UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d)

of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 8, 2023

Acumen Pharmaceuticals, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation)

> 427 Park St., Charlottesville, Virginia (Address of Principal Execut ve Offices

001-40551 (Commission File Number)

36-4108129 (IRS Employer Identification No.)

22902 (Zip Code)

(434) 297-1000

(Registrant's Tele r, Including Area Code

Not Applicable (Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) 0

0 Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) 0

0 Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value	ABOS	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company x

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. 0

Item 2.02 Results of Operations and Financial Condition.

On August 8, 2023, Acumen Pharmaceuticals, Inc. (the "**Company**") reported financial results and business highlights for the quarter ended June 30, 2023. A copy of this press release (the "**Earnings Press Release**") is furnished as Exhibit 99.1 to this Current Report on Form 8-K (this "**Report**") and is incorporated by reference.

The information in this Item 2.02 of this Report (including Exhibit 99.1) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 7.01. Regulation FD Disclosure.

On August 8, 2023, the Company posted an updated corporate presentation to its website at https://investors.acumenpharm.com/news-events/presentations, which the Company may use from time to time in communications or conferences. This corporate presentation was updated to (i) include topline results from the Phase 1 INTERCEPT-AD trial of ACU193, which the Company presented at the Alzheimer's Association International Conference (AAIC[®]) 2023 on July 16, 2023, (ii) update the Company's cash runway through the first half of 2026, and (iii) point to initiation of the Company's Phase 2 trial of ACU193 during the first half of 2024. A copy of the corporate presentation is attached as Exhibit 99.2 to this Report.

The information in this Item 7.01 of this Report (including Exhibit 99.2), is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such filing. The Company's submission of this Report shall not be deemed an admission as to the materiality of any information required to be disclosed solely to satisfy the requirements of Regulation FD.

Item 9.01 Financial Statements and Exhibits.

(d). Exhibits

Exhibit No.	Description
99.1	Earnings Press Release, dated August 8, 2023.
99.2	Corporate Presentation, dated August 8, 2023.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Company has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Acumen Pharmaceuticals, Inc.

Dated: August 8, 2023

By:

/s/ Matthew Zuga Matthew Zuga Chief Financial Officer and Chief Business Officer



Acumen Pharmaceuticals Reports Second Quarter 2023 Financial Results and Business Highlights

- Positive INTERCEPT-AD Phase 1 trial results announced in July 2023 demonstrate ACU193's potential as a differentiated antibody for the treatment of early Alzheimer's disease
- Cash, cash equivalents and marketable securities of \$172.2 million as of June 30, 2023 bolstered by an additional \$122 million in net proceeds in July following an upsized public follow-on offering; expected to be sufficient to support current clinical and operational activities into second half of 2026
- Initiation of a Phase 2 study expected in the first half of 2024, with potential to expand to a Phase 3 registration study based on interim analyses
- Company to host conference call and webcast today at 8:00 a.m. ET

Charlottesville, Va. and Carmel, In., Aug. 8, 2023 - <u>Acumen Pharmaceuticals, Inc.</u> (NASDAQ: ABOS) ("Acumen" or the "Company"), a clinical-stage biopharmaceutical company developing a novel therapeutic that targets toxic soluble amyloid beta oligomers (ABOs) for the treatment of Alzheimer's disease (AD), today reported financial results for the second quarter of 2023 and provided a business update.

"Our positive Phase 1 results announced last month exceeded our expectations and established a fundamental turning point in the development of our asset, ACU193. We observed rapid reduction of amyloid plaque, demonstrated convincing, dose-related near-maximal target engagement of AβOs, a first for the field, and showed that ACU193 was well tolerated with low levels of ARIA-E. We believe that these data confirm robust proof of mechanism for ACU193. The data also set the stage for ACU193's differentiation as a potentially safer antibody amenable to monthly dosing with a broad therapeutic index, and the prospect of best-in-class efficacy conferred by targeting the most toxic amyloid beta species in the brain: oligomers," said Daniel O'Connell, President and Chief Executive Officer of Acumen. "We are well-capitalized and expect our runway to support current operational and clinical activities into the second half of 2026. We look forward to an anticipated interaction with the FDA in the fourth quarter to inform our next phase of development for ACU193, and plan to initiate our Phase 2 study in the first half of next year."

Recent Highlights and Anticipated Milestones

- In July 2023, the Company presented positive topline results from Phase 1 INTERCEPT-AD trial at the Alzheimer's Association International Conference in Amsterdam, Netherlands.
 - Topline results from INTERCEPT-AD trial met primary and secondary objectives, demonstrating compelling proof-of-mechanism for ACU193, the first clinical-stage antibody designed and developed to target toxic AβOs.



- ACU193 demonstrated rapid, dose-related, statistically significant (p=0.01) amyloid plaque reduction in higher dose cohorts (25% reduction in 60 mg/kg Q4W cohort at day 63 and 20% reduction in 25 mg/kg Q2W cohort at day 70).
- ACU193 approached maximal central target engagement of toxic AβOs beyond expected levels, indicating a broad therapeutic index and path to convenient monthly dosing.
- ACU193 was well-tolerated in patients with early Alzheimer's disease and resulted in no drug-related serious adverse events, with a low overall rate of ARIA-E of 10.4%, and a symptomatic ARIA-E rate of 2.1%.
- In July 2023, the Company raised net proceeds of approximately \$122 million through an underwritten public follow-on offering of approximately 16.8 million ordinary shares.
- In the fourth quarter of 2023, the Company anticipates an interaction with the FDA to discuss future clinical development plans.
- In the first half of 2024, the Company expects to initiate a Phase 2 study as the next phase of development for ACU193, with potential to expand to a Phase 3 registration study based on interim analyses.

