

<b>Title: Aduhelm (Aducanumab-avwa)</b>	<b>Division: Medical Management Department: Pharmacy, Utilization Management</b>
<b>Approval Date: 1/28/2022</b>	<b>LOB: Medicaid, Medicare, HIV SNP, CHP, MetroPlus Gold, Goldcare I&amp;II, Market Plus, Essential, HARP, UltraCare</b>
<b>Effective Date: 1/28/2022</b>	<b>Policy Number: UM-MP327</b>
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### 1. POLICY DESCRIPTION:

Alzheimer's Disease - Amyloid Directed Monoclonal Antibody, Aduhelm

### 2. RESPONSIBLE PARTIES:

Medical Management Administration, Utilization Management, Integrated Care Management, Pharmacy, Claim Department, Providers Contracting.

### 3. DEFINITIONS:

Aduhelm is indicated for the treatment of Alzheimer's Disease. Treatment with Aduhelm should be initiated in patients with mild cognitive impairment or mild dementia stage of disease, the population in which treatment was initiated in clinical trials. There are no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied. This indication was approved under accelerated approval based on reduction in amyloid beta plaques observed in patients treated with Aduhelm.

### 4. POLICY – FDA APPROVED INDICATIONS

#### A. Alzheimer's Disease

Aduhelm will be considered medically necessary when the following conditions of coverage have been met:

#### Initial Request:

- a. Patient has a diagnosis of Alzheimer's with documentation of disease history from prescriber **AND**
- b. Aduhelm is prescribed by or in consultation with a psychiatrist, neurologist, or Neuropsychiatrist **AND**
- c. Patient is 50 years or older **AND**
- d. Dosing is performed according to FDA regulations (no more than 6 doses)
  - i. Dose 1 and 2: 1 mg/kg every 4 weeks
  - ii. Dose 3 and 4: 3 mg/kg every 4 weeks
  - iii. Dose 5 and 6: 6 mg/kg every 4 weeks**AND**
- e. Documentation of magnetic resonance imaging within the past year showing **ALL** of the below:
  - i. No localized superficial siderosis
  - ii. Less than 10 brain microhemorrhages
  - iii. No brain hemorrhage greater than 1 cm within one year**AND**

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- f. Patient has objective evidence of cognitive impairment at baseline (see Appendix A)  
**AND**
- g. Patient has mild dementia or mild cognitive impairment confirmed by **BOTH** of the following scores within the past 6 months:
  - i. Clinical Dementia Rating (CDR) – Global Score of 0.5 or 1 (see Appendix B)  
**AND**
  - ii. Mini-Mental Examination Status (MMSE) score of 20 - 30 (see Appendix C)  
**AND**
- h. One of the following:
  - i. Confirmed presence of beta-amyloid plaques by Positron emission topography (PET) scan or other neuroimaging; i.e. brain biopsy  
**OR**
  - ii. An beta-amyloid 42/40 ratio (AB42/AB40 ratio)  $\leq$  0.25 confirmed by Cerebrospinal fluid (CSF) testing  
**AND**
- i. The following causes of dementia have been ruled out:
  - i. Frontotemporal lobar dementia
  - ii. Dementia with Lewy Bodies
  - iii. Vascular dementia
  - iv. Huntington’s disease
  - v. HIV dementia complex
  - vi. Creutzfeldt-Jakob disease  
**AND**
- j. Patient has been previously treated with Alzheimer’s drug therapies (i.e: donepezil, galantamine, memantine, rivastigmine)

*Approved for 6 months*

**Renewal Request:**

- a. Initial conditions of coverage have been met
- b. Individual doses cannot exceed 10 mg/kg
- c. Member has been evaluated for evidence of severe amyloid-related imaging abnormalities (ARIA) on MRI prior the 7<sup>th</sup> dose (first dose of 10 mg/kg). (See Appendix D)
  - i. If 10 or more new incident microhemorrhages or > 2 focal areas of superficial siderosis (radiographic severe ARIA-H) is observed, treatment may be continued with caution only after a clinical evaluation and a follow-

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up MRI demonstrates radiographic stabilization (i.e., no increase in size or number of ARIA-H).

*Approved for 6 months*

### 5. LIMITATIONS/ EXCLUSIONS:

- a. Suspected neurodegenerative etiology of cognitive impairment other than Alzheimer’s disease (AD), including but not limited to frontotemporal lobar degeneration (FTLD), vascular dementia, or Lewy body disease (i.e., meeting consensus criteria for possible or probable dementia with Lewy bodies).
- b. Requirement for therapeutic anticoagulation (e.g., anticoagulants, antiplatelets), except for aspirin at a prophylaxis dose or less (no more than 325 mg daily).
- c. Stroke, transient ischemic attack (TIA), or unexplained loss of consciousness within the past year.
- d. Brain hemorrhages, cerebrovascular disorders, or bleeding disorders within the past 6 months.
- e. Unstable angina, myocardial infarction, or advanced chronic heart failure within the past year.
- f. HIV infection or significant systemic infection within the past 30 days

