Figure S1. *TP53* mutation distribution. Lollipop diagram depicting the distribution of TP53 mutations. The x-axis represents the protein sequence of p53 with colored boxes indicating different functional domains, incusing the transactivation domain, DNA binding domain and tetrameric domain. Different colors represent different types of mutations. The location of the circle specifies the mutation site. Each patient is represented by a circle. The y-axis corresponds to the number of patients with a particular mutation. The length of each lollipop represents the number of patients with that specific mutation.

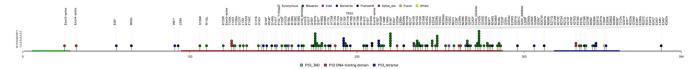


Figure S2. Mutation spectrum of patients with and without TP53 mutations. Each row represents a gene and each column represents a patient. The y-axis denotes the number of patients. Different colors represent different types of mutations. Top bars represent the number of mutations in each patient. Side bars represent the number of patients with mutations in a certain gene. EGFR, epidermal growth factor receptor; ERBB2, erb-b2 receptor tyrosine kinase 2; MET, MET proto-oncogene, receptor tyrosine kinase; RB1, RB transcriptional corepressor 1; APC, APC regulator of WNT signaling pathway; CTNNB1, catenin  $\beta$  1; KEAP1, kelch like ECH associated protein 1; PIK3CA, phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit  $\alpha$ ; CDKN2A, cyclin dependent kinase inhibitor 2A.

