✓ Broad therapeutic index with convenient monthly dosing



Preclinical Data



Sabirnetug: Extensive Data Package Supporting Development

SELECTIVITY

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

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 (FcγR binding)
- Nonclinical microhemorrhage studies show no increased risk of microhemorrhage
- GLP studies demonstrated acceptable safety supporting clinical dosing plans including Ph 2



ACU193: An Immunotherapeutic Poised to Test the Amyloid β Oligomer Hypothesis of Alzheimer's Disease

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

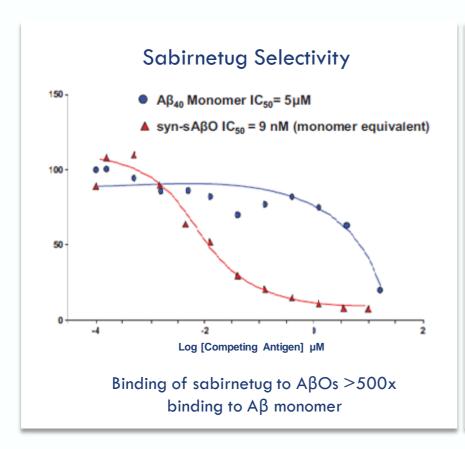
Acumen Pharmaceuticals, Inc., Charlottesville, VA, United States

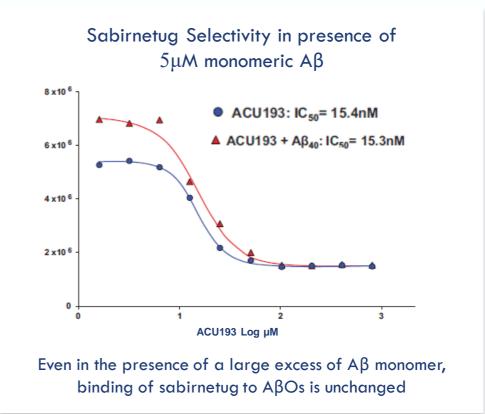
Sabirnetug is a promising immunotherapy for early AD expected to provide meaningful cognitive and functional benefits, slow disease progression, and offer an attractive safety profile.



Sabirnetug is the First mAb Developed to Selectively Target ABOs

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



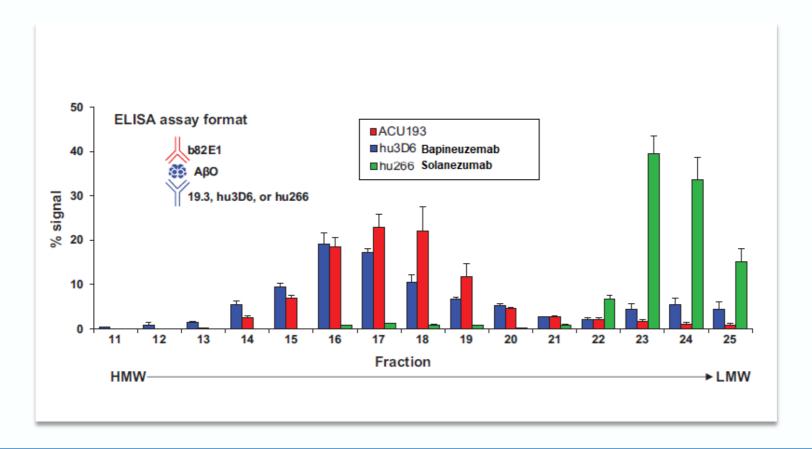


Sabirnetug selective for binding to A β Os is preserved even in the presence of a large excess of A β monomers – such as what is present in the brain, thus limiting 'target distraction'



