

**CASEY EYE**
Institute**Oregon Health & Science University**

OCULAR IMMUNOLOGY LABORATORY

LBRB-Room 253

3181 SW Sam Jackson Park Road, Portland, Oregon 97239

Ph: 503-418-2543 Fax: 503-418-2541

Patient Name: Accession #
Medical Record #: SA0086885
Account #:
Date of Birth: 8/29/1951
Sex: Female Reference Lab no.:
Referral Source: MAYO MEDICAL LABS/REFERRAL Physician(s):

Ocular Immunology (Final result)

Authorizing Provider:	Ordering Provider:
Pathologist: David J Wilson, MD	Collected: 01/09/2019
	Received:

Specimens**A** Blood, 2ml**Clinical History**

Decreased vision; history of CME OD; posterior uveitis OD; ERM OD; chorioretinal inflammation, scars and disorders of choroid; VA: 20/200 OD and 20/20 OS; PVEP: delayed responses OU (OD<OS); fERG: normal retinal responses; GVF: enlarged blind spot, superior constriction OU; history of BCC excised from forearm in 2002 and possible early melanoma 06/2014

Anti Retinal Result***Test results must be interpreted in the context of clinical presentation*****Western Blotting: POSITIVE for anti-optic nerve autoantibodies against 40-kDa protein**

[Adequacy: Satisfactory for evaluation]

This test was developed and its performance characteristics determined by Ocular Immunology Laboratory OHSU. It has not been approved by the U.S. Food and Drug Administration.

Electronically signed by Grazyna Adamus, PhD, on 01/10/2019

Electronically signed by David J Wilson, MD on 01/10/2019

Interpretation**Autoimmune Optic Neuropathy**

A positive result indicates that anti-optic nerve autoantibodies are present, which may be a sign of Autoimmune Neuropathy. Recent study show that the repertoire of anti-optic nerve autoantibodies often differed from anti-retinal antibodies [Adamus et al, J Ophthal Inflamm Infect: 1-11, 2011]. The major antigenic targets for these antibodies could be divided into four groups. Autoantibodies specific to classical glycolytic enzymes involved in energy production (α and γ enolases, 46-kDa, glyceraldehyde 3-phosphate dehydrogenase-GAPDH, 36-kDa) also

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reacted with retinal antigens. Autoantibodies targeted neuronal specific myelin proteins (MBP-19-kDa, PLP-20-kDa, MOG-26-kDa), aquaporin 4 (40-kDa), and collapsing response mediator protein 5 (CRMP5, 62-kDa) reacted with optic nerve antigens. They showed immunostaining of axons and myelin in the optic nerve.

Optic neuritis has been described in some patients with paraneoplastic syndromes of the CNS in association with several anti-neuronal antibodies, including anti-ANNA-1 (35-40-kDa), anti-PCA-1, anti-CRMP-5, anti-aquaporin and others [Pittock SJ, Lennon VA: Arch Neurol 65(5):629, 2008]. Anti-CRMP-5 (62-kDa) antibodies are associated with optic neuritis and retinitis with vitreous inflammatory cells. Positive serology recommends vitreous biopsy and expedite search for cancer [Cross et al, Ann Neurol 54(1):38, 2003]. Anti-22-kDa neuronal antigen antibodies were found in patients with an abnormal ERG, optic atrophy, or both. Most patients with anti-22-kDa antibodies had skin melanoma. The clinical significance of anti-22-kDa antibodies is not clear [Keltner et al, J Neuroophthalmol 21(3):173, 2001].

Protocols:

MAYO MEDICAL LABS/REFERRAL

Referrals, 3050 Superior Dr NW
Rochester Minnesota 55901