Second Quarter 2023 Financial Results

- Cash Balance. As of June 30, 2023, cash, cash equivalents and marketable securities totaled \$172.2 million, compared to cash, cash equivalents and marketable securities of \$183.8 million as of March 31, 2023. On July 21, 2023, the Company closed a net public offering of approximately \$122 million. Altogether, this runway is expected to be sufficient to support current clinical and operational activities into the second half of 2026.
- Research and Development (R&D) Expenses. R&D expenses were \$9.1 million for the three-month period ended June 30, 2023, compared to \$7.3 million for the three-month period ended June 30, 2022. The increase in R&D expenses was primarily due to increased costs related to personnel, consulting and other costs related to the Phase 1 clinical trial.
- General and Administrative (G&A) Expenses. G&A expenses were \$4.3 million for the three-month period ended June 30, 2023, compared to \$3.1 million for the three-month period ended June 30, 2022. The increase in G&A expenses was primarily due to increased costs related to personnel and consulting.
- Loss from Operations. Losses from operations were \$13.5 million for the three-month period ended June 30, 2023, compared to \$10.4 million for the three-month period ended June 30, 2022. This increase was due to the increased R&D and G&A expenses over the prior year period.
- Net Loss. Net loss was \$11.6 million for the three-month period ended June 30, 2023, compared to \$10.2 million for the three-month period ended June 30, 2022.

Conference Call Details

Acumen will host a conference call and live audio webcast today, August 8, 2023, at 8:00 a.m. ET.



To participate in the live conference call, please register using this link. After registration, you will be informed of the dial-in numbers including PIN. Please register at least one day in advance.

The webcast audio will be available via this link.

An archived version of the webcast will be available for at least 30 days in the Investors section of the Company's website at www.acumenpharm.com.

About ACU193

ACU193 is a humanized monoclonal antibody (mAb) discovered and developed based on its selectivity for soluble AβOs, which Acumen believes are the most toxic and pathogenic form of Aβ, relative to Aβ monomers and amyloid plaques. Soluble AβOs have been observed to be potent neurotoxins that bind to neurons, inhibit synaptic function and induce neurodegeneration. By selectively targeting toxic soluble AβOs, ACU193 aims to directly address a growing body of evidence indicating that soluble AβOs are a primary underlying cause of the neurodegenerative process in Alzheimer's disease. ACU193 has been granted Fast Track designation for the treatment of early Alzheimer's disease by the U.S. Food and Drug Administration.

About INTERCEPT-AD

INTERCEPT-AD is a Phase 1, U.S.-based, multi-center, randomized, double-blind, placebo-controlled clinical trial evaluating the safety and tolerability, and establishing clinical proof of mechanism, of ACU193 in patients with early Alzheimer's disease (AD). Sixty-five individuals with early AD (mild cognitive impairment or mild dementia due to AD) enrolled in this first-in-human study of ACU193. The INTERCEPT-AD study consists of single-ascending-dose (SAD) and multiple-ascending-dose (MAD) cohorts and is designed to evaluate the safety, tolerability, pharmacokinetics (PK), and target engagement of intravenous doses of ACU193. More information can be found on www.clinicaltrials.gov, NCT identifier NCT04931459.

About Acumen Pharmaceuticals, Inc.

Acumen, headquartered in Charlottesville, VA, with clinical operations based in Carmel, IN, is a clinical-stage biopharmaceutical company developing a novel therapeutic that targets toxic soluble amyloid beta oligomers (AβOs) for the treatment of Alzheimer's disease (AD). Acumen's scientific founders pioneered research on AβOs, which a growing body of evidence indicates are early and persistent triggers of Alzheimer's disease pathology. Acumen is currently focused on advancing its investigational product candidate, ACU193, a humanized monoclonal antibody that selectively targets toxic soluble AβOs, following positive topline results in INTERCEPT-AD, a Phase 1 clinical trial involving early Alzheimer's disease patients. For more information, visit www.acumenpharm.com.

Forward-Looking Statements

This press release 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," "should," "seeks," "aims," "plans," "potential," "will," "milestone" 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 expected sufficiency of its cash resources into the second half of 2026, and the therapeutic potential of Acumen's product candidate, ACU193, including against other antibodies, and the anticipated timeline for initiating a Phase 2 clinical trial of ACU193 and for further engagement with the FDA. 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 geopolitical events and macroeconomic conditions, such as rising inflation and interest rates, supply disruptions and uncertainty of credit and financial markets. 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 on Form 10-K, and in subsequent filings with the SEC. 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.

