



DONANEMAB UPDATE

March 15, 2021

Lilly

Agenda

Introduction

Dr. Dan Skovronsky, Chief Scientific Officer

Donanemab Update

**Dr. Mark Mintun, Vice President,
Alzheimer's Disease Development**

Closing Remarks

Dr. Dan Skovronsky, Chief Scientific Officer

Q&A

SAFE HARBOR PROVISION



This presentation contains forward-looking statements that are based on management's current expectations, but actual results may differ materially due to various factors. The company's results may be affected by factors including, but not limited to, the risks and uncertainties in pharmaceutical research and development; competitive developments; regulatory actions; the extent and duration of the effects of the COVID-19 pandemic; litigation and investigations; business development transactions; economic conditions; and changes in laws and regulations, including health care reform.

For additional information about the factors that affect the company's business, please see the company's latest Forms 10-K, 10-Q, and any 8-Ks filed with the Securities and Exchange Commission.

The company undertakes no duty to update forward-looking statements

CHALLENGES AND NEEDS IN ALZHEIMER'S DISEASE (AD)



Still principally diagnosed and treated based on symptoms rather than on brain pathology

Noisy trials have led to a replication crisis, creating confusion and slowing scientific advancement

Reluctance to lean in on AD drug development and apply lessons from oncology: precision medicine, biomarkers & robust clinical endpoints, accelerated regulatory pathways

LILLY HAS SIGNIFICANT EXPERIENCE IN ALZHEIMER'S DISEASE



COMPLETED THERAPEUTIC TRIALS

Semagacestat & Lanabecestat

Secretase inhibitors

Discontinued for toxicity and lack of efficacy

Solanezumab

Antibody against soluble A β

Primaries showed trend for modest efficacy

Ongoing prevention study at higher dose

Donanemab

Antibody against amyloid plaques

Positive Phase 2 study TRAILBLAZER-ALZ

Ongoing Phase 3 replication study

VALIDATED DIAGNOSTICS

Amyvid

First FDA-approved amyloid imaging agent

Approved in 2012, widely used in therapeutic trials

Tauvid

First FDA-approved tau tangle imaging agent

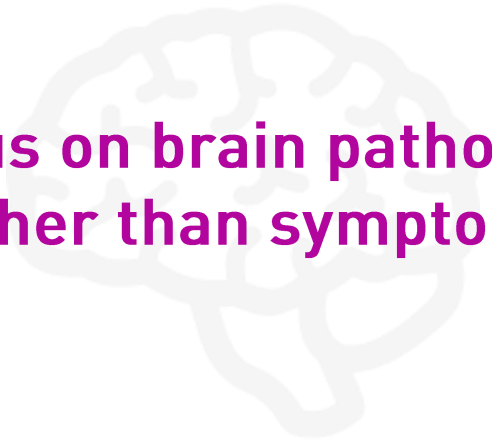
Approved in 2020, Lilly using in therapeutic trials

P-tau217 test

Developing IVD for widespread use

Well validated blood-based tau biomarker

KEY DONANEMAB TRAILBLAZER-ALZ STUDY GOALS



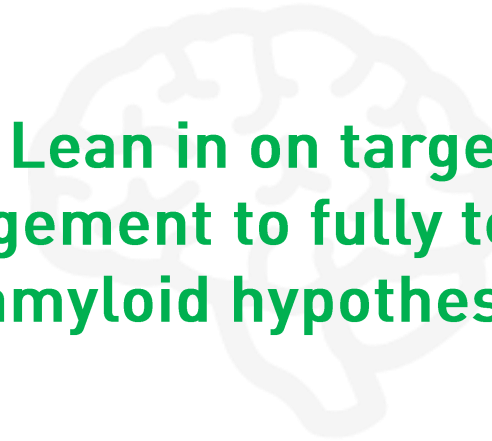
Focus on brain pathology rather than symptoms

- Amyloid & tau criteria for enrollment
- Plaque clearance to adjust dosing
- Tau spread as a surrogate endpoint



Decrease noise to enable highly replicable results

- Enroll homogenous population
- Develop improved endpoint (iADRS)
- Use sensitive statistical method (DPM)

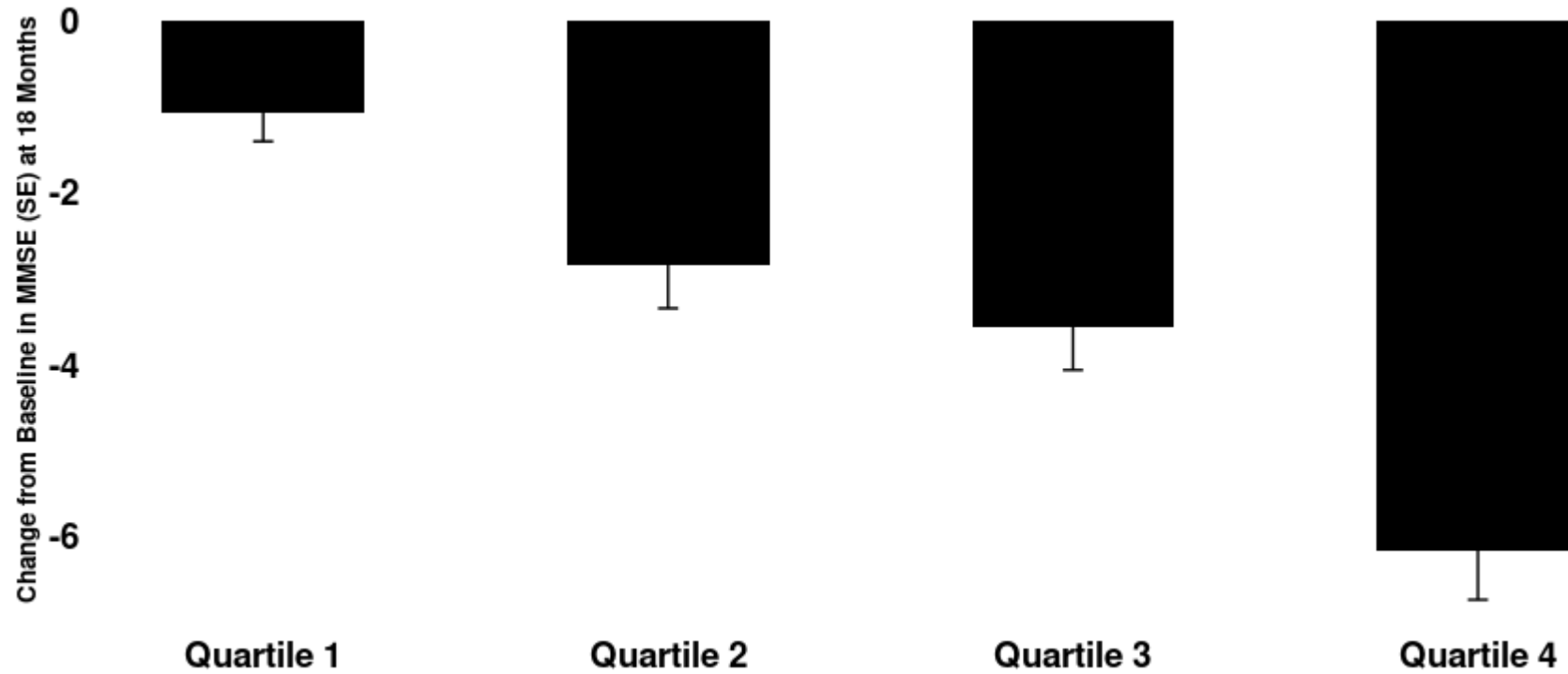
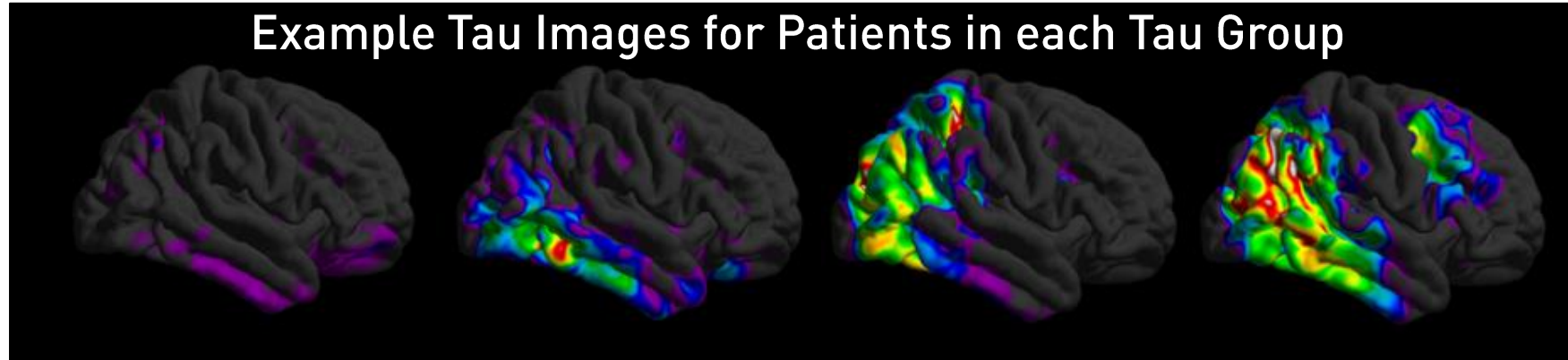


Lean in on target engagement to fully test the amyloid hypothesis

- Test mechanism that fully clears plaques
- Dose aggressively to clear quickly
- Treat to target rather than indefinitely

BASELINE TAU STAGE PREDICTS SUBSEQUENT DECLINE

HISTORICAL DATA FROM SOLANEZUMAB AND FLORTAUCIPIR TRIALS



Patients selected for amyloid positivity have high heterogeneity in tau, which corresponds to a range in rate of clinical progression

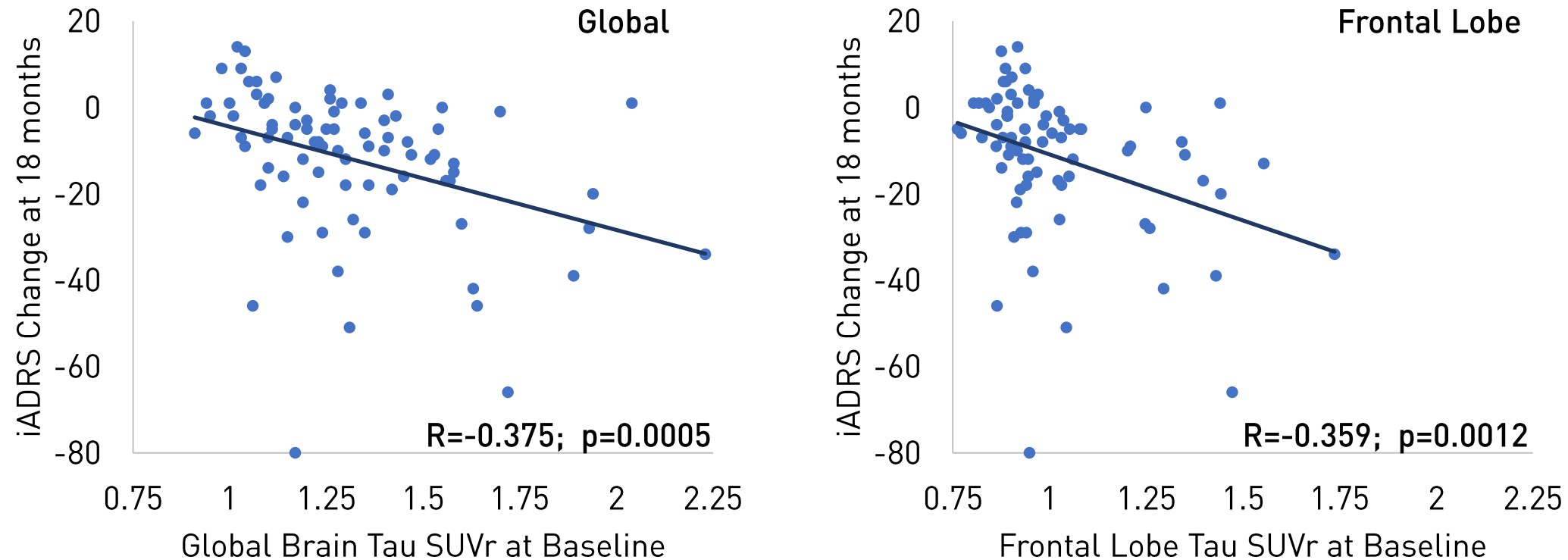
Note: 241 amyloid positive subjects with confirmed or suspected AD from Lilly trials Expedition 3, a Phase 3 study of solanezumab, and flortaucipir Phase 2 then divided into quartiles by baseline tau signal.