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

Comparison of AB species-mAb complex signals across SEC fractions

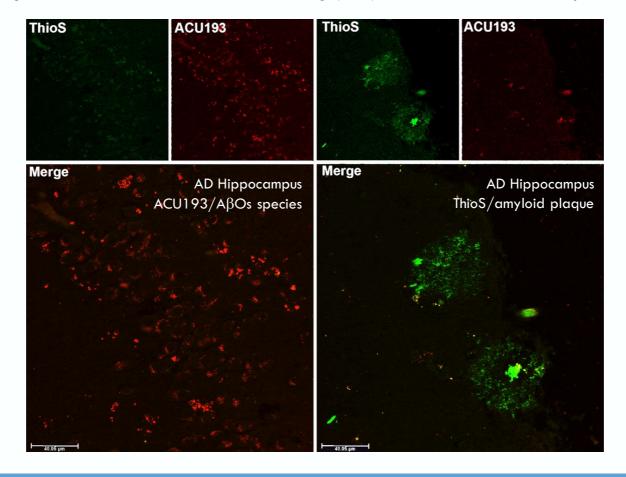


Sabirnetug binds to oligomeric species of $A\beta$ that are differentiated from those bound by hu266 (solanezumab) or hu3D6 (bapineuzumab)



Sabirnetug is Highly Selective for ABOs Versus AB Plaques

Sabirnetug staining in human AD brain slices sabirnetug (red) binds non-Thioflavin S positive A β (green)

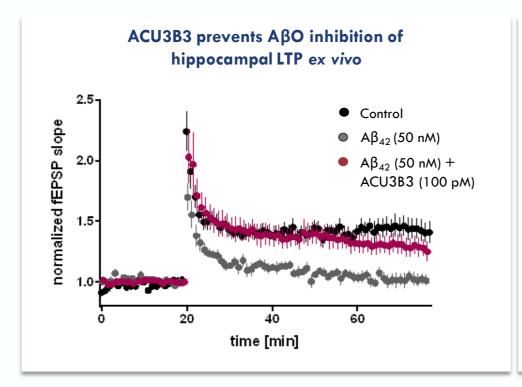


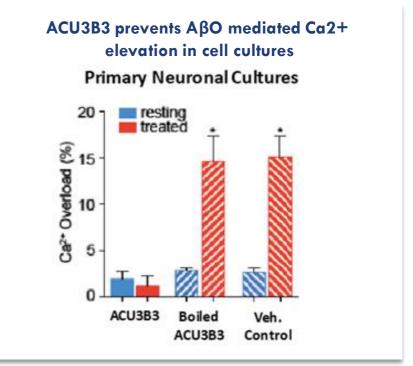
Sabirnetug has little or no binding to thioflavin S positive fibrillar AB plaque in human AD brain tissue



AβOs Bind to Neurons and are Toxic; Mouse Analogue of Sabirnetug Prevents Toxicity

After binding to neurons, A β Os disrupt Long Term Potentiation (LTP) and cause pathologic increases in intracellular calcium that is destructive to cells.





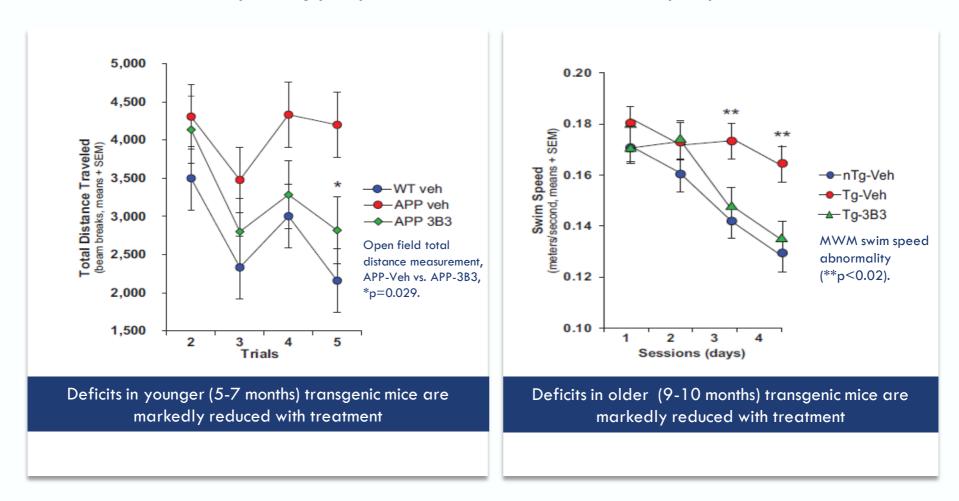
Note: (1) ACU3B3 is the mouse monoclonal antibody precursor to and equivalent of humanized sabirnetug (ACU193)

