



Nonprofit corporations and independent licensees
of the Blue Cross and Blue Shield Association

Medical benefit drug policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information. This policy may be updated and therefore subject to change.

P&T Date: 02/13/2025

Kisunla™ (donanemab-azbt)

HCPCS: J0175

Policy:

Requests must be supported by submission of chart notes and patient specific documentation.

A. Commercial Benefit

- a. Coverage of the requested drug will be considered investigational/experimental for all indications due to insufficient evidence of a clinical benefit
 - i. BCBSM and BCN are awaiting the results of ongoing clinical trials to provide evidence of a clinical benefit

B. Medicare Benefit

Coverage of the requested drug will be provided when all of the criteria are met. Coverage requests must be supported by submission of chart notes and patient specific documentation.

- a. Diagnosis of early symptomatic Alzheimer's disease (AD) defined as mild cognitive impairment (MCI) or mild AD dementia as confirmed by ALL of the following:
 - i. Confirmed amyloid-beta pathology based on the presence of amyloid beta pathology consistent with AD confirmed by amyloid positron emission tomography (PET) scan
 - ii. Other differential diagnoses have been ruled out and/or adequately managed by their respective specialists including:
 - a) Other types of dementia (e.g. vascular dementia, Lewy body dementia)
 - b) Other medical and neurological causes of cognitive impairment (e.g. medications, infections, vitamin B12 deficiency, folate deficiency)
 - c) Psychiatric diagnoses or symptoms (e.g. hallucinations, anxiety, major depression, or delusions)
 - iii. Mildly impaired cognition as evidenced by Mini Mental State Exam (MMSE) score and/or Montreal Cognitive Assessment (MoCA) score results within the past two months
 - iv. Global CDR score of 0.5 to 1.0 and a CDR Memory Box score of 0.5 or greater within the past two months.
- b. Brain magnetic resonance imaging (MRI) completed within the past 60 days without findings that indicate an increased risk for amyloid-related imaging abnormalities (ARIA) and/or intracerebral hemorrhage, including:
 - i. Findings suggestive of ARIA and/or cerebral amyloid angiopathy (prior cerebral hemorrhage greater than 1 cm at greatest diameter, more than 4 microhemorrhages, superficial siderosis,

This policy and any information contained herein is the property of Blue Cross Blue Shield of Michigan and its subsidiaries, is strictly confidential, and its use is intended for the P&T committee, its members and BCBSM employees for the purpose of coverage determinations.

vasogenic edema) or other lesions (aneurysm, vascular malformation) that could potentially increase the risk of intracerebral hemorrhage.

- c. Member is not currently taking an anticoagulant (e.g. warfarin, apixaban)
 - i. If the member is currently taking an anticoagulant, the prescriber must attest that education has been provided that the use of anti-amyloid therapy with anticoagulant therapy may increase the risk of intracerebral hemorrhage
- d. Testing for ApoE ε4 status has been completed and the prescriber attests that education has been provided on test results including the risk of ARIA associated with ApoE ε4 status if applicable
 - i. If the member has opted out of testing, the prescriber must attest that the patient understands the risk versus benefit of treatment, including an increased risk of ARIA if positive for ApoE ε4
- e. No documented history of any of the following:
 - i. Transient ischemic attacks (TIA), stroke, or seizures within 12 months
 - ii. Evidence of other clinically significant lesions on brain MRI at Screening that could indicate a dementia diagnosis other than AD
 - iii. Presence of a bleeding disorder that is not under adequate control (including a platelet count <50,000 or International normalized ratio [INR] >1.5)
- f. Member must be enrolled in an approved study/registry that meets the Centers for Medicare and Medicaid Services (CMS) Coverage with Evidence Development (CED) criteria and is listed on the 'Monoclonal Antibodies Directed Against Amyloid for the Treatment of Alzheimer's Disease (AD)' page of the CMS CED website
- g. Not to be used in combination with other anti-amyloid therapy

C. Quantity Limitations, Authorization Period, and Renewal Criteria (Medicare Benefit Only)

- a. Quantity Limits: Align with FDA recommended dosing
- b. Authorization Period: Six months
- c. Renewal Criteria: For continuation of therapy, all of the following requirements must be met:
 - i. Diagnosis of MCI or mild AD dementia as evidenced by Mini Mental State Exam (MMSE) score and/or Montreal Cognitive Assessment (MoCA) score results within the past three months
 - ii. Follow up MRIs have been completed at the intervals indicated in the FDA package insert and either:
 - a) ARIA has not been observed on MRI, OR
 - b) ARIA has been observed on MRI and all of the following:
 - 1. The prescriber attests that continuation of therapy is appropriate based on the severity of the patient's clinical symptoms, AND
 - 2. Follow-up MRI demonstrates radiographic resolution and/or stabilization, OR the prescriber attests that continuation of therapy is appropriate based on the radiographic severity of ARIA

***Note: Coverage and approval duration may differ for Medicare Part B members based on any applicable criteria outlined in Local Coverage Determinations (LCD) or National Coverage Determinations (NCD) as determined by Center for Medicare and Medicaid Services (CMS). See the CMS website at <http://www.cms.hhs.gov/>. Determination of coverage of Part B drugs is based on medically accepted indications which have supported citations included or approved for inclusion determined by CMS approved compendia.