### 6. APPLICABLE PROCEDURE CODES:

CPT	Description
J0172	Injection, aducanumab-avwa, 2 mg

### 7. APPLICABLE DIAGNOSIS CODES:

CODE	Description
G30.9	Alzheimer’s disease, unspecified

### 8. APPENDICES

**Appendix A: Summary of clinical and cognitive evaluation for mild cognitive impairment due to Alzheimer’s Disease**

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- Cognitive concern reflecting a change in cognition reported by patient or information or clinician (i.e. historical or observed evidence of decline over time)
- Objective evidence of impairment in one or more cognitive domains, typically including memory (i.e., formal or bedside testing to establish level of cognitive function in multiple domains)
- Preservation of independence in functional abilities
- Not demented

### Appendix B: Clinical Dementia Rating (CDR) Scale

The CDR is obtained through semi-structured interviews of patients and informants with cognitive functioning rated on a 5-point scale in the following domains: memory, orientation, judgement and problem solving, community affairs, home and hobbies, and personal care. The score relates to the member's level of dementia:

- 0 = Normal
- 0.5 = Very Mild Dementia
- 1 = Mild Dementia
- 2 = Moderate Dementia
- 3 = Severe Dementia

### Appendix C: Mini-Mental Status Exam (MMSE)

The MMSE is scored on a 30-point scale, with items that assess orientation (temporal and spatial; 10 points), memory (registration and recall; 6 points), attention/concentration (5 points), language (verbal and written, 8 points), and visuospatial function (1 point). The score relates to the member's level of dementia:

- 25 - 30 suggest normal cognition
- 20 – 24 suggests mild dementia
- 13 – 20 suggests moderate dementia
- Less than 12 suggests severe dementia

### Appendix D: ARIA MRI Classification Criteria

ARIA Type	Radiographic Severity
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	Mild	Moderate	Severe
ARIA-E	FLAIR hyperintensity confined to sulcus and or cortex/subcortical white matter in one location < 5 cm	FLAIR hyperintensity 5 to 10 cm, or more than 1 site of involvement, each measuring < 10 cm	FLAIR hyperintensity measuring > 10 cm, often with significant subcortical white matter and/or sulcal involvement. One or more separate sites of involvement may be noted.
ARIA-H Microhemorrhage	4 or fewer new incident microhemorrhages	5 to 9 new incident microhemorrhages	10 or more new incident microhemorrhages
ARIA-H Superficial Siderosis	1 focal area of superficial siderosis	2 focal areas of superficial siderosis	More than 2 focal areas of superficial siderosis

### 9. REFERENCES:

1. Aduhelm [package insert]. Cambridge, MA: Biogen, July 2021
2. Cummings, J., Aisen, P., Lemere, C., Atri, A., Sabbagh, M., & Salloway, S. (2021, May 10). *Aducanumab produced a clinically meaningful benefit in association with amyloid lowering.* Alzheimer's research & therapy. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8111757/>.
3. Fandos N, Pérez-Grijalba V, Pesini P, et al. Plasma amyloid  $\beta$  42/40 ratios as biomarkers for amyloid  $\beta$  cerebral deposition in cognitively normal individuals. *Alzheimer's & dementia (Amsterdam, Netherlands)*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5602863/>. Published September 12, 2017. Accessed November 19, 2021.
4. Journal of the Alzheimer's Association. (2020, December). *Emerge and Engage topline results: Phase 3 studies of aducanumab in early Alzheimer's disease.* <https://alz-journals.onlinelibrary.wiley.com/doi/epdf/10.1002/alz.047259>.
5. Journal of the Alzheimer's Association. (2020, October). *Failure to demonstrate efficacy of aducanumab: An analysis of the EMERGE and ENGAGE trials as reported by Biogen, December 2019.* <https://alz-journals.onlinelibrary.wiley.com/doi/epdf/10.1002/alz.12213>.
6. Quest diagnostic's beta-amyloid 42/40 ratio and apolipoprotein E (APOE) isoform panel. Quest Diagnostic's Beta-Amyloid 42/40 Ratio and Apolipoprotein E (APOE) Isoform Panel: - LabCE.com, Laboratory Continuing Education.



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[https://labce.com/spg2598861\\_quest\\_diagnostics\\_beta\\_amyloid\\_4240\\_ratio\\_and\\_apol.aspx](https://labce.com/spg2598861_quest_diagnostics_beta_amyloid_4240_ratio_and_apol.aspx).  
Accessed November 19, 2021.

7. 221AD302 Phase 3 Study of Aducanumab (BIIB037) in Early Alzheimer's Disease - Full Text View - ClinicalTrials.gov
8. 221AD301 Phase 3 Study of Aducanumab (BIIB037) in Early Alzheimer's Disease - Full Text View - ClinicalTrials.gov
9. 2338 PA Medicaid PA Criteria for Aduhelm.pdf
10. ERX.SPA.379 Aducanumab (envolvehealth.com)
11. Aducanumab-avwa. Drug Result Page - In-Depth Answers - Dosing/Administration - Place In Therapy (micromedexsolutions.com)
12. Cunningham EL, McGuinness B, Herron B, Passmore AP. Dementia. Ulster Med J. 2015 May;84(2):79-87.

### REVISION LOG:

REVISIONS	DATE
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Approved:	Date:	Approved:	Date:
<b>Glendon Henry, MD</b> <b>Senior Medical Director</b>		<b>Sanjiv Shah, MD</b> <b>Chief Medical Officer</b>	



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### **Medical Guideline Disclaimer:**

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