

Supplementary Table 1. Characteristics of patients with ICI-PMR.

Patient	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6
Age and sex	83, male	73, male	74, male	59, female	72, male	63, female
Malignancy	Urothelial cell carcinoma	Squamous cell carcinoma (lung)	Adenocarcinoma (lung) *	Adenocarcinoma (lung)	Renal cell carcinoma	Adenocarcinoma (lung)
ICI name	Pembrolizumab	Nivolumab	Pembrolizumab	Pembrolizumab	Nivolumab	Nivolumab
ICI response according to RECIST criteria	Complete [sustained]	Partial [progression] §	Partial [sustained] *	Partial [sustained]	Partial [sustained]	Stable disease [progression]
Progression-free survival (months)	>24	13.2	>10 *	>23	>16	8.2
ICI treatment at time of diagnosis ICI-PMR	Interrupted (4 weeks)	Continued	Continued	Continued	Continued	Continued

§ Patient received radiotherapy (20 Gy) due to oligo-progression, but ICI therapy was continued.

* Patient also had a metastatic rectal cancer. Due to progression of rectal cancer, the immune checkpoint inhibitor therapy was discontinued.

Supplementary Figure 1. Treatment and long-term outcomes of other patients with ICI-PMR. Overview of immune checkpoint inhibitor (ICI) infusions, glucocorticoid doses and use of additional therapies in the three patients with the briefest follow-up. *Patient 5* was initially treated with 7.5 mg prednisolone per day; but this dose was promptly increased to 15 mg after one day and could already be decreased to 7.5 mg after three days. The dashed line indicates the time point at which ICI-PMR was diagnosed. The grey box depicts the period during which symptoms of ICI-PMR were already present. Chemo = chemotherapy. Dx = diagnosis. ICI = immune checkpoint inhibitor. MTX = methotrexate. * Prednisolone equivalent; the patient received hydrocortisone. † = patient died due to infection.

