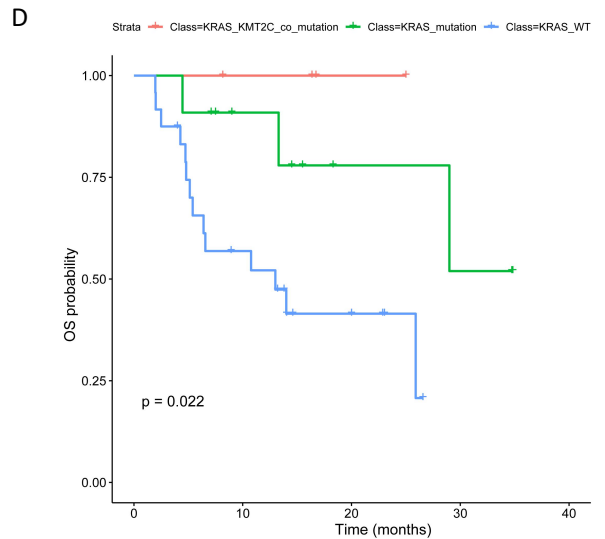
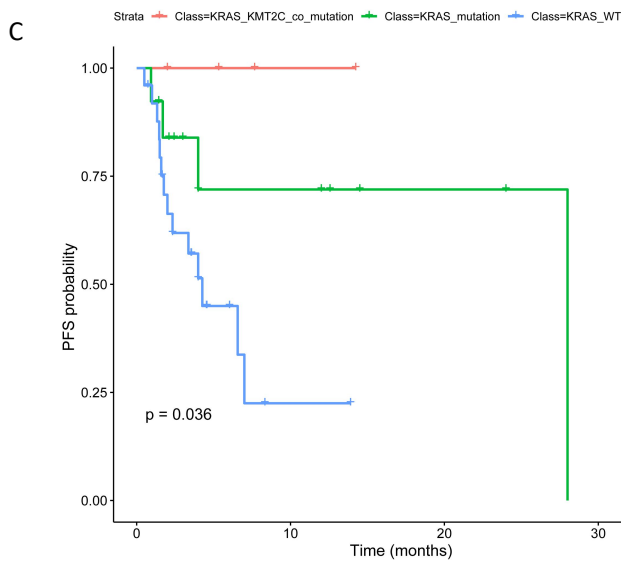
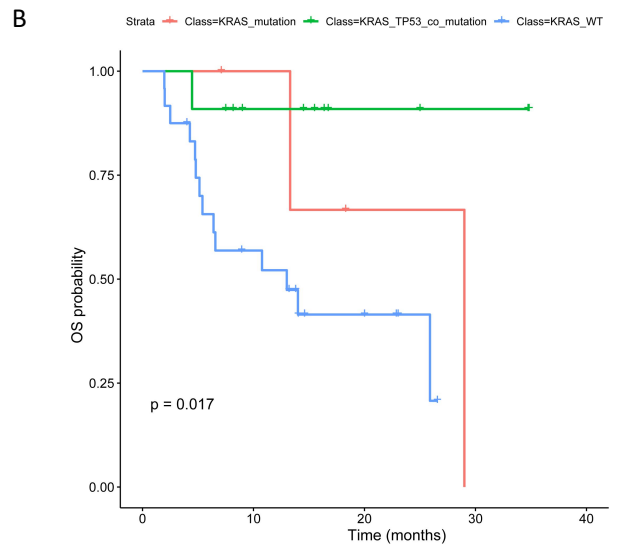
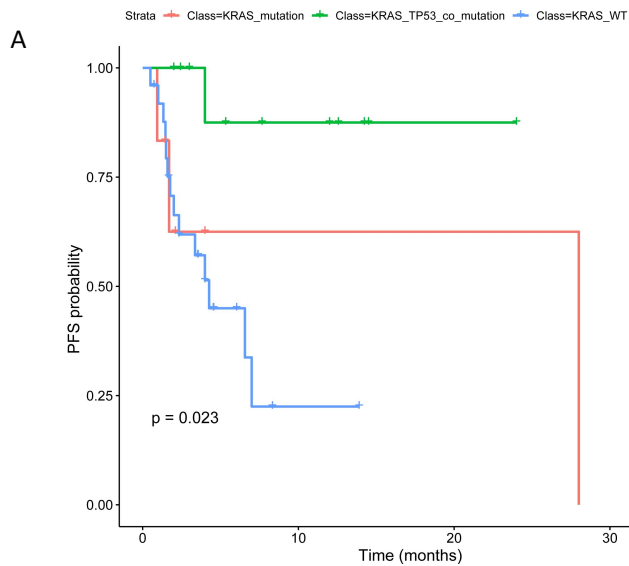
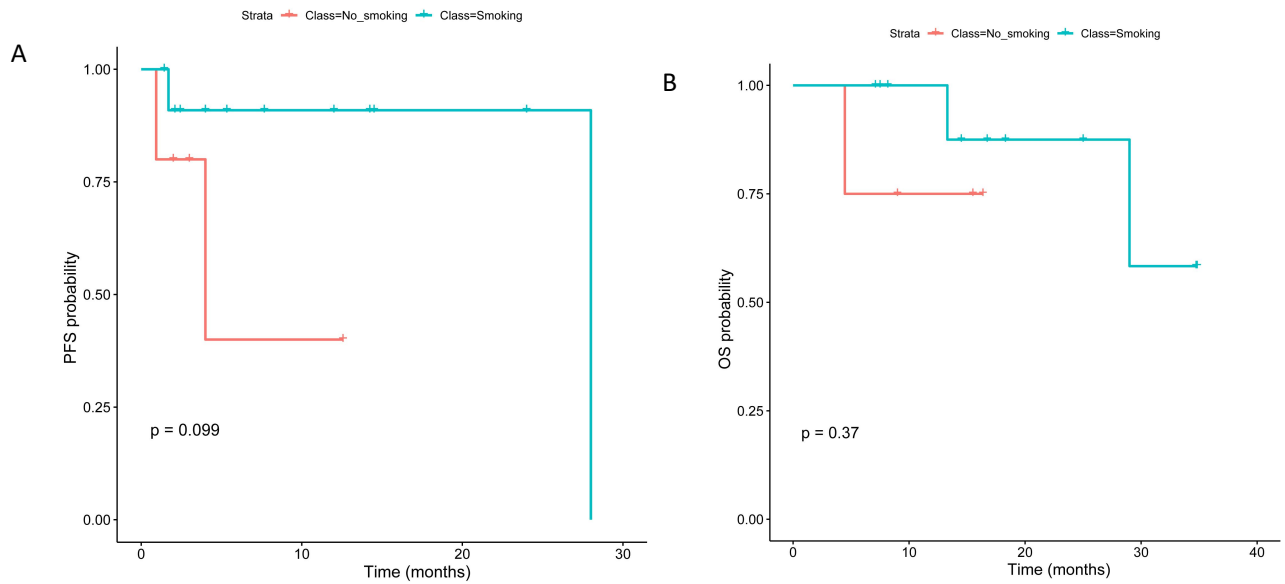


Supplementary Figure 1 Landscape of somatic mutations identified in the 129 NSCLC patients with non-KRAS mutation, the top 30 genes with mutation frequency are shown on the graph.



Supplementary Figure 2 The impact of co-mutated genes on immunotherapy. patients with TP53 and KRAS co-mutation had the best immunotherapy effect, which was better than KRAS mutation alone (A and B). patients with KRAS and KMT2C co-mutations responded best to immunotherapy, better than those with KRAS mutations alone (C and D).



Supplementary Figure 3 Effects of smoking on KRAS mutation immunotherapy. A. The PFS of smoking and non-smoking KRAS mutated patients with immunotherapy. B. The OS of smoking and non-smoking NON-KRASmutated patients with immunotherapy.