

Can anti-nephrin antibodies be used as a biomarker in MCD and INS?

Cohort



Multi-centre Study



Biopsy-Proven
Glomerular Disease



Adult and Paediatric
Patients



Serum/Plasma
Samples

Methods



Identification of
anti-nephrin
antibodies by immuno-
precipitation



Immunisation
with recombinant
murine nephrin

Results



n = 357

+ 44% MCD
+ 9% 1^{ary} FSGS
+ 2% 2^{ndary} FSGS

+ 69%
in active
MCD pre-
treatment



n = 182

+ 52% INS

+ 90%
in active
INS pre-
treatment



+ anti-nephrin antibodies, rapid
development of nephrotic syndrome

Conclusions Circulating anti-nephrin autoantibodies can be detected by immunoprecipitation and are common in MCD and INS. They are pathogenic autoantibodies and serve as markers of disease activity, correlating strongly with proteinuria levels.

Reference: Hengel FE, Dehde S, Lassé M et al. Autoantibodies Targeting Nephrin in Podocytopathies. NEJM 2024