Assessing Meaningful Benefit in Early Stages of Alzheimer's Disease (AD)

This content is intended for health care professionals for educational and informational purposes and does not substitute for sound medical judgement or clinical decision making in the context of medical treatment

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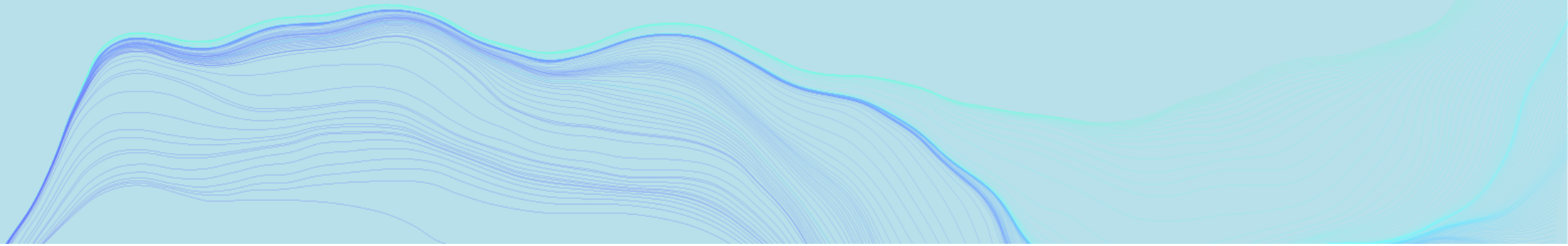
Contents

AD, Alzheimer's disease; CDR-SB, Cognitive Dementia Rating – Sum of Boxes.

Evolving AD Treatment Landscape Towards Earlier Intervention



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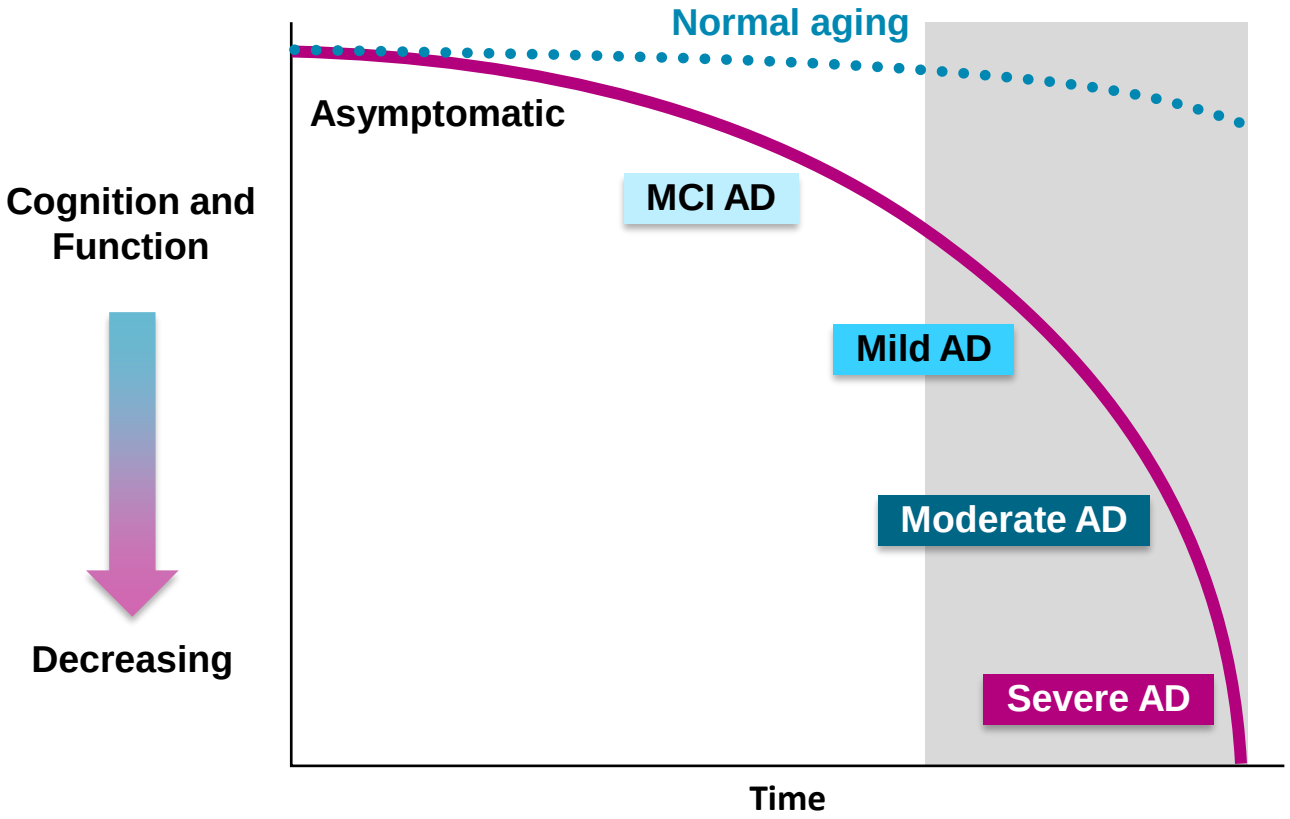
AD Is a Chronic Progressive Disease That Accelerates After the Early AD Stage

Hypothetical Model of Decline Across the AD Continuum Versus Normal Aging[1,2]



AD impacts multiple domains and daily activities[3]

- Difficulty remembering appointments
- Unable to drive or manage finances
- Requires assistance to dressing, grooming, personal care
- Fully dependent on others

Due to the neurodegenerative nature and accelerating progression in later stages of AD, it is crucial to intervene in early stages[4]

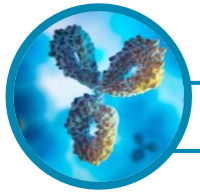
Figure adapted from Forlenza OV et al BMC Med. 2010;8:89.
AD, Alzheimer's disease; MCI, mild cognitive impairment.
1. Forlenza OV et al BMC Med. 2010;8:89; 2. Sperling R et al. Alzheimers Dement. 2011;7:280–292; 3. Hartz SM et al. Alzheimers Dement (N Y). 2025;11(1):e70033; 4. Crous-Bou M et al. Alzheimers Res Ther. 2017;9(1):71.

AD Therapeutic Development Has Shifted From Symptomatic Treatments for Later Stages to Anti-Amyloid Treatments for Early Stages

Preclinical AD | MCI due to AD | Mild AD dementia | Moderate AD dementia | Severe AD dementia

Symptomatic therapy

- **Established therapies** that improve cognitive and behavioral symptoms in people with AD **without altering** the **underlying disease mechanism**[3]
- **Symptomatic** therapies are indicated for **mild-to-severe dementia**[4]



Anti-amyloid therapy

- **Emerging therapies** that slow AD progression[1]
- These therapies modify underlying AD pathophysiological mechanisms[1]
- **Anti-amyloid** therapies are indicated for **early symptomatic AD**, including MCI or mild dementia due to AD[2]

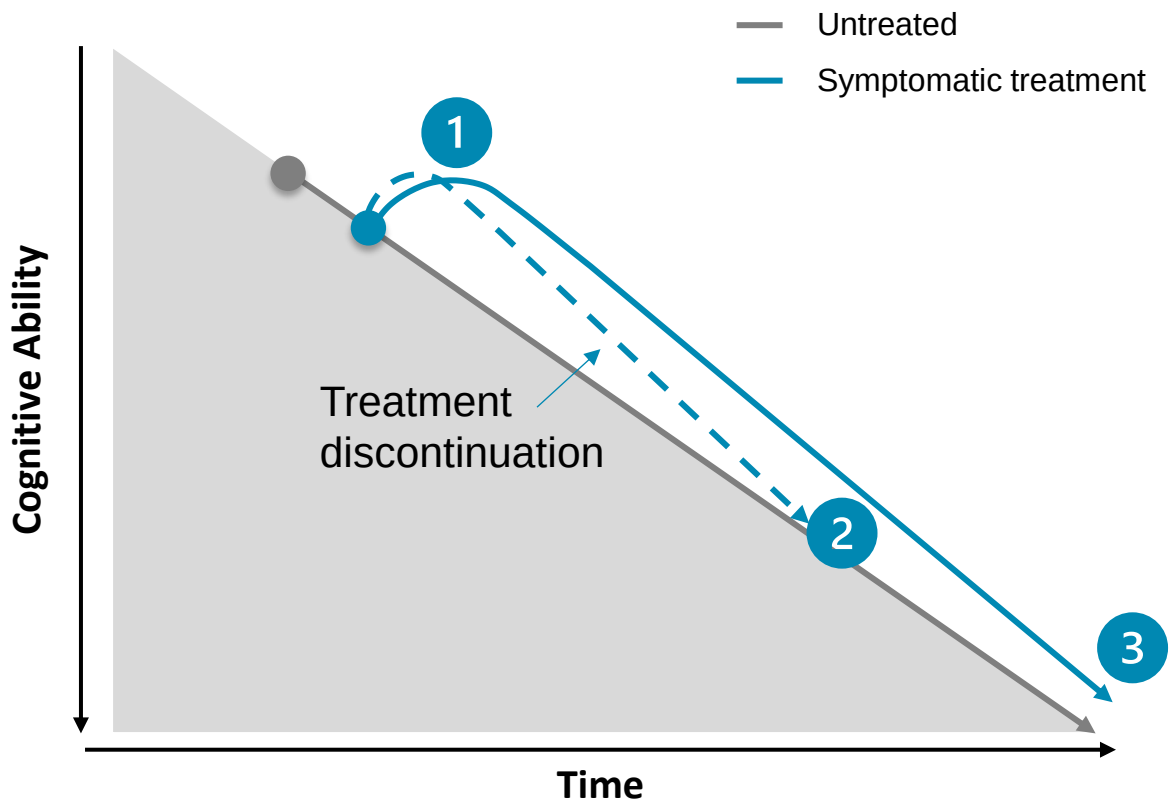
Anti-amyloid therapies are expected to produce an enduring change in the clinical progression of AD. The effects of symptomatic therapies do not persist after the treatment is stopped[1]