Background Information:

- Alzheimer's disease is a progressive disease, with pathophysiological changes and clinical manifestations occurring along a continuum. It continues to be a growing health crisis worldwide, affecting patients with the disease and their families. Nearly 7 million Americans aged 65 years and older are currently living with Alzheimer's dementia. About 5 million individuals 65 years of age and older may have mild cognitive impairment (MCI) due to Alzheimer's disease,

presenting as memory loss and confusion that does not interfere with activities of daily living; however, it may also be secondary to other conditions.

- It is estimated that 10-15% of individuals with MCI go on to develop dementia each year. Within 5 years, approximately 32% of patients with MCI due to Alzheimer's disease progress to dementia. The progression from MCI to dementia marks the point at which the symptoms of Alzheimer's disease will have gradually led to behavior and personality changes, a decline in cognitive abilities that interfere with a person's ability to carry out daily activities independently, and eventually more severe loss of mental function and problems recognizing family and friends. Diagnosis of MCI and of Alzheimer's dementia is based on clinical evaluation determining cognitive and functional status and not solely on test scores, with progressive cognitive decline demonstrated on subsequent follow ups with the patient.
 - Historically, only symptomatic therapies have been available for treating Alzheimer's dementia. These agents do not act on the evolution of the disease. Standard medical treatment for Alzheimer's disease dementia includes cholinesterase inhibitors (donepezil, galantamine, rivastigmine) and N-methyl-D-aspartate (NMDA) antagonists (memantine).
 - All cholinesterase inhibitors are approved for use in mild and moderate Alzheimer's dementia, though donepezil and transdermal rivastigmine are also approved to treat severe Alzheimer's dementia. Memantine, however, is not recommended in mild disease and is only approved for patients with moderate to severe Alzheimer's dementia.
- Current research efforts are focused on identifying and treating patients as early as possible for the best chance of slowing or stopping the progression of Alzheimer's disease. The accumulation of amyloid beta plaques is a defining pathophysiological feature of Alzheimer's disease that can be exhibited as early as the MCI stage of disease and potentially even earlier, before symptoms arise; as such, a great deal of research has focused on clearing amyloid beta from the brain early in the disease process in an attempt to affect disease progression.
- The presence of amyloid beta plaques can be confirmed by an amyloid positron emission tomography (PET) scan or a cerebrospinal fluid (CSF) test via lumbar puncture; these are the only two FDA-cleared methods to confirm amyloid pathology at this time. Confirmation of the presence of amyloid pathology and other Alzheimer's disease biomarkers has not historically been guideline recommended for the diagnosis of Alzheimer's disease at any point in the disease process, and testing for these biomarkers has primarily been used for research and in settings where the use of FDA-approved therapies requires confirmation of their presence.
 - Amyloid PET imaging uses a class of radiopharmaceuticals that detect levels of amyloid in the human brain; examples of such radiopharmaceuticals include Amyvid™ (florbetapir F18), Neuraceq™ (florbetaben F18) and Vizamy™ (flutemetamol F18). These scans can be interpreted as positive (elevated amyloid) or negative (non-elevated amyloid). If the amyloid PET is positive with abnormal amyloid beta pathology present, cognitive and/or functional testing is necessary to assist in confirming and staging Alzheimer's disease. A positive amyloid PET alone is not diagnostic of Alzheimer's disease.
 - CSF testing measures beta-amyloid, specifically beta-amyloid 1-42 which is a marker of amyloid plaques, and total-tau (tTau) and phosphorylated-tau (pTau181) which are markers of neurofibrillary tangles and provide insight into the intensity of neurodegeneration. CSF testing can be useful in differential diagnosis of Alzheimer's disease and other causes of cognitive impairment. In contrast to amyloid PET scans which are typically high cost and limited in availability, the use of CSF assays offers the potential to provide a more affordable and more accessible option to verify amyloid pathology in the brain, as well as detection of both amyloid and tau biomarkers at once.

