



POLICY INFORMATION			
Policy Number:	POL-PP- 307 AHS – G2123 – Serum Biomarker Testing for Multiple Sclerosis and Related Neurologic Diseases	Original Effective Date:	07/01/2025
Version Number:	001	Revision Date:	
Policy Status:	Active	Next Revision Date:	07/01/2026

**NOTICE**

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Blue KC reserves the right to review and revise these policies when necessary. When there is an update, we will publish the most current policy to: <https://providers.bluekc.com/ContactUs/PaymentPolicies>.

PROVIDER/ENTITY IMPACTED					
<input checked="" type="checkbox"/> <b>PROFESSIONAL</b>	<input checked="" type="checkbox"/> <b>FACILITY</b>	<input type="checkbox"/> <b>DME</b>	<input type="checkbox"/> <b>AMBULATORY SURGERY</b>	<input checked="" type="checkbox"/> <b>LAB</b>	<input type="checkbox"/> <b>OTHER</b>

LINES OF BUSINESS IMPACTED						
<input checked="" type="checkbox"/> <b>COMMERCIAL</b>	<input checked="" type="checkbox"/> <b>BLUE MEDICARE ADVANTAGE</b>	<input checked="" type="checkbox"/> <b>ACA QHP<sup>1</sup></b>	<input checked="" type="checkbox"/> <b>SMALL GROUP ACA</b>	<input checked="" type="checkbox"/> <b>JAA<sup>2</sup></b>	<input checked="" type="checkbox"/> <b>FEP<sup>3</sup></b>	<input type="checkbox"/> <b>DENTAL</b>

<sup>1</sup> ACA QHP: Affordable Care Act Qualified Health Plan for Individual/Family    <sup>2</sup> JAA: Joint Administrative Account    <sup>3</sup> 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

Multiple sclerosis (MS) is the most common immune-mediated inflammatory demyelinating disease of the central nervous system (CNS) and is defined by multifocal areas of demyelination with loss of oligodendrocytes and astroglial scarring. The most commonly present symptom is sensory disturbances, followed by weakness and visual disturbances. However, the disease has a highly variable pace and many atypical forms (Olek, 2024a). Besides MS, acute CNS demyelination also occurs in acute disseminated encephalomyelitis (ADEM), optic neuritis, transverse myelitis, and neuromyelitis optica (Lotze, 2024).

Neuromyelitis optica and neuromyelitis optica spectrum disorders (NMOSD) are inflammatory disorders of the CNS characterized by severe, immune-mediated demyelination and axonal damage predominantly targeting the optic nerves and spinal cord. Previously considered a subset of MS, this set of disorders is now recognized as its own clinical entity with its own unique immunologic features (Glisson, 2024).

### Policy

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

For the diagnosis of multiple sclerosis (MS), cerebrospinal fluid (CSF) and serum oligoclonal band analysis **may be reimbursed in any** of the following situations:

- For individuals with atypical clinical, laboratory, or imaging features.
- For individuals with an atypical, clinically isolated syndrome, including, but not limited to, primary progressive multiple sclerosis or relapsing-remitting course.
- For individuals belonging to a population in which MS is less common (e.g., children, older individuals).
- For individuals with insufficient clinical or imaging evidence for diagnosis.

In cases of suspected neuromyelitis optica spectrum disorders (NMOSD) or myelin oligodendrocyte glycoprotein-immunoglobulin G (MOG-IgG)-associated encephalomyelitis (MOG-EM), serum indirect fluorescence assay or fluorescence-activated cell sorting (FACS) assay of aquaporin-4-IgG (AQP4-IgG) and MOG-IgG **may be reimbursed when all of the following conditions are met:**

- The individual has monophasic or relapsing acute optic neuritis, myelitis, brainstem encephalitis, encephalitis, or any combination thereof;
- The individuals have radiological or electrophysiological findings compatible with central nervous system (CNS) demyelination;
- The individual has at least one of the following:
  - Belongs to a higher risk population (e.g., pediatric).
  - Has an abnormal MRI depicting extensive optic nerve lesion, extensive spinal cord lesion or atrophy, or large confluent T2 brain lesions.
  - Has prominent papilledema/papillitis/optic disc swelling during acute optic neuritis.
  - Has neutrophilic CSF pleocytosis.
  - Has a histopathology finding of primary demyelination with intralesional complement and IgG deposits or has a previous diagnosis of "pattern II MS".
  - Has simultaneous bilateral acute optic neuritis.
  - Has a severe visual deficit or blindness in one or both eyes during or after acute optic neuritis.



- Has severe or frequent episodes of acute myelitis or brainstem encephalitis.
- Has permanent sphincter and/or erectile disorder after myelitis.
- Has a previous diagnosis of acute disseminated encephalomyelitis (ADEM).

*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.*

In all other situations, serum biomarker tests for multiple sclerosis **may not be reimbursed.**

ELISA, Western blot, immunohistochemistry, or any other serum assays to test for NMOSD or MOG-EM **may not be reimbursed.**

For the diagnosis of MS, NMOSD, or MOG-EM, all other cerebrospinal fluid (CSF) biomarker tests, including AQP4-IgG or MOG-IgG, **may not be reimbursed.**

**Coding**

CPT	Code Description
83520	Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative, not otherwise specified
83916	Oligoclonal immune (oligoclonal bands)
84182	Western Blot, with interpretation and report, blood or other body fluid, immunological probe for band identification, each
86051	Aquaporin-4 (neuromyelitis optica [NMO]) antibody; enzyme-linked immunosorbent immunoassay (ELISA)
86052	Aquaporin-4 (neuromyelitis optica [NMO]) antibody; cell-based immunofluorescence assay (CBA), each
86053	Aquaporin-4 (neuromyelitis optica [NMO]) antibody; flow cytometry (ie, fluorescence-activated cell sorting [FACS]), each
86362	Myelin oligodendrocyte glycoprotein (MOG-IgG1) antibody; cell-based immunofluorescence assay (CBA), each
86363	Myelin oligodendrocyte glycoprotein (MOG-IgG1) antibody; flow cytometry (ie, fluorescence-activated cell sorting [FACS]), each
88341	Immunohistochemistry or immunocytochemistry, per specimen; each additional single antibody stain procedure (List separately in addition to code for primary procedure)
88342	Immunohistochemistry or immunocytochemistry, per specimen; initial single antibody stain procedure
0443U	Neurofilament light chain (nfl), ultra-sensitive immunoassay, serum or cerebrospinal fluid Proprietary test: Neurofilament Light Chain (NfL) Lab/Manufacturer: Neuromuscular Clinical Laboratory at Washington University in St. Louis School of



	Medicine, Neuromuscular Clinical Laboratory at Washington University in St. Louis School of Medicine
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**Related Documents**

Policy Number	Policy Title
N/A	

**References and Resources**

Avalon Medical Policy AHS – G2123 – Serum Biomarker Testing for Multiple Sclerosis and Related Neurologic Diseases
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**Revision History**

Version	Date	Summary of Revisions
001	06/01/2025	Initial version