

Table S3 Gene alterations with potential correlation with the efficacy of immune checkpoint blockade.

Gene	Alteration	Correlation
<i>ARID1A</i>	Inactivation	Positive
<i>CD274</i>	Amplification	Positive
<i>CDK12</i>	Inactivation	Positive
<i>PBRM1</i>	Inactivation	Positive
<i>MET</i>	Amplification	Positive
<i>POLD1</i>	Inactivation	Positive
<i>POLE</i>	Mutation	Positive
<i>FAT1</i>	Mutation	Positive
<i>LRP1B</i>	Mutation	Positive
<i>NOTCH1</i>	Mutation	Positive
<i>NOTCH2</i>	Mutation	Positive
<i>NOTCH3</i>	Mutation	Positive
<i>TERT</i>	Mutation	Positive
<i>B2M</i>	Inactivation	Negative
<i>CTNNB1</i>	Activation	Negative
<i>JAK1</i>	Inactivation	Negative
<i>JAK2</i>	Inactivation	Negative
<i>EGFR</i>	Mutation	Negative
<i>ALK</i>	Fusion	Negative
<i>KEAP1</i>	Mutation	Negative
<i>PTEN</i>	Inactivation	Negative
<i>STK11</i>	Mutation	Negative
<i>SOCS1</i>	Amplification	Negative
<i>IFNGR1</i>	Inactivation	Negative
<i>IFNGR2</i>	Inactivation	Negative
<i>IRF1</i>	Inactivation	Negative
<i>PIAS4</i>	Inactivation	Negative
<i>CCND1</i>	Amplification	HPD
<i>FGF3</i>	Amplification	HPD
<i>FGF4</i>	Amplification	HPD
<i>FGF19</i>	Amplification	HPD
<i>MDM2</i>	Amplification	HPD
<i>DNMT3A</i>	Mutation	HPD

Abbreviation: HPD: hyperprogression disease.