- Elevated CSF levels of tTau and pTau181 are associated with faster progression of cognitive decline.
- There are currently three CSF tests cleared by the FDA for the evaluation of Alzheimer's disease: 1) Lumipulse® G β -Amyloid Ratio (1-42/1-40) test, 2) Elecsys® beta-Amyloid (1-42) CSF II (Abeta42) and Elecsys® Phospho-Tau (181P) CSF (pTau181) assays (used as a pTau181/Abeta42 ratio), and 3) Elecsys® beta-Amyloid (1-42) CSF II (Abeta42) and Elecsys® Total-Tau (tTau)CSF assays (used as a tTau/Abeta42 ratio). Refer to Appendix 1 for additional information regarding these tests.
- As with the amyloid PET, a positive result on CSF test alone is not diagnostic of Alzheimer's disease.
- Updated guidelines from the Alzheimer's Association Workgroup (2024) support a biologically based diagnosis of Alzheimer's disease using the above biomarkers, with the caveat that their use in clinical settings is for the evaluation of symptomatic individuals, and not those who are cognitively unimpaired. Additionally, the guidelines acknowledge that though the presence of abnormal biomarkers may be sufficient to confirm Alzheimer's pathology in a symptomatic individual, it should not preclude a clinician from exercising their clinical judgment and searching for other contributors to the patient's symptoms.
- Amyloid pathology can also be found in both cognitively unimpaired adults and in patients with other neurodegenerative disorders; therefore, a positive amyloid PET and/or CSF result alone may be insufficient to establish a diagnosis of Alzheimer's disease or other cognitive disorders. Results from these tests should be interpreted in tandem with other clinical diagnostic evaluations, including cognitive and/or functional testing.
- Validated mental and functional status exams are important tools for assessing cognitive and behavioral functions and measuring activities of daily living and are frequently used when screening older adults for MCI or dementia. They represent a portion of the necessary workup for cognitive impairment or dementia and, like biomarker evaluations, should be interpreted in the context of other clinical information prior to finalizing a diagnosis. Two of the most widely used mental status scales include the Mini-Mental State Examination (MMSE) and the Montreal Cognitive Assessment (MoCA), while the Functional Activities Questionnaire (FAQ) is a commonly used functional status exam.
 - The MMSE evaluates temporal and spatial orientation, memory, attention/concentration, language, and visuospatial function. It is scored on a 30-point scale with scores <24 typically regarded as abnormal and indicative of cognitive impairment. Of note, age, education, and race/ethnicity have been shown to affect MMSE scores and should be considered when evaluating an individual patient.
 - The MoCA includes a broader range of cognitive domains, particularly executive abilities, and is able to detect more subtle cognitive deficits that characterize MCI. It evaluates delayed word recall, visuospatial/executive function, language, attention/concentration, and orientation. The MoCA is also scored on a 30-point scale, with scores of 18-25 suggestive of MCI. The cut-off score of 18 is usually considered to separate MCI from Alzheimer's disease, though there is overlap in the scores as AD is determined by the presence of cognitive impairment as well as the loss of functional independence.
 - The FAQ is a subjective 10-item scale that assesses a patient's functional abilities, specifically instrumental activities of daily living (IADL; e.g., preparing meals, performing chores, running errands, traveling outside of one's neighborhood, keeping track of finances). Per-item scores range from 0-3, with higher scores indicating greater functional impairment. There is no established cut-off score for IADL impairment, though a cut point of 9 (i.e., dependent in 3 or more activities) is recommended to indicate impaired function and

possible cognitive impairment. The total FAQ score may be useful in differentiating MCI and mild Alzheimer's dementia.

- The Clinical Dementia Rating Scale (CDR) is another validated clinical instrument used to assess and standardize Alzheimer's disease staging that is most often used in research settings and is commonly used to stage dementia progression over time. It is derived from the scores in each of six different categories, or "box scores": memory, orientation, judgment, community affairs, home hobbies, and personal care. Memory is considered the primary category while all others are secondary. According to the CDR Global scores, Alzheimer's disease stages can be defined as unimpaired cognition (CDR Global = 0), MCI due to Alzheimer's (CDR Global = 0.5), mild Alzheimer's dementia (CDR Global = 1), moderate Alzheimer's dementia (CDR Global = 2), and severe Alzheimer's dementia (CDR = 0.3). If the memory box score is 0.5, the CDR Global score can only be 0.5 or 1.
- Ruling out other conditions with similar presentation is essential during diagnostic workup for a patient being evaluated for Alzheimer's disease. Examples of situations where a diagnosis of Alzheimer's disease may be unlikely are listed below; these examples are not all-inclusive. Additionally, when feasible and medically appropriate, patients should be weaned from medications that may contribute to cognitive impairment.
 - Evidence of concomitant cerebrovascular disease, defined by a history of stroke temporally related to the onset or worsening of cognitive impairment; or the presence of multiple or extensive infarcts or severe white matter hyperintensity burden,
 - Features of Lewy Body dementia other than the dementia itself,
 - Prominent features of behavioral variant frontotemporal dementia,
 - Prominent features of semantic variant primary progressive aphasia or non-fluent/agrammatic variant primary progressive aphasia
 - Evidence for another neurological disease or a non-neurological medical comorbidity (e.g., HIV dementia, dementia of Huntington's disease) or medication use that could have a substantial effect on cognition.
 - Vitamin B12 or folate deficiency
 - Psychiatric diagnoses or symptoms, such as hallucinations, anxiety, major depression, or delusions
- The first FDA approved treatment for Alzheimer's disease that could potentially modify the disease process was Aduhelm® (aducanumab-avwa), a human immunoglobulin gamma 1 (IgG1) monoclonal antibody directed against aggregated soluble and insoluble forms of amyloid beta protein, for the treatment of Alzheimer's disease in patients with mild forms of Alzheimer's disease (i.e., MCI due to Alzheimer's or mild Alzheimer's dementia) as this was the population treated in clinical trials and no safety and effectiveness data is available on initiating treatment in earlier or later stages of the disease than were studied. Aduhelm was approved on June 7, 2021, and brought a first-in-class product to market. However, Aduhelm was approved via the accelerated approval pathway based on the reduction in amyloid beta plaques observed in clinical trials; discordant results of Aduhelm's identically designed Phase III EMERGE and ENGAGE trials failed to provide sufficient evidence to support that the lowering of beta amyloid plaque yields a clinical benefit of improved cognition and delayed disease progression. As such, Aduhelm has had minimal impact on the Alzheimer's population in the time since its approval due to uncertain clinical efficacy, negative press surrounding its approval, and questionable long-term safety, and was discontinued in November 2024.
- On January 6, 2023, the FDA granted Biogen/Eisai's Leqembi® (lecanemab-irmb) accelerated approval based on amyloid plaque reduction, making it the second humanized IgG1 monoclonal antibody directed against amyloid beta for the treatment of Alzheimer's disease. On July 6, 2023, the FDA granted full approval to Leqembi for the treatment

of AD in patients with MCI or mild dementia stage of disease and confirmed presence of amyloid, the population in which treatment was initiated in clinical trials. The conversion to full approval was supported by data from the Phase III, randomized, placebo-controlled Clarity AD trial that demonstrated the drug's clinical benefit as it relates to amyloid reduction.

