Aquaporin-4 (AQP4)-IgG and myelin oligodendrocyte glycoprotein (MOG)-IgG1 are not found in MS or healthy subjects, and detection of both antibodies in serum is rare and unusual.

AQP4+
This result is consistent with an autoimmune astrocytopathy/NMOSD and justifies initiation of optimal immunosuppressive therapy at the earliest possible time. Follow-up in 3 to 6 months is recommended if NMOSD is suspected and initial testing is negative.

MOG+
This result is consistent with an NMO-like phenotype, and in the setting of acute disseminated encephalomyelitis, optic neuritis, and transverse myelitis, it indicates an autoimmune oligodendrogliopathy with potential for relapsing course. Identification of MOG-IgG1 allows distinction from MS and may justify initiation of appropriate immunosuppressive therapy (not MS disease-modifying agents) at the earliest possible time. Follow-up in 6 to 12 months is recommended as persistence of MOG-IgG1 seropositivity predicts a relapsing course.