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



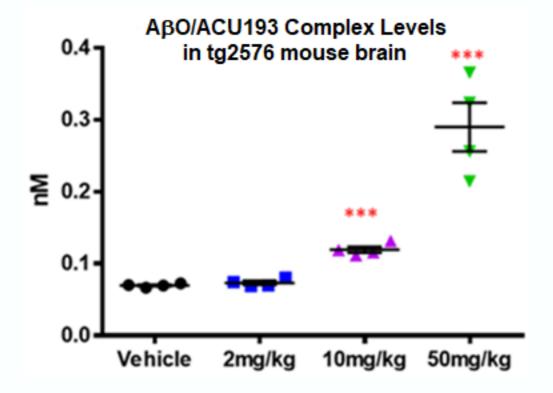
Treatment of a Transgenic Mouse Model of AD Results in Behavioral Improvements

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





Sabirnetug Enters the CNS and Binds to $A\beta Os$ in Transgenic Mice in Dose Dependent Manner



Sabirnetug engages target AβOs 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 & Strategic Considerations



Significant Milestones Achieved in 2023

MILESTONES	STATUS/ EXPECTED TIMING
Proof-of-mechanism topline results	
Biomarker results from Phase 1 study	√
End of Phase 2 meeting with FDA	√
Anticipated initiation of ALTITUDE-AD trial	1H 2024
Anticipated initiation of Phase 1 subcutaneous trial	Mid-2024

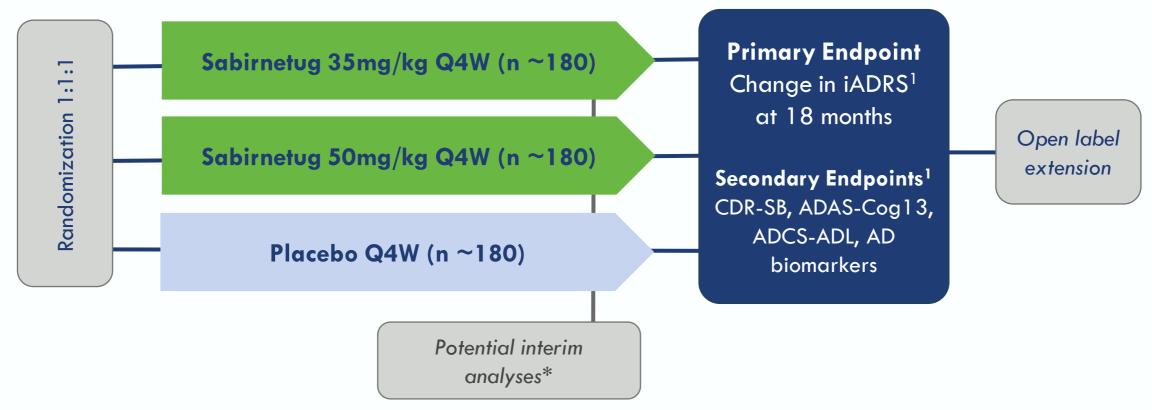


We believe that Acumen has the expertise and resources to advance sabirnetug into the first half of 2027



ALTITUDE-AD Study Design

Objective: To evaluate the clinical efficacy, safety and tolerability of sabirnetug **Patient population:** Patients with early AD (MCl or mild dementia due to early AD)



^{*}Based on regulatory feedback from the European Medicines Agency (EMA) and to enhance the probability that the EMA will consider our Phase 2 a registration-eligible study for sabirnetug, we anticipate amending the protocol later this year to change the current Phase 2/3 study to a Phase 2 standalone study. If this occurs, any interim analysis may then lead to an initiation of a confirmatory Phase 3 study.



