

A phase 1 study, INTERCEPT-AD, of ACU193: safety, target engagement, and biomarker changes

Eric Siemers¹, Erika Cline², Todd Feaster¹, Vladimir Skljarevski¹, Karen Sundell¹, Daniel Antwi-Berko³, Marleen Koel-Simmelink³, Charlotte Teunissen³, Hao Zhang², Gopalan Sethuraman¹, Jerome Moore², Hugo Vanderstichele², June Kaplow², Robert Dean², Jasna Jerecic²

1. Clinical Research, Acumen Pharmaceuticals
2. Bioanalytical Methods, Acumen Pharmaceuticals
3. Amsterdam UMC

American Academy of Neurology
Denver, Colorado
April 16, 2024

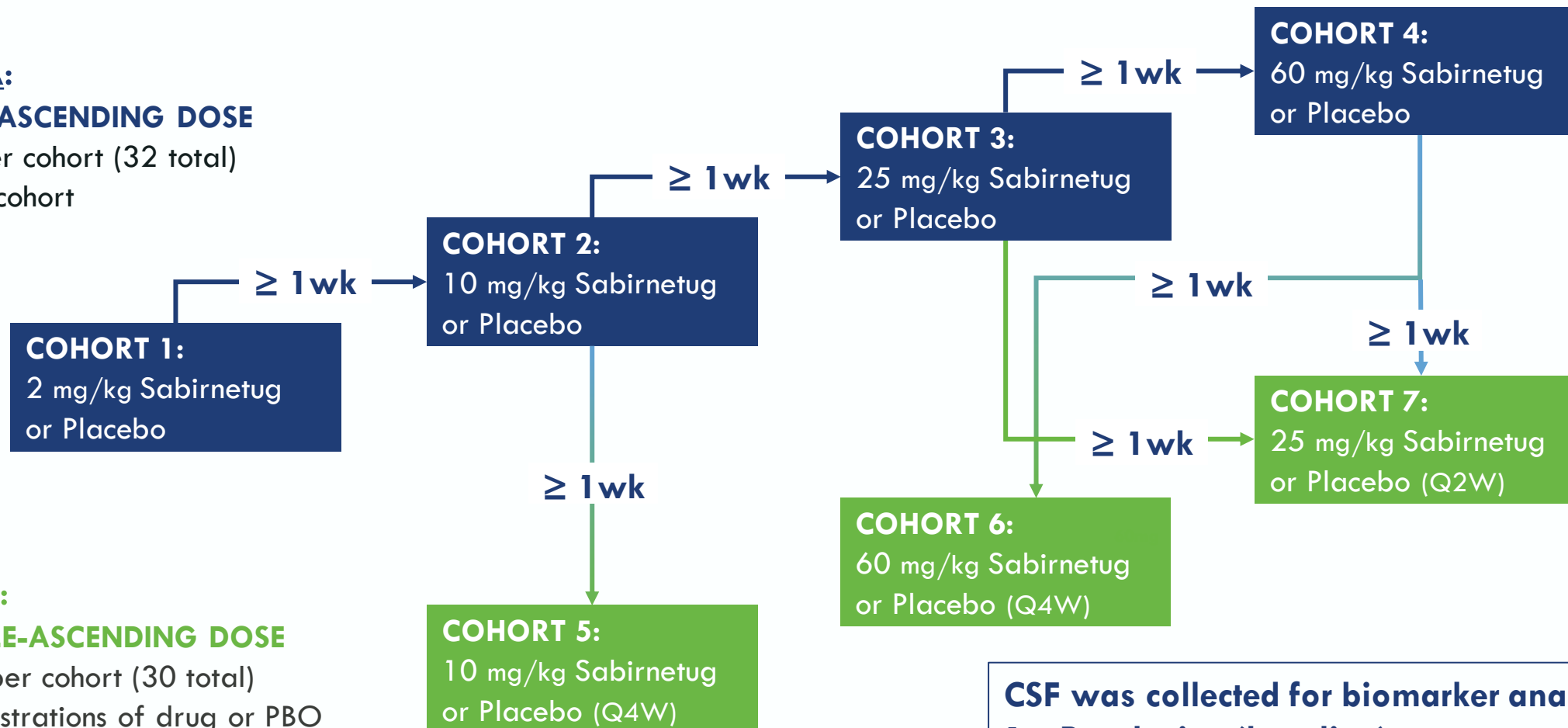
INTERCEPT-AD: A Randomized Placebo Controlled Phase 1 Study in Early AD Patients