AD, Alzheimer's disease; MCI, mild cognitive impairment.

1. Cummings J, Fox N. J Prev Alzheimers Dis. 2017;4(2):109–115; 2. Schindler SE et al. Nat Rev Neurol. 2024;20(7):426–439; 3. Cummings J. Mol Neurodegener. 2021;16(1):2;
4. National Institute on Aging. How is Alzheimer's disease treated? Available from: https://www.nia.nih.gov/health/alzheimers-treatment/how-alzheimers-disease-treated (Accessed March 2025).

Treatments Indicated for Later Stages of AD Impact Symptoms, Without Altering the Underlying Disease Course[1]

Hypothetical Illustration of Symptomatic Treatment Effects[2]



Clinical Effects[1,3,4]

1. Post-treatment clinical improvement or stabilization
2. Symptom improvement is transient and lost on treatment discontinuation
3. Since the underlying disease continues to progress at the same rate, the treatment effect diminishes over time

Molecular Effects[5]

- ✕ No biomarker evidence of impact on disease

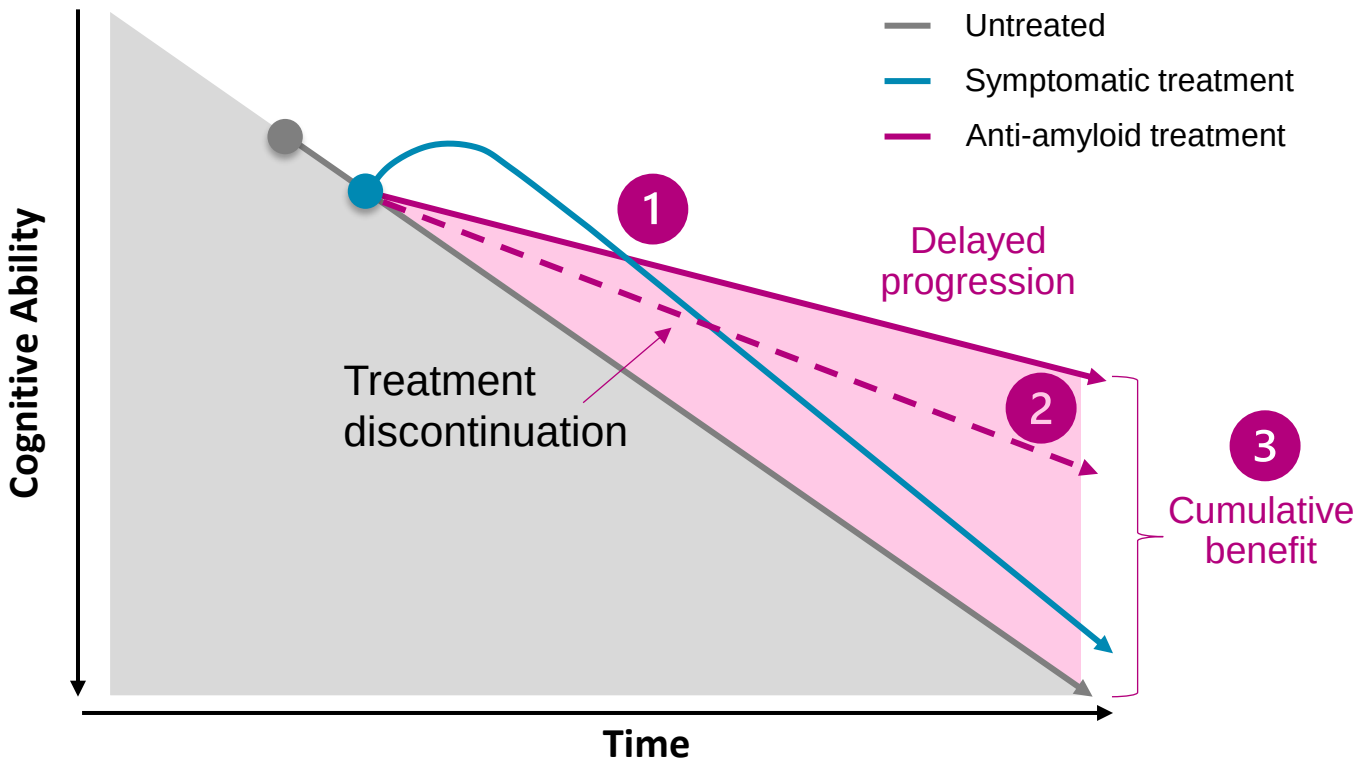
Symptomatic treatments can improve AD symptoms but do not slow down the underlying disease pathology[1,6]

Figure adapted from Cummings J. Alzheimers Dement. 2006;2(4):263–271.
AD, Alzheimer's disease.

1. Hefti FF, Bales R. Aging Cell. 2006;5(1):3–8; 2. Cummings J. Alzheimers Dement. 2006;2(4):263–271; 3. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 4. Cummings J, Fox N. J Prev Alzheimers Dis. 2017;4:109–115;
5. Cummings J et al. Alzheimers Dement (N Y). 2021;7:e12179; 6. Cummings J. Mol Neurodegener. 2021;16(1):2.

Anti-Amyloid Treatments Indicated for Early AD May Impact Symptoms and Slow the Rate of Disease Progression

Hypothetical Illustration of Symptomatic and Anti-Amyloid Treatment Effects[1,2]



Clinical Effects[3]

1. Post-treatment clinical improvement or stabilization
2. Differences in symptoms from untreated individuals is maintained during treatment discontinuation consistent with disease modification
3. Increasing delay of progression and drug-placebo difference over time

Molecular Effects[4]