- Clarity AD was conducted over 18 months in patients 50 to 90 years of age with early Alzheimer's disease (i.e., MCI due to Alzheimer's or mild Alzheimer's dementia) and evidence of amyloid on PET or by CSF testing (n=1,795). The primary endpoint was the change from baseline at 18 months in the score on the Clinical Dementia Rating Sum of Boxes (CDR-SB; range, 0-18 with higher scores indicating greater impairment), which assesses three domains of cognition (memory, orientation, judgment/problem solving) and three domains of function (community affairs, home/hobbies, personal care). Key secondary endpoints included change in amyloid burden on PET and the scores on a variety of other cognitive and functional assessment scales.
- Participants treated with Leqembi demonstrated a statistically significant 27% less decline in CDR-SB compared to placebo at 18 months, with a mean difference of -0.45 ($p < 0.001$). Other measures of cognition assessed in the trial also showed statistically significant differences favoring the lecanemab treatment arm. It should be noted that statistical significance in the change in CDR-SB may not demonstrate a clinically important change, as some experts suggest that the minimum clinically important difference (MCID) in CDR-SB where a clinically meaningful change to patients, caregivers or clinicians is apparent is generally a change of 1 to 2 points.
- Change in amyloid burden on PET, another key secondary endpoint, was assessed in a substudy involving 698 participants. At 18 months, the lecanemab group demonstrated a statistically significant larger amount of beta amyloid removal compared with placebo, corresponding to a mean percentage difference of -76.0% ($p < 0.001$). 32.4% of those in the lecanemab arm reached amyloid negativity; however, it's worth noting that 7.8% of those in the placebo arm also were amyloid negative at 18 months.
- On July 2, 2024, the FDA approved Eli Lilly's Kisunla for the treatment of Alzheimer's disease, with the caveat that Kisunla should be initiated in patients with MCI or mild dementia stage of disease, the population in which treatment was initiated in the clinical trials. Kisunla marks the third FDA approved anti-amyloid therapy for early symptomatic Alzheimer's disease, and the second to gain full FDA approval based on demonstration of statistically significant clinical benefit in clinical trials alongside Leqembi. Kisunla targets a specific epitope of beta amyloid found within beta amyloid plaque to facilitate plaque removal. Of the approved anti-amyloid therapies, Kisunla is the first and only agent with evidence to support a limited-duration treatment regimen based on amyloid plaque removal, which could potentially result in fewer infusions and lower treatment costs.
- Approval of Kisunla was based on results from the double-blind, placebo-controlled, parallel-group, Phase III TRAILBLAZER-ALZ-2 trial. Participants (n=1,736) were required to have a diagnosis of MCI or mild dementia stage of Alzheimer's disease with confirmed presence of amyloid pathology based on amyloid PET imaging and a progressive change in memory function for at least 6 months. Eligible participants were also required to have the following during the screening period (i.e. within 63 days) prior to randomization:
 - An MMSE score ≥ 20 but ≤ 28
 - Baseline brain magnetic resonance imaging (MRI), without findings showing:
 - Increased risk for Amyloid-related imaging abnormalities (ARIA) and/or intracerebral hemorrhage (e.g., findings suggestive of ARIA-E and/or cerebral amyloid angiopathy (prior cerebral hemorrhage greater than 1 cm at greatest diameter, more than 4 cerebral microhemorrhages, more than 1 area of superficial siderosis, any macrohemorrhage or severe white matter disease) or other lesions

(aneurysm, vascular malformation) that could potentially increase the risk of intracerebral hemorrhage