BASELINE TAU PREDICTS PROGRESSION USING iADRS

HISTORICAL DATA FROM SOLANEZUMAB AND LANABECESTAT TRIALS



Change in iADRS at 18 months in Expedition 3 vs baseline tau



Change in iADRS at 18 months in Amaranth vs. baseline tau replicates that seen in Expedition 3

Brain Area	Correlation	P-value
Global	-0.306	0.0085
Frontal Lobe	-0.281	0.0160

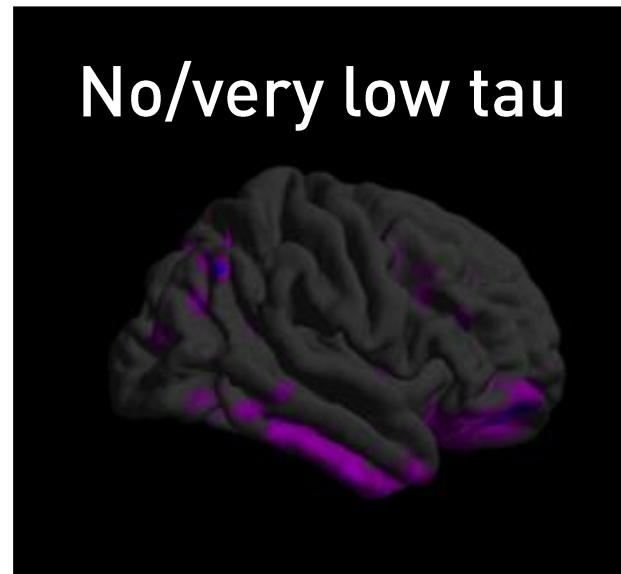
Expedition 3 = a Phase 3 study of solanezumab (mild AD only); Amaranth = a Phase 2/3 study of lanabecestat (early symptomatic AD); SUVr=Standardized Uptake Value ratio
 Note: placebo patients only; Expedition 3 n=82; Amaranth n=73.

TRAILBLAZER-ALZ TAU STAGING OF EARLY SYMPTOMATIC AD

FIRST STUDY TO SCREEN AND ENROLL PATIENTS BASED ON THEIR TAU PATHOLOGY



Removes those hypothesized as unlikely to have significant decline in 18 months



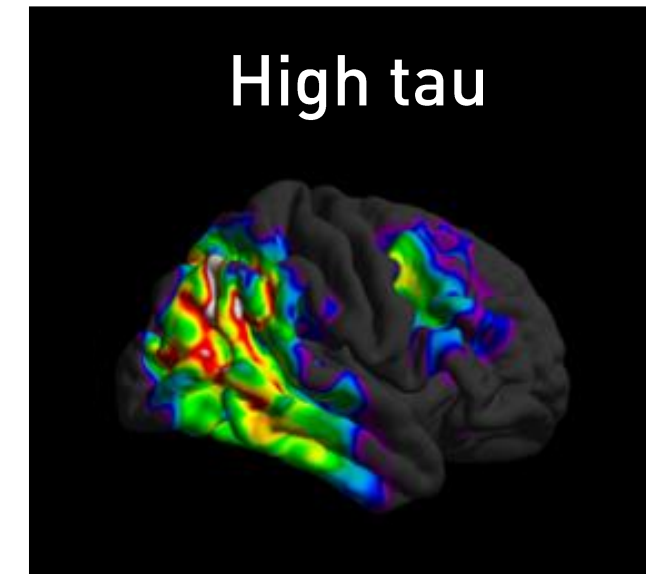
No/very low tau

EXCLUDED

% of early symptomatic AD population:

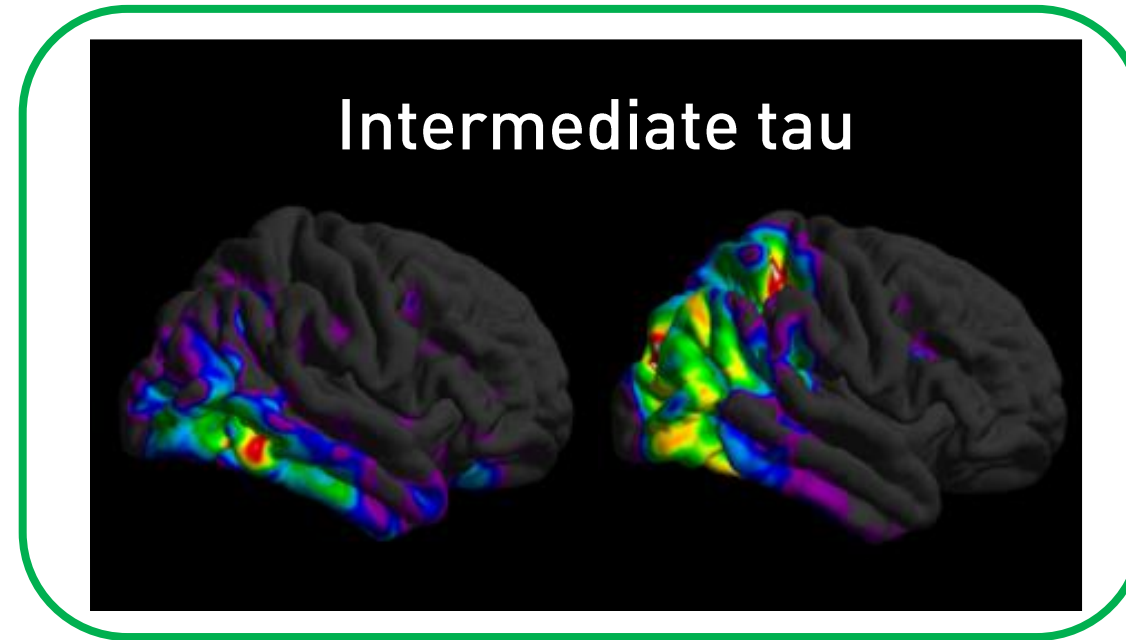
~40 - 60%*

Removes those hypothesized as too advanced to be slowed by anti-amyloid therapy



High tau

EXCLUDED



Intermediate tau

TAU PET INCLUSION WINDOW

~30 - 45%

*includes amyloid negative subjects (25-35% of screened)

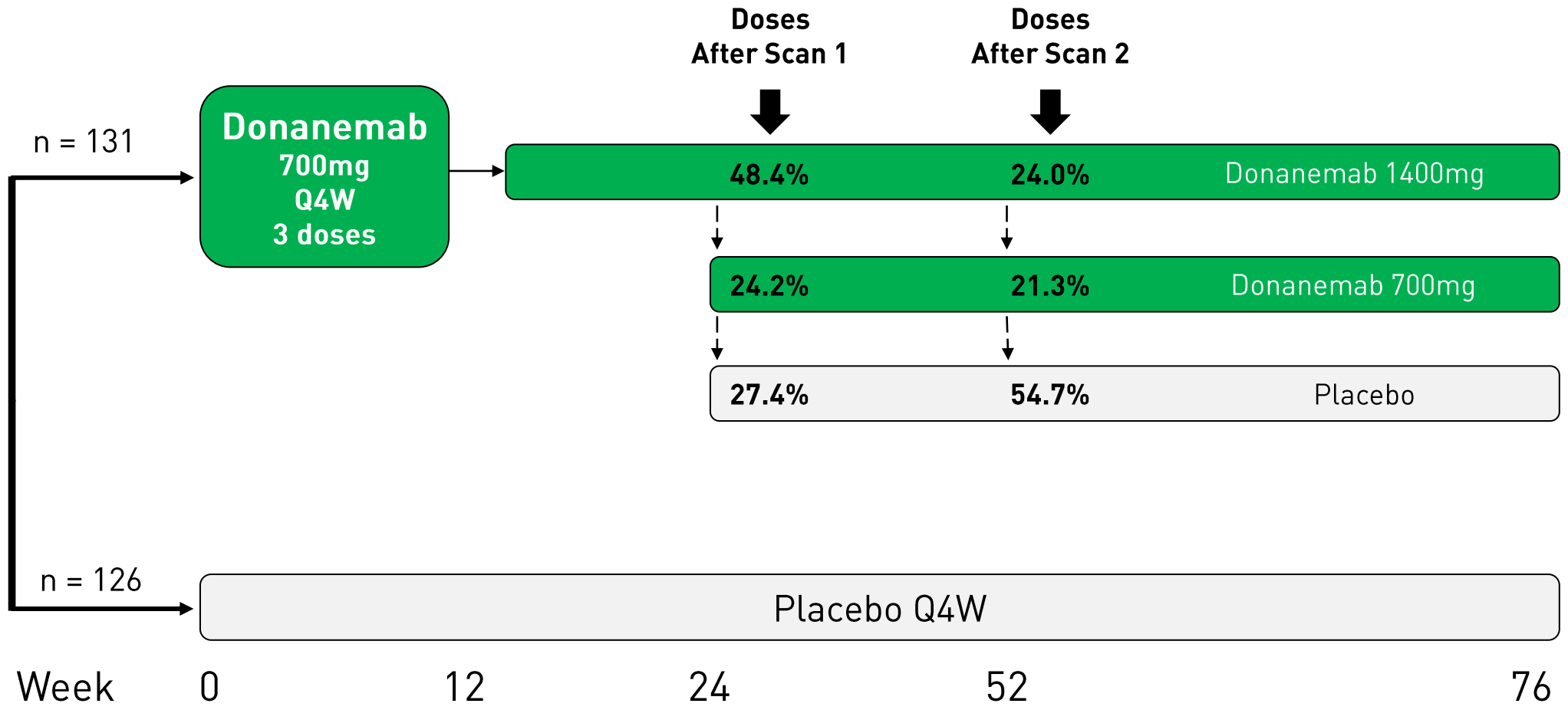
TRAILBLAZER-ALZ DESIGNED TO ACHIEVE AMYLOID CLEARANCE

DOSING STOPPED ONCE AMYLOID CLEARANCE ACHIEVED



Patient population:

- Early symptomatic AD
- Ages 60-85
- Intermediate tau burden
- Amyloid positive



Note: at 6-month and 12-month florbetapir PET scans, dosing decision to continue 1400mg Q4W or reduce to 700mg Q4W if amyloid was $11 \leq CL < 25$ or switched to placebo if it was < 11 CL at any one measure or $11 \leq CL < 25$ for two consecutive scans; all percentages are the proportion of participant administered doses and do not count those who discontinued treatment but stayed in the trial.
 CL = Centiloids; n = number of patients; PET = Positron Emission Tomography; Q4W = every 4 weeks

