



**Figure S1.** Additional patient timelines and serologies. Timepoints of biopsies of metastases in subcutaneous nodule (Pt 1), lymph node (Pt 1) and liver (other patients) are noted to the left. Treatment lines prior to study enrolment (left) and serologies magnified to the right (citrulline = orange, arginine = blue, in  $\mu\text{M}$ , left y-axis; anti-drug antibody titers = grey, right y axis). Pembro: pembrolizumab, Ipi/Nivo: combined ipilimumab and nivolumab, IMCgp100: tebentafusp.

**Table S1.** Additional clinical information including age, sex, stage, liver- and non-liver metastases, type of prior systemic therapy, liver embolization, LDH- and Alkaline Phosphatase elevation, genetic alterations, RECIST at 12 weeks, outcome, dosing, related- and unrelated adverse events. Met = metastasis, embo = embolization, LDH = lactate dehydrogenase, alk phos = alkaline phosphatase, RECIST = response evaluation criteria in solid tumors, PFS = progression free survival, OS = overall survival, mo = months