PART A:

SINGLE-ASCENDING DOSE

n = 8 per cohort (32 total)

6:2 per cohort



PART B:

MULTIPLE-ASCENDING DOSE

n = 10 per cohort (30 total)

3 administrations of drug or PBO

8:2 per cohort

CSF was collected for biomarker analysis:

1. Pre-dosing (baseline)
2. Post-dosing (7-21 days; endpoint)

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

NCT04931459



INTERCEPT-AD: ARIA-E summary

SAD

2 mg/kg
Cohort 1

ApoE	D21	D140
3,4		
3,3	PBO	PBO
3,4		
2,3		
3,4	PBO	PBO
3,3		
3,3		
3,3		

10 mg/kg
Cohorts 2, 5

ApoE	D21	D140
3,4	PBO	PBO
3,3		
3,3		
3,4		
3,4	PBO	PBO
3,4		
3,4		
3,4		

25 mg/kg
Cohorts 3, 7

ApoE	D21	D140
3,3		
3,3	PBO	PBO
4,4		
3,3		
2,4		
3,3	PBO	PBO
3,4		
3,3		

60 mg/kg
Cohorts 4, 6

ApoE	D21	D140
4,4	PBO	PBO
3,4		
3,4	PBO	PBO
3,3		
3,3		
3,4		
2,4		
3,4		

MAD

ApoE	D28	D70	D196
2,3			
3,3			
3,3			
4,4			
3,3	PBO	PBO	PBO
3,4			
4,4			
3,4			
3,3			
3,4			

ApoE	D28	D70	D98
3,3			
3,4			
3,4			
3,4			
3,4			
3,4			
3,4	PBO	PBO	PBO
3,3			
3,4	PBO	PBO	PBO
3,4			
4,4			
4,4			

ApoE	D28	D63	D126
3,4			
3,3			
3,3			
4,4			
4,4	PBO	PBO	PBO
3,3			
3,4			
3,4			
3,4			
3,4			
3,4	PBO	PBO	PBO
3,3			

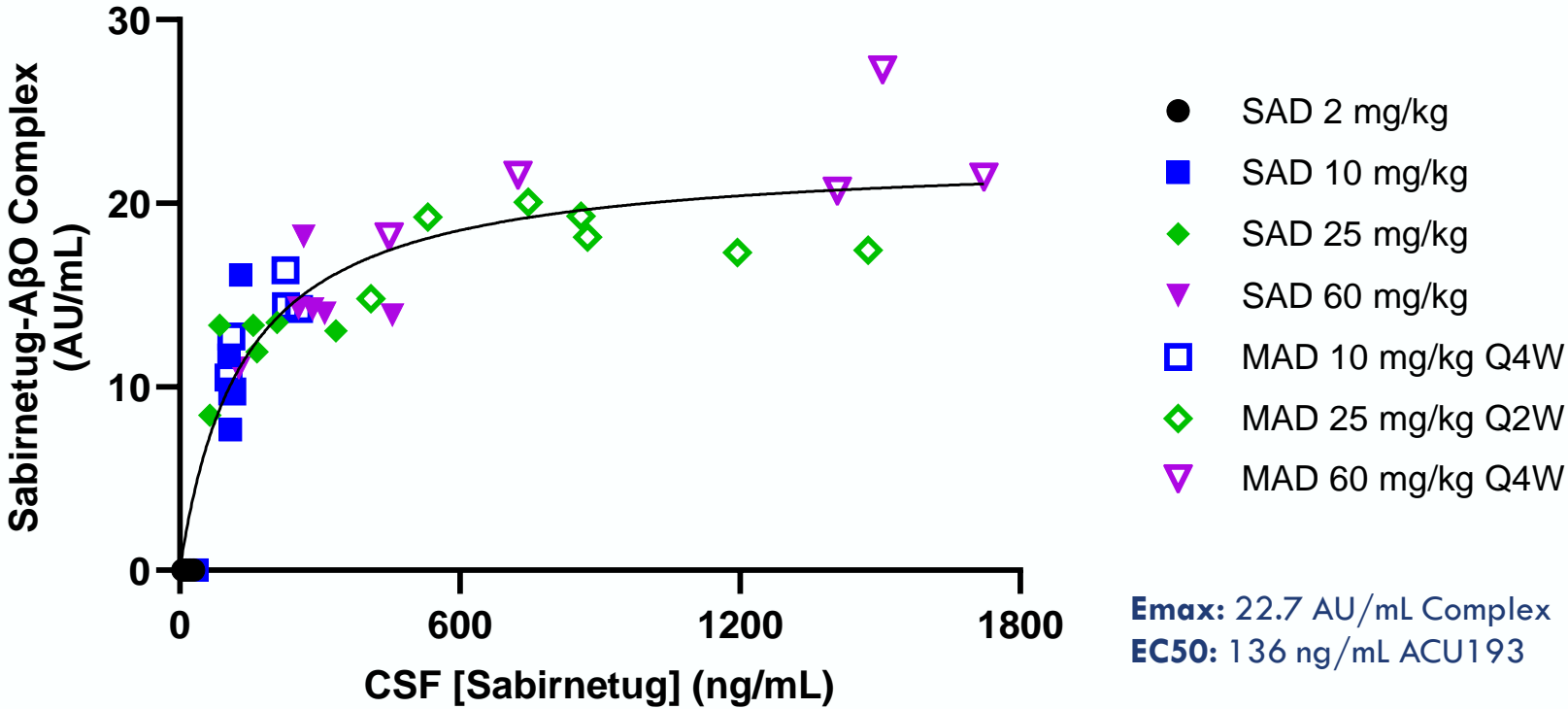
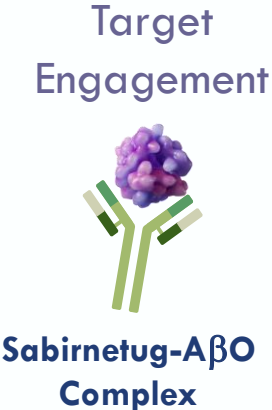
NO ARIA-E
Asymptomatic ARIA-E
Symptomatic ARIA-E
Discontinued

PBO: Patient on placebo

No $\epsilon 4$ homozygotes developed ARIA-E despite comprising 6 individuals (13%) in study;
4/5 ARIA-E cases are $\epsilon 4$ heterozygotes and 1/5 (at 60 mg/kg) was a non-carrier.

