

References

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Membranous Nephropathy and PLA2R



testing at ARUP Laboratories



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keyword: PLA2R

A nonprofit enterprise of the University of Utah and its Department of Pathology

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PLA2R IgG test results provide physicians the information needed to help differentiate a diagnosis of primary membranous nephropathy (MN) from secondary MN. ARUP's cell-based immunofluorescence antibody methodology provides a reliable, robust, semi-quantitative test result that helps physicians evaluate disease activity and clinical course, monitor therapeutic response, and provide risk assessment before and after kidney transplantation.²

Membranous nephropathy is one of the most common causes of nephrotic syndrome. Circulating autoantibodies against PLA2R were found in 70–80% of patients with primary MN, but not in those with secondary MN or other renal diseases, making the PLA2R assay integral for managing care of MN patients.

Prevalence

- · Occurs in 1 out of 100,000 individuals.
- Seen in all ethnic/racial groups, in both sexes, and at any age.
- More common after age 40, with a higher prevalence seen in white males.

Laboratory Testing at ARUP

test code test name

2011828 Phospholipase A2 Receptor (PLA2R) Antibody, IgG with Reflex to Titer

Benefits of the PLA2R IgG Assay

Differential diagnosis:

 Assay discriminates primary MN (pMN) from secondary MN (sMN).

Therapy monitoring:3

- · Autoantibodies reappear during a relapse.
- Increase in the antibody titers precedes a rise in proteinuria.
- Decrease in antibody titers is followed by a fall in proteinuria.

Disease activity and course:

 Clinical disease activity correlates with level of proteinuria.

Risk estimation in transplantation:

• Presence of antibodies is associated with increased risk of kidney rejection.

Benefits of ARUP's PLA2R Assay

ARUP's cell-based IFA assay is characterized by:

- Excellent specificity and comparable sensitivity to the ELISA assay.
- Semi-quantitative titer results, which are important in disease evaluation, response to treatment monitoring, and risk assessment in antibody-positive patients.
- Low false-positivity rate compared to the ELISA assay.

ARUP Laboratories offers a more reliable, robust, and predictable test to detect and quantify PLA2R IgG antibodies in serum.

PLA2R IgG assay can help differentiate between primary and secondary MN.

one-third of patients have spontaneous complete remission.

334



one-third of patients have persistent proteinuria where renal function is normal or impaired but stable.

PLA2R IgG assay can help physicians evaluate disease activity and clinical course, as well as monitor therapeutic response.

one-third of patients have progressive disease leading to end-stage renal disease.



PLA2R IgG assay can provide risk assessment before and after kidney transplantation.