4

CONTACTS:

Investors: Alex Braun abraun@acumenpharm.com

Media: AcumenPR@westwicke.com



Acumen Pharmaceuticals, Inc. Condensed Balance Sheets (in thousands, except share and per share data)

		June 30, 2023		December 31, 2022
		(unaudited)		
ASSETS				
Current assets				
Cash and cash equivalents	\$	77,248	\$	130,101
Marketable securities, short-term		67,633		47,504
Prepaid expenses and other current assets		4,657		2,724
Total current assets		149,538		180,329
Marketable securities, long-term		27,311		15,837
Property and equipment, net		136		165
Deferred offering costs		183		—
Right-of-use asset		29		105
Other assets		208		151
Total assets	\$	177,405	\$	196,587
LIABILITIES AND STOCKHOLDERS' EQUITY	-		-	
Current liabilities				
Accounts payable	\$	2,026	\$	1,640
Accrued clinical trial expenses		4,102		2,717
Accrued expenses and other current liabilities		2,374		3,350
Operating lease liability		29		105
Total current liabilities		8,531		7,812
Total liabilities		8,531		7,812
Commitments and contingencies				
Stockholders' equity				
Preferred stock, \$0.0001 par value; 10,000,000 shares authorized and no shares issued and outstanding as of June 30, 2023 and December 31, 2022		_		_
Common stock, \$0.0001 par value; 300,000,000 shares authorized and 41,025,062 shares issued and outstanding as of June 30, 2023 and December 31, 2022		4		4
Additional paid-in capital		362,860		359,949
Accumulated deficit		(193,344)		(170,427)
Accumulated other comprehensive loss		(646)		(751)
Total stockholders' equity		168,874		188,775
Total liabilities and sockholders' equity	\$	177,405	\$	196,587
	_		-	



Acumen Pharmaceuticals, Inc. Condensed Statements of Operations and Comprehensive Loss (in thousands, except share and per share data) (unaudited)

Three Months Ended June 30,		Six Months End		ided June 30,	
 2023		2022	2023		2022
\$ 9,133	\$	7,321	\$ 17,8	46	\$ 13,306
 4,345		3,090	8,2	67	6,312
13,478		10,411	26,6	13	19,618
(13,478)		(10,411)	(26,6	13)	(19,618)
1,884		260	3,7	16	337
 (16)		_	(20)	1
1,868		260	3,6	96	338
 (11,610)		(10,151)	(22,9	17)	(19,280)
 (122)		(151)	1	05	(734)
\$ (11,732)	\$	(10,302)	\$ (22,8	12)	\$ (20,014)
\$ (0.28)	\$	(0.25)	\$ (0	56)	\$ (0.48)
41,025,062		40,497,087	41,025,	062	40,485,244
\$ \$ 	\$ 9,133 4,345 113,478 (13,478) 1,884 (16) 1,868 (11,60) (1122) \$ (11,732) \$ (0.28)	\$ 9,133 4,345 13,478 (13,478) 1,884 (16) 1,868 (16) (11,610) (122) (122) (122) (11,732) (123) (11,732) (123) (11,732) (1	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



Acumen Pharmaceuticals, Inc. Condensed Statements of Cash Flows (in thousands) (unaudited)

	Six Months Ended June 30,		
	 2023	2022	
Cash flows from operating activities			
Net loss	\$ (22,917) \$	(19,280)	
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	29	10	
Stock-based compensation expense	2,911	1,333	
Amortization of premiums and accretion of discounts on marketable securities, net	(634)	384	
Amortization of right-of-use asset	76	66	
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(1,933)	3,282	
Other assets	(57)	(92)	
Accounts payable	384	580	
Accrued clinical trial expenses	1,385	448	
Operating lease liability	(76)	(66)	
Accrued expenses and other current liabilities	 (1,013)	(1,432)	
Net cash used in operating activities	(21,845)	(14,767)	
Cash flows from investing activities			
Purchases of marketable securities	(52,131)	(12,129)	
Proceeds from maturities and sales of marketable securities	21,268	15,860	
Purchases of property and equipment	—	(45)	
Net cash provided by (used in) investing activities	 (30,863)	3,686	
Cash flows from financing activities	 		
Payments for deferred offering costs	(145)	(31)	
Proceeds from exercise of stock options	 	17	
Net cash used in financing activities	(145)	(14)	
Net change in cash and cash equivalents	(52,853)	(11,095)	
Cash and cash equivalents at the beginning of the period	130,101	122,162	
Cash and cash equivalents at the end of the period	\$ 77,248 \$	111,067	



Corporate Presentation

August 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 of the trial. 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 most recent Annual Report Form 10-K and future 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, an

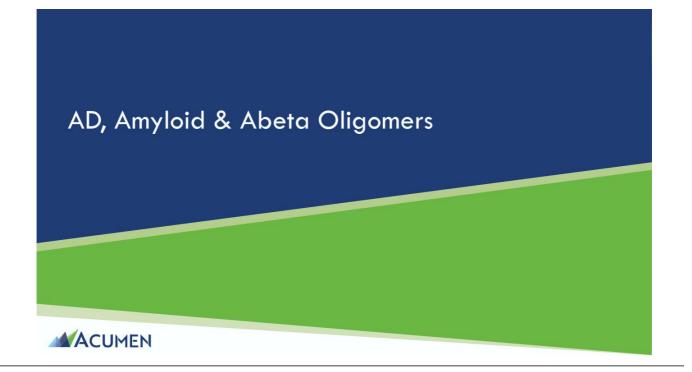
2

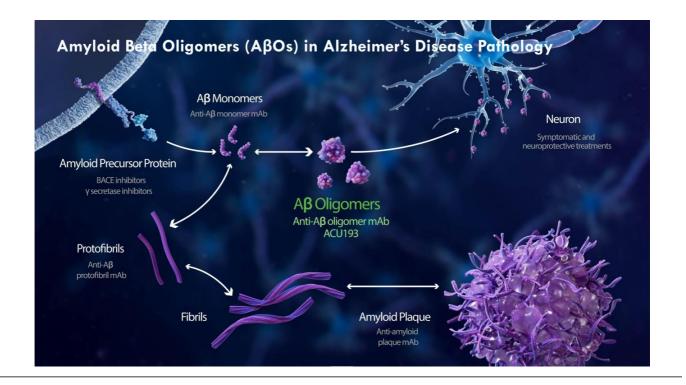


Acumen Business Strategy: 2023 - 2026

- → 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.

