

Supplemental References:

- S1. Farooqui N, Zaidi M, Vaughan L, et al. Cytokines and Immune Cell Phenotype in Acute Kidney Injury Associated With Immune Checkpoint Inhibitors. *Kidney Int Rep* 2023;8(3):628-41. doi: 10.1016/j.ekir.2022.11.020
- S2. Gupta S, Short SAP, Sise ME, et al. Acute kidney injury in patients treated with immune checkpoint inhibitors. *J Immunother Cancer* 2021;9(10) doi: 10.1136/jitc-2021-003467
- S3. Abdelrahim M, Mamlouk O, Lin H, et al. Incidence, predictors, and survival impact of acute kidney injury in patients with melanoma treated with immune checkpoint inhibitors: a 10-year single-institution analysis. *Oncoimmunology* 2021;10(1):1927313. doi: 10.1080/2162402X.2021.1927313
- S4. Pan M, Zhao H, Jin R, et al. Targeting immune checkpoints in anti-neutrophil cytoplasmic antibodies associated vasculitis: the potential therapeutic targets in the future. *Front Immunol* 2023;14:1156212. doi: 10.3389/fimmu.2023.1156212
- S5. Schildberg FA, Klein SR, Freeman GJ, et al. Coinhibitory Pathways in the B7-CD28 Ligand-Receptor Family. *Immunity* 2016;44(5):955-72. doi: 10.1016/j.immuni.2016.05.002
- S6. Das R, Bar N, Ferreira M, et al. Early B cell changes predict autoimmunity following combination immune checkpoint blockade. *J Clin Invest* 2018;128(2):715-20. doi: 10.1172/JCI96798
- S7. Damsky W, Jilaveanu L, Turner N, et al. B cell depletion or absence does not impede anti-tumor activity of PD-1 inhibitors. *J Immunother Cancer* 2019;7(1):153. doi: 10.1186/s40425-019-0613-1
- S8. Nishimura H, Nose M, Hiai H, et al. Development of lupus-like autoimmune diseases by disruption of the PD-1 gene encoding an ITIM motif-carrying immunoreceptor. *Immunity* 1999;11(2):141-51. doi: 10.1016/s1074-7613(00)80089-8
- S9. Jhaveri KD, Kitchlu A, Abudayyeh A. Does treating with anti-PD-1 to improve glomerular health come without a cost? *J Clin Invest* 2022;132(22) doi: 10.1172/JCI164747
- S10. Pippin JW, Kaverina N, Wang Y, et al. Upregulated PD-1 signaling antagonizes glomerular health in aged kidneys and disease. *J Clin Invest* 2022;132(16) doi: 10.1172/JCI156250
- S11. Liao W, Zheng H, Wu S, et al. The Systemic Activation of Programmed Death 1-PD-L1 Axis Protects Systemic Lupus Erythematosus Model from Nephritis. *Am J Nephrol* 2017;46(5):371-79. doi: 10.1159/000480641
- S12. Fadel F, El Karoui K, Knebelmann B. Anti-CTLA4 antibody-induced lupus nephritis. *N Engl J Med* 2009;361(2):211-2. doi: 10.1056/NEJMc0904283
- S13. Palamaris K, Alexandris D, Stylianou K, et al. Immune Checkpoint Inhibitors' Associated Renal Toxicity: A Series of 12 Cases. *J Clin Med* 2022;11(16) doi: 10.3390/jcm11164786
- S14. Brahmer JR, Lacchetti C, Schneider BJ, et al. Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: American Society of Clinical Oncology Clinical Practice Guideline. *J Clin Oncol* 2018;36(17):1714-68. doi: 10.1200/JCO.2017.77.6385
- S15. Bruera S, Suarez-Almazor ME. The effects of glucocorticoids and immunosuppressants on cancer outcomes in checkpoint inhibitor therapy. *Front Oncol* 2022;12:928390. doi: 10.3389/fonc.2022.928390
- S16. Schina A, Sztupinszki Z, Marie Svane I, et al. Intratumoral T-cell and B-cell receptor architecture associates with distinct immune tumor microenvironment features and clinical outcomes of anti-PD-1/L1 immunotherapy. *J Immunother Cancer* 2023;11(8) doi: 10.1136/jitc-2023-006941
- S17. Katsumoto TR, Wilson KL, Giri VK, et al. Plasma exchange for severe immune-related adverse events from checkpoint inhibitors: an early window of opportunity? *Immunother Adv* 2022;2(1):ltac012. doi: 10.1093/immadv/ltac012