TRAILBLAZER-ALZ STUDIED AN EARLY AD POPULATION



BASELINE CHARACTERISTICS

Demographic	Placebo(N=126)	Donanemab(N=131)	Total †(N=272)
Female sex, n (%)	65 (51.6)	68 (51.9)	145 (53.3)
Mean age, years (SD)	75.4 (5.4)	75.0 (5.6)	75.2 (5.5)
Race, n (%)			
Asian	2 (1.6)	1 (0.8)	3 (1.1)
Black or African American	3 (2.4)	5 (3.8)	8 (2.9)
White	121 (96.0)	122 (93.1)	258 (94.9)
Other*	0 (0)	3 (2.3)	3 (1.1)
Ethnicity, Hispanic/Latino#, n (%)	3 (2.4)	5 (3.8)	9 (3.3)
Education, ≥13 years, n (%)	102 (81.0)	97 (74.0)	209 (76.8)
APOE 4 carrier, n (%)	92/124 (74.2)	95/131 (72.5)	197/270 (73.0)
% E2/E3	1 (0.8)	1 (0.8)	2 (0.7)
% E2/E4	2 (1.6)	2 (1.5)	4 (1.5)
% E3/E3	31 (25.0)	35 (26.7)	71 (26.3)
% E3/E4	62 (50.0)	68 (51.9)	137 (50.7)
% E4/E4	28 (22.6)	25 (19.1)	56 (20.7)
AChEI use, n (%)	74 (58.7)	78 (59.5)	162 (59.6)
Scale, Mean (SD)			
ADAS-Cog13	27.5 (7.6)	27.6 (7.7)	27.6 (7.6)
ADCS-ADL	67.0 (8.1)	67.4 (8.6)	67.3 (8.2)
ADCS-iADL	48.4 (7.5)	48.9 (7.6)	48.8 (7.5)
iADRS	105.9 (13.2)	106.2 (13.0)	106.2 (13.0)
MMSE	23.7 (2.9)	23.6 (3.1)	23.5 (3.1)
CDR-SB	3.4 (1.7)	3.6 (2.1)	3.5 (1.9)
Amyloid PET Centiloids, Mean (SD)	101.1 (33.3)	107.6 (36.0)	104.2 (34.8)
Flortaucipir PET global tau load, Mean (SD)	0.46 (0.15)	0.47 (0.19)	0.46 (0.17)

BALANCED ACROSS ARMS

- Cognition and function scores representative of early symptomatic population similar to previous studies
- Cognition and function metrics comparable across study arms
- APOE 4 carriers consistent in both the placebo and donanemab arms

† Includes 15 participants in the combo group,* Includes Multiple & American Indian or Alaska Native, # Number of participants with non-missing data, used as denominator, SD = Standard Deviation; APOE 4 = Apolipoprotein E allele 4; AChEI=Acetylcholinesterase Inhibitor; ADAS-Cog13 = Alzheimer's Disease Assessment Scale - Cognitive subscale; ADCS-(i)ADL = Alzheimer's Disease Cooperative Study-(instrumental) Activities of Daily Living Inventory; iADRS = Integrated Alzheimer's Disease Rating Scale; MMSE = Mini-Mental State Examination; CDR-SB = Clinical Dementia Rating Scale; PET = positron emission tomography

TRAILBLAZER-ALZ SAFETY PROFILE REMAINS CONSISTENT



SAFETY & TOLERABILITY

Overview of Adverse Events, n (%)			
	Placebo (n=125)	Donanemab (n=131)	p-value
Deaths	2 (1.6)	1 (0.8)	0.62
SAEs	22 (17.6)	23 (17.6)	>1.00
Treatment discontinuations due to AE*	9 (7.2)	40 (30.5)	<0.001
Study discontinuations due to AE*	6 (4.8)	20 (15.3)	0.007
TEAEs	113 (90.4)	119 (90.8)	>1.00
Treatment Emergent Adverse Events ≥5% Incidence, n (%)			
ARIA-E	1 (0.8)	35 (26.7)	<0.001
Fall	19 (15.2)	17 (13.0)	0.72
Dizziness	15 (12.0)	11 (8.4)	0.41
Headache	15 (12.0)	10 (7.6)	0.29
Superficial siderosis of central nervous system	4 (3.2)	18 (13.7)	0.003
Arthralgia	10 (8.0)	10 (7.6)	>1.00
Nausea	4 (3.2)	14 (10.7)	0.03
Upper respiratory tract infection	9 (7.2)	9 (6.9)	>1.00
Urinary tract infection	5 (4.0)	13 (9.9)	0.09
Diarrhea	5 (4.0)	11 (8.4)	0.20
ARIA-H	4 (3.2)	11 (8.4)	0.11
Cerebral microhemorrhage	3 (2.4)	10 (7.6)	0.09
Infusion-Related Reaction	0 (0)	10 (7.6)	0.002
Pneumonia	5 (4.0)	7 (5.3)	0.77
Depression	8 (6.4)	6 (4.6)	0.59
Contusion	10 (8.0)	0 (0)	<0.001
Vomiting	3 (2.4)	7 (5.3)	0.34
Anxiety	2 (1.6)	7 (5.3)	0.17

FINDINGS

- Safety profile in line with Phase 1 results; no new safety signals observed
- ARIA-E was 27% (6% symptomatic) on the treatment arm, similar to other plaque-clearing agents
- Treatment discontinuation due to ARIA was driven by strict protocol criteria
- Approximately 8% of patients had infusion-related reactions
- ~90% of subjects developed anti-drug antibodies; despite this, donanemab was able to engage the target resulting in nearly 70% of patients being amyloid negative

SAE = Serious Adverse Event; TEAE = Treatment-Emergent Adverse Event; ARIA-E = Amyloid-Related Imaging Abnormalities with Edema/Effusions
 *Discontinued treatment due to protocol-defined criteria and patient/principal investigator-cited reasons for discontinuation.

18-MONTH PLACEBO DECLINE IN ANTI-AMYLOID TRIALS



PLACEBO DECLINE IN TRAILBLAZER-ALZ COMPARED TO OTHER CONTEMPORARY EARLY AD TRIALS

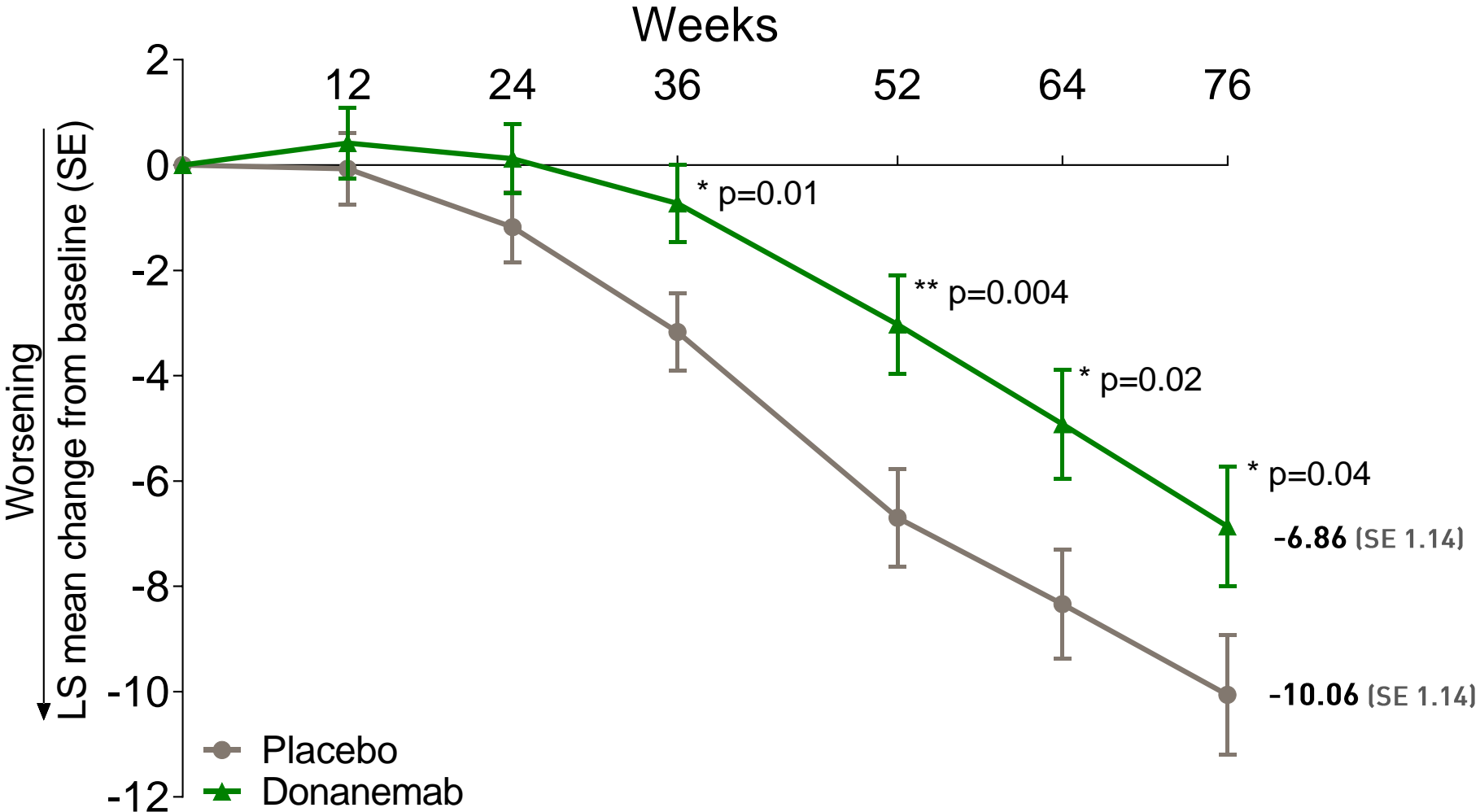
Readout Year	Molecule, Trial	n	18-month Placebo Δ		
			ADAS-Cog13	CDR-SB	MMSE
2016	solanezumab, Exp 3	893	7.4	2.2	3.7
2018	lanabecestat, Phase 3	196	6.5	2.2	4.0
2018	lecanemab, Phase 2	160	4.9	1.5	NR
2019	aducanumab, 301	333	5.1	1.6	3.5
2019	aducanumab, 302	288	5.2	1.7	3.3
2021	donanemab, TB	90	4.8	1.6	3.0

Recent trials conducted in amyloid positive early AD subjects showed similar rates of placebo decline

ADAS-Cog13 = Alzheimer's Disease Assessment Scale - Cognitive subscale; CDR-SB = Clinical Dementia Rating Scale; MMSE = Mini-Mental State Examination; NR = not reported
 Exp 3 = a Phase 3 study of solanezumab (mild AD only); lecanemab= BAN2401 (early symptomatic AD); lanabecestat = a Phase 2/3 study (early symptomatic AD); 301 & 302 = Phase 3 studies of aducanumab (early symptomatic AD)
 Note: conclusions from cross-trial comparisons have limitations due to differences in study design, patient population, duration of therapy, background therapy and other factors that confound comparisons

