



Fig. S1. Histological features of melanoma before and after anti-PD-1 treatment. Histological features of melanoma. Patient 1: mucosal melanoma (a–c) before and (d) after 10 infusions of pembrolizumab. Patient 2: mucosal melanoma (e–g) before and (h) after 12 infusions of pembrolizumab. Patient 3: superficial spreading melanoma (SSM) (i–k) before and (l) after 3 infusions of nivolumab. (a, d, e, h, i, l) Haematoxylin-eosin saffron (HES) staining. PD-L1 status in immunohistochemistry for (b) patient 1 was negative on tumour cells and intermediate on immune cells; for (f) patient 2 was positive on tumour and immune cells; and for (j) patient 3 was negative on tumour and immune cells. CD8 status in immunohistochemistry was positive for (c) patient 1 and (g) patient 2; and negative for (k) patient 3. Magnification $\times 20$.