Underlying biology and biomarkers of AD pathology are impacted

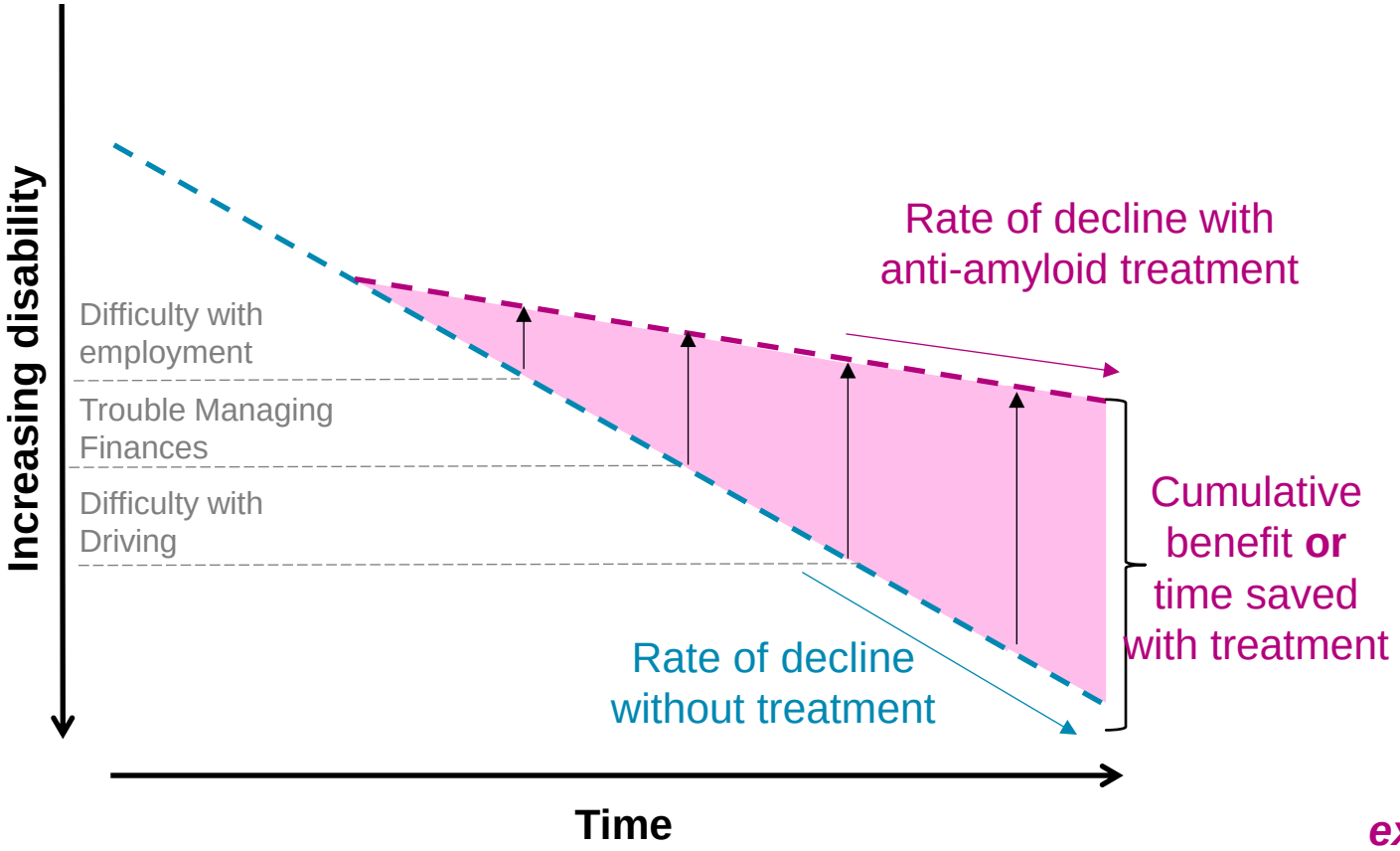
Anti-amyloid treatments affect the underlying AD pathophysiology, slow disease progression, and may allow patients to spend more time in the early stages of the disease[5]

Figure adapted from Cummings J. Alzheimers Dement. 2006;2(4):263–271.
AD, Alzheimer's disease.

1. Cummings J. Alzheimers Dement. 2006;2(4):263–271; 2. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 3. Cummings J, Fox N. J Prev Alzheimers Dis. 2017;4:109–115; 4. Cummings J et al. Alzheimers Dement (N Y). 2021;7:e12179; 5. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

The Cumulative Benefit of Anti-Amyloid Therapies is a Crucial Component of Defining Their Meaningful Benefit

Theoretical Rate of Decline With Anti-Amyloid Treatments[1,2]



- Slowing of cognitive and functional decline with anti-amyloid therapies is reflected in a **change in the rate or slope of decline**[3]
- Anti-amyloid therapy benefits are expected to be **time-dependent**, meaning the differences between treatment and placebo increase with longer therapy duration[3]
- Early intervention with a treatment that slows decline, may result in **"time saved"** or delay in decline due to the treatment[1–3]
- **Cumulative benefits** reflect the gradual accumulation of treatment effects over long-term anti-amyloid therapy[1,3]

Due to the potential for cumulative benefits, the meaningful benefit of anti-amyloid therapies is expected to increase with increased therapy duration[1,3]

1. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736; 2. Rentz DM et al. Alzheimers Dement. 2024;20(11):8162–8171; 3. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54.

There is an Unmet Need to Define Meaningful Benefit From Anti-Amyloid Treatments in Early Stages of AD

AD affects **multiple domains**, and the **rate of progression varies**. No single outcome captures meaningful treatment benefit[1]

Medical treatments are evaluated based on their **meaningful benefit** to patients and society[1]

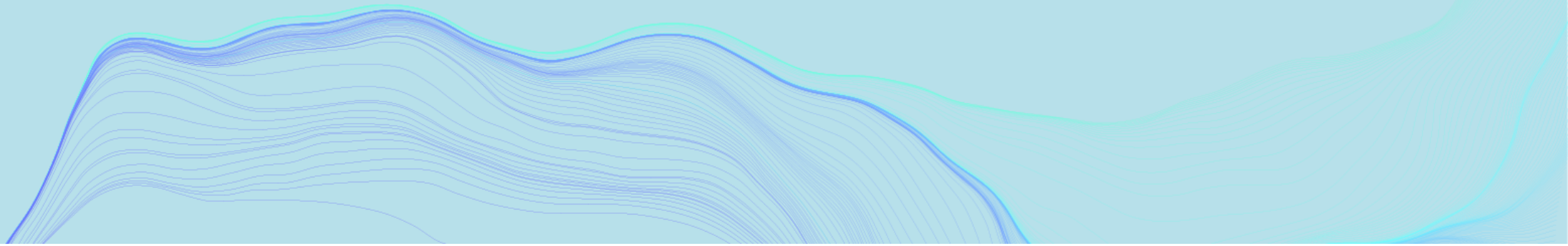
For **later-stage AD**, meaningful benefits from **symptomatic treatments** are measured by cognition and function outcomes[2–4]

With the advent of **anti-amyloid treatments**, there is an increasing need to measure the meaningful benefit of treatments **targeting underlying AD pathology** in **early stages** of AD[1,5]

AD, Alzheimer's disease.

1. Stoeckel LE, et al. Alzheimers Dement (N Y). 2025;11(1):e70058; 2. Van Dam D, De Deyn PD. Nat Rev Drug Discov. 2006;5(11):956–970; 3. Cummings J et al. J Prev Alzheimers Dis. 2017;4(2):109–115; 4. Atri A. Semin Neurol. 2019;39(2):227–240; 5. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 6. Stoeckel LE et al. Alzheimers Dement (N.Y). 2025;11(1):e70058.

Defining Meaningful Benefit With Anti-Amyloid Treatments



There are Several Considerations for Defining Meaningful Benefit With Anti-Amyloid Treatments

Considerations for Defining Meaningful Benefit With Anti-Amyloid Treatments Can Include:

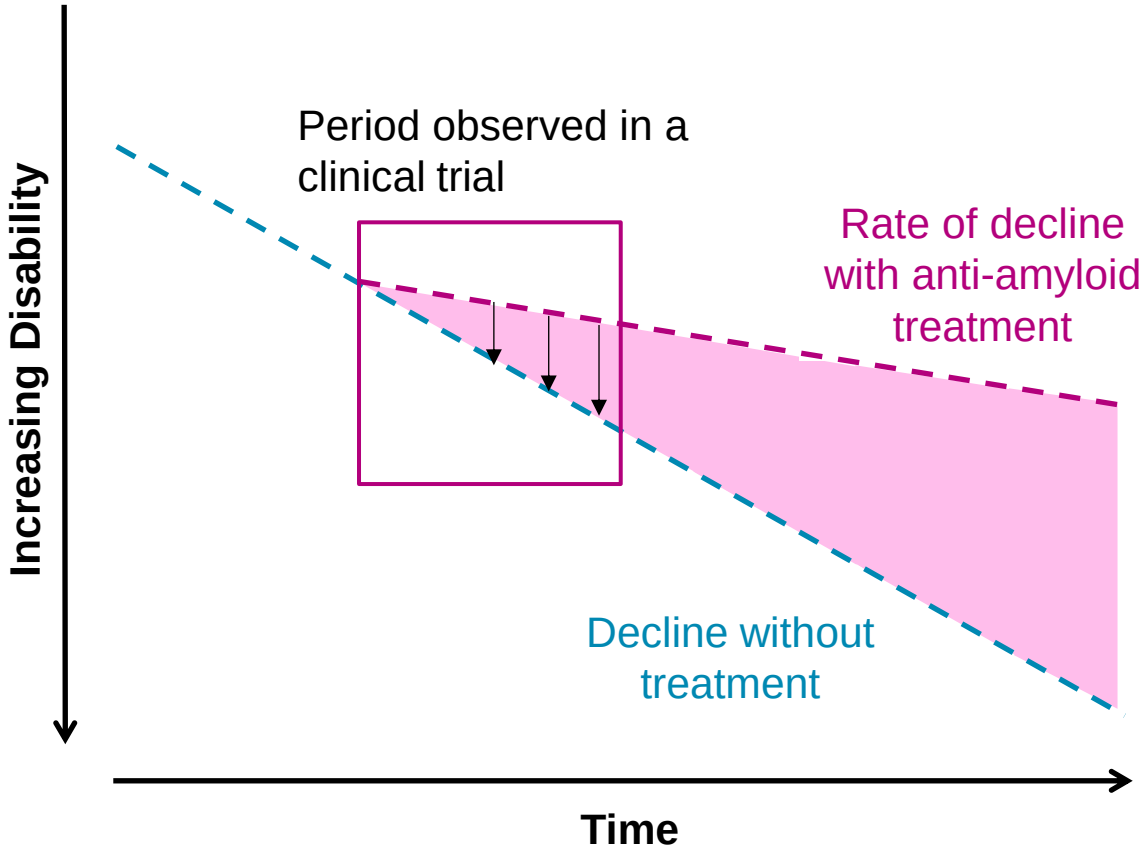
- Treatments should demonstrate efficacy on both **cognition** and **function**[1,2]
- Outcome measures should be **sensitive** enough to detect changes **within clinical trial periods** in **early stages** of AD[3,4]
- The benefits of anti-amyloid treatments are **cumulative** and may not become noticeably meaningful for several months or even years[1]
- **Comprehensive** analytical approaches may be needed to measure meaningful benefits **over time**[1]
- Various **stakeholder perspectives** should be considered[5]