TRAILBLAZER-ALZ iADRS

DONANEMAB IS THE FIRST PLAQUE CLEARING AGENT TO ACHIEVE A DISEASE MODIFICATION PRIMARY ENDPOINT



32% slowing by donanemab at 76 weeks

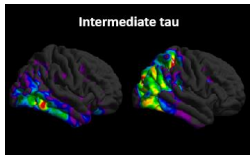
Placebo n=120	113	110	103	90	90	91
Donanemab n=125	120	112	102	88	89	93

LS mean change from baseline, SE, and p-value are derived using MMRM with factors for treatment, visit, treatment-by-visit interaction, pooled investigator, AChEI and/or memantine use at baseline, and covariates for baseline score, age at baseline, and baseline score-by-visit interaction. MMRM statistical analysis used. iADRS = Integrated Alzheimer's Disease Rating Scale; LS = Least Squares; MMRM = mixed model for repeated measures; n = number of patients; SE = Standard Error; AChEI = acetylcholinesterase inhibitor

EXPLORATORY ANALYSIS OF iADRS BY BASELINE TAU



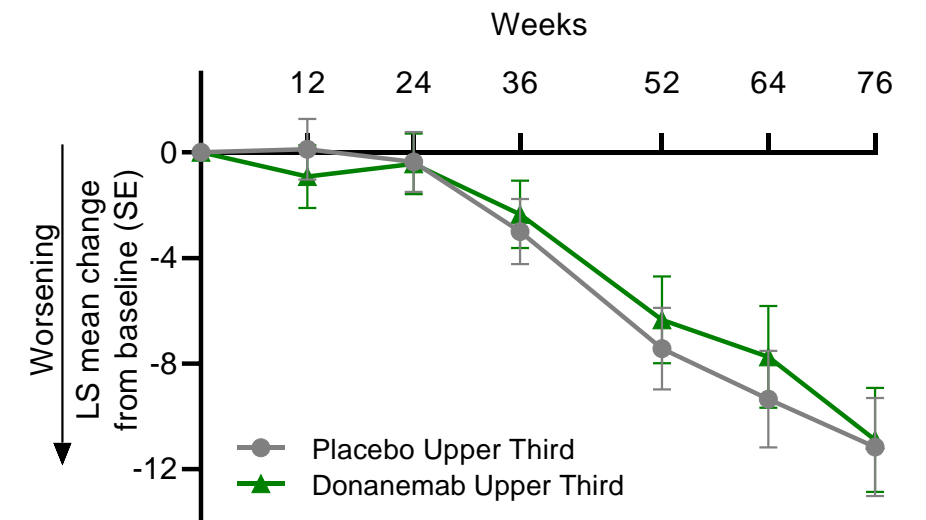
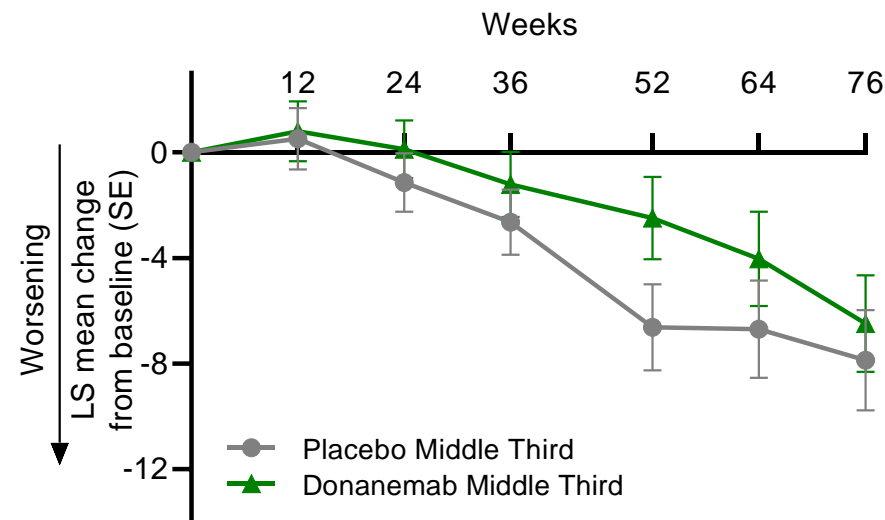
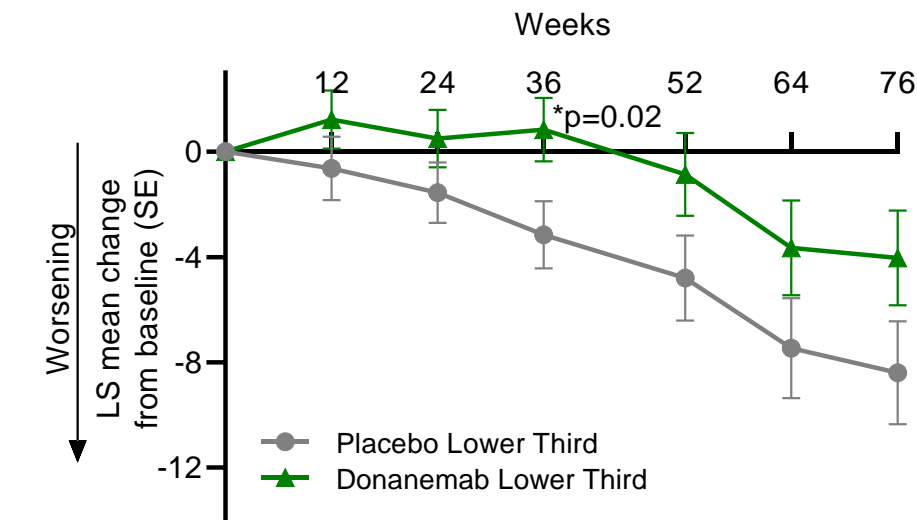
INTERMEDIATE TAU ENROLLED PATIENTS WERE FURTHER DIVIDED INTO TERCILES BY BASELINE TAU



Lower baseline tau

Middle baseline tau

Upper baseline tau



● Placebo n= 37 33 34 31 29 28 28
 ▲ Donanemab n= 45 44 38 36 29 31 34

● Placebo n= 39 37 37 34 26 30 29
 ▲ Donanemab n= 42 39 39 34 31 32 32

● Placebo n= 42 41 37 36 33 30 32
 ▲ Donanemab n= 38 37 35 32 28 26 27

Divided by baseline flortaucipir SUVR; lower third cut point is 1.144; upper third cut point 1.274

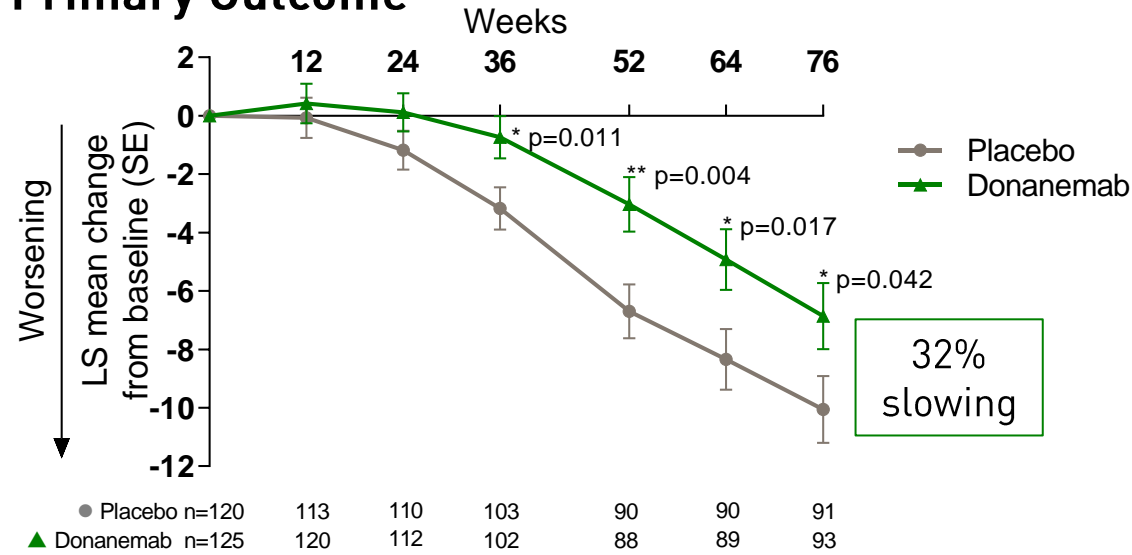
iADRS = Integrated Alzheimer's Disease Rating Scale; LS = Least Squares; n = number of patients; SE = Standard Error; SUVR=Standardized Uptake Value ratio

