Kansas City	Biochemical Markers of Alzheimer Disease and Dementia	
	Policy Number: POL-PP-261 AHS – G2048	**Original Creation Date:** 7/1/2025
	Version Number: 002	**Version Effective Date:** 10/1/2025
	Policy Status: Active	**Next Review Date:** 10/1/2026

PROVIDER/ENTITY IMPACTED					
☒ PROFESSIONAL	☒ FACILITY	☐ DME	☐ AMBULATORY SURGERY	☒ LAB	☐ OTHER

LINES OF BUSINESS IMPACTED						
☒ COMMERCIAL	☒ BLUE MEDICARE ADVANTAGE	☒ ACA QHP[1]	☒ SMALL GROUP ACA	☒ JAA[2]	☒ FEP[3]	☐ DENTAL

[1] ACA QHP: Affordable Care Act Qualified Health Plan for Individual/Family [2] JAA: Joint Administrative Account [3] FEP: Federal Employee Program

Disclaimer

Blue KC has developed Provider Payment Policies to provide guidance on payment methodologies as they pertain to submitted claims. These policies are written following industry standard recommendations from sources such as:

- Current Procedural Terminology
- Centers for Medicare and Medicaid
- American Medical Association
- National Correct Coding Initiative
- Other professional organizations and societies

Coverage of any service is determined by date of service, a member's eligibility and benefit limits for the service or services rendered, all terms of the Provider Service Agreement, and other standards of coding rules and guidelines.

Final payment is subject to the application of claims adjudication and edits common to the industry.

For confirmation of which services may be eligible for coverage and description of when medical services are considered medically necessary, not medically necessary, or investigational, please contact:

- Blue KC Provider Hotline for Commercial lines of Business 816-395-3929
- Affordable Care Act Provider Hotline 866-859-3822
- Blue Medicare Advantage Provider Hotline 866-508-7140

In the event of a conflict between any policies, the Member's coverage document will govern.

Description/Application

Alzheimer disease (AD) is a neurodegenerative disease defined by a gradual decline in memory, cognitive functions, gross atrophy of the brain, and accumulation of extracellular amyloid plaques and intracellular neurofibrillary tangles.

Policy

Application of coverage criteria is dependent upon an individual's benefit coverage at the time of the request.

For individuals with suspected Alzheimer Disease or mild cognitive impairment, measurement of the following biomarkers in cerebrospinal fluid **may be reimbursed**:

- Amyloid beta peptides
- The ratio of total tau (t-tau) to amyloid beta 1-42 (AB42)
- The ration of phosphorylated tau 181 (p-tau181) to AB42

For individuals with suspected Alzheimer disease or mild cognitive impairment, measurement of the ration of p-tau 217 (p-tau217) to Ab42 in plasma using an FDA-approved test (e.g. Lumipulse G pTau217/B-Amyloid 1-42 Plasma Ratio) may be reimbursed.

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of an individual's illness.

- Measurement of cerebrospinal fluid biomarkers of Alzheimer disease or dementia not mentioned above (e.g. a-synuclein, neural threat proteins) **may not be reimbursed**.
- Measurement of plasma and/or serum biomarkers of Alzheimer disease or dementia (e.g. p-tau217 or AB42 as individual markers, total tau protein, amyloid beta, neural thread proteins, ApoE4, **may not be reimbursed.**
- Measure of urinary biomarkers of Alzheimer disease or dementia (e.g. neural thread proteins, amyloid beta peptides, urinary extracellular vesicle analysis) **may not be reimbursed**.
- The use of multianalyte assays, algorithmic analysis, and/or any other tests not mentioned above for the prognosis, diagnosis, and or management of Alzheimer disease or dementia **may not be reimbursed**