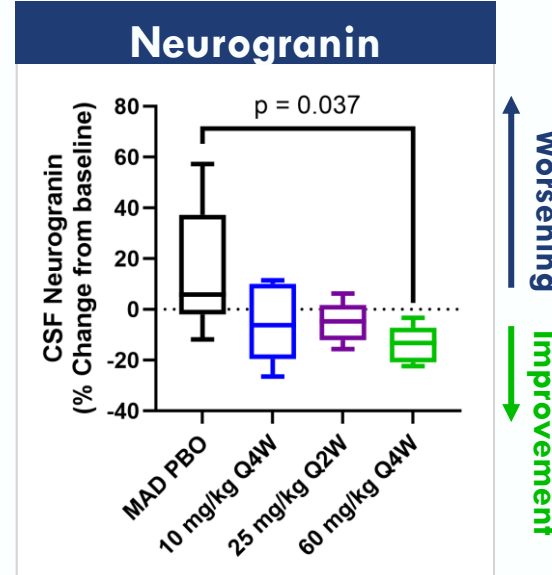
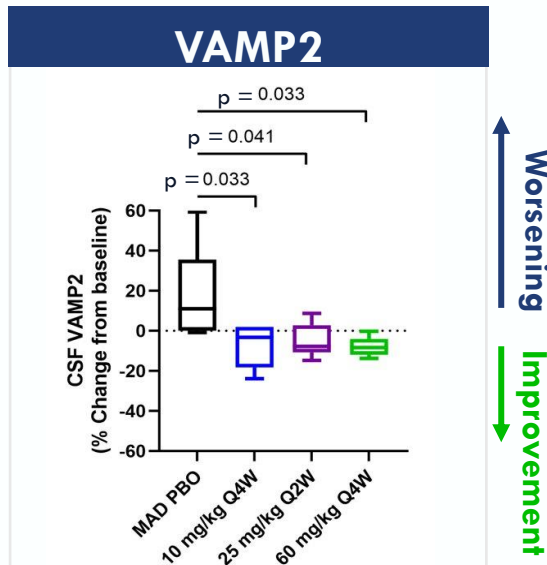
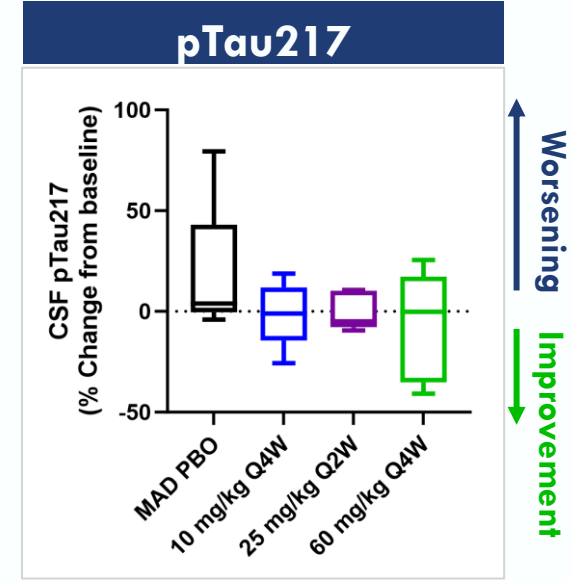
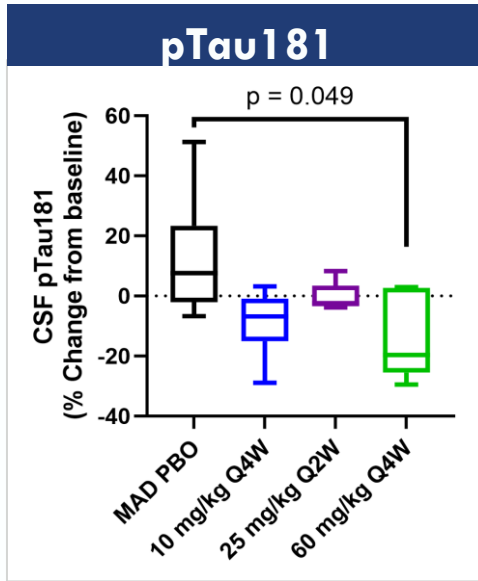
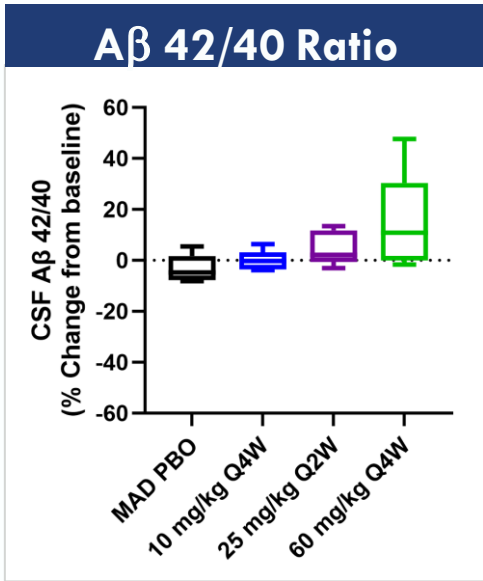
Central Target Engagement (Sabirnetug-A β O Complex) Approaches Maximum at Highest Sabirnetug Doses Administered in INTERCEPT-AD

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



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

Sabirnetug-Associated Changes in CSF Biomarkers Indicate Downstream Pharmacology for Amyloid, pTau Species, and Synaptic Markers After 3 Administrations



- $n = 8$ subjects/treated group; 6 subjects in pooled placebo (PBO)
- p -values from unpaired, 2-sided Student's t test