TRAILBLAZER-ALZ RESULTS CONSISTENT ACROSS ENDPOINTS

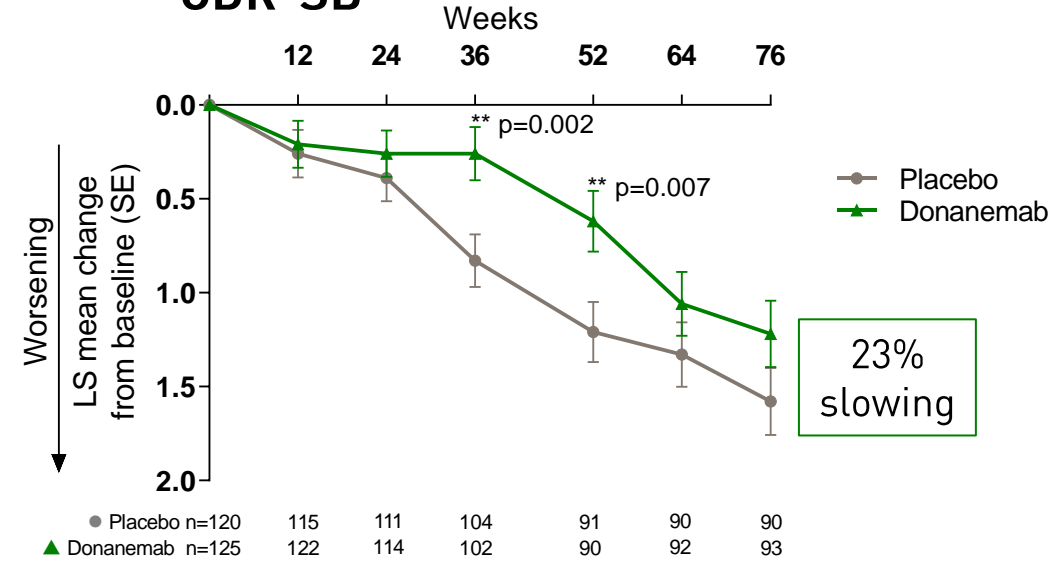
CONSISTENT EFFECTS OBSERVED ON iADRS, CDR-SB, ADAS-COG13, ADCS-iADL, AND MMSE



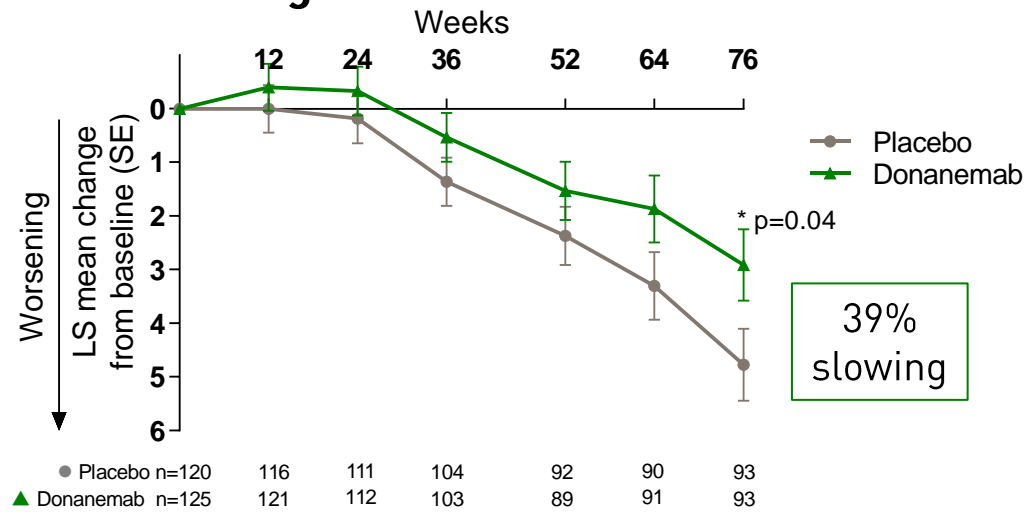
iADRS – Primary Outcome



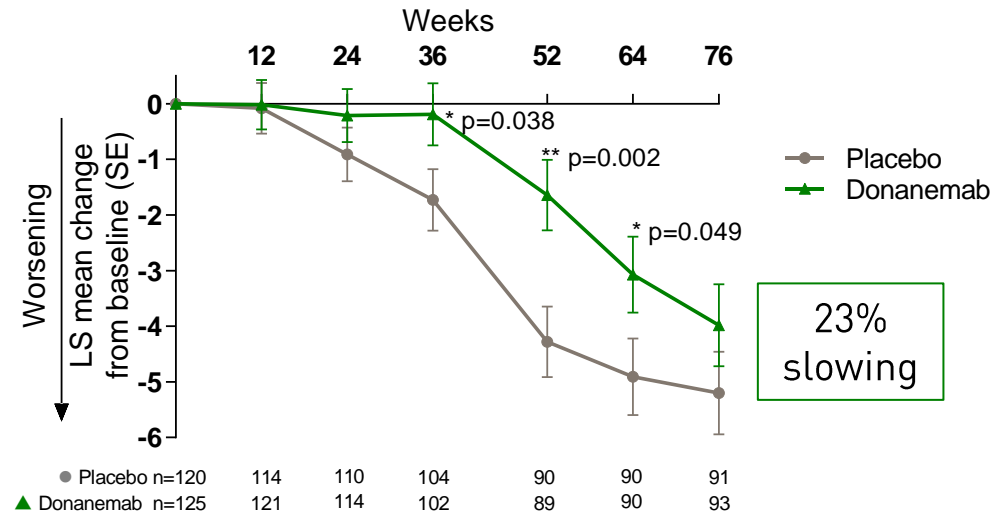
CDR-SB



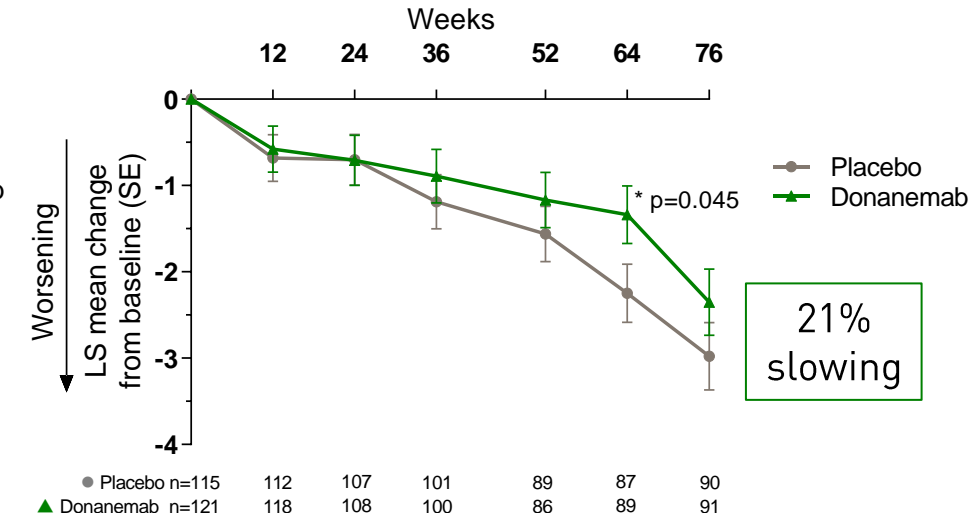
ADAS-Cog13



ADCS-iADL



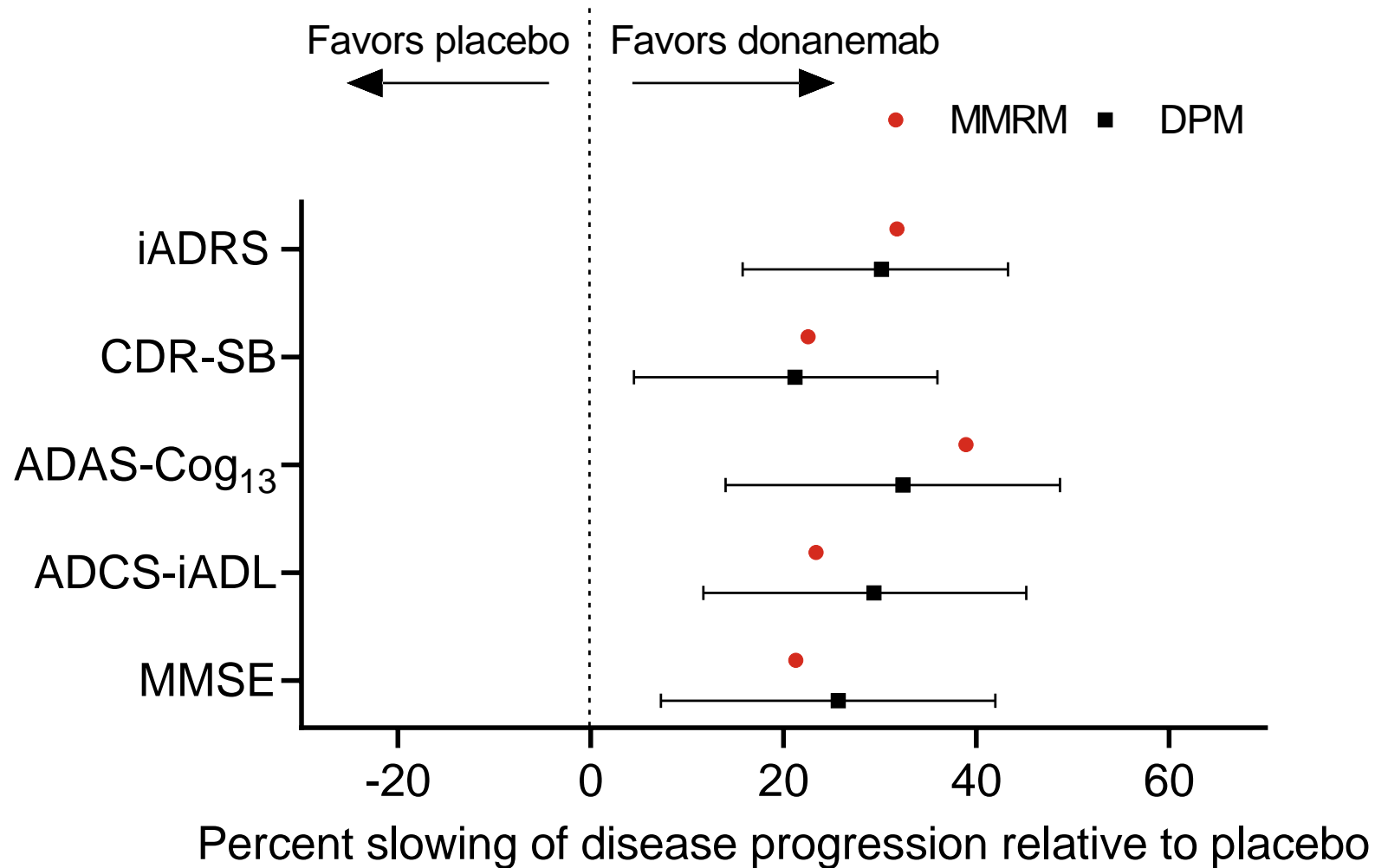
MMSE



ADAS-Cog₁₃ = Alzheimer's Disease Assessment Scale - Cognitive subscale; ADCS-iADL = Alzheimer's Disease Cooperative Study - Activities of Daily Living Inventory; CDR-SB = Clinical Dementia Rating Scale; iADRS = Integrated Alzheimer's Disease Rating Scale; LS = Least Squares; n = number of patients; MMSE = Mini-Mental State Examination; SE = Standard Error
Note: This trial was not powered to hit on multiple endpoints

DISEASE PROGRESSION MODEL ANALYSIS

SHOWED SLOWING IN ALL CLINICAL ENDPOINTS RELATIVE TO PLACEBO WITH SIMILAR MAGNITUDE TO MMRM



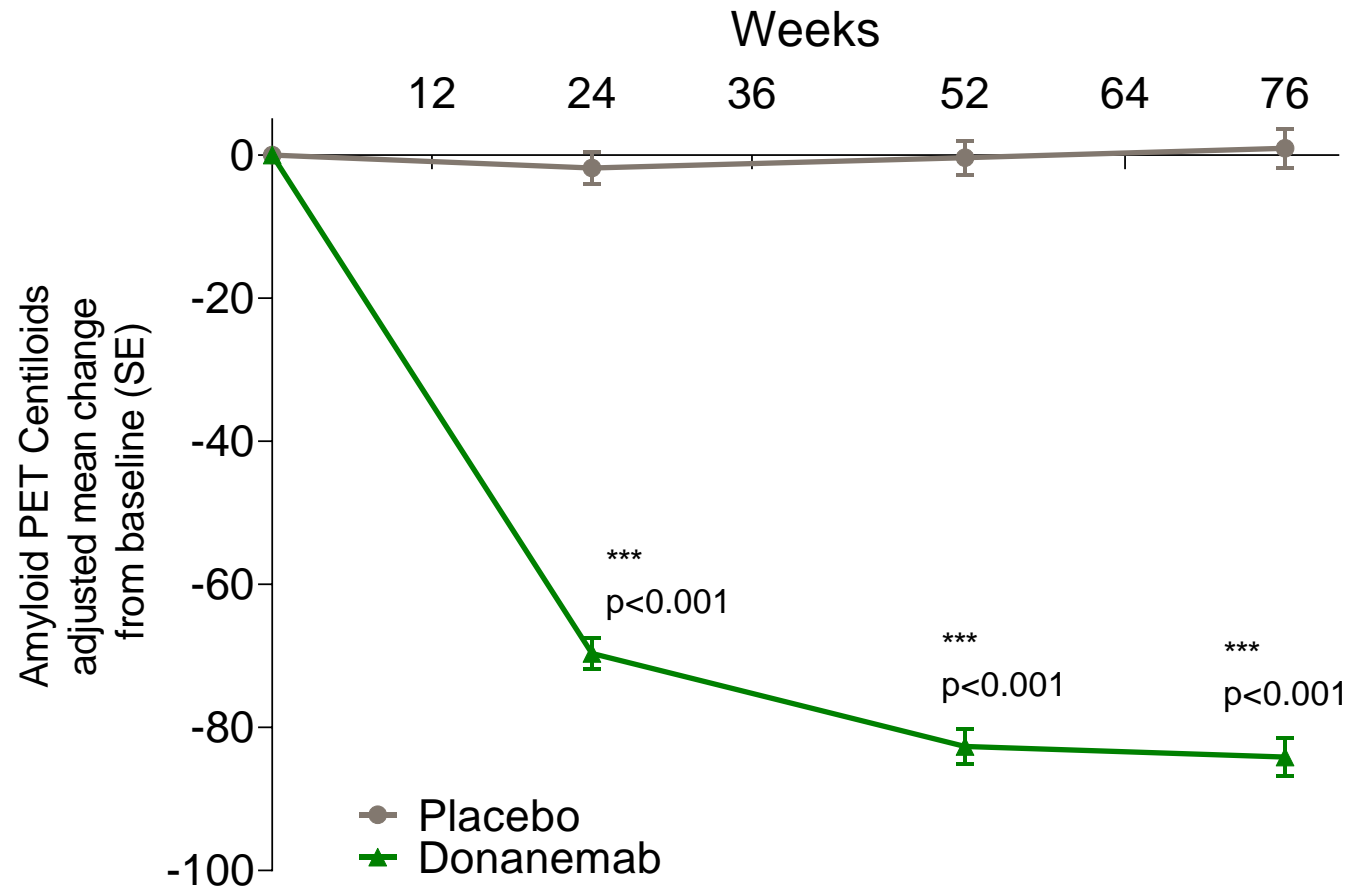
The Disease Progression Model (DPM) assumes a proportional treatment effect relative to placebo, includes diffuse priors and generated a posterior probability distribution of the disease progression ratio.