AD, Alzheimer's disease.

1. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 2. McDougall F et al. J Prev Alzheimers Dis 2021; 8:151–160; 3. Posner H et al. Innov Clin Neurosci 2017;14:22–29; 4. Jutten RJ et al. Alzheimers Dement (N Y) 2020;6:e12020; 5. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

Outcomes Should Be Sensitive Enough to Demonstrate Efficacy on Both Cognition and Function in Early Stages of AD

Theoretical Rate of Decline With Anti-Amyloid Treatments[1]



To detect subtle changes in the early stages of AD, clinical trial outcomes need to:

- **Detect changes during the clinical trial period[1]**
- **Have acceptable levels of reliability and validity, and sensitivity to change over time[2]**
- **Feature complex instrumental activities of daily living, which are prone to early cognitive decline[3]**

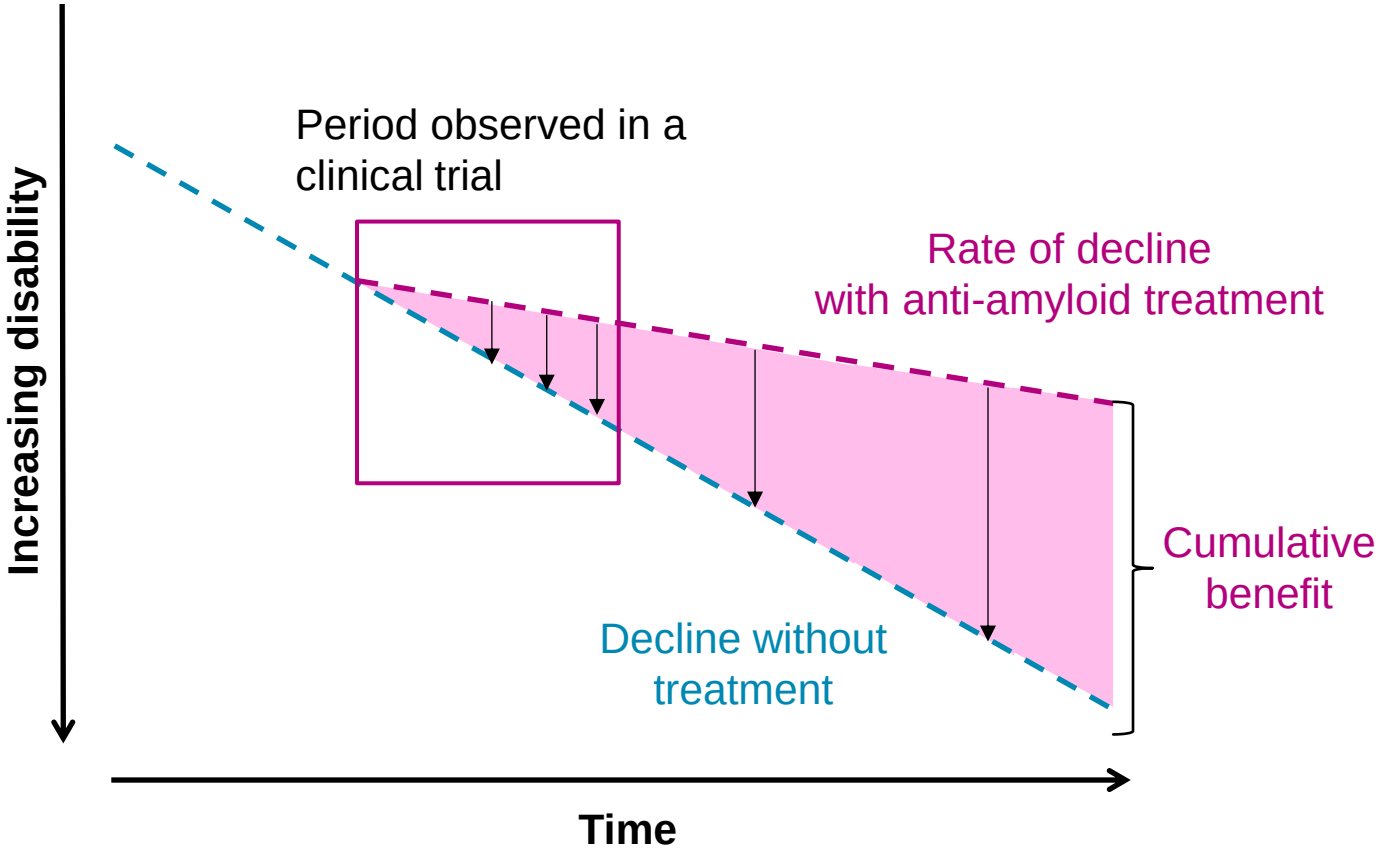
A statistically significant change in clinical outcome measures over an 18- to 24-month clinical trial may signify meaningful changes in succeeding years[4]

AD, Alzheimer's disease.

1. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 2. Posner H et al. Innov Clin Neurosci 2017;14:22–29; 3. Jutten RJ et al. Alzheimers Dement (N Y) 2020;6:e12020; 4. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

The Benefits of Anti-Amyloid Treatments are Cumulative and May Not Become Noticeably Meaningful For Several Months or Even Years

Theoretical Rate of Decline With Anti-Amyloid Treatments[1]



Due to the complex pathophysiology and heterogeneous disease trajectory of AD:[1–3]

- **Changes in the rate of disease progression may take years to become apparent after treatment initiation**
- **Treatment must be initiated early enough to observe a treatment effect, but late enough to measure progression**
- **Treatments slowing disease progression may lead to cumulative benefit; this can be shown by widening drug-placebo differences**

AD, Alzheimer's disease.

1. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 2. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736; 3. Stoeckel LE et al. Alzheimers Dement (N.Y). 2025;11(1):e70058.

Patients and Their Care Partners Can Help Identify Meaningful Outcomes Across the AD Continuum

Remembering things on a list

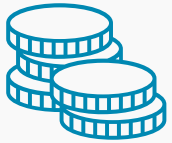
Recognizing people known for a long time

Not getting lost in familiar surroundings or putting things in wrong places

Remembering appointments and names

Able to follow instructions

Taking medications correctly



Managing money or pay bills correctly; not have difficulty at work

Sense of purpose; completing basic household activities

Being able to stay safe and not feeling like a burden

Not feeling down or depressed, worried, anxious or stressed

Patient perspective

Care partner perspective

Patient and care partner perspective

Individuals with AD and their care partners have shared goals related to maintaining independence and emotional well being*

*This was a web-based survey for individuals with AD and their care partners (N=274) to evaluate the importance of different concepts including treatment-related needs, symptoms, impacts, and outcomes. Care partner respondents were asked to indicate how important it was to them that the care recipient was able to avoid the specific symptom or impact or maintain the specific ability or function captured by that item.

AD, Alzheimer's disease.

Hauber B et al. Neurol Ther. 2023;12:505–527.

Broader Perspectives About Defining Meaningful Benefit Emerge When Considering Stakeholders Beyond Individuals Affected by AD

Timely and effective treatment benefits impact real-world implementation and approval by:[1,2]

- Healthcare systems and HCPs
- Regulatory agencies

Individuals affected by AD

Measuring the various benefits and costs associated with treatment can support decision-making for:[1,2]

- Healthcare payers
- Society

AD, Alzheimer's disease; HCP, healthcare professional.

1. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 2 Stoeckel LE et al. Alzheimers Dement (N.Y). 2025;11(1):e70058.