- Presence of other clinically significant lesions that could indicate a dementia diagnosis other than Alzheimer's disease
- Additionally, those included in the study were required to have low/medium or high tau levels based on visual assessment of tau PET imaging, with tau levels considered prognostic of rate of clinical decline. Treatment effect was hypothesized to be more difficult to demonstrate in participants with high tau levels due to their more advanced disease state. Patients ranged from 59 to 86 years old, with a mean age of 73 years. Of the total trial population, 68% had low/medium tau level and 32% had high tau.
- Patients in TRAILBLAZER-ALZ-2 were randomized 1:1 to receive Kisunla (n=860) or placebo (n=876) for a total of up to 72 weeks. Patients who achieved a prespecified reduction in amyloid levels as measured by amyloid PET at weeks 24, 52, and 76 were switched to placebo. Analyses were conducted on two primary populations within the trial: the low/medium tau level population, and the combined population of low/medium plus high tau groups.
 - The primary endpoint was change in the integrated Alzheimer's Disease Rating Scale (iADRS) score from baseline to 76 weeks. The iADRS is a combination of the Alzheimer's Disease Assessment Scale-Cognitive subscale (ADAS-Cog13) score, which assesses cognition, and the Alzheimer's Disease Cooperative Study – instrumental Activities of Daily Living (ADCS-iADL) scale score, which assesses function. The total score ranges from 0 to 144, with lower scores reflecting worse cognitive and functional performance. Other efficacy endpoints evaluated in the trial included the CDR-SB, the ADAS-Cog13, and the ADCS-iADL.
 - Patients treated with Kisunla demonstrated a statistically significant reduction in clinical decline on iADRS compared to placebo at week 76 in both the combined tau group (2.92, $p < 0.0001$) and the low/medium tau group (3.25, $p < 0.0001$), equating to a 22% slowing of disease progression at week 76 in the combined tau group and 35% slowing of disease progression at week 76 in the low-medium tau group.
 - Statistically significant reduction in clinical decline on CDR-SB compared to placebo at week 76 was also demonstrated in the combined tau group (-0.70, $p < 0.0001$) and the low/medium tau group (-0.67, $p < 0.0001$), correlating to a 29% slowing of disease progression at week 76 in the combined group and a 36% slowing of disease progression in the low/medium tau group. Statistically significant differences between treatment groups were also demonstrated as measured by ADCS-Cog13, and ADCS-iADL at week 76 ($p < 0.001$).
 - The percentages of patients that reached the prespecified reductions in amyloid and were eligible for switch to placebo based on amyloid PET levels at Week 24, Week 52, and Week 76 timepoints were 17%, 47%, and 69%, respectively. Of note, amyloid PET values could increase after Kisunla treatment is stopped, and there is no data beyond the 76-week trial to guide whether additional Kisunla dosing may be needed for longer-term clinical benefit or how long the amyloid reductions with treatment will last.
- With the approval of Kisunla, we now have two Phase III clinical trials of anti-amyloid therapies (i.e., Clarity AD and TRAILBLAZER-ALZ-2) that have demonstrated an association between amyloid clearance and slowing of cognitive decline in the early Alzheimer's patient population; however, the available evidence, particularly in light of the history of mixed results with previously trialed and failed anti-amyloid therapies in the pipeline, does not unequivocally suggest that amyloid clearance will definitively improve cognitive outcomes. It also remains unclear whether the modest effect on cognition and function demonstrated in the trial will be clinically relevant when used in the real world. There is disagreement among experts about clinical meaningfulness of the magnitude of change in the cognitive outcomes of these trials, and despite the demonstrated statistical significance of the reduction in cognitive decline, we cannot say with certainty that treatment with Kisunla and other anti-amyloid therapies will yield a

meaningful change in the patient's status for the benefit to outweigh the risk to treatment. Ultimately, uncertainty remains around the amyloid hypothesis and we do not have adequate data for anti-amyloid therapies to show a correlation between amyloid removal and treatment effect, or differences in outcomes by achieving or not achieving amyloid negativity.

- Any cognitive benefits seen with Kisunla and other anti-amyloid therapies must be weighed against the potential harms of treatment, especially in light of the risk of amyloid-related imaging abnormalities (ARIA) with edema and/or cerebral microhemorrhage. We must also recognize that ARIA risk with real world use may be greater than that in clinical trials due to issues like limited clinical expertise and accessibility issues affecting monitoring. ARIA can occur spontaneously in patients with Alzheimer's disease, with the three main risk factors being exposure to anti-amyloid treatment, presence of pre-treatment microhemorrhages, and APOE ε4 carrier status. Per the labeling, testing for ApoE ε4 status is recommended prior to initiating treatment to inform the risk of ARIA development, though it is not a requirement. The prescriber should educate the patient on test results and its implications, including the risk of ARIA associated with APOE ε4 status. For those opting out of testing, the prescriber should inform patients they can still be treated with Kisunla; however, it cannot be determined if they are at higher risk for ARIA based on APOE ε4 status. The benefits of treatment versus the potential risk of ARIA should be considered prior to initiating treatment with Kisunla. An FDA-authorized test to detect ApoE ε4 alleles to identify those at risk of ARIA is not currently available, and those that are available may vary in accuracy and design.
- Caution should also be exercised when considering administration of Kisunla in patients with factors indicating increased risk of intracerebral hemorrhage, in particular those who need concomitant anticoagulant therapy, as well as when considering the administration of antithrombotics or a thrombolytic agent (e.g., tissue plasminogen activator) to a patient already being treated with Kisunla. Because ARIA-E can cause focal neurologic deficits that can mimic an ischemic stroke, treating clinicians should consider whether such symptoms could be due to ARIA-E before giving thrombolytic therapy in a patient being treated with Kisunla.
 - Patients with a history of transient ischemic attacks (TIAs) or stroke within the previous 12 months and those with an inadequately controlled bleeding disorder (including platelet count <50,000 or International Normalized Ratio [INR] >1.5) were not eligible to participate in Leqembi clinical trials in early Alzheimer's disease. Given that these factors may increase the risk of intracerebral hemorrhage in this patient population, it is clinically appropriate to apply the same exclusions to Kisunla and other future anti-amyloid therapies.
- The cognitive decline associated with MCI and mild Alzheimer's disease dementia often spans many years. The limited follow up duration of Kisunla's Phase III trial may be insufficient to conclude how effective Kisunla is for treating early Alzheimer's disease in the long term. Ultimately, longer trials are warranted to determine the true efficacy and safety of Kisunla in early Alzheimer's disease. With the lack of information surrounding long-term use, safety, and the real-world effects of Kisunla, a number of questions arise including the appropriate duration of treatment, if or at what point effectiveness will start to decline, and how discontinuation of Kisunla upon reaching undetectable levels of amyloid beta plaque will affect the trajectory of Alzheimer's disease progression.
- The Centers for Medicare & Medicaid Services (CMS) recognizes the need for such information surrounding treatment with Kisunla and other anti-amyloid therapies in the real world. On April 7, 2022, CMS released a national policy for coverage of monoclonal anti-amyloid antibodies approved by the FDA for the treatment of Alzheimer's disease. Under the National Coverage Determination (NCD), Medicare will provide coverage of FDA approved anti-amyloid antibodies under Coverage with Evidence Development (CED) when furnished in accordance with prespecified coverage criteria laid out in the NCD for patients with a clinical diagnosis of MCI due to Alzheimer's disease or mild Alzheimer's disease dementia, both with confirmed presence of amyloid beta pathology consistent with Alzheimer's disease.