- MMRM model: at the 18-month endpoint
- Bayesian DPM: over the entire 18 months (95% credible intervals)

ADAS-Cog₁₃ = Alzheimer's Disease Assessment Scale - Cognitive subscale; ADCS-iADL = Alzheimer's Disease Cooperative Study - Activities of Daily Living Inventory; CDR-SB = Clinical Dementia Rating Scale; iADRS = Integrated Alzheimer's Disease Rating Scale; MMRM = Mixed-Model Repeated-Measures; MMSE = Mini-Mental State Examination

DONANEMAB SIGNIFICANTLY REDUCED AMYLOID PLAQUE

AVERAGE AMYLOID PLAQUE REDUCTION OF 85 CENTILOIDS AT 76 WEEKS



	12	24	36	52	64	76
Placebo n = 112	112	111	111	91	91	91
Donanemab n = 121	121	115	115	92	92	90
Donanemab amyloid negative <24.1 CL, n (%)		46 (40%)		55 (60%)		61 (68%)

	Centiloid LS Mean Change Δ (SE) Difference	SUVr LS Mean Change Δ (SE) Difference
W24	-67.83 (3.16)	-0.37 (0.017)
W52	-82.30 (3.41)	-0.45 (0.019)
W76	-85.06 (3.87)	-0.46 (0.021)

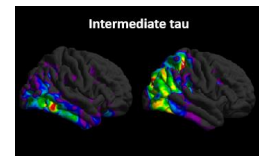
40% of donanemab-treated participants reached amyloid negative levels by 24 weeks

CL = Centiloids; LS = Least Squares; n = number of patients; SE = Standard Error; SUVr = Standardized Uptake Value ratio; W = weeks

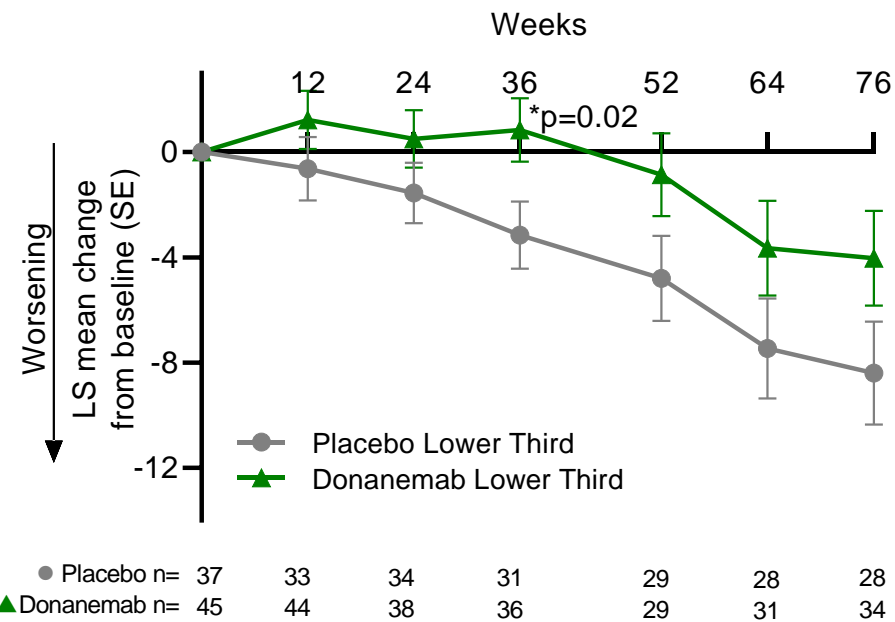
EXPLORATORY ANALYSIS OF iADRS BY BASELINE TAU



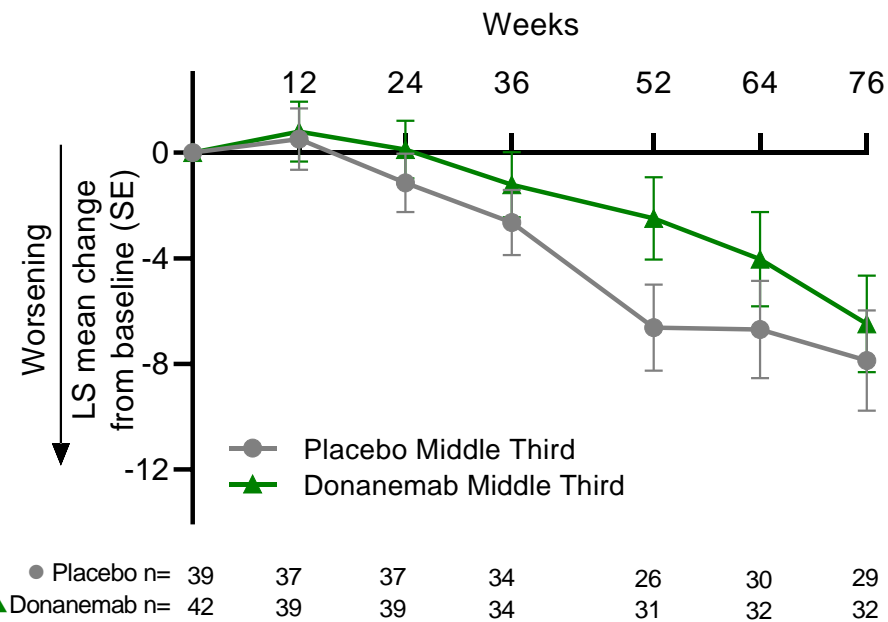
INTERMEDIATE TAU ENROLLED PATIENTS WERE FURTHER DIVIDED INTO TERCILES BY BASELINE TAU



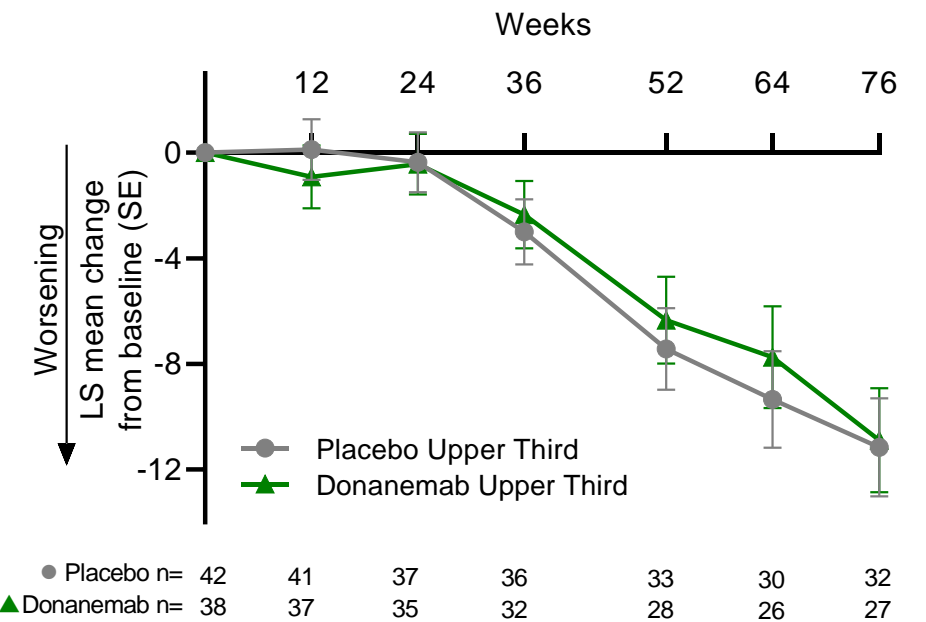
Lower baseline tau



Middle baseline tau



Upper baseline tau



Correlation of baseline frontal tau SUVR with change over 76 weeks:
 iADRS: $r = -0.26$; $p\text{-value} = 0.019$
 CDR-SB: $r = 0.27$; $p\text{-value} = 0.016$

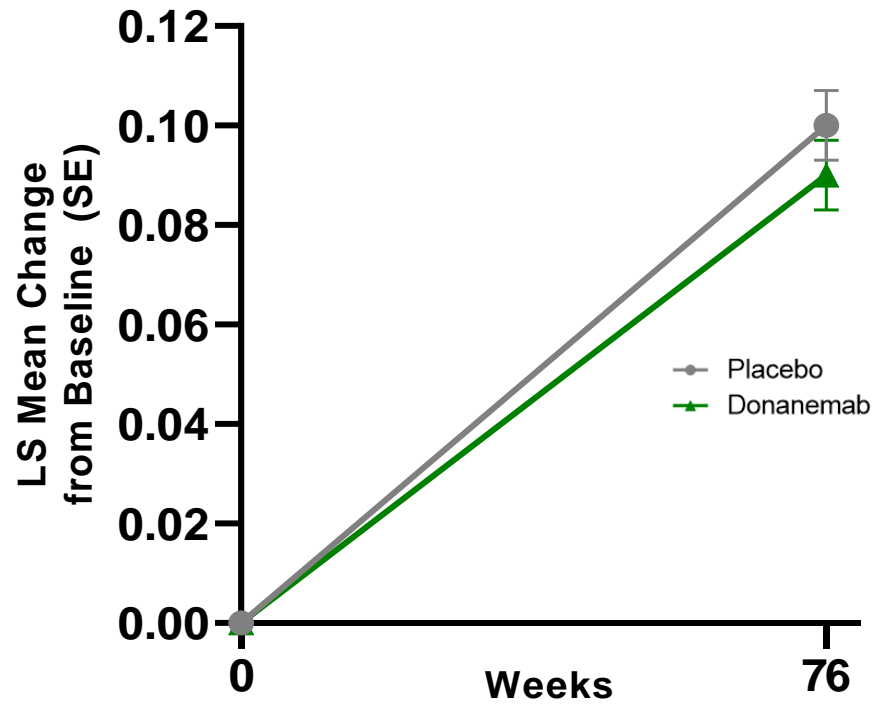
iADRS = Integrated Alzheimer's Disease Rating Scale; CDR-SB = Clinical Dementia Rating Scale; LS = Least Squares; n = number of patients; SE = Standard Error; SUVR = Standardized Uptake Value ratio