Utility of CDR-SB in Assessing the Meaningful Benefits of Anti-Amyloid Treatments

CDR-SB Is a Global Cognitive and Functional Scale Encompassing 6 Domains

Domains

Cognition			Function		
Memory	Orientation	Judgment/ Problem-solving	Community	Home/ Hobbies	Personal care

Scoring

- Each domain is graded as follows: 0, 0.5, 1, 2, 3
- Total scores range from 0 to 18
- Higher scores indicate greater disease severity

Scores by AD Severity

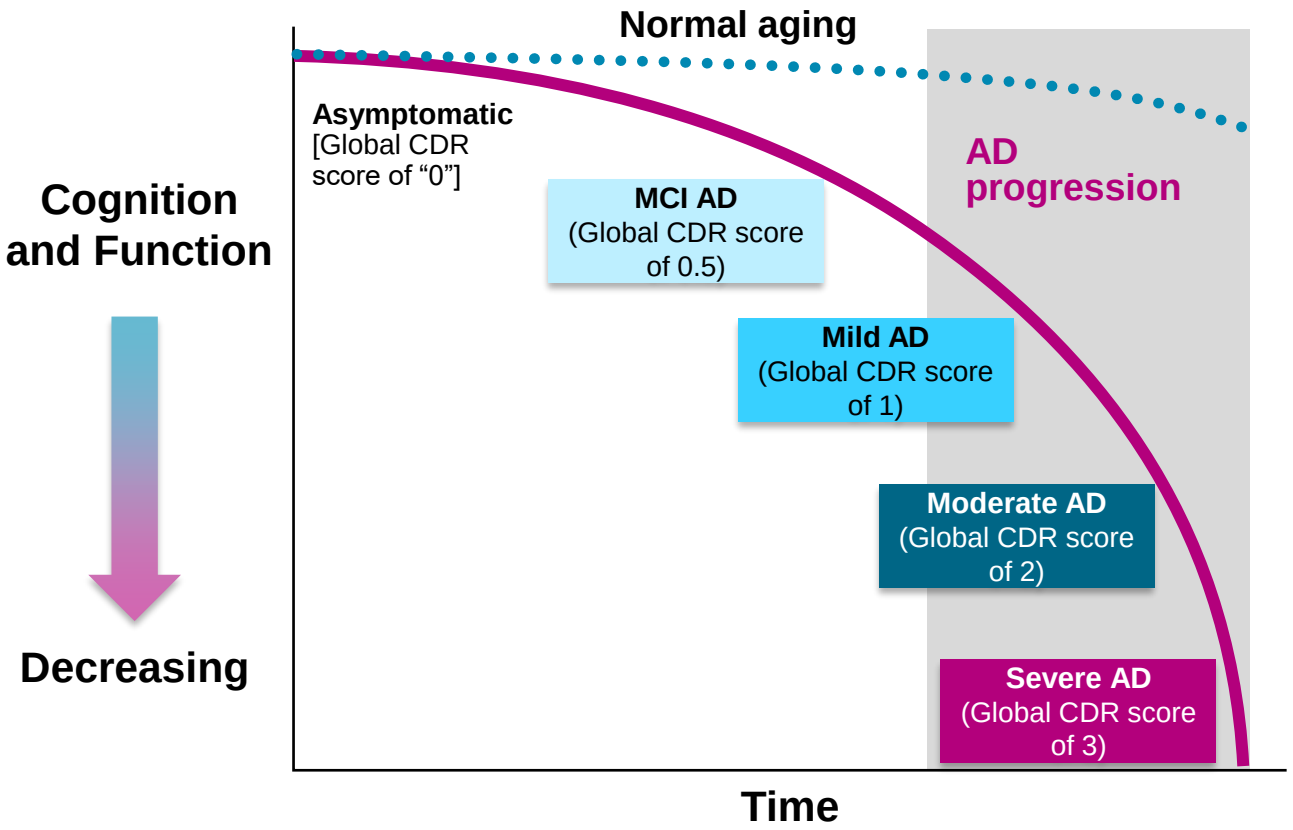
CDR-SB Total Score	Disease Severity	Global CDR score
0	Normal	0 (normal)
0.5–4.0 0.5–2.5 3.0–4.0	Questionable cognitive impairment to very mild dementia Suggests questionable cognitive impairment Suggests very mild dementia	0.5 (very mild)
4.5–9.0	Suggests mild dementia	1 (mild)
9.5–15.5	Suggests moderate dementia	2 (moderate)
16.0–18.0	Suggests severe dementia	3 (severe)

AD, Alzheimer's disease; CDR-SB, Cognitive Dementia Rating – Sum of Boxes.

O'Bryant S et al. Arch Neurol. 2008;65(8):1091–1095.

CDR-SB is a Global Measure of Both Cognition and Function that Can Help Determine a Clinically Meaningful Effect

Change in CDR Score Across the AD Continuum[1,2]

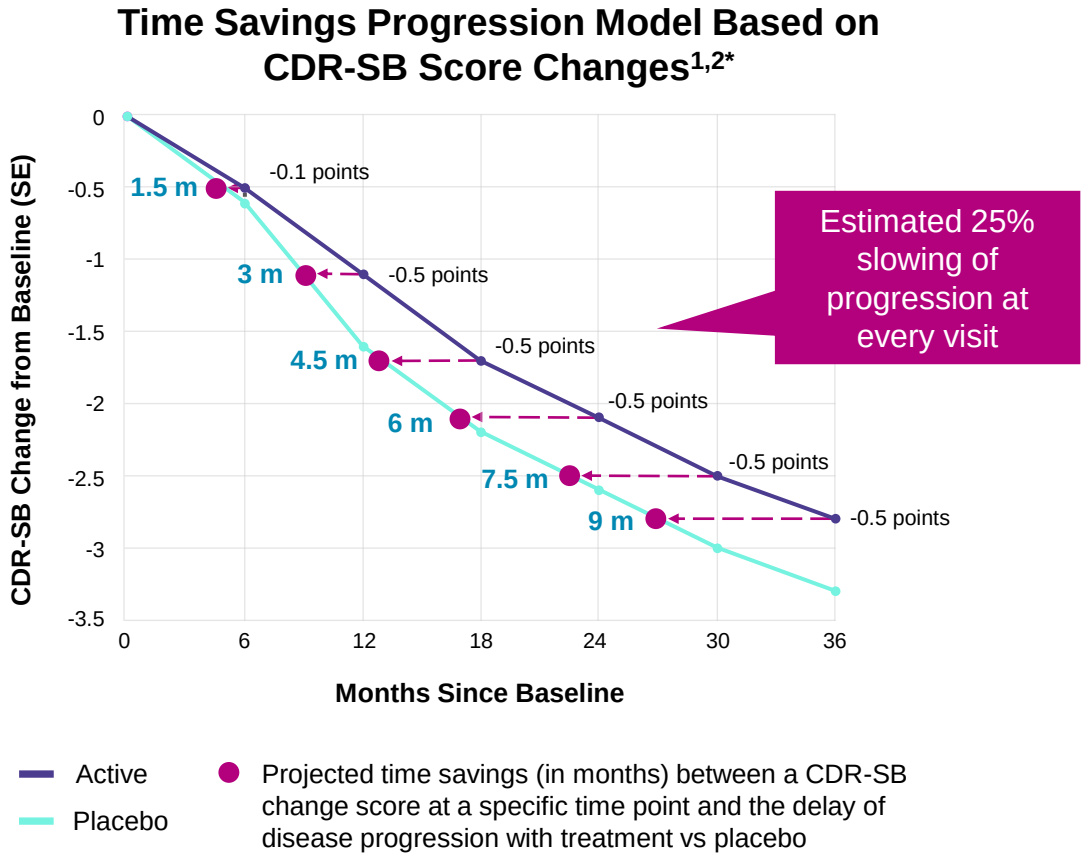


The CDR-SB is an Inherently Clinically Meaningful Outcome for Early Stages of AD

- It **assesses subtle changes** in cognition and function in early stages[3,4]
- It is a **continuous measure** that is sensitive to change over time[3,4]
- Any increment of change on an individual domain of the CDR-SB (e.g., 0.5 or 1) is considered to be **clinically meaningful** for an individual[5]

Figure adapted from Forlenza OV et al BMC Med. 2010;8:89.
AD, Alzheimer's disease; CDR, Clinical Dementia Rating; CDR, Clinical Dementia Rating – Sum of Boxes; MCI, mild cognitive impairment.
1. Forlenza OV et al BMC Med. 2010;8:89; 2. O'Bryant S et al. Arch Neurol. 2008;65(8):1091–1095; 3. Posner H et al. Innov Clin Neurosci 2017;14:22–29; 4. Tarawneh R, et al. Alzheimers Res Ther. 2024;16(1):37;
5. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

The CDR-SB Is Able to Capture Meaningful Changes in Function and Cognition in Early-Stage AD



- A patient with a 25% slowing of progression on CDR-SB† over a given time point gains **additional time** in milder disease stages[1]
- A **0.5 reduction in CDR-SB‡** score within a single domain would represent a **noticeable loss** of independence, function, and ability in early stages of AD[1]

Figure adapted from Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.
*The graph is based on a progression model for repeated measures to illustrate the time savings between a CDR-SB score change at a specific time point and the slowing or delay of disease progression.[1] A 25% reduction in progression is frequently cited as an appropriate benchmark for clinical meaningfulness.[3] ‡CDR-SB is the total of scores from each of 6 CDR domains, with each domain graded on this scale: 0, 0.5, 1, 2, 3.
AD, Alzheimer's disease; CDR-SB, Clinical Dementia Rating – Sum of Boxes; m, months; SE, standard error.
1. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736; 2. Tarawneh R, Pankratz VS. Alz Res Therapy. 2024;16(37):1-13. 3. Insel PS et al. Neurology. 2019;93(4):e322–e333.