- Coverage of these anti-amyloid therapies under CED requires that providers participate in an approved registry to gather information on patient outcomes with treatment to further evaluate whether these products are reasonable and necessary in the Medicare population. The data being collected by these registries is expected to help answer such questions as whether Kisunla and other approved anti-amyloid therapies meaningfully improve health outcomes with real-world use, whether the benefits and harms of these therapies are dependent on select factors in a patient's care, and how the benefits and harms of treatment may change over time.
- Refer to CMS's NCD: Monoclonal Antibodies Directed Against Amyloid for the Treatment of Alzheimer's Disease for a complete description.
- To date, there is no literature available to support the use of Leqembi in combination with other anti-amyloid therapies.
- On June 10, 2024, the FDA's Peripheral and Central Nervous System Drugs Advisory Committee convened and unanimously voted 11-0 in favor of Kisunla, voting that the available data supported Kisunla's effectiveness in the population enrolled in clinical trials, which excluded patients with low or no tau burden, and that the benefits outweigh the risks of Kisunla in the treatment of Alzheimer's disease in the population enrolled in the clinical trials. Though the vote was unanimous, the committee recognized that questions remained around Lilly's decision to cease dosing once a patient achieved amyloid clearance, particularly with regard to how clinicians in the real world would monitor for and determine when to cease dosing, and they acknowledged that longer-term follow up would be beneficial to provide more clear guidance on both stopping treatment and potentially restarting. The committee also acknowledged that we lack answers to questions surrounding Kisunla's duration of benefit, how to monitor patients between drug stoppage and restarting, and what will happen with side effects in the interim or upon restarting treatment, and that data on patients within different subgroups was lacking, in particular the higher risk ApoE 4 homozygotes and those with little to no representation in the trial which lacked diversity.
- Based on the current information available, there is insufficient evidence that Kisunla provides a meaningful clinical benefit in patients with mild Alzheimer's disease, and that potential benefits of therapy outweigh the risks of treatment. Therefore, further demonstration of clinical benefit and safety is warranted.

References:

1. Aduhelm [prescribing information]. Cambridge, MA: Biogen, Inc.; July 2021.
2. Albert MS, DeKosky ST, et al. The diagnosis of mild cognitive impairment due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimer's Dement*. 2021 May; 7(3): 270-279.
3. Alexander GC, Emerson S, and Kesselheim AS. Evaluation of Aducanumab for Alzheimer Disease Scientific Evidence and Regulatory Review Involving Efficacy, Safety and Futility. *JAMA*. 2021;325(17):1717-1718. doi:10.1001/jama.2021.3854.
4. Alzheimer's Association 2022 Alzheimer's Disease Facts and Figures. *Alzheimers Dement* 2022; 18.
5. Arevalo-Rodriguez I, Smailagic N, et al. Mini-Mental State Examination (MMSE) for the detection of Alzheimer's disease and other dementias in people with mild cognitive impairment (MCI) (Review). *Cochrane Database of Systematic Reviews*. 2015, Issue 3. Art. No.: CD010783.
6. Armstrong, A. (2024, June 10). Lilly's donanemab sails through FDA meeting with 2 unanimous votes in favor. *FierceBiotech.com*. Accessed on July 9, 2024. Available at: <https://www.fiercebiotech.com/biotech/lillys-donanemab-sails-through-fda-meeting-unanimous-votes-favor>
7. Budd Haeberlein S, von Hehn C, Tian Y, et al. EMERGE and ENGAGE topline results: two phase 3 studies to evaluate aducanumab in patients with early Alzheimer's Disease. Presented at: 12th Annual CTAD Meeting. December 4-7, 2019; San Diego, CA.