PRIMARY MEASURE OF GLOBAL TAU LOAD SHOWED NO SIGNIFICANT CHANGE

PRESPECIFIED EXPLORATORY REGIONAL ANALYSIS SHOWS SIGNIFICANT DECREASE IN TAU LOAD

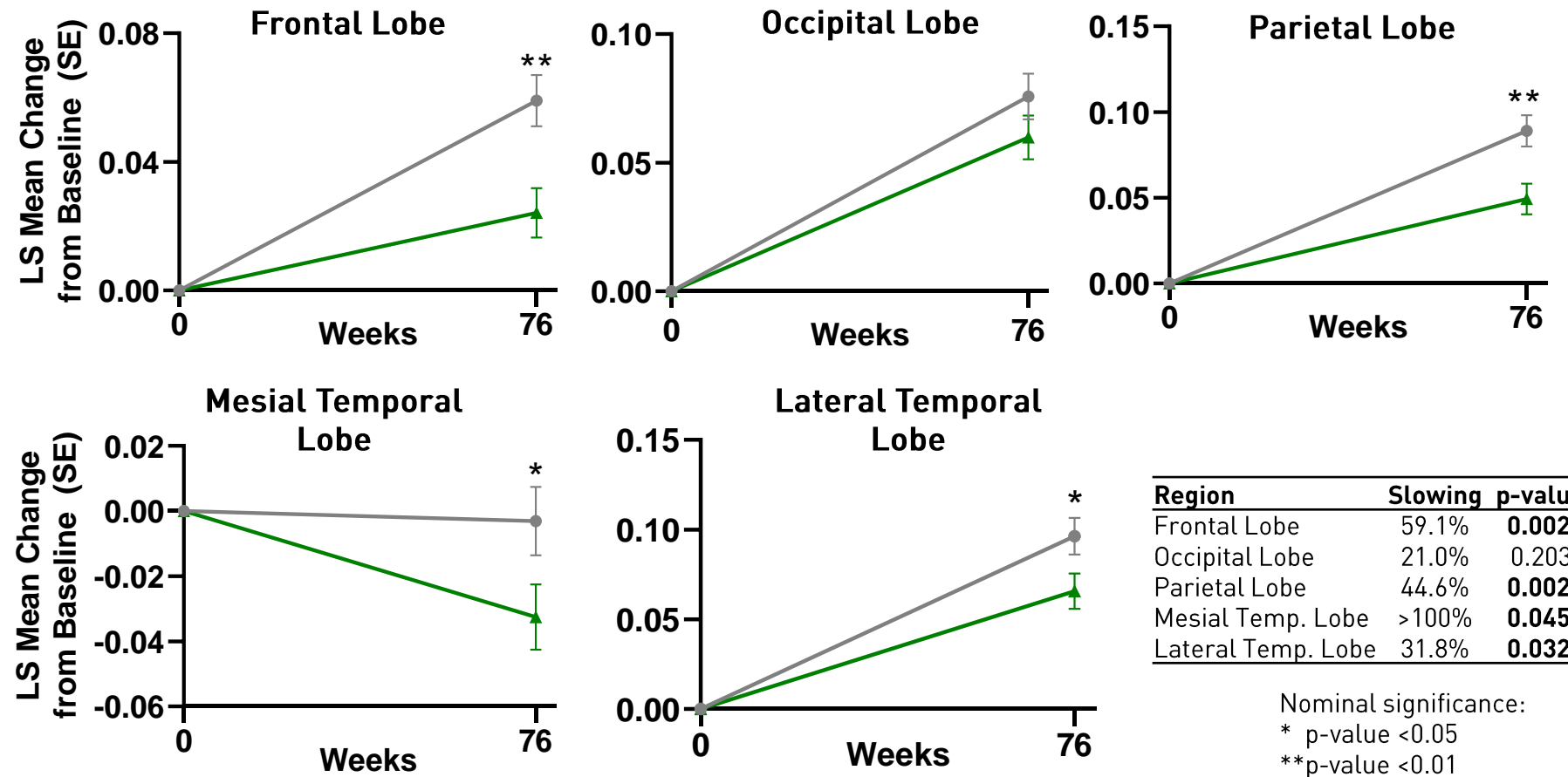


Global Tau Load (Tau¹⁰)



Treatment Arm	Baseline Mean (SD)	LS Mean Change from Baseline (SE)	p-value (treatment difference)
Donanemab	0.44 (0.163)	0.09 (0.007)	0.56
Placebo	0.46 (0.152)	0.10 (0.007)	

Regional SUVR with Cerebellar Gray Reference[#]



Note: Regional SUVRs were prespecified
#AAL Regions using posterior cerebellum gray matter reference region. LS = Least Squares; SE = Standard Error; SUVR = Standardized Uptake Value ratio

TRAILBLAZER-ALZ Summary



TRAILBLAZER-ALZ significantly slowed disease progression in early AD

Strong efficacy signal demonstrated by 32% slowing of decline as measured by iADRS



Consistent improvements observed across all secondary clinical endpoints

Consistency seen across analysis methods and across timepoints with early separation from placebo on functional scales



Alzheimer's disease treatment needs to stage patients by pathology

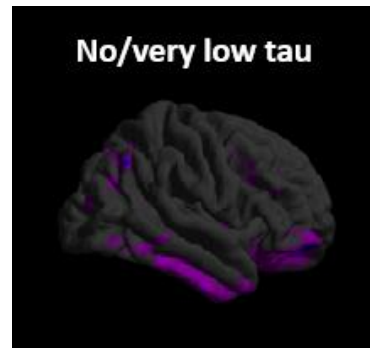
Tau is validated to stage AD pathology providing biomarker for predicting disease progression and surrogate for treatment outcome

TRAILBLAZER-ALZ 2 STUDY DESIGN

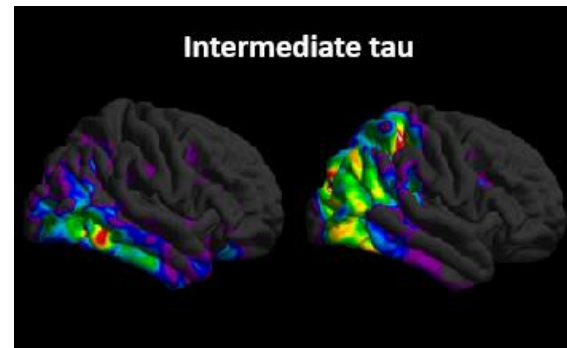


EARLY AD PATIENT POPULATION

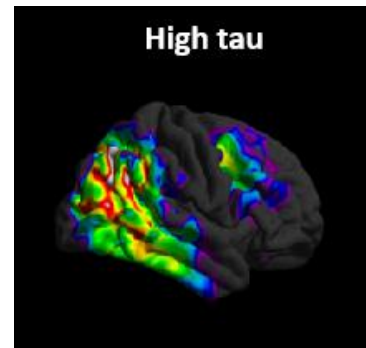
- Early symptomatic Alzheimer's disease
- Pathologically staged by PET:
 - Amyloid positive AND
 - Stratified for intermediate or high tau burden



EXCLUDED



INCLUDED



ENROLLED
(excluded from primary)

MODIFICATIONS TO STUDY DESIGN

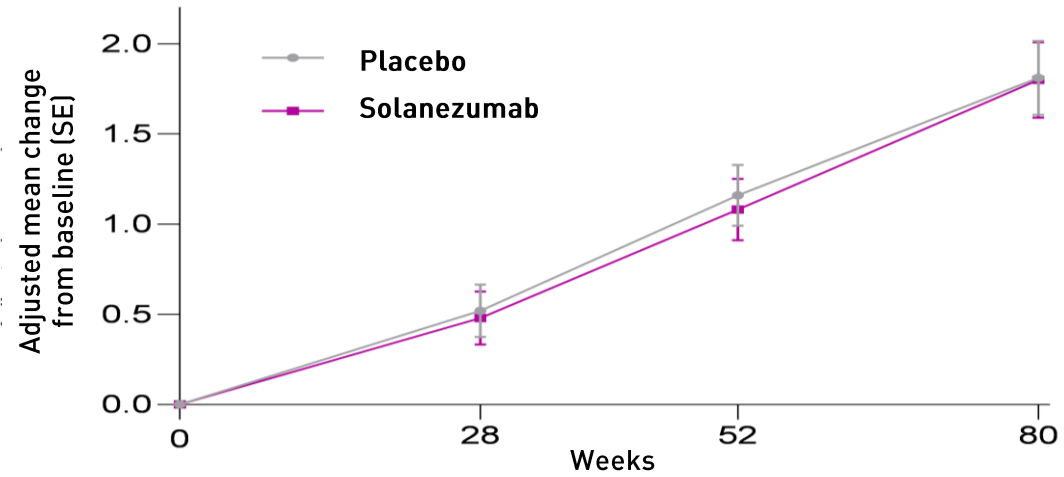
- Phase 3 study
- Focusing on intermediate tau patients for primary analysis
- Continuing to enroll high tau patients to inform future treatment guidelines; planning for pre-specified analyses of this group as well as subgroups within the intermediate tau primary analysis population
- Increasing sample size
 - 1,000 intermediate tau patients
 - Anticipate up to 1,500 total patients (~500 high tau patients)
- Primary endpoint changing to iADRS from CDR-SB

CDR-SB HAS NOT BEEN RELIABLE

CDR-SB DOES NOT REPLICATE, EVEN IN IDENTICALLY DESIGNED SISTER TRIALS

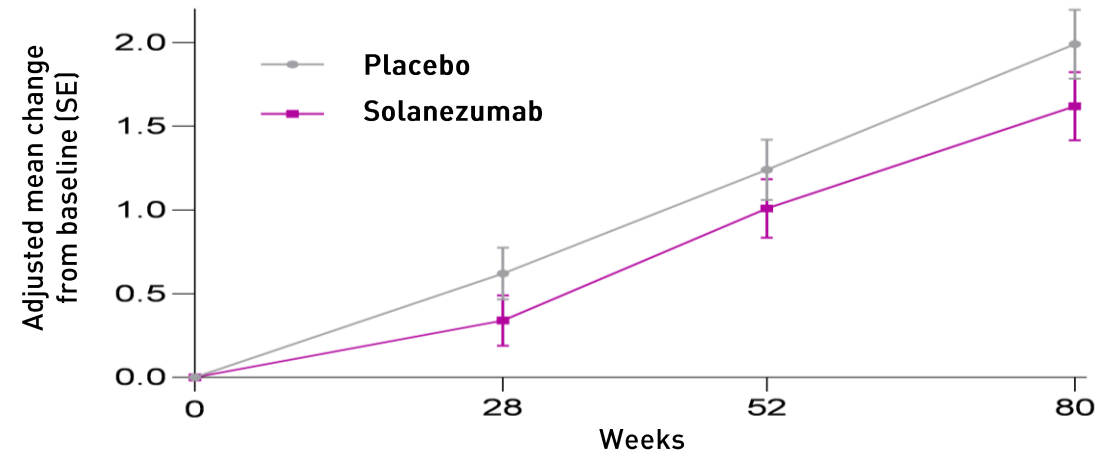


Change From Baseline on the CDR-SB Over Time, Expedition (Mild AD)