4





Toxic ABOs Represent an Ideal Alzheimer's Disease Drug Target

AβOs are widely recognized as key pathogenic structures in AD

Impair synaptic function¹

Pyramidal neurons in rat organotypic slices had markedly decreased density of dendritic spines and numbers of electro-physiologically active synapses after exposure to picomolar levels of soluble oligomers²

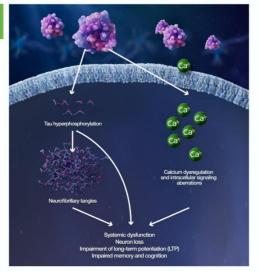
2 Contribute to impairment of memory and cognition³

Soluble A β Os (but not monomers) have been found to block hippocampal long-term potentiation (LTP), a synaptic correlate of memory and learning⁴

3 Induce tau hyperphosphorylation⁵

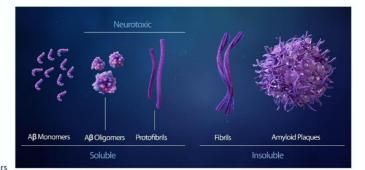
It was demonstrated in 2008 that A β Os were capable of inducing tau hyperphosphorylation in cultured neurons in the absence of fibrils⁵

¹Cleary et al., 2005; Townsend et al., 2006; Poling et al., 2008; Reed et al., 2011; Batista et al., 2018. ²Shankar et al., 2007. ³Ferreira, S. T., and Klein, W. L., 2011. ⁴Lambert et al., 1998; Walsh et al., 2002; Wang et al., 2002; Klyubin et al., 2005; Townsend et al., 2006; Shankar et al., 2007, 2008. ³De Felice et al., 2008; Zempel et al., 2010; Ochalek et al., 2017.



ACU193: A Monoclonal Antibody that Selectively Binds Toxic A β Os

- Humanized, affinity matured mAb developed to target toxic A β oligomers
 - >500-fold greater selectivity for ABOs over AB monomers
 - >85-fold selectivity for A β Os over A β fibrils
- IgG2 subclass mAb with reduced effector function
 Potential for more selective targeting of AβOs and
 - lower ARIA-E relative to $A\beta$ plaque directed mAbs
- ACU193 discovered as part of research collaboration between Acumen and Merck & Co.
 - Currently developed by several former senior members
 of Eli Lilly's global Alzheimer's development team
- ACU193 has been granted Fast Track designation for the treatment of early Alzheimer's disease by the U.S. FDA

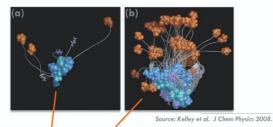


ACU193's high selectivity for toxic AβOs may provide meaningful cognitive efficacy and improved safety and tolerability



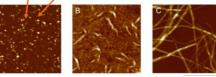
What is an A\beta Oligomer? ABOs May Consist of 2 to >200 AB Peptides

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



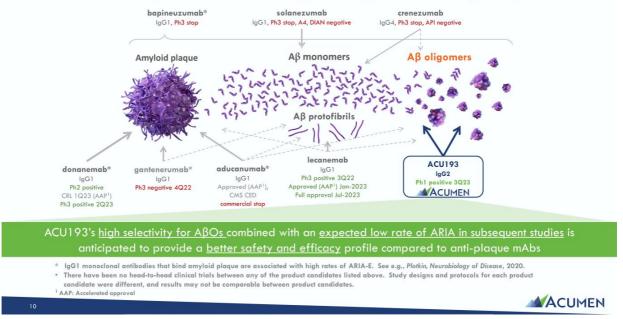
Quaternary structures of $A\beta$ oligomers, protofibrils, and fibrils

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.

ACU193 Positioning Relative to Late-Stage and Approved Anti-A β /Plaque mAbs



ACU193 Target Product Profile: Best-in-Class, 1st Line, Anti-AβO, Disease-Modifying Immunotherapy for Early AD

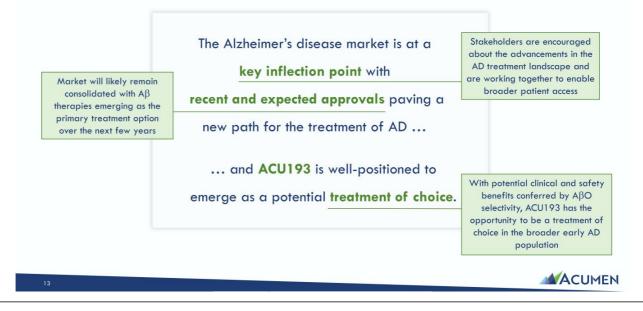
DRUG:	ACU193 is a humanized, affinity-matured, mAb with high selectivity for toxic AβOs vs. Aβ monomers (>500x), >85-fold selectivity for AβOs over Aβ fibrils ACU193 is an IgG2 subclass mAb which has a reduced effector function.	Ster:
POPULATION:	Early AD - Mild Cognitive Impairment and Mild Dementia due to AD (amyloid positive by PET)	A DOUGHT
DOSING:	IV infusion every 4 weeks planned	
DURATION:	Chronic therapy for duration of Early AD	•
VALUE PROPOSITION:	Selectivity for toxic ABOs may provide meaningful cognitive efficacy and an improved safety and tolerability profile relative to non-selective anti-AB/plaque mAbs, including:	
	 Slowing the decline of memory and cognition in Early AD 	
	 Decreasing AβO induced synaptic and neuronal network toxicity 	
	 Slowing disease progression and downstream effects on tau, neurodegeneration, and neuro- inflammation 	
	 With expected low rate of ARIA in subsequent studies 	
	 Potentially effective as stand-alone therapy or in combination with other symptomatic, anti- inflammatory, and/or tau directed therapies 	