Coding

CPT/HCPCS	Description
82233	Beta-amyloid; 1-40 (Abeta 40)
82234	Beta-amyloid; 1-42 (Abeta 42)
83520	Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative, not otherwise specified
83884	Neurofilament light chain (NfL)
84393	Tau, phosphorylated (eg, pTau 181, pTau 217), each
84394	Tau, total (tTau)
0206U	Neurology (Alzheimer disease); cell aggregation using morphometric imaging and protein kinase C-epsilon (PKCe) concentration in response to amylospheroid treatment by ELISA, cultured skin fibroblasts, each reported as positive or negative for Alzheimer disease
0207U	Neurology (Alzheimer disease); quantitative imaging of phosphorylated ERK1 and ERK2 in response to bradykinin treatment by in situ immunofluorescence, using cultured skin

	fibroblasts, reported as a probability index for Alzheimer disease (List separately in addition to code for primary procedure)
0289U	Neurology (Alzheimer disease), mRNA, gene expression profiling by RNA sequencing of 24 genes, whole blood, algorithm reported as predictive risk score
0358U	Neurology (mild cognitive impairment), analysis of B-amyloid 1-42 and 1-40, chemiluminescence enzyme immunoassay, cerebral spinal fluid, reported as positive, likely positive, or negative
0393U	Neurology (eg, Parkinson disease, dementia with Lewy bodies), cerebrospinal fluid (CSF), detection of misfolded a-synuclein protein by seed amplification assay, qualitative
0412U	Beta amyloid, AB42/40 ratio, immunoprecipitation with quantitation by liquid chromatography with tandem mass spectrometry (LC-MS/MS) and qualitative ApoE isoform-specific proteotyping, plasma combined with age, algorithm reported as presence or absence of brain amyloid pathology
0443U	Neurofilament light chain (NfL), ultra-sensitive immunoassay, serum or cerebrospinal fluid
0445U	B-amyloid (Abeta42) and phospho tau (181P) (pTau181), electrochemiluminescent immunoassay (ECLIA), cerebral spinal fluid, ratio reported as positive or negative for amyloid pathology
0459U	B-amyloid (Abeta42) and total tau (tTau), electrochemiluminescent immunoassay (ECLIA), cerebral spinal fluid, ratio reported as positive or negative for amyloid pathology
0479U	Tau, phosphorylated, pTau217
0503U	Neurology (Alzheimer disease), beta amyloid (AB40, AB42, AB42/40 ratio) and tau-protein (pTau217, np-tau217, pTau217/np-tau217 ratio), blood, immunoprecipitation with quantitation by liquid chromatography with tandem mass spectrometry (LC-MS/MS), algorithm score reported as likelihood of positive or negative for amyloid plaques
0547U	Neurofilament light chain (NfL), chemiluminescent enzyme immunoassay, plasma, quantitative Proprietary test: Neurofilament Light BloodTest Lab/Manufacturer: Neurocode USA Inc, Fujirebio Diagnostics Inc
0548U	Glial fibrillary acidic protein (GFAP), chemiluminescent enzyme immunoassay, using plasma Proprietary test: Glial Fibrillary Acidic Protein Blood test Lab/Manufacturer: Neurocode USA Inc, Fujirebio Diagnostics Inc
0551U	Tau, phosphorylated, pTau217, by single-molecule array (ultrasensitive digital protein detection), using plasma Proprietary test: LucentAD p-Tau217 Lab/Manafacturer – Quanterix Corporation
0568U	Neurology (dementia), beta amyloid (AB40, AB42, AB42/40 ratio), tau-protein phosphorylated at residue (eg, pTau217), neurofilament light chain (NfL), and glial fibrillary acidic protein (GFAP), by ultra-high sensitivity molecule array detection, plasma, algorithm reported as positive, intermediate, or negative for Alzheimer pathology Proprietary test: LucentAD Complete Lab/Manufacturer: Quanterix Corporation
0596U	Neurology (Alzheimer disease), plasma, 3 distinct isoform-specific peptides (APOE2, APOE3, APOE4) by liquid chromatography with tandem mass spectrometry (LCMS,MS), reported as a APOE prototype Proprietary test: Precivity-ApoE Lab/Manufacturer: C@n Diagnostics LLC

References and Resources

Avalon Medical Policy AHS – G2048 – Biochemical Markers of Alzheimer Disease and Dementia

Related Documents

Avalon Medical Policy AHS- M2038 Genetic Testing for Familial Alzheimer Disease

Revision History

Version	Date	Summary of Revisions
001	07/01/2025	Initial version
002	10/01/2025	Avalon 4th Quarter updates