A Small Change in the CDR-SB Score May Represent Meaningful Benefit in Early Stages of AD

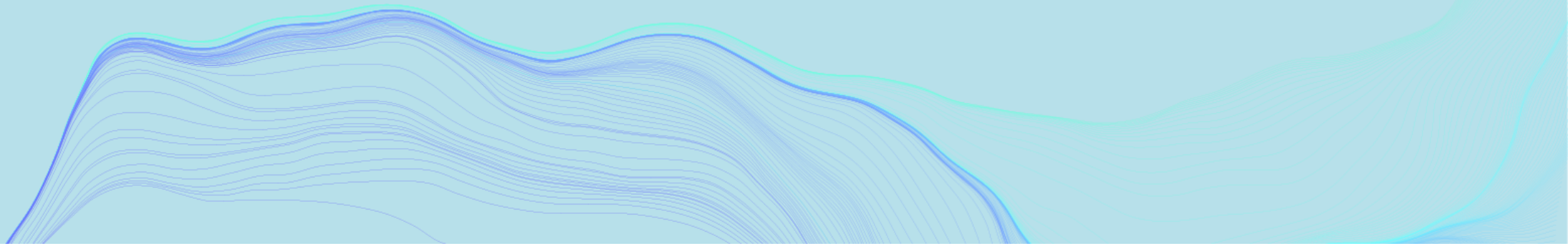
Potential Impact of a 0.5 Change in CDR-SB Score

CDR Domain Score	Memory	Community Affairs	Home/Hobbies
0.5 (very mild impairment)	• Consistent forgetfulness • Partial event recollection	• Slight impairment	• Life at home, hobbies, and intellectual interests slightly impaired
1 (mild impairment)	• Moderate memory loss • Noticeable for recent events • Daily activities affected	• Unable to function independently • May engage in some activities • Appears normal to casual inspection	• Definite mild impairment of function at home • Difficult chores and interests abandoned

A 0.5 change in CDR-SB score within a single domain in early stages of AD may be meaningful to patients because it could represent a noticeable loss of independence or functional abilities

AD, Alzheimer's disease; CDR, Clinical Dementia Rating; CDR-SB, Clinical Dementia Rating – Sum of Boxes.
Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

Contextualizing the Meaningful Benefits of Anti-Amyloid Treatments



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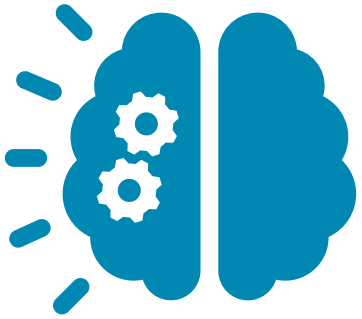
Understanding the Benefit of AD Treatments is Crucial for Guiding Clinical Decision Making



Clinical Benefits of AD Treatments Can Include:

- Improvement in symptoms
- Slowing of disease progression
- Enhanced quality of life
- Reduced care partner burden
- Biomarker changes that reflect the treatment effect

AD, Alzheimer's disease

Stoeckel LE et al. Alzheimers Dement (N.Y). 2025;11(1):e70058.

People With AD Often Want Treatment to Address Several Key Challenges

Key Challenges That Patients With AD Consider Important and Want to Address

Inability to recognize or converse

Loss of independence as symptoms progress

Unable to make important decisions

Increased reliance on care partners

In an European study of 232 individuals (patients with AD and care partners), a two-step, mixed-methods approach was adopted (qualitative interview and survey) to determine prognostic information related to cognitive decline, dependency, and physical health were considered some of the most important outcomes along the AD trajectory for both patients and their care partners.
AD, Alzheimer's disease.
Mank A et al. Alzheimers Dement (N Y). 2021;7(1):e12189.

Minimal Clinically Important Differences to Communicate Clinical Meaningfulness in Early AD May Be Limited

Hypothetical Clinical Decline Over Time for AD Versus a Treatment Intervention That Slows Disease Progression

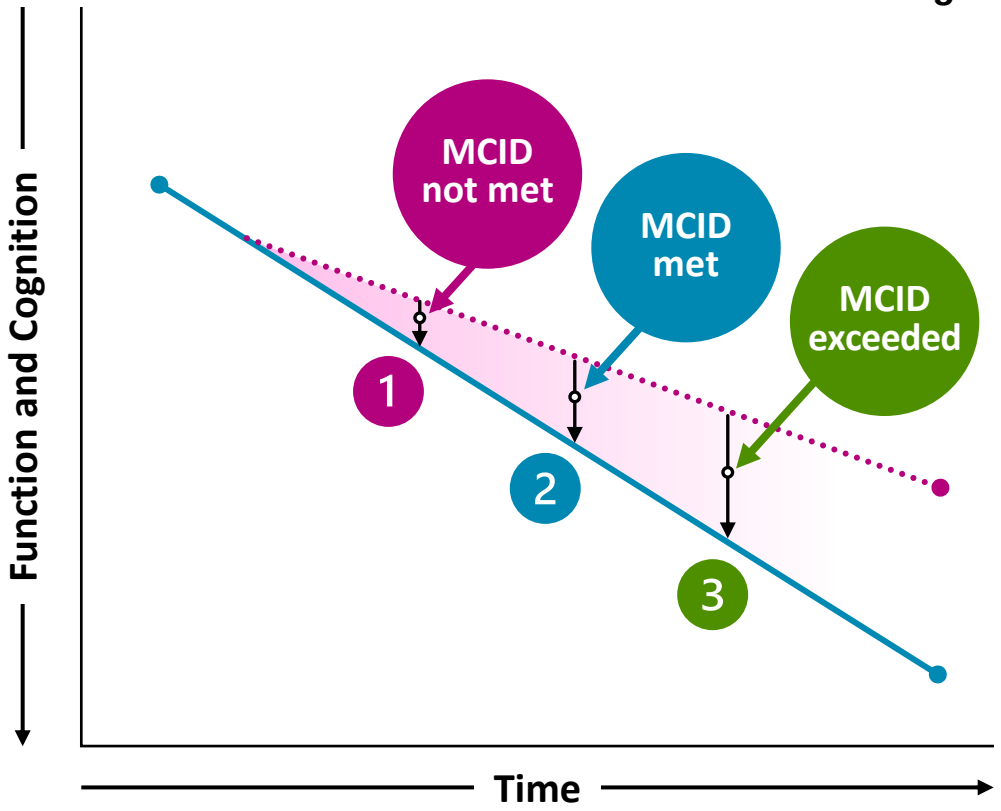


Figure adapted from Cummings J. Alzheimers Dement (NY) 2023;9:e12411.
AD, Alzheimer's disease; CDR-SB, Clinical Dementia Rating – Sum of Boxes; MCID, minimal clinically important difference.
Cummings J. Alzheimers Dement (NY) 2023;9:e12411.