8. Castrillo-Viguera C, Chalkias S, Burkett P, Wu S, Chen H, Harrison K, Yurgalevitch C, Budd Haeberlein S. EMBARK: A Phase 3b, open-label, single-arm, safety study to evaluate the long-term safety and efficacy of aducanumab in eligible participants with Alzheimer's disease. Presented at: American Academy of Neurology (AAN) 2021, April 17th - April 22nd, 2021; Virtual. P1.013.
9. Centers for Medicare & Medicaid Services Medicare Coverage Database. National Coverage Determination: Monoclonal Antibodies Directed Against Amyloid for the Treatment of Alzheimer's Disease. April 7, 2022. <https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncid=375&ncdver=1>. Accessed July 18, 2023.
10. Chapleau M, Iaccarino L, Soleimani-Meigooni D, Rabinovici GD. The Role of Amyloid PET in Imaging Neurodegenerative Disorders: A Review. *J Nucl Med*. 2022 Jun;63(Suppl 1):13S-19S. doi: 10.2967/jnumed.121.263195. PMID: 35649652; PMCID: PMC9165727.
11. Gonzalez DA, Gonzales MM, et al. Comprehensive evaluation of the Functional Activities Questionnaire (FAQ) and its reliability and validity. *Assessment*. 2022 June; 29(4): 748-763.
12. IPD Analytics. Payer & Provider Insights. July 2024. Accessed July 3, 2024. <https://www.ipdanalytics.com>
13. Jack CR Jr, et al. Revised criteria for diagnosis and staging of Alzheimer's disease: Alzheimer's Association Workgroup. *Alzheimers Dement*. 2024 Jun 27. doi: 10.1002/alz.13859. Epub ahead of print. PMID: 38934362.
14. Kisunla [prescribing information]. Indianapolis, IN: Eli Lilly; July 2024.
15. Knopman DS, Jones DT, and Greicius MD. Failure to demonstrate efficacy of aducanumab: An analysis of the EMERGE and ENGAGE trials as reported by Biogen, December 2019. *Alzheimer's Dement*. 2020; 1-6.
16. Leqembi [prescribing information]. Nutley, NJ: Eisai, Inc.; July 2023.
17. Lin GA, Whittington MD, Wright A, Agboola F, Herron-Smith S, Pearson SD, Rind DM. Lecanemab for Early Alzheimer's Disease: Final Evidence Report. Institute for Clinical and Economic Review, April 17, 2023.
18. Manufacturer press release. FDA grants accelerated approval for Aduhelm as the first and only Alzheimer's disease treatment to address a defining pathology of the disease. 7 June 2021. Accessed 8 June 2021. Available at: <https://www.globenewswire.com/news-release/2021/06/07/2243019/0/en/FDA-grants-accelerated-approval-for-ADUHELM-as-the-first-and-only-Alzheimer-s-disease-treatment-to-address-a-defining-pathology-of-the-disease.html>.
19. Manufacturer press release. Lilly's Kisunla (donanemab-azbt) Approved by the FDA for the Treatment of Early Symptomatic Alzheimer's Disease. July 2, 2024. Accessed on July 3, 2024. Available at: <https://investor.lilly.com/news-releases/news-release-details/lillys-kisunlatm-donanemab-azbt-approved-fda-treatment-early>
20. Marshall GA, Zoller AS, et al. Functional Activities Questionnaire items that best discriminate and predict progression from clinically normal to mild cognitive impairment. *Curr Alzheimer Res*. 2015; 12(5): 493-502.
21. Mayo AM. Use of the Functional Activities Questionnaire in Older Adults with Dementia. In: *Try This: Best Practices in Nursing Care to Older Adults with Dementia*. Greenberg SA (Ed). 2016. Accessed on November 14, 2023. Available at: <https://www.alz.org/careplanning/downloads/functional-activities-questionnaire.pdf>
22. McKhann GM, Knopman DS, et al. The diagnosis of dementia due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimer's Dement*. 2011 May; 7(3): 263-269.
23. Morris, J.C. (1993). The clinical dementia rating (CDR): Current version and scoring rules. *Neurology*, 43(11), 2412-2414
24. O'Bryant SE, Lacritz LH, Hall LH, et al. Validation of the new interpretive guidelines for the clinical dementia rating scale sum of boxes score in the National Alzheimer's Coordinating Center database. *Arch Neurol*. 2010;67(6):746-749.
25. Press Release. FDA Grants Accelerated Approval for Alzheimer's Drug. 7 June 2021. Accessed 8 June 2021. Available at: <https://www.prnewswire.com/news-releases/fda-grants-accelerated-approval-for-alzheimers-drug-301306966.html>.
26. Protocol for: van Dyck CH, Swanson CJ, Aisen P, et al. Lecanemab in early Alzheimer's disease. *N Engl J Med* 2023;388:9-21. DOI: 10.1056/NEJMoa2212948
27. Schneider L. A resurrection of aducanumab for Alzheimer's disease. *Lancet Neurol*. Published online December 4, 2019. doi: 10.1016/S1474-4422(19)30480-6.
28. Sims JR, Zimmer JA, et al. Donanemab in Early Symptomatic Alzheimer Disease. *JAMA* 2023;330(6):512-527. doi:10.1001/jama.2023.13239

