



**Supplementary Figure 6. Pembrolizumab increases Kv1.3 activity long term in resting responder PBTs.** (A) KCa3.1 (left) and Kv1.3 (right) activity reported as conductance (G) from TN ( $n = 163$  cells from 33 patients) and PT ( $n = 106$  and 105 cells, respectively, from 21 patients) resting PBTs. (B) KCa3.1 (left) and Kv1.3 (right) activity (G) from individual post-resection (PR) resting PBTs from control (PR-CTR) ( $n = 35$  cells, respectively, from 7 patients) and pembrolizumab (PR- $\alpha$ PD1) ( $n = 75$  cells from 15 patients) patients. (C) KCa3.1 (left) and Kv1.3 (right) activity (G) from PT resting PBTs from non-responder (NR) ( $n = 56$  and 55, respectively cells from 11 patients) and responder (R) ( $n = 50$  cells from 10 patients) patients and from KCa3.1 (left) and Kv1.3 (right) activity (G) from individual PR resting PBTs (r-PBTs) from NR ( $n = 40$  cells from 8 patients) and R ( $n = 35$  cells from 7 patients) patients. (A-C) Data are represented as box plots: line indicates the median; lower box is the 25<sup>th</sup> percentile; upper box is the 75<sup>th</sup> percentile; and whiskers represent the 10<sup>th</sup> and 90<sup>th</sup> percentiles. Data compared using Mann-Whitney Rank Sum test. On average we recorded 4-5 cells/patient.