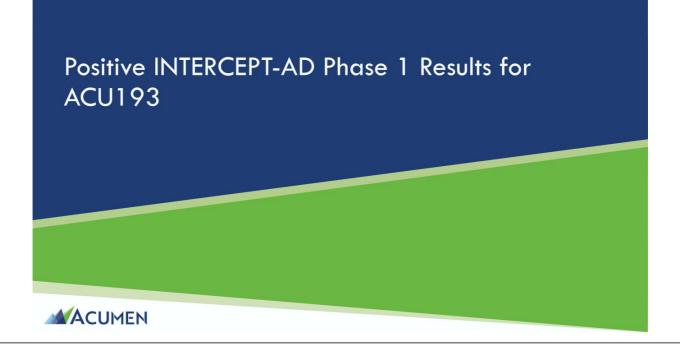
Comparative Profiles of Recent and Current Anti-A β Antibodies in Development

		mAb epitope / isotype ⁽⁴⁾	A β Target Selectivity $^{(1)(2)}$				Safety Profile	
Company	Asset	isorype	monomers	plaque	fibrils	oligomers	ARIA-E ⁽⁴⁾	Efficacy Profile
ACUMEN	ACU193	N-term, Confirmational IgG2	-		+	+++++	Expected Low in Phase 2	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 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

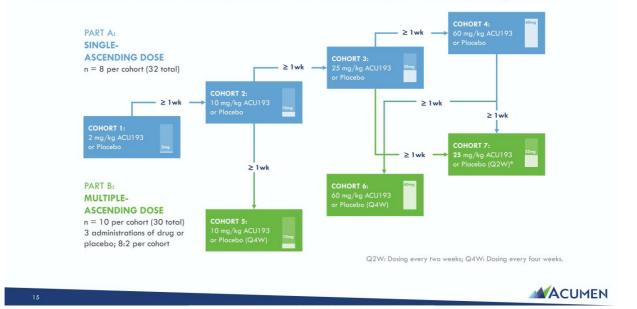
There have been no head-to-head trials between any of the product condidates listed above. Study designs and protocols for each product candidate were different, and results may not be comparable between product candidates.
 Caure et al. (2014). Targeting the proper amyloid-beta neuronal taxins: a path forward for Alzheimer's disease immunotherapeutics. Alzheimer's Research & Therapy. 6:42. DOI: http://alzres.com/content/6/4/42.
 Phans 3 discontinued for primary AD indication.
 van yck, C. (2017). AnII-Amyloid-b Monoclanal 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.

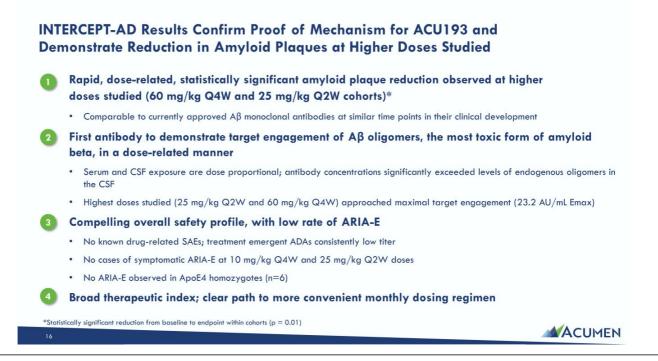
ACU193: Value Proposition





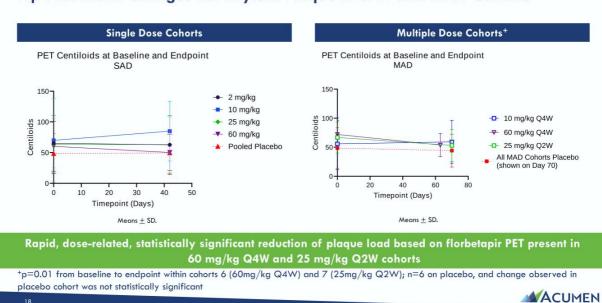
INTERCEPT-AD: A Randomized Placebo Controlled Phase 1 in Early AD patients





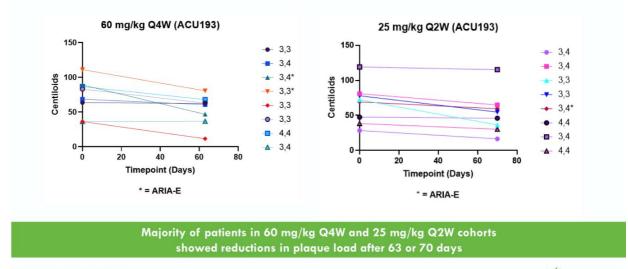
Proof of Mechanism Demonstrated Low Levels of ARIA-E, Dose-Related Target Engagement, CSF ACU193 Levels Exceeding AβO Levels, Supporting Q4W Dosing