Sabirnetug Subcutaneous Formulation Under Development in Collaboration with Halozyme

Potential to Broaden Patient Access and Increase Treatment Convenience



- Announced partnership with Halozyme in November 2023 to develop subcutaneous dosing option for sabirnetug
- Halozyme's drug delivery technology, ENHANZE®,
 is commercially validated in seven approved therapies,
 with global collaborations covering more than 60
 therapeutic targets
- Current sabirnetug potential target product profile inclusive of no more than single weekly injection

Plan to initiate Phase 1 bioavailability study in mid-2024 comparing the pharmacokinetics of subcutaneous forms of sabirnetug to the IV form



Acumen Leadership Team

Experienced in AD/Neuro Drug Development



Chief Executive Officer

ACUMEN

neuro ventures



President &
Chief Development Officer
ACUMEN
Sage
Therapeutics: AstraZeneca



ERIC SIEMERS, MD
Chief Medical Officer
ACUMEN
Lilly



MATT ZUGA
Chief Financial Officer &
Chief Business Officer
ACUMEN
HIGHCAPE



RUSSELL BARTON
Chief Operating Officer
ACUMEN
Lilly



VP, Regulatory Affairs

ACUMEN

Liley



VP, Head of CMC

ACUMEN

Liley LONZO

NOVAVAX



SIEW TIN GAN
Head of Clinical
Operations

ACUMEN

Takeda



ROBERT DEAN, MD, PHD
Sr. Development Advisor,
Biomarkers and Analytical
Methods
ACUMEN
Lilly



JASNA JERECIC, PHD
Analytical Methods
Leader, Research Scientist
ACUMEN



Chief Legal Officer

ACUMEN



JULIE BOCKENSTETTE

Executive Vice President,
Head of HR

ACUMEN

Roche

Liley

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



Sabirnetug IP & Market Exclusivity

- Exclusive, perpetual, irrevocable, worldwide, royalty-free license from Merck to its Amyloid Derived Diffusible Ligand (ADDL) IP including issued sabirnetug patents
- Sabirnetug 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 sabirnetug as a novel biologic drug
 - ✓ US provides 12 years market exclusivity for novel biologics
 - ✓ Europe provides 10 years of market exclusivity for novel biologics



Summary

Key Takeaways

- ✓ Significant and growing Alzheimer's population in need of additional treatment options
- Sabirnetug demonstrates high selectivity for toxic AβOs in AD patients
- ✓ Highly experienced clinical, regulatory and development leaders driving sabirnetug 's development
- ✓ Positive Phase 1 data strengthen potential for sabirnetug to offer best-in-class efficacy and safety

