Membranous Nephropathy and PLA2R testing at ARUP Laboratories

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References
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

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<th>test code</th>
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<td>2011828</td>
<td>Phospholipase A2 Receptor (PLA2R) Antibody, IgG with Reflex to Titer</td>
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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.