29. Swanson CJ, et al. A randomized, double-blind, phase 2b proof-of-concept clinical trial in early Alzheimer's disease with lecanemab, an anti-A β protofibril antibody. *Alzheimer's Research & Therapy* (2021) 13:80.
30. Van Dyck CH, Swanson CJ, et al. Lecanemab in Early Alzheimer's Disease. *New Engl J Med*. 2023; 388:9-2. DOI: 10.1056/NEJMoa2212948.
31. Williams, MM et al. Progression of Alzheimer disease as measured by Clinical Dementia Rating sum of boxes scores. *Alzheimer's Dement*. 2012 Aug 1;9(1 0):S39–S44. doi: [10.1016/j.jalz.2012.01.005](https://doi.org/10.1016/j.jalz.2012.01.005)

Policy History												
#	Date	Change Description										
1.5	Effective Date: 02/13/2025	Added initial criteria, quantity limits, authorization period, and renewal criteria for Medicare benefit only										
1.4	Effective Date: 08/08/2024	New policy. This criteria replaces previously approved preliminary criteria.										
1.3	Effective Date: 07/18/2024	UM medical management system update for BCBS and BCN <table><tr><th>Line of Business</th><th>PA Required in Medical Management System (Yes/No)</th></tr><tr><td>BCBS</td><td>Yes</td></tr><tr><td>BCN</td><td>Yes</td></tr><tr><td>MAPPO</td><td>Yes</td></tr><tr><td>BCNA</td><td>Yes</td></tr></table>	Line of Business	PA Required in Medical Management System (Yes/No)	BCBS	Yes	BCN	Yes	MAPPO	Yes	BCNA	Yes
Line of Business	PA Required in Medical Management System (Yes/No)											
BCBS	Yes											
BCN	Yes											
MAPPO	Yes											
BCNA	Yes											
1.2	Effective Date: 07/15/2024	UM medical management system update for MAPPO and BCNA <table><tr><th>Line of Business</th><th>PA Required in Medical Management System (Yes/No)</th></tr><tr><td>BCBS</td><td>No</td></tr><tr><td>BCN</td><td>No</td></tr><tr><td>MAPPO</td><td>Yes</td></tr><tr><td>BCNA</td><td>Yes</td></tr></table>	Line of Business	PA Required in Medical Management System (Yes/No)	BCBS	No	BCN	No	MAPPO	Yes	BCNA	Yes
Line of Business	PA Required in Medical Management System (Yes/No)											
BCBS	No											
BCN	No											
MAPPO	Yes											
BCNA	Yes											
1.1	Effective Date: 08/10/2023	Updated proposed Medicare preliminary criteria to reference National Coverage Determination vs. National Coverage Analysis										
1.0	Effective Date: 12/01/2022	Preliminary drug review										

* The prescribing information for a drug is subject to change. To ensure you are reading the most current information it is advised that you reference the most updated prescribing information by visiting the drug or manufacturer website or <http://dailymed.nlm.nih.gov/dailymed/index.cfm>.

Appendix 1: CSF Tests Cleared by the FDA for the Evaluation of Alzheimer's Disease (AD) Biomarkers*

Test	What is measured	Results Interpretation	Notes
Lumipulse β -Amyloid Ratio (1-42/1-40) Fujirebio Diagnostics, Inc.	Ratio of AB 1-42 and AB 1-40 concentrations Determines likelihood of amyloid plaques	Negative (normal): ≥ 0.073 Likely positive (abnormal): 0.059-0.072 Positive (abnormal): ≤ 0.058	AB 1-42 accumulation leads to plaque aggregation and neurotoxicity in AD AB 1-40 remains relatively stable and less prone to aggregating Likely positive and positive results are more likely to be consistent with a positive amyloid PET result; however, these results do not establish a diagnosis of AD or other cognitive disorders.
Elecsys beta-amyloid (1-42) CSF II and Elecsys Phospho-Tau (181P)CSF (pTau181) Roche	Used together to measure the ratio of pTau181 and AB 1-42 concentrations Ratio provides a surrogate marker of amyloid plaque burden with 90% concordance with Amyloid PET imaging	Negative (normal): ratio \leq lab-designated ratio cut-off Positive (abnormal): ratio $>$ lab-designated ratio cut-off	Increases in CSF pTau181 concentration is associated with more rapid cognitive decline in AD Results below the cut-off reduces the likelihood of AD causing the cognitive impairment Intended to be used in addition to other clinical diagnostic evaluations.
Elecsys beta-amyloid (1-42) CSF II and Elecsys Total-Tau CSF Roche	Used together to measure the ratio of tTau and AB 1-42 concentrations Ratio provides a surrogate marker of amyloid plaque burden concordant with Amyloid PET imaging	Negative (normal): ratio \leq lab-designated ratio cut-off Positive (abnormal): ratio $>$ lab-designated ratio cut-off	Expected to be available 4 th quarter 2023 High CSF tTau can also be found in other neurodegenerative disease (e.g., Creutzfeldt-Jakob disease) Intended to be used in addition to other clinical diagnostic evaluations.

AB – amyloid beta; pTau181 – phosphorylated tau-181; tTau – total Tau

*All are cleared by the FDA for adults 55 and older presenting with cognitive impairment who are being evaluated for AD and other causes of cognitive decline.

*Results from different assays may be different and cannot be used interchangeably.

*Results must be interpreted in conjunction with other diagnostic tools, such as neurological examination, neurobehavioral tests, imaging, routine lab tests.