

Memorandum - Core #199

 To: UNC Health System Attending Physicians, Housestaff, Clinical Nurse Coordinators, Department Heads and Supervisors
From: Nichole Korpi-Steiner, PhD Director, Special Chemistry Laboratory
Metherbert C. Whinna, MD, PhD Medical Director, McLendon Clinical Laboratories
Irena Dujmovic Basuroski, MD, PhD Division Chief, Multiple Sclerosis and Neuroimmunology

Date: September 12, 2023

Subject: Change in CSF IgG oligoclonal band interpretation

Effective September 18th, 2023, in order to better serve UNC Health patients, the McLendon Clinical Laboratories Special Chemistry Lab will change the CSF IgG oligoclonal band interpretation criteria to the revised McDonald criteria [1] reviewed by the International Panel on Diagnosis of Multiple Sclerosis. Per revised criteria, the qualitative demonstration of two or more CSF-specific IgG oligoclonal bands more reliably indicates intrathecal antibody synthesis than other tests such as the IgG index.

| # CSF Oligoclonal Bands | Previous Interpretation | New Interpretation |
|-------------------------|--------------------------------|---|
| 0 | Negative | Negative. < 2 IgG bands unique to the CSF |
| 1 | Atypical | observed. |
| 2 | Atypical | Positive. 2 or more IgG bands unique to the |
| 3 | Atypical | CSF observed. |
| 4 or more | Positive | |

NOTE: Analysis of paired CSF and serum samples is essential to confirm that the oligoclonal IgG bands are unique to CSF.

The presence of 2 or more unique CSF IgG oligoclonal bands was incorporated into diagnostic criteria for Multiple Sclerosis in the revised McDonald criteria (2017; [1]). These findings, however, are not specific for Multiple Sclerosis as CSF-specific IgG synthesis may also be found in patients with other neurologic diseases including but not limited to infectious, various CNS

immune-mediated inflammatory diseases and cerebrovascular diseases. Clinical correlation is recommended.

Please contact Dr. Nichole Korpi-Steiner (Nichole.korpi-steiner@unchealth.unc.edu) for any technical questions.

Reference:

1. Thompson AJ, Banwell BL, Barkhof F, et al: Diagnosis of multiple sclerosis: 2017 revisions of the McDonald criteria. Lancet Neurol. 2018 Feb;17(2):162-173.