



Figure S6. Extended Data for Survival Analyses of *ITGAE* and *CD8A* in Clinical Trials of Immunotherapy Treatment. (A) Kaplan-Meier curves showing the probability of overall survival of patients from OAK (NSCLC) treated with either atezolizumab (top panels) or chemotherapy (docetaxel) (bottom panels) categorized by quartiles (Q1: lowest, Q4: highest) of transcriptional expression of either *ITGAE* (left panels) or *CD8A* (right panels). (B) Kaplan-Meier curves showing the probability of overall survival of patients from IMvigor210 (bladder) treated with atezolizumab categorized by quartiles (Q1: lowest, Q4: highest) of transcriptional expression of either *ITGAE* (left panel) or *CD8A* (right panel). Kaplan-Meier

curves showing the probability of OS of patients from IMvigor211 (bladder) treated with either atezolizumab (top panels) or chemotherapy (docetaxel, paclitaxel, or vinflunine) (bottom panels) categorized by median (high in red, low in blue) (C) or quartiles (Q1: lowest, Q4: highest) (D) of transcriptional expression of either *ITGAE* (left panels) or *CD8A* (right panels). p-values and hazard ratios (where applicable) are displayed within each panel. Statistical significance for all analyses was determined by Cox-proportional hazards modeling.