- MCID for the CDR-SB is generally considered to be a change of 1 point; however, this can **vary depending on the severity of disease**
- A change of **0.5 points can be considered meaningful for individuals with milder cognitive impairment** and a higher point change for more severe cases

1

Early in the disease course, the MCID may not be achieved because it takes time for the drug and placebo trajectories to diverge

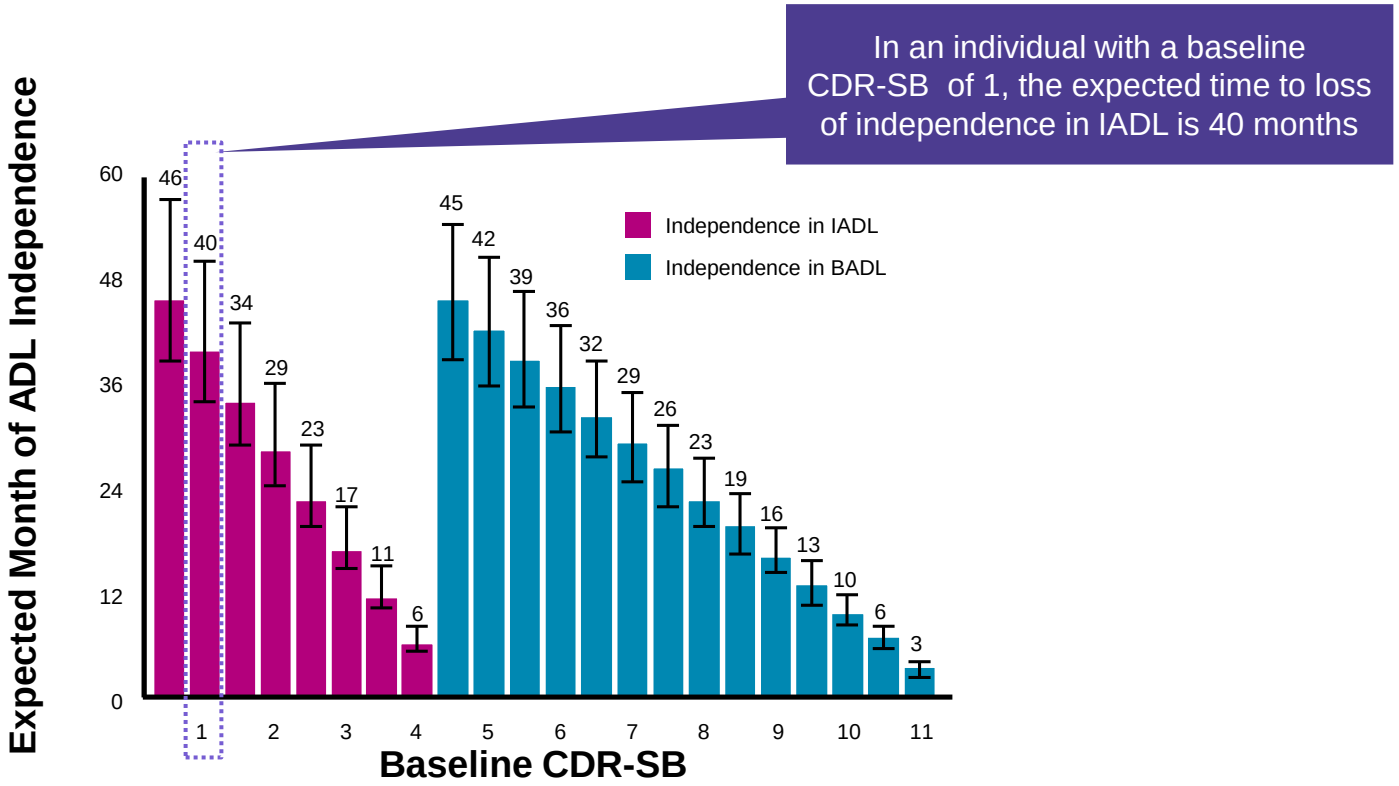
2 3

Treatments that slow disease progression are expected to produce **a progressive divergence of drug and placebo trajectories**

MCIDs are most applicable to **symptomatic therapies** for which the drug-placebo difference remains constant

CDR-SB Can Be Translated to Functional Independence

Model of the Relationship Between CDR-SB Progression in AD and Functional Independence



- Modeling can be used to understand the **functional implications** of AD dementia progression
- Expected months of **ADL independence decrease** as AD progresses
- Modeling data suggests anti-amyloid treatments may provide an **additional year** or more of **independence** to individuals in early stages of AD (actual results in clinical practice may vary)

Mixed effects logistic and ordinal regression models were used to examine the relationship between CDR-SB and the individual functional outcomes and their components in a cohort of 282 individuals with AD who were followed for 2.9 years (SD 1.3 years). A model for estimation of time savings in AD treatment trials was adapted to estimate the time (and corresponding 95% CIs) to the CDR-SB values associated with loss of independence in IADLs or BADLs. To estimate the impact of anti-amyloid treatments, clinical trial data was used to estimate time to a CDR-SB cutoff for the placebo and treatment groups based on the published changes in CDR-SB.

AD, Alzheimer's disease; ADL, activities of daily living; BADL, basic activities of daily living; CDR-SB, Clinical Dementia Rating – Sum of Boxes; CI, confidence interval; IADL, instrumental activities of daily living; SD, standard deviation.

Hartz SM et al. Alzheimers Dement (N Y). 2025;11(1):e70033.

Baseline CDR-SB and Function May Influence the Additional Months of Independence Possible With Anti-Amyloid Treatments

Hypothetical Example of the Relationship Between CDR-SB and Functional Outcomes, and Longevity of Independence Due To Anti-Amyloid Treatment[1]

Baseline CDR-SB 1

Functional outcomes

- Fully independent in BADL
- Independent in IADL
  - Difficulty with meal preparation
- **40 months to loss of functional independence**

Anti-amyloid treatment

Potential for 10 to 14 additional months of independence

Baseline CDR-SB 2

- Fully independent in BADL
- Independent in IADL
  - Difficulty remembering dates and medications
- **29 months to loss of functional independence**

Potential for 7 to 10 additional months of independence

- A 20% to 30% slowing of AD in the earlier stages of disease could mean a delay in onset of a later stage[2]
- Delaying AD progression in early stages can translate to delaying a move to an assisted living facility with meaningful benefit to patients and families[1]
- The potential to preserve independence with anti-amyloid treatments should be considered with any individual's risk from the treatments[1]

This is a hypothetical example based on data modeling, actual results in clinical practice may vary.

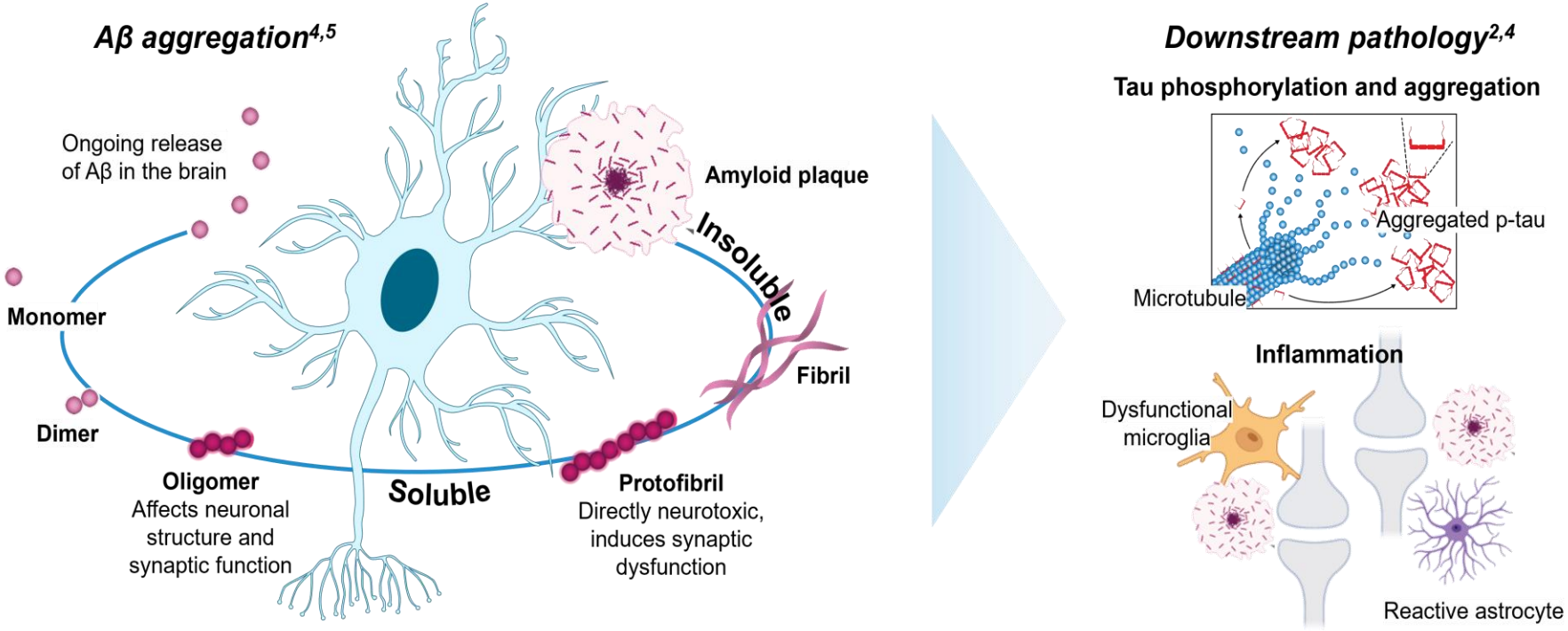
Mixed effects logistic and ordinal regression models were used to examine the relationship between CDR-SB and the individual functional outcomes and their components in a cohort of 282 individuals with AD who were followed for 2.9 years (SD 1.3 years). A model for estimation of time savings in AD treatment trials was adapted to estimate the time (and corresponding 95% CIs) to the CDR-SB values associated with loss of independence in IADL or BADL. To estimate the impact of anti-amyloid treatments, clinical trial data were used to estimate time to a CDR-SB cutoff for the placebo and treatment groups based on the published changes in CDR-SB.

