

# QUIZ 29-12-2025

# MEMBRANEOUS NEPHROAPTHY

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# QUESTION 1

- Which property of **human PLA2R** best explains its role as a dominant target antigen in **primary membranous nephropathy**?
- A. High-affinity binding to circulating secreted phospholipase A2
- B. Mesangial expression with antigen shedding into circulation
- C. **Endocytic recycling of a podocyte-restricted transmembrane receptor**
- D. Enzymatic activity causing direct podocyte injury

# ANSWER --. ENDOCYTIC RECYCLING OF A PODOCYTE-RESTRICTED TRANSMEMBRANE RECEPTOR

- A Human PLA2R has limited affinity for common PLA2 isoforms; disease is not due to trapped circulating complexes.
- B PLA2R expression is podocyte-specific, not mesangial.
- C PLA2R undergoes endocytic recycling, ensuring continuous surface availability → persistent *in situ* immune-complex formation.
- D PLA2R has no enzymatic function; injury is immune-mediated.

## WINNER --DR. URVASHI KHAN

- 3rd year Drnb Nephrology resident
- Dharamshila Narayana Superspeciality Hospital
- Delhi



## QUESTION 2

- A 58-year-old male presents with nephrotic syndrome (proteinuria 8.2 g/day, serum albumin 2.3 g/dL).

Renal biopsy shows **stage II membranous nephropathy** with diffuse subepithelial deposits.

Immunofluorescence: **IgG+, C3+, IgG4 predominant.**

Serology: **Anti-PLA2R ELISA negative** (tested twice, 4 weeks apart).

He has unintentional weight loss over 6 months.

# WHICH IS THE MOST APPROPRIATE NEXT DIAGNOSTIC STEP?

- A. Perform extended antigen testing including NELL-1
- B. Repeat anti-PLA2R using immunoblot assay
- C. Start rituximab based on biopsy-proven primary membranous nephropathy
- D. Treat conservatively for 6 months and reassess proteinuria

# ANSWER -- EXTENDED ANTIGEN TESTING.

- A Extended antigen testing (NELL-1)
  - NELL-1 is strongly linked to malignancy-associated membranous nephropathy, especially in older patients with weight loss
- B Repeat anti-PLA2R (immunoblot)
  - Two negative ELISAs make PLA2R-associated disease unlikely
- C- Start rituximab
  - PLA2R-negative MN with systemic red flags risks missing secondary/malignancy-associated MN.
- D Conservative therapy
  - Heavy proteinuria plus red-flag features mandates etiologic clarification before delay.

## WINNER --DR SARAVANA BALAJI

- DM nephrology resident
- 3rd year
- MMC chennai



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THANK YOU

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