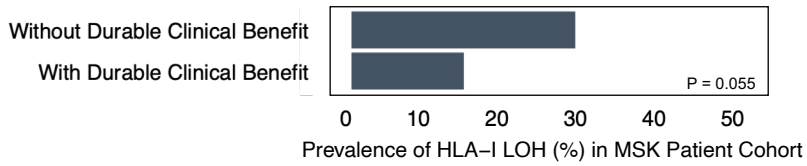
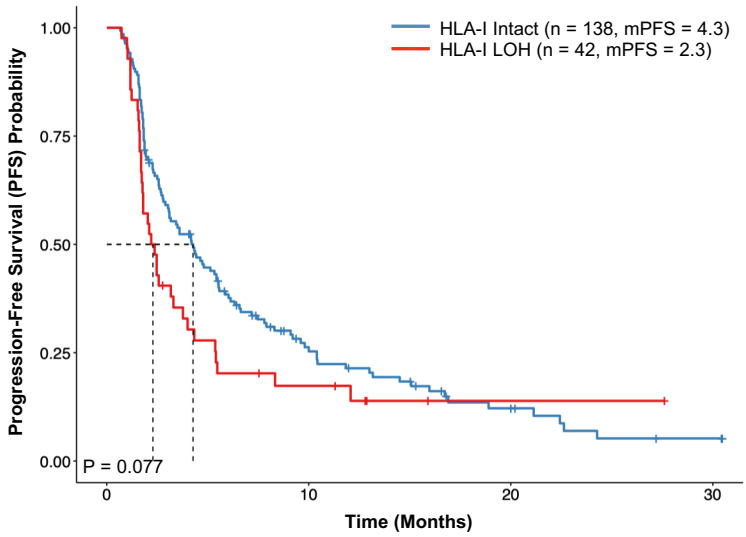
Supplementary Data Figure S2. Somatic HLA-I LOH is associated with decreased durable clinical benefit and progression free survival in ICI-treated NSCLC.

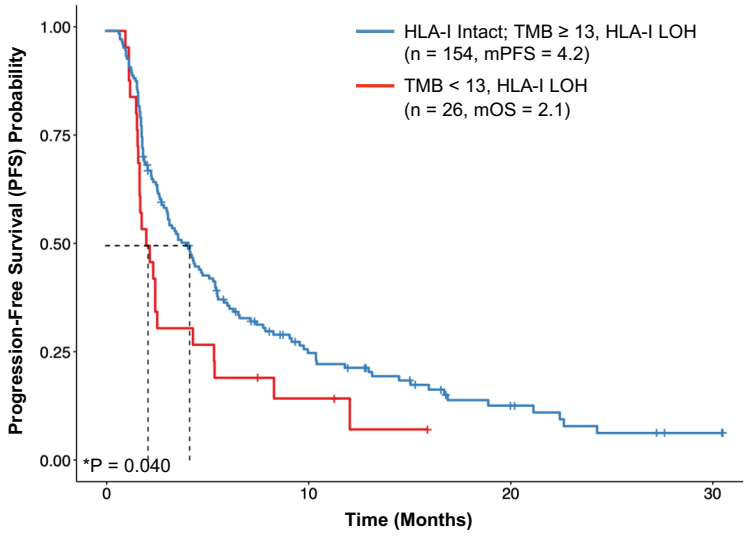
a)



b)



c)



Supplementary Data Figure S2. Somatic HLA-I LOH is associated with decreased durable clinical benefit and progression free survival in ICI-treated NSCLC. a) Prevalence of HLA-I LOH in ICI-treated patients without durable clinical benefit (n=116) as compared to patients with durable clinical benefit (n=56) (28% vs. 14%) in the MSK non-squamous NSCLC cohort. Durable clinical benefit was characterized as complete response, partial response, or stable disease that lasted at least 6 months. Significance (P = 0.055) determined by Fisher's Exact. b) Progression-free survival of ICI-treated patients in the MSK non-squamous NSCLC cohort, stratified by HLA-I LOH. Median progression-free survival (mPFS) for HLA-I intact (n=138) was 4.3 months [3.1-5.5] and HLA-I LOH (n=42) was 2.3 months [1.8-4.0]. HR for HLA-I intact = 0.71 [0.48-1.0], P=0.077. c) Progression-free survival of ICI-treated patients in the MSK non-squamous NSCLC cohort, stratified by the strongest TMB and HLA-I status combination threshold observed in the clinico-genomics dataset. Median progression-free survival (mPFS) for any TMB, HLA-I intact; TMB ≥ 13, HLA-I LOH (n=154) was 4.2 months [3.1-5.4] and TMB < 13, HLA-I LOH (n=26) was 2.1 months [1.7-5.4]. HR for any TMB, HLA-I intact; TMB ≥ 13, HLA-I LOH = 0.61 [0.39-0.95], P=0.040. For panels b and c, significance is determined by log-rank test. For all panels (a-c), significant (P < 0.05) associations are labeled with an asterisk.