

Table S1. Summary of reported cases of anti-glomerular basement membrane disease following immune checkpoint inhibitor therapy

	Sammartino et al. 2010 ^{S3}	Takahashi et al. 2018 ^{S4#}	Hultin et al. 2020 ^{S5}	Kyriazis et al. 2021 ^{S6}	Present case
No of patients	1	1	1	1	1
Age, years	50	74	NA	58	74
Sex	M	M	M	M	M
Cancer type	Melanoma	Adenocarcinoma of the lung	Melanoma	Melanoma	Squamous cell lung carcinoma
ICI therapy	Anti-CTLA-4 tremelimumab	Anti-PD-1 nivolumab	Anti-CTLA-4 ipilimumab + anti-PD-1 nivolumab	Anti-CTLA-4 ipilimumab + anti-PD-1 nivolumab	Anti-PD-1 pembrolizumab
Cancer outcome	Stable	Stable	Complete response	Stable	Partial response
Delay after ICI introduction, months	13.5	4	12	16	2
Creatinine at presentation, mg/dL	3.3	1.98	15.6	2.4	5.6
Proteinuria at presentation	NA	2+ dipstick result	NA	2 g/g creatinine	12 g/g creatinine
Oliguria	Yes	Yes	NA	No	No
Pulmonary hemorrhage	No	Yes	NA	No	No
Renal biopsy findings					
%crescents	71%	NA	>95%	13%	23%
%GS	6%	NA	NA	0	45%
ANCA	Negative	NA	NA	Negative	Negative
Anti-GBM antibody	Positive	Positive	Positive	Negative	Negative
Treatment	Steroids, cyclophosphamide, plasma exchange	Steroids, plasma exchange	Steroids, cyclophosphamide, plasma exchange	Steroids, cyclophosphamide	Rituximab, plasma exchange
Outcome	ESKD	ESKD, death	Partial response	Partial response but relapse 4 weeks after reinitiating nivolumab, ESKD	ESKD

Abbreviations: ANCA, antineutrophil cytoplasmic antibody; CTLA-4, cytotoxic T-lymphocyte-associated protein 4; ESKD, end-stage kidney disease; GBM, glomerular basement membrane; GS, global glomerulosclerosis; ICI, immune checkpoint inhibitor; PD-1, programmed cell death protein 1.

#autopsy case.

Supplemental References

- S1. Clatworthy MR, Wallin EF, Jayne DR. Anti-glomerular basement membrane disease after alemtuzumab. *N Engl J Med*. 2008;359:768-769.
- S2. Al-Chalabi S, Wu HHL, Chinnadurai R, Ponnusamy A. Etanercept-Induced Anti-Glomerular Basement Membrane Disease. *Case Rep Nephrol Dial*. 2021;11:292-300.
- S3. Sammartino C, Goodman D, Flanagan G, et al. Anti-GBM disease following CTLA4 blockade in a patient with metastatic melanoma, *NDT Plus*. 2010;3:135-137.
- S4. Takahashi N, Tsuji K, Tamiya H, et al. Goodpasture's disease in a patient with advanced lung cancer treated with nivolumab: An autopsy case report. *Lung Cancer*. 2018;122:22-24.
- S5. Hultin S, Nahar K, Menzies AM, et al. Histological diagnosis of immune checkpoint inhibitor induced acute renal injury in patients with metastatic melanoma: a retrospective case series report. *BMC Nephrol*. 2020;21:391.
- S6. Kyriazis P, Tiwary A, Freeman J, et al. Atypical anti-glomerular basement membrane glomerulonephritis in a patient with metastatic melanoma treated with mitogen-activated protein kinase and immune checkpoint inhibitors: a case report. *J Med Case Rep*. 2021;15:186.