Next Steps



Anticipate initiation of ALTITUDE-AD clinical study in 1H 2024

Two treatment arms versus placebo: 50 mg/kg Q4W and 35 mg/kg Q4W



Anticipate initiation of Phase 1 subcutaneous clinical study in mid-2024



Appendix

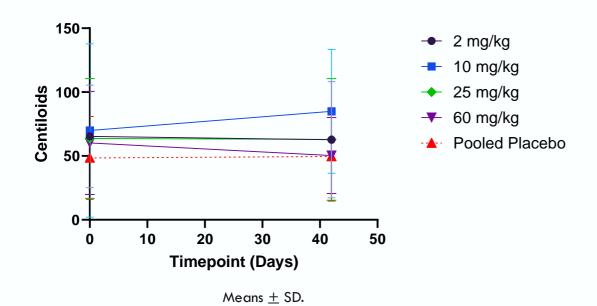
www.acumenpharm.com



Aß PET: Mean Changes in Amyloid Plaque in SAD and MAD Cohorts

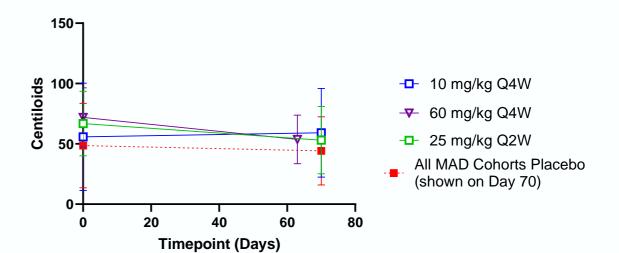
Single Dose Cohorts

PET Centiloids at Baseline and Endpoint SAD



Multiple Dose Cohorts⁺

PET Centiloids at Baseline and Endpoint MAD



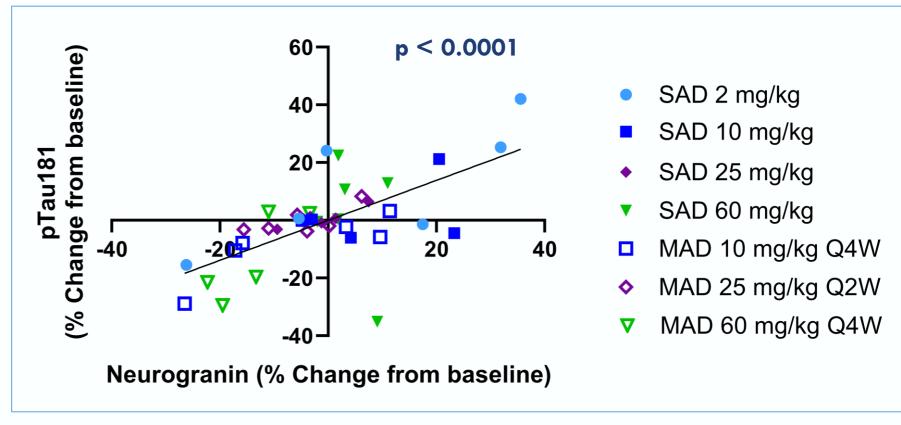
Means \pm SD.

Rapid, dose-related, statistically significant reduction of plaque load based on florbetapir PET present in 60 mg/kg Q4W and 25 mg/kg Q2W cohorts

+p=0.01 from baseline to endpoint within cohorts 6 (60mg/kg Q4W) and 7 (25mg/kg Q2W); n=6 on placebo, and change observed in placebo cohort was not statistically significant

Significant Correlation Between Change in CSF Neurogranin and pTau181

- Neurogranin is a synaptic protein that has been shown to modulate glutamatergic neuronal activity and may be linked to enhancement in synaptic plasticity and cognitive function.^{1,2}
- Researchers in the field, such as Agnello et al and others,^{3,4,5} have found correlations between CSF neurogranin and p-tau.
- This suggests a biological link between these two biomarkers and provides further confidence in our biomarker observations with sabirnetug.



1. Xiang, Yang, et al. Neurogranin: A Potential Biomarker of Neurological and Mental Diseases. Front. Aging Neurosci. 2020 Volume 12 DOI: 10.3389/fnagi.2020.584743; 2. Saunder, Tyler, et al. Neurogranin in Alzheimer's disease and ageing: A human post-mortem study. Neurobiology of Disease 2023. DOI:10.1016/j.nbd.2023.10599. 3. Agnello L, et al. Neurogranin as a Reliable Biomarker for Synaptic Dysfunction in Alzheimer's Disease. Diagnostics 2021, 11, 2339. DOI: 10.3390/diagnostics11122339; 4. Thorsell A, Bjerke M, Gobom J, et al. Neurogranin in cerebrospinal fluid as a marker of synaptic degeneration in Alzheimer's disease. Brain Res 2010;1362:13-22. DOI: 10.1016/j.brainres.2010.09.073; 5. Hellwig K, Kvartsberg H, Portelius E, et al. Neurogranin and YKL-40: independent markers of synaptic degeneration and neuroinflammation in Alzheimer's disease. Alzheimers Res Ther 2015;7:74. DOI: 10.1186/s13195-015-0161-y.

Observed Apparent Drug Effect on CSF Biomarkers in the ApoE4 Homozygotes in Line With the Total Participant Population