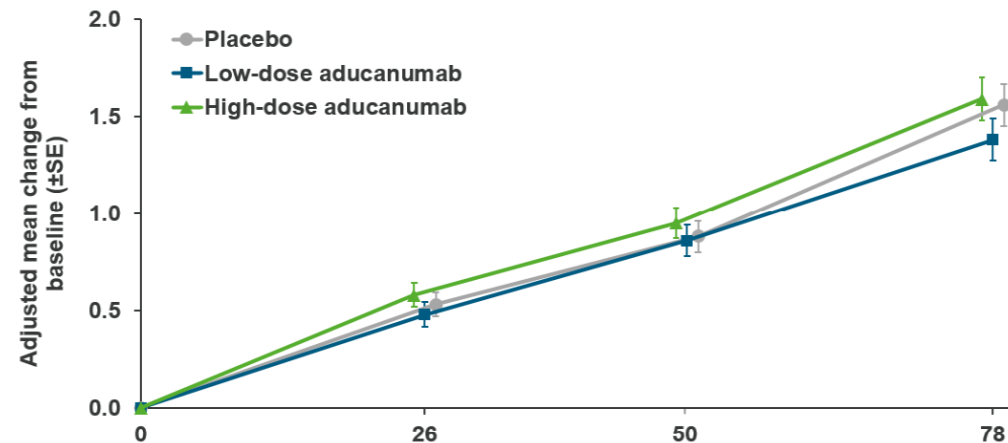
Placebo, n	336	295	280	262
Solanezumab, n	285	285	274	250

Change From Baseline on the CDR-SB Over Time, Expedition 2 (Mild AD)



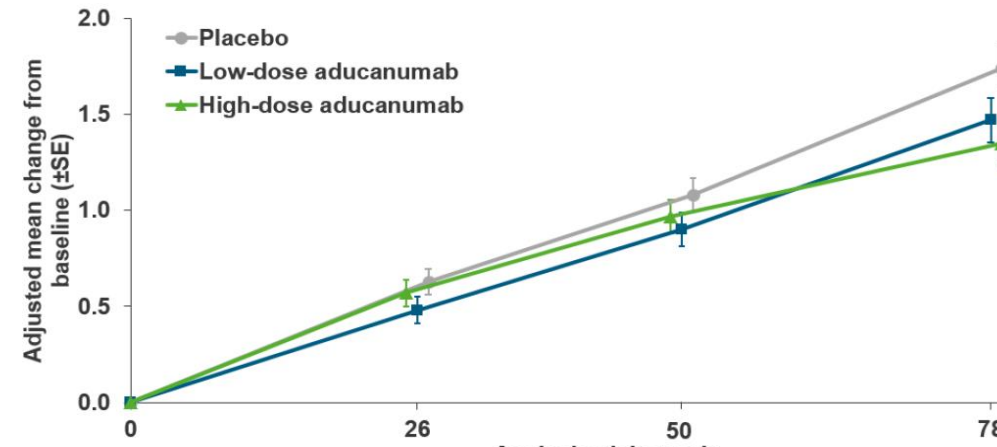
Placebo, n	334	292	273	259
Solanezumab, n	319	284	262	249

Figure 13: Change From Baseline on the CDR-SB Over Time, Study 301



Patients, n				
Placebo	545	522	455	333
Low dose	547	529	456	331
High dose	554	532	449	295

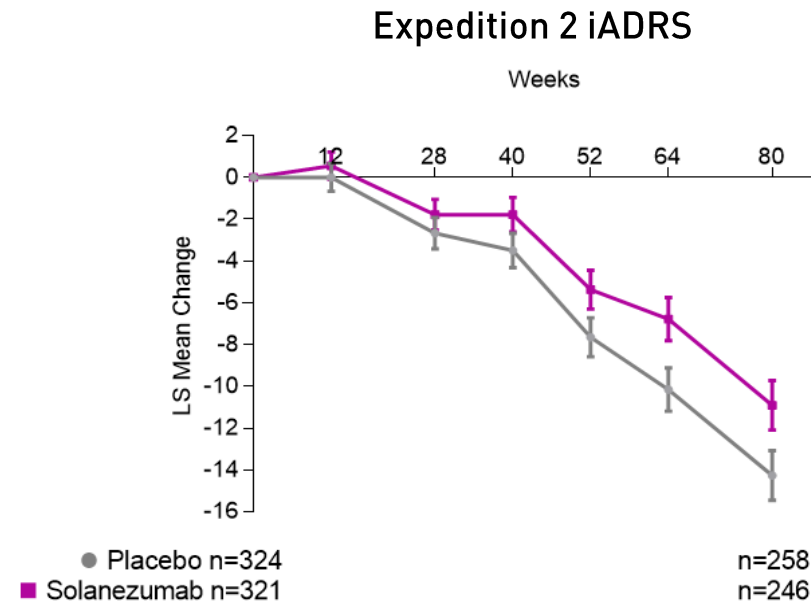
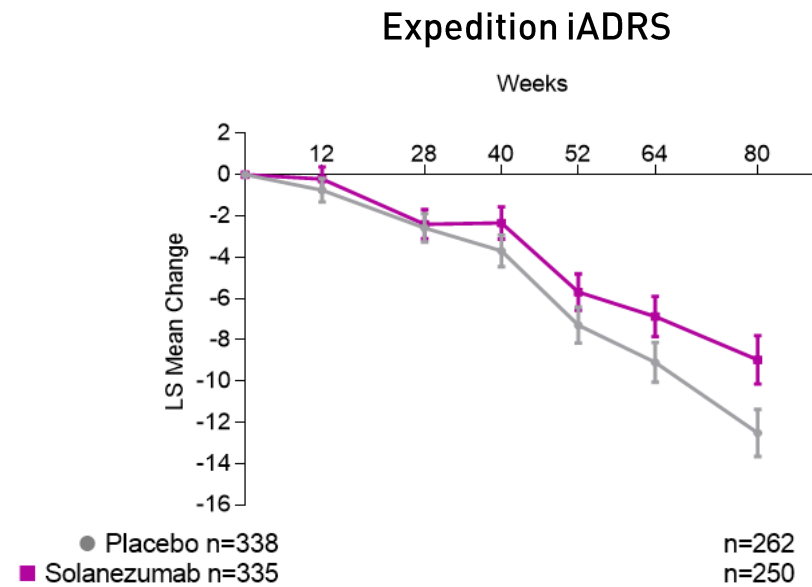
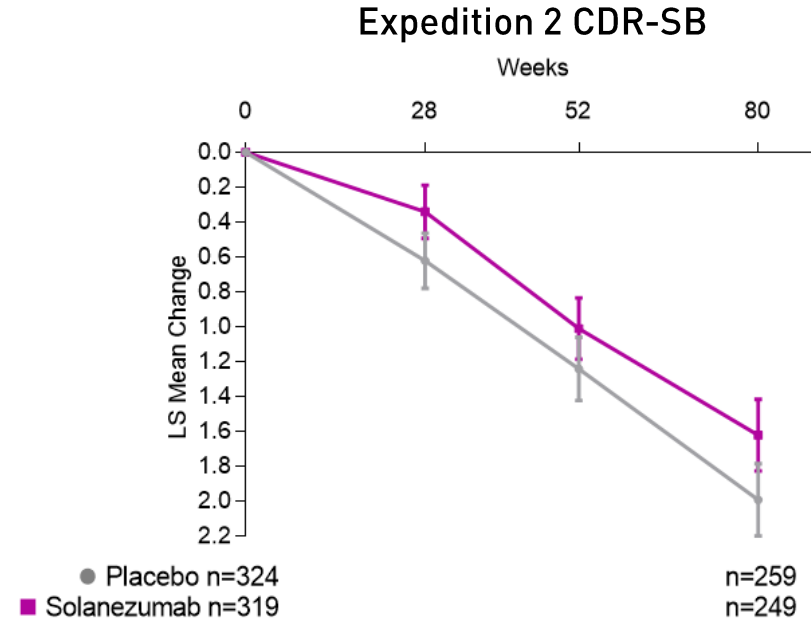
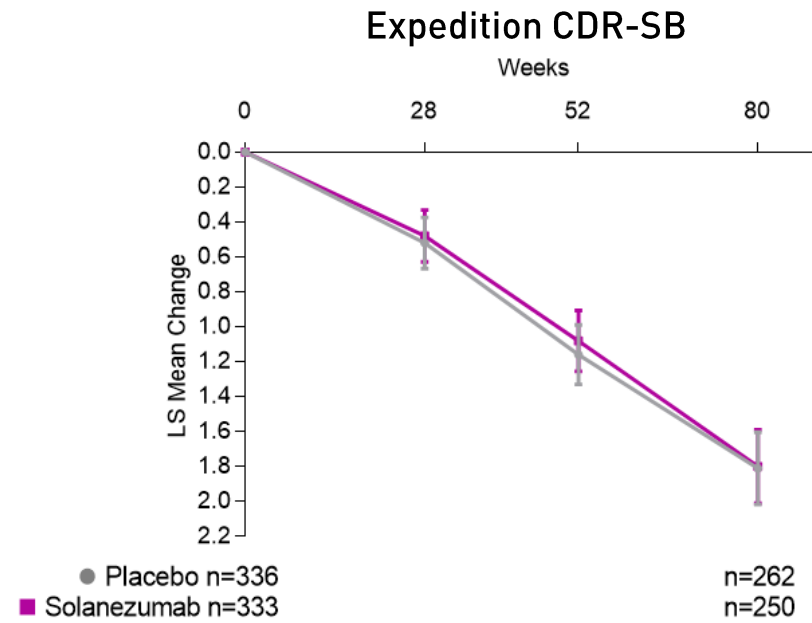
Figure 5: Change From Baseline on the CDR-SB Over Time in Study 302



Patients, n				
Placebo	548	532	430	288
Low dose	543	513	420	290
High dose	547	513	431	299

Figure 13 and Figure 5 source: PCNS-20201106-Combined FDA Biogen Backgrounder
CDR-SB = Clinical Dementia Rating Scale

iADRS IS MORE RELIABLE AND CONSISTENT THAN CDR-SB



iADRS = Integrated Alzheimer's Disease Rating Scale; CDR-SB = Clinical Dementia Rating Scale

DONANEMAB NEXT STEPS



INTEND TO REPLICATE RESULTS

- Failure of replication has led to uncertainty around the amyloid hypothesis
- Inconsistent results create uncertainty for patients, physicians and payers
- Replication allows confirmation of subgroups that may show increased benefit or no benefit

TRAILBLAZER-ALZ 2

- Second pivotal study with enrollment expected to complete in the second half of 2021
- Primary efficacy data from 18-month timepoint expected in the first half of 2023
- Ongoing discussions with regulators

DONANEMAB POTENTIAL



KEY CONSIDERATIONS

- Limited treatment duration, expected benefit extending beyond the time on treatment
- Using diagnostics to identify patients who are most likely to show greatest benefit
- Synergy with Lilly's leadership in imaging diagnostics
- Global reach can be facilitated by blood-based diagnostic, currently under development at Lilly

ESTIMATED EARLY AD PREVALENCE

- 4.5M early Alzheimer's patients in the U.S. (mild AD plus mild cognitive impairment)
- 1-2M U.S. patients that match TRAILBLAZER entry criteria, 4-5M globally
- Expect this population to grow over time as the elderly population increases
- Every patient with AD will meet the criteria at some point during disease course

Summary



Large unmet need in Alzheimer's disease

Lilly is dedicated to being a part of the solution and has made a meaningful step forward with the positive TRAILBLAZER-ALZ results



Aim to bring a disease modifying treatment to early Alzheimer's patients

Focus on staging participants by amyloid and tau levels in clinical trial design to identify the right patient



Second pivotal study, TRAILBLAZER-ALZ 2 ongoing

Regardless of regulatory requirements, Lilly plans to replicate results observed in TRAILBLAZER-ALZ



QUESTIONS AND ANSWERS

**LILLY UNITES
CARING WITH DISCOVERY
TO CREATE MEDICINES THAT
MAKE LIFE BETTER
FOR PEOPLE
AROUND THE WORLD**

Lilly