



Fig. S11. Machine learning evaluation of immune-metabolic targets in predicting patient response to anti-PD1 and anti-CTLA4 combination therapy.

(A) Survival stratification performance of BTAS score versus seven other previously published biomarkers for melanoma patients receiving anti-PD1+anti-CTLA4 combo. (B-J) Kaplan-Meier plots showing

progression-free survival and overall survival differences for patients receiving anti-PD1 between the low-risk and high-risk groups defined by the median value of signatures. Signatures displayed are: **(B)** BTAS, **(C)** deepBTAS, **(D)** TIDE (7), **(E)** T-cell inflamed (10), **(F)** Immune (11), **(G)** Cytotoxic(12), **(H)** IFNG (13), **(I)** Melanocytic plasticity (14), and **(J)** Tumor mutation burden.