All **Participants**

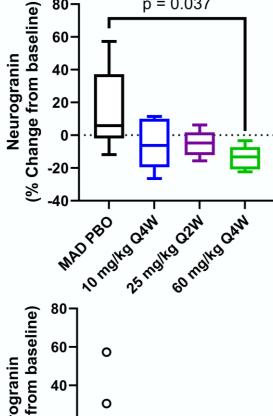
Individual

ApoE4

homozygotes

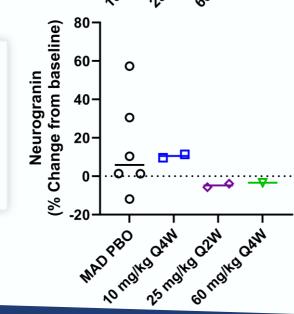
(all patients for

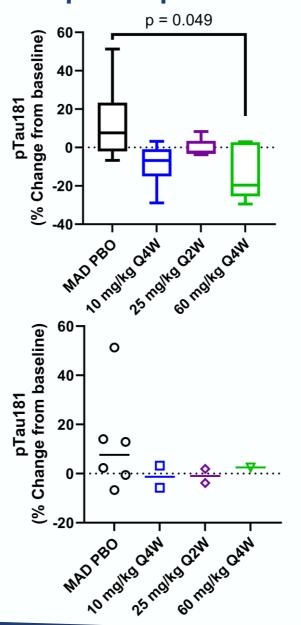
PBO)

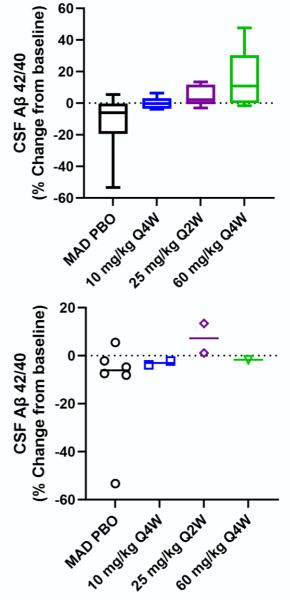


p = 0.037

80-





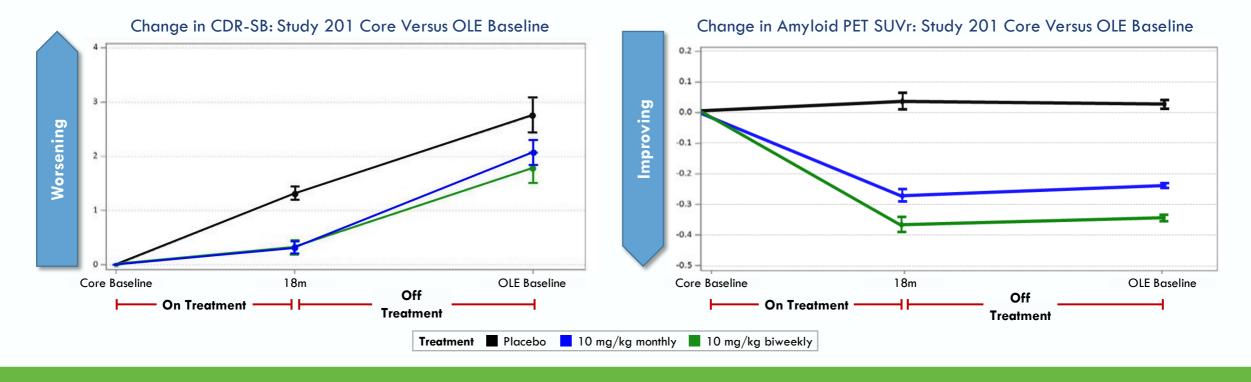


*A larger sample size is needed to know if ApoE4 carrier status has a quantitative effect on response.



Lecanemab Phase 2 Suggests Amyloid Plaque Reduction Alone is Insufficient to Optimize Alzheimer's Disease Slowing*