AD, Alzheimer's disease; BADL, basic activities of daily living; CDR-SB, Clinical Dementia Rating – Sum of Boxes; CI, confidence interval; IADL, instrumental activities of daily living; SD, standard deviation.

1. Hartz SM et al. Alzheimers Dement (N Y). 2025;11(1):e70033; 2. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

Continued Anti-Amyloid Treatment May Be Required to Address Ongoing AD Pathology Beyond Amyloid Plaques

AD Is an Ongoing Neurotoxic Process[1]



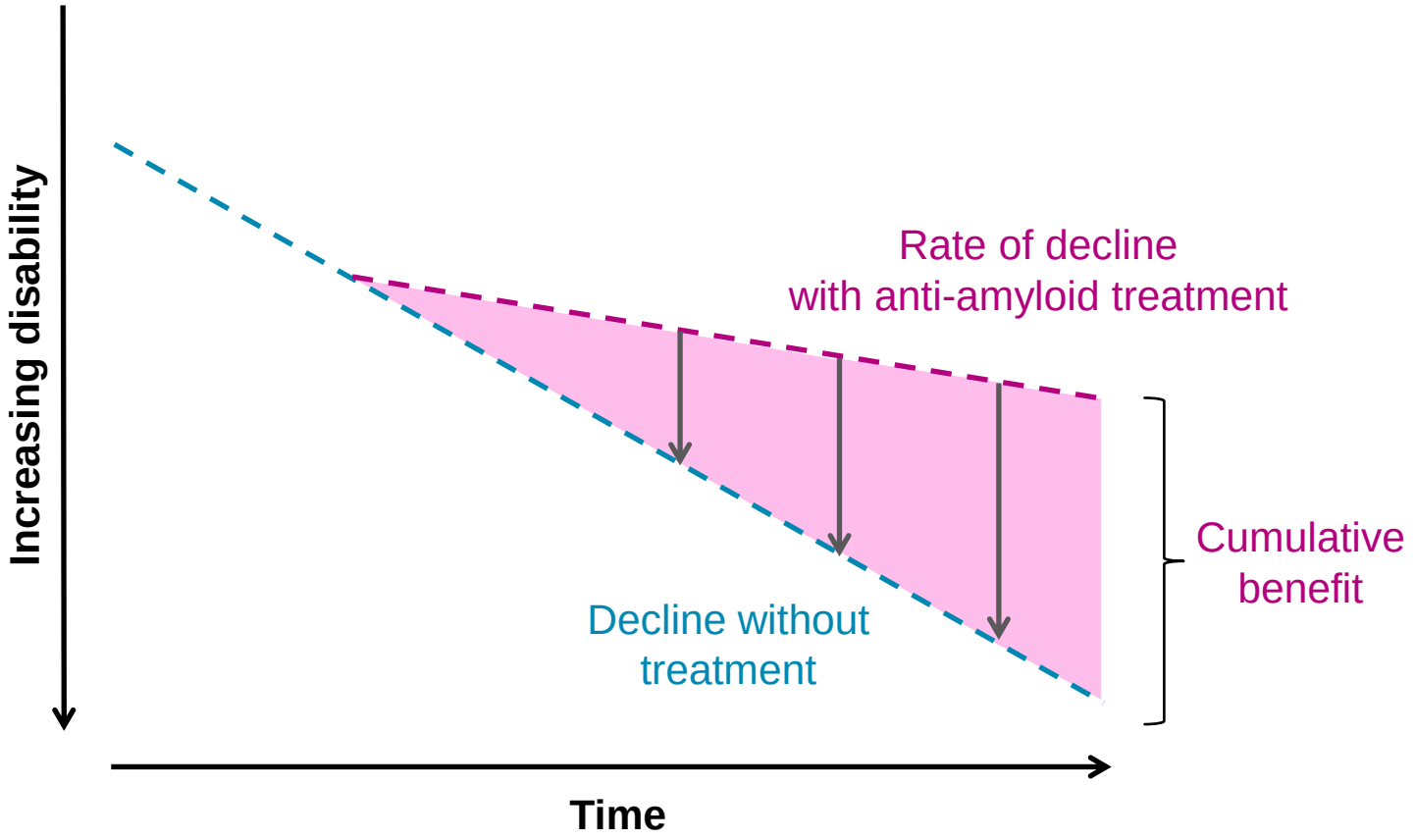
- Anti-amyloid mAbs target specific Aβ species; however, ongoing pathological changes beyond detectable Aβ plaque, drive continued neurodegeneration[4–8]
- Continued treatment with anti-amyloid treatments may be needed to observe cumulative benefit over time[9*]

Note: Different mAbs target a different constellation of Aβ species.[4]
*Examining those that have been on treatment for a number of years will be critical to determining whether there is a cumulative benefit over time
Aβ, amyloid beta; mAb, monoclonal antibody; p-tau, phosphorylated tau.

1. Hampel H et al. Mol Psychiatry. 2021;26(10):5481–5503; 2. Pospich S et al. Science. 2017;358(6359):45-46; 3. Selkoe DJ et al. EMBO Mol Med. 2016;8(6):595–608; 4. Cummings J et al. BioDrugs. 2024;38(1):5–22; 5. Swanson CJ et al. Alzheimers Res Ther. 2021;13(1):80; 6. Schöll M et al. Neurology. 2012;79(3):229–236; 7. Villemagne VL et al. Ann Neurol. 2011;69(1):181–192; 8. Andersson E et al. Nat Aging. 2025; 9. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736.

Consideration of the Indirect Benefits of Anti-Amyloid Treatments is Important to Assess Meaningful Benefit to Patients and Society

Theoretical Rate of Decline With Anti-Amyloid Treatments[1]



- Although trials may show clinical effect over a relatively short duration, other meaningful benefits, including QALYs and cost savings, **become evident over a longer period[2]**
- Therefore, treatments should also be evaluated for their **cumulative health** and **financial impacts** on **patients, families, payers,** and **society[2]**

QALY, quality-adjusted life year.
1. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 2. Stoeckel LE et al. Alzheimers Dement (N.Y). 2025;11(1):e70058.

Summary

With anti-amyloid treatments now available for AD, there is a shift in focus to earlier intervention. These treatments target the disease's underlying causes, slow progression, and may offer cumulative benefits over time[1–4]

Outcome measures for meaningful benefit need to be sensitive enough to detect changes in early AD.[4–6] Comprehensive analytical approaches may be needed to measure meaningful benefit over time[4]

CDR-SB can detect subtle changes in cognition and function in early AD and is sensitive to change over time.[5,7] Any increment of change in a CDR-SB domain can be clinically meaningful for individuals[8]

Anti-amyloid treatments may satisfy several criteria associated with meaningful benefit, including the preservation of independence;[9,10] however, continued treatment may be needed to observe cumulative benefit over time[8]

AD, Alzheimer's disease; CDR-SB, Clinical Dementia Rating – Sum of Boxes.

1. Cummings J, Fox N. J Prev Alzheimers Dis. 2017;4(2):109–115; 2. Schindler SE et al. Nat Rev Neurol. 2024;20(7):426–4391; 3. Cummings J. Mol Neurodegener. 2021;16(1):2; 4. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54; 5. Posner H et al. Innov Clin Neurosci 2017;14:22–29; 6. Jutten RJ et al. Alzheimers Dement (N Y) 2020;6:e12020; 7. Tarawneh R, et al. Alzheimers Res Ther. 2024;16(1):37; 8. Petersen RC et al. Alzheimers Dement. 2023;19(6):2730–2736; 9. Hartz SM et al. Alzheimers Dement (N Y). 2025;11(1):e70033; 10. Assunção SS et al. Alzheimers Res Ther. 2022;14(1):54.