



Figure S1. Performance overview of the model for predicting PD-L1 status and response to immunotherapy when trained on pan-cancer-VHIO cohort and validated in NSCLC-MSK. Area under the receiver operating characteristic (ROC) curves for the model to predict PD-L1 status (TPS \geq 1%) in the training (pan-cancer-VHIO cohort) (A) and in the test cohort (NSCLC-MSK cohort) (B) for the 5-folds cross-validation. All trained models were deployed in the test cohort. Kaplan-Meier curves for the predicted PD-L1 status (high/low) differentiates patients with longer Progression Free Survival to immunotherapy from patients with shorter survival in both pan-cancer-VHIO (C) and NSCLC-MSK cohort (D).