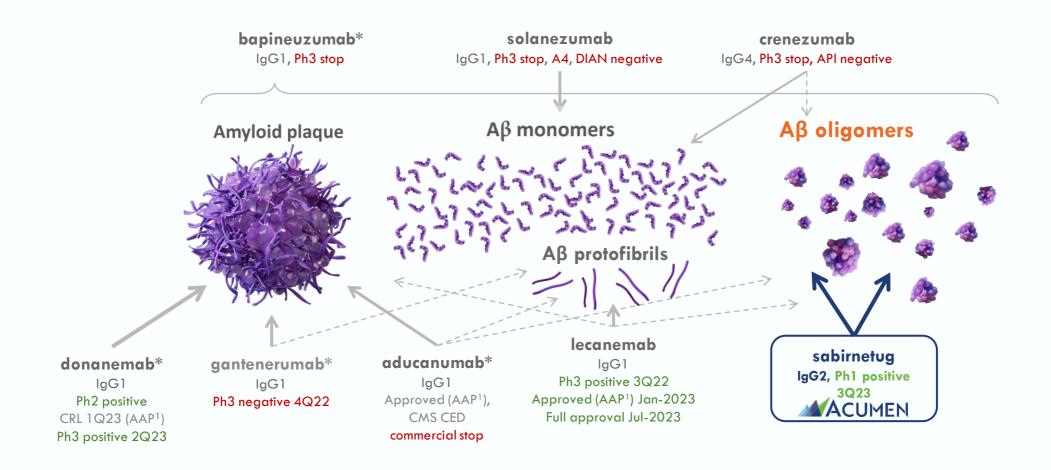
• Lecanemab (BAN2401) Study 201 – Off treatment "gap" period prior to start of Open Label Extension (OLE) study confirmed cognitive outcomes (CDR-SB) worsened upon discontinuation of Lecanemab despite sustained reduced amyloid plaque (Aβ PET SUVr). Aβ PET measures amyloid plaque in the brain, but does not measure soluble Aβ species, such as oligomers or protofibrils



Suggests soluble A β aggregate species (e.g. protofibrils, oligomers) play a role in clinical decline

^{*}Persistence Of BAN2401-Mediated Amyloid Reductions Post-treatment: A Preliminary Comparison of Amyloid Status Between the Core Phase of BAN2401-G000-201 and Baseline of the Open-Label Extension Phase in Subjects with Early Alzheimer's Disease (1330); Chad J. Swanson, et al. Neurology Apr 2020, 94 (15 Supplement) 1330; *Presented at the American Academy of Neurology (AAN) conference in April 2020.

Sabirnetug Targeting Relative to Late-Stage and Approved Anti-A β /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 β Antibodies in Development

		mAb epitope / isotype ⁽⁴⁾		Aβ Target	Selectivity ⁽¹⁾⁽²⁾	Safety Profile				
Company	Asset	Isotype	monomers plaque		fibrils	oligomers	ARIA-E ⁽⁴⁾	Efficacy Profile		
ACUMEN	sabirnetug	N-term, Confirmational IgG2	-	-	+	+++++	Expected Low in Phase 2	TBD		
Eisai / Biogen	Leqembi TM	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 TM	N-term IgG1	-	++++	++ Protofibrils	++	High	Ph3 Emerge Positive, Engage Negative		
Roche	gantenerumab ⁽³⁾	N-term + Mid domain IgG1	-	++++	+++	++	High	Ph3 Negative		
Lilly	solanezumab ⁽³⁾	Mid domain / IgG1	++++	-	-	-	None	Ph3 Negative, trends; A4 negative		
Roche / Genentech	crenezumab ⁽³⁾	Mid domain / IgG4	++++	-	++	+++	None	Ph3 Negative, no trends		
Pfizer / Janssen	bapineuzumab ⁽³⁾	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.

⁽⁴⁾ van Dyck, C. (2017). Anti-Amyloid-b 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.



⁽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.

Efficacy Results 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) ⁺	donanemab TRAILBLAZER-2 (Phase 3) ⁺⁺ (Intermediate & High Tau)	donanemab TRAILBLAZER-2 (Phase 3) ⁺⁺ (Intermediate Tau)		
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-[(endpoint score-baseline score)active/(endpoint score-baseline score)placebo]]*100%*(-1)

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⁺⁺

^{**} ADAS-cog: Alzheimer's Disease Assessment Scale – Cognitive Subscale

⁺ 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.

Safety Results From Recent Anti-Amyloid mAb AD Studies

Percent of ARIA Events for Anti-Aβ/plaque mAbs*

		TING AB	TARGETING AMYLOID PLAQUES									TARGETING PROTOFIBRILS				
	solanezumab EXPEDITION 3 (Phase 3)		aducanumab EMERGE (Phase 3)		aducanumab ENGAGE (Phase 3)		donanemab (Phase 2)		donanemab (Phase 3) ⁺⁺ (Intermediate & High Tau)		lecanemab (Phase 2)		lecanemab (Phase 3)+			
	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 & 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-E 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.