			Potentially Therapeutic Do	ses	
Endpoint	Critical Success Factors	10mg/kg	25mg/kg	60mg/kg	
	• Deaths, SAEs Related to Study Drug	None	None	None	
Safety & Tolerability	• Any ARIA-E	1/14 (7.1%)	1/14 (7.1%)	3/14 (21.4%)	
	Symptomatic ARIA-E	0/14 (0.0%)	0/14 (0.0%)	1/14 (7.1%)	
РК	 Consistent Dose-Related PK CSF Exposure Above Endogenous CSF Oligomer Levels 	Achieved (Significantly Higher than Reported Aß Oligomer Levels)	Achieved (Orders of Magnitude Higher than Reported Aβ Oligomer Levels)	Achieved (Orders of Magnitude Higher than Reported Aβ Oligomer Levels)	
Target Engagement	- Measurement of ACU193-A β Oligomer Complex in CSF	Measurement Achieved	Dose-Related; Nearing Max Target Engagement	Dose-Related; Nearing Max Target Engagement	
Amyloid PET	• Reduction in Amyloid PET in Centiloids	No Reduction Observed	Reduction within MAD Cohort $(p = 0.01)$	Reduction within MAD Cohe $(p = 0.01)$	

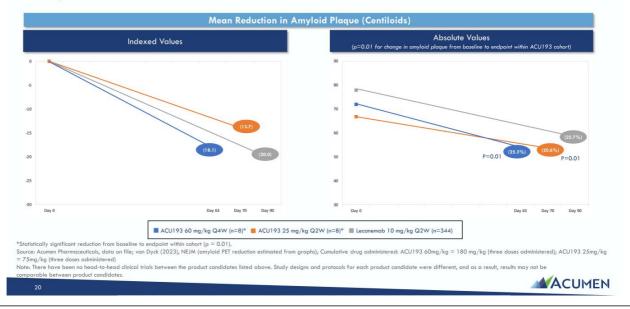


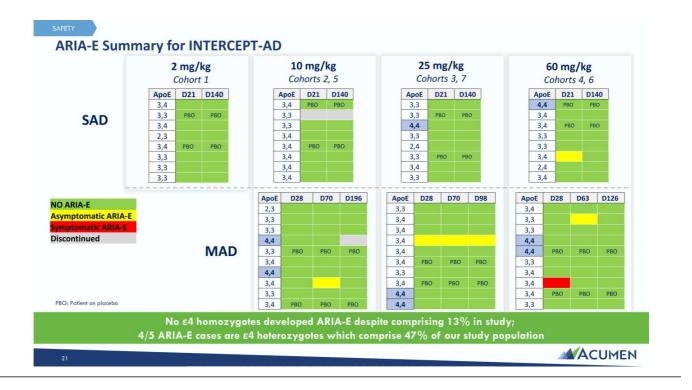
Aß PET: Mean Changes in Amyloid Plaque in SAD and MAD Cohorts

A β PET: Individual Patient Changes in Amyloid Plaque in Cohort 6 at 60 mg/kg Q4W and Cohort 7 at 25 mg/kg Q2W



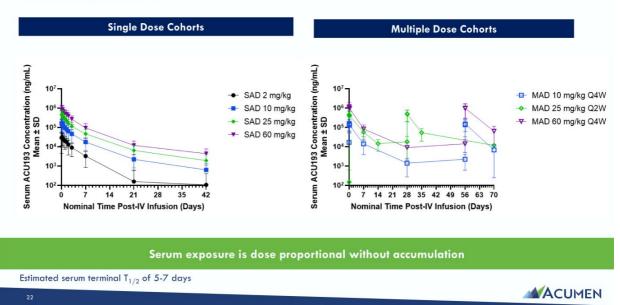
Highest Doses of ACU193 Demonstrate Rapid Reduction in Amyloid Plaque Reduction Comparable to Lecanemab (in Phase 3) at Similar Timeframe