Article	Pathology	Time to AKI from ICI exposure	Antibodies	Other IRAE	Proteinuria	Treatment	Renal response	Cancer status
Current case	Lupus nephritis	8 months	ANA, Anti-DsDNA, Anti-Histone, myeloperoxidase antibodies	none	4.5g	Prednisone & rituximab	1.29g	Stable disease
Palamaris etal, 2022 (case10)	Lupus like membranous nephropathy	23 months	NA	Dermatitis & Colitis	16g	Prednisone	<1g	NA
Palamaris etal,2022 (case 11)	Lupus like membranous nephropathy	10 months	NA	none	11g	NA	NA	NA
Fadel etal, 2009	Lupus nephritis	1.5 months	ANA, Anti-DsDNA	none	7.5g	Prednisone	1g	Response

Table S1: Summary of all cases published with lupus like glomerulonephritis after ICI treatment.

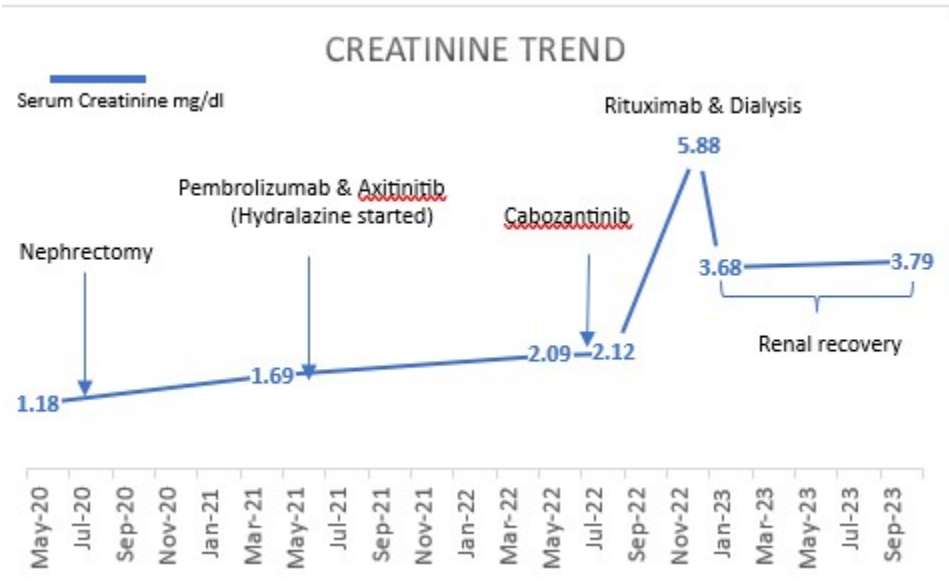


Figure S1: A) Trend of creatinine mg/dl

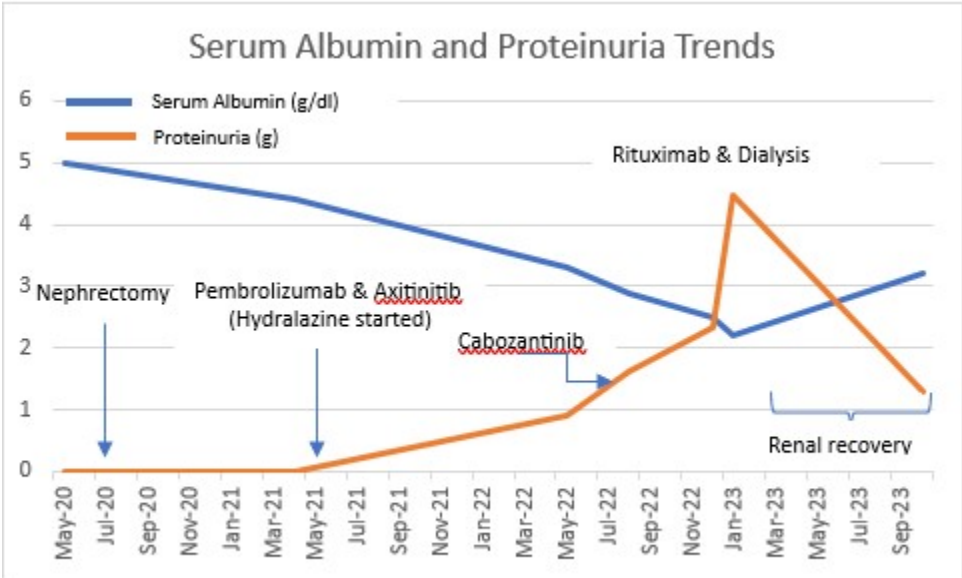


Figure S1: B) Trend of albumin and proteinuria over time.