

## Case studies of sustained remission of membranous glomerulonephritis with dupilumab treatment

Mark H. Kaplan, PhD<sup>1</sup>, Jessica M. Greco, MD<sup>2</sup>, Brad H. Rovin, MD<sup>2</sup>, Anthony M. Cannon, BS<sup>1</sup>, Abigail Pajulas, PhD<sup>1</sup>, Jeffrey B. Travers, MD, PhD<sup>3</sup>, Ayman Hallab, MD<sup>4</sup>, Matthew J. Turner, MD, PhD<sup>5</sup>

### Supplementary References

- S1. Keegan AD, Zamorano J, Keselman A, *et al.* IL-4 and IL-13 Receptor Signaling From 4PS to Insulin Receptor Substrate 2: There and Back Again, a Historical View. *Front Immunol* 2018; **9**: 1037.
- S2. Finkelman FD, Hogan SP, Hershey GK, *et al.* Importance of cytokines in murine allergic airway disease and human asthma. *J Immunol* 2010; **184**: 1663-1674.
- S3. Beck LA, Thaci D, Hamilton JD, *et al.* Dupilumab treatment in adults with moderate-to-severe atopic dermatitis. *N Engl J Med* 2014; **371**: 130-139.
- S4. Guttman-Yassky E, Bissonnette R, Ungar B, *et al.* Dupilumab progressively improves systemic and cutaneous abnormalities in patients with atopic dermatitis. *J Allergy Clin Immunol* 2019; **143**: 155-172.
- S5. Erb KJ, Ruger B, von Brevern M, *et al.* Constitutive expression of interleukin (IL)-4 in vivo causes autoimmune-type disorders in mice. *J Exp Med* 1997; **185**: 329-339.
- S6. Foote LC, Evans JW, Cifuni JM, *et al.* Interleukin-4 produces a breakdown of tolerance in vivo with autoantibody formation and tissue damage. *Autoimmunity* 2004; **37**: 569-577.
- S7. Morris SC, Dragula NL, Finkelman FD. IL-4 promotes Stat6-dependent survival of autoreactive B cells in vivo without inducing autoantibody production. *J Immunol* 2002; **169**: 1696-1704.
- S8. Schorlemmer HU, Dickneite G, Kanzy EJ, *et al.* Modulation of the immunoglobulin dysregulation in GvH- and SLE-like diseases by the murine IL-4 receptor (IL-4-R). *Inflamm Res* 1995; **44 Suppl 2**: S194-196.
- S9. Singh RR, Saxena V, Zang S, *et al.* Differential contribution of IL-4 and STAT6 vs STAT4 to the development of lupus nephritis. *J Immunol* 2003; **170**: 4818-4825.
- S10. Kim AH, Chung JJ, Akilesh S, *et al.* B cell-derived IL-4 acts on podocytes to induce proteinuria and foot process effacement. *JCI Insight* 2017; **2**.

- S11. Munoz-Bellido FJ, Moreno E, Davila I. Dupilumab: A Review of Present Indications and Off-Label Uses. *J Investig Allergol Clin Immunol* 2022; **32**: 97-115.
- S12. Simpson RS, Lau SKC, Lee JK. Dupilumab as a novel steroid-sparing treatment for IgG4-related disease. *Ann Rheum Dis* 2020; **79**: 549-550.
- S13. Kulkarni M, Rohan CA, Travers JB, *et al.* Long-Term Efficacy of Dupilumab in Alopecia Areata. *Am J Case Rep* 2022; **23**: e936488.
- S14. Yang YQ, Chen H, Qiu LR, *et al.* Case Report: The Application of Dupilumab in Atopic Dermatitis Children Complicated With Nephrotic Syndrome. *Front Med (Lausanne)* 2022; **9**: 813313.