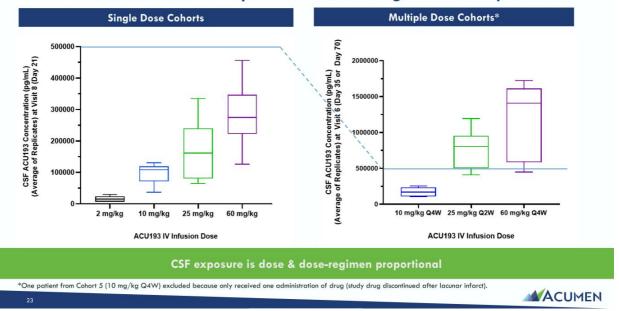


ACU193 Serum PK

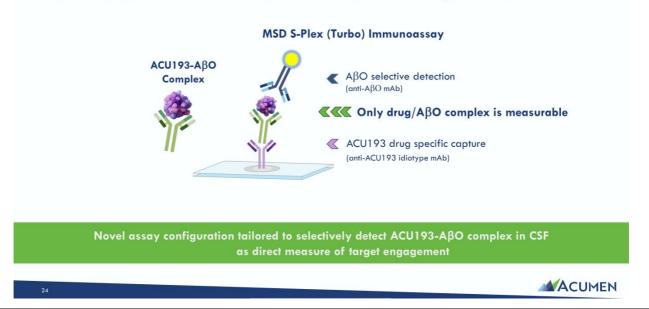




Dose-Related CSF ACU193 Exposure: Above Endogenous CSF ABO Levels

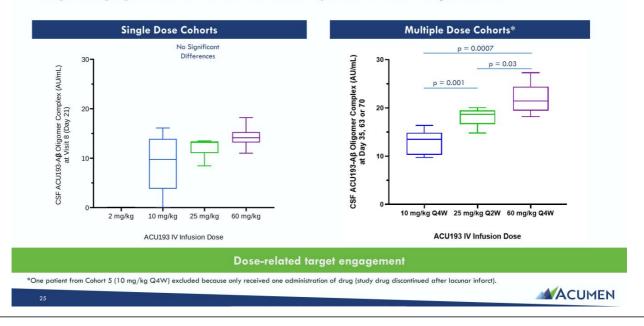


Target Engagement Assessed by Measuring ACU193-A β O Complex in CSF

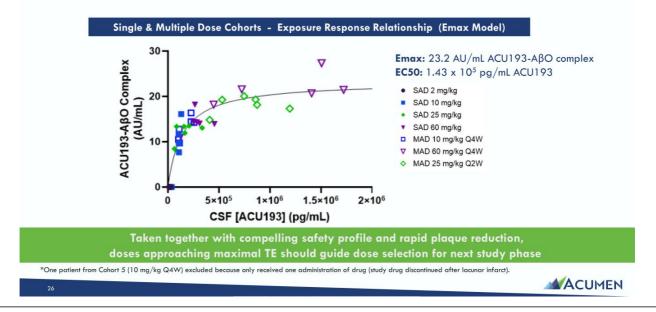




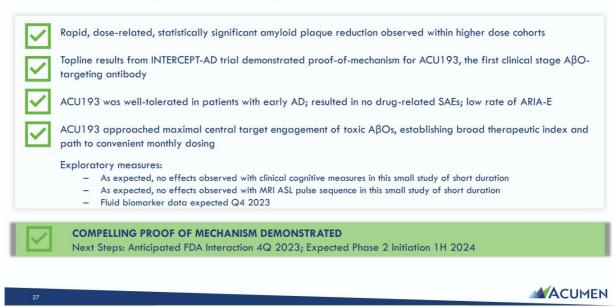
Target Engagement of ACU193 with A β Os is Dose Proportional



Maximal TE Response Observed at Doses of 25 mg/kg Q2W and 60 mg/kg Q4W

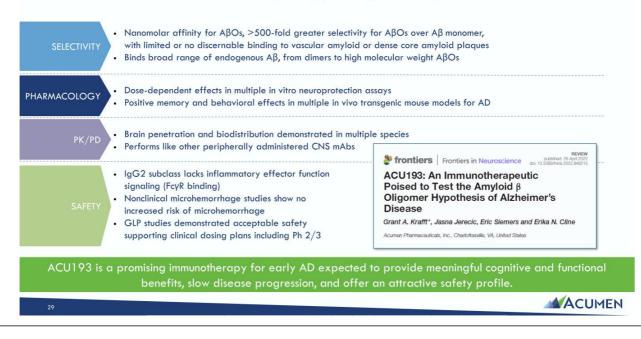


Phase 1 Data Supports Advancing to Phase 2/3





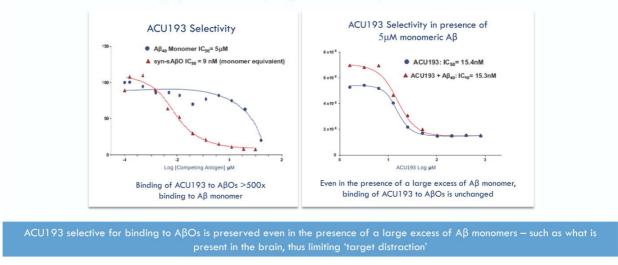
ACU193: Extensive Data Package Supporting Development





ACU193 is the First mAb Developed to Selectively Target ABOs

Highly selective for Aβ oligomers versus Aβ monomers

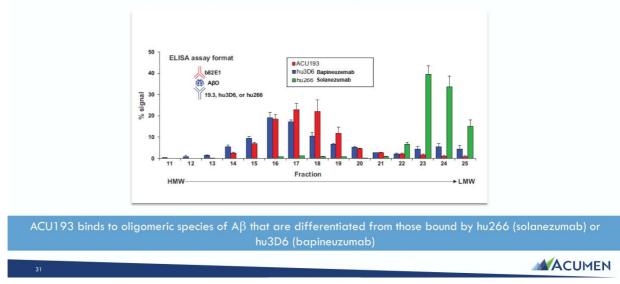


ACUMEN



ACU193 Binds to a Wide Range of Oligomeric Species of $\textbf{A}\beta$

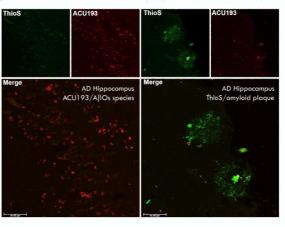
Comparison of Aß species-mAb complex signals across SEC fractions





ACU193 is Highly Selective for ABOs Versus AB Plaques

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

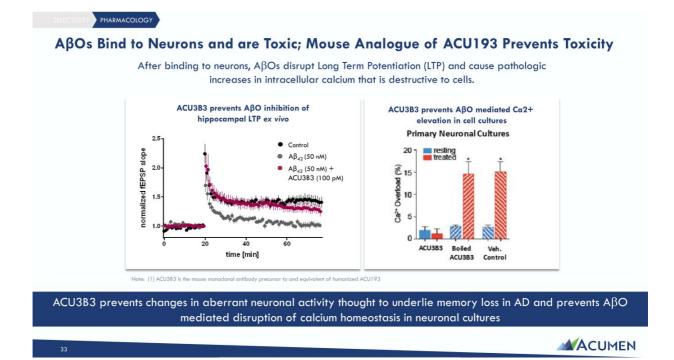


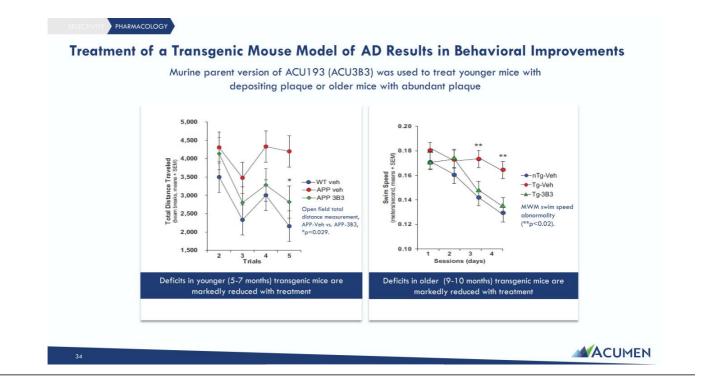
ACU193 has little or no binding to thioflavin S positive fibrillar AB plaque in human AD brain tissue

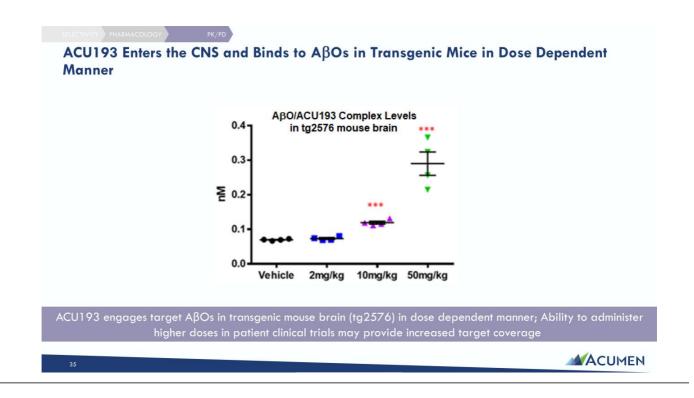
Sources: E. Cline et al. CTAD 2019.

ACUMEN

32











ACU193 Development Summary

- \Rightarrow Differentiated profile: Nonclinical and Phase 1 data consistent with toxicity of A β oligomers and selective binding of ACU193 to A β oligomers
- ⇒ Positive topline results from Phase1 study assessing safety, PK, and target engagement
- ⇒ Anticipate next clinical study, following FDA interaction in Q4 2023, starting as Phase 2 study with potential to expand to Phase 3 registration study based on interim analyses

38

ACUMEN

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
 - \checkmark 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 Into 2H 2026

MILESTONES	STATUS/ EXPECTED TIMING			
Proof-of-mechanism topline results	1			
Biomarker results from Phase 1 study	Q4 2023			
Anticipated interaction with FDA	Q4 2023			
Anticipated initiation of Phase 2 trial	1H 2024			

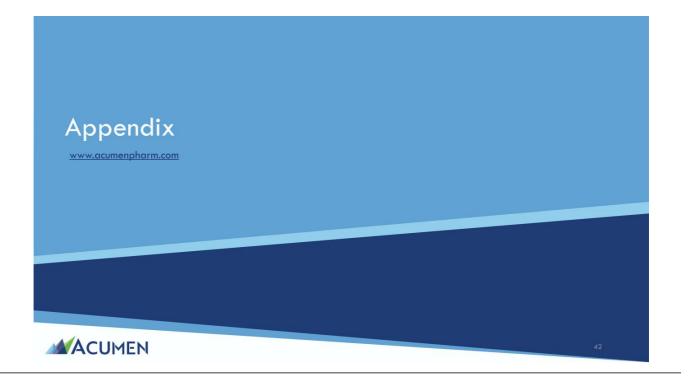


We believe that Acumen has the cash and marketable securities on hand to advance ACU193 into 2H 2026

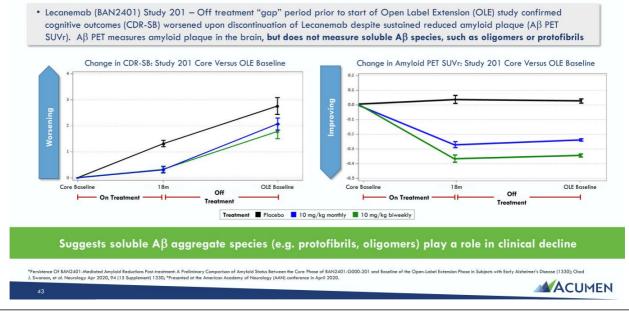
ACUMEN

ABOS: Key Takeaways

	Massive unmet need in AD, recent favorable trends and cumulative learnings position field for future successes
P	Upcoming sector catalysts in 2023
	Differentiated product candidate targeting toxic A β Os
	Experienced AD drug development team
\$	Blue chip investors, very strong balance sheet and cash runway into the second half of 2026
	Positive Phase 1 clinical data presented in July 2023
41	







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) ⁺	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)
 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

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

+ 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-Aβ/plaque mAbs*

		ETING AB	IARGETING							TARGETING PROTOFIBRILS						
	solanezumab EXPEDITION 3 (Phase 3)		aducanumab EMERGE (Phase 3)		aducanumab ENGAGE (Phase 3)		donanemab (Phase 2)		donanemab (Phase 3) ⁺⁺ (Intermediate & High Tav)		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 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 β 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 β , i.e. A β monomers and A β Os.

ARIA-E represents a dose limiting adverse effect for mAbs with amyloid plaque binding; We believe antibodies that exhibit lower

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.