

Supplemental Materials

Baseline Genomic Features in *BRAF*V600-Mutated Metastatic Melanoma Patients Treated with BRAF Inhibitor + MEK Inhibitor in Routine Care

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Table S1. List of studied genes.

Mutation analysis (Next Generation Sequencing)			DNA Copy number analysis	mRNA expression analysis
<i>ABL1</i>	<i>GNAQ</i>	<i>RAC1</i>	<i>BRAF</i>	<i>BRAF</i>
<i>AKT1</i>	<i>GRIN2A</i>	<i>RAF1</i>	<i>NRAS</i>	<i>RAF1</i>
<i>AKT2</i>	<i>GRM3</i>	<i>RASA2</i>	<i>MAP2K1</i>	<i>ARAF</i>
<i>AKT3</i>	<i>HOXD8</i>	<i>RET</i>	<i>MET</i>	<i>PDGFRB</i>
<i>ALK</i>	<i>HRAS</i>	<i>RPS27</i>	<i>CDKN2A</i>	<i>IGF1R</i>
<i>ARAF</i>	<i>IDH1</i>	<i>SERPINB3</i>	<i>CDK4</i>	<i>MET</i>
<i>BRAF</i>	<i>IGF1R</i>	<i>SNX31</i>	<i>CDK6</i>	<i>HGF</i>
<i>BTK</i>	<i>JAK2</i>	<i>STAT3</i>	<i>CCND1</i>	<i>KIT</i>
<i>CCND1</i>	<i>KDR</i>	<i>STK11</i>	<i>CCND2</i>	<i>EGFR</i>
<i>CDK4</i>	<i>KIT</i>	<i>STK19</i>	<i>CCND3</i>	<i>ERBB2</i>
<i>CDKN2A</i>	<i>KRAS</i>	<i>TACC1</i>	<i>RB1</i>	<i>MAP3K8</i>
<i>CD274</i>	<i>MAP2K1</i>	<i>TERT</i>	<i>CTNNB1</i>	<i>MKI67</i>
<i>CTNNB1</i>	<i>MAP2K2</i>	<i>TRRAP</i>		<i>E2F2</i>
<i>CXCR4</i>	<i>MDM2</i>	<i>WT1</i>		<i>RB1</i>
<i>DDR1</i>	<i>MET</i>			<i>CDK2</i>
<i>DDR2</i>	<i>MITF</i>			<i>CDK4</i>
<i>DDX3X</i>	<i>MRPS31</i>			<i>CDK6</i>
<i>DUSP4</i>	<i>NOTCH1</i>			<i>CCND1</i>
<i>EGFR</i>	<i>NOTCH2</i>			<i>RRM2</i>
<i>ERBB2</i>	<i>NRAS</i>			<i>BCL2</i>
<i>ERBB3</i>	<i>PDGFRA</i>			<i>BCL2L1</i>
<i>ERBB4</i>	<i>PDGFRB</i>			<i>BCL2L11</i>
<i>EZH2</i>	<i>PHLPP1</i>			<i>BMF</i>
<i>FBXW7</i>	<i>PIK3CA</i>			<i>MCL1</i>
<i>FERMT3</i>	<i>PIK3CG</i>			<i>BAD</i>
<i>FGFR1</i>	<i>PIK3R1</i>			<i>PTEN</i>
<i>FGFR2</i>	<i>PIK3R2</i>			<i>CDKN1A</i>
<i>FGFR3</i>	<i>PLCG2</i>			<i>CDKN1B</i>
<i>FLT3</i>	<i>PPP6C</i>			<i>CDKN2A</i>
<i>GNA11</i>	<i>PTPN11</i>			

Table S2. Mutations detected by Next Generation Sequencing (Panel of 74 genes) on the 24 baseline samples.

Patient ID	Mutation
1	KDR:NM_002253:exon11:c.1416A>T:p.Q472H 48%
1	DUSP4:NM_001394:exon4:c.983T>C :p.L328P 3.7%
1	BRAF :NM_004333:exon15:c.1799T>A:p.V600E 41%
2	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 6%
2	CDKN2A:NM_001195132:exon3:c.465C>G:p.I155M 10.5%
2	CTNNB1:NM_001904:exon3:c.131_133del:p.S45del3.8%
3	NOTCH2:NM_024408:exon34:c.6956C>T:p.A2319V 47%
3	DDR2:NM_006182:exon12:c.1323G>A:p.M441I 35%
3	RAC1:NM_006908:exon2:c.85C>T:p.P29S 50%
3	MET:NM_000245:exon2:c.1124A>G:p.N375S 7%
3	BRAF :NM_004333:exon15:c.1799T>A:p.V600E 85%
3	AKT1:NM_005163:exon3:c.49G>A:p.E17K 27%
4	DDR2:NM_001014796:exon13:c.1323G>A:p.M441I 49.7%
4	BRAF:NM_004333:exon15:c.1798_1799delinsAA:p.V600K 57.8%
4	NOTCH1:NM_017617:exon33:c.6149A>G:p.N2050S 63%
4	MAP2K1:NM_002755:exon3:c.371C>T:p.P124L 37.6%
5	BRAF:NM_004333:exon15: c.1798_1799delinsAA:p.V600K 48.8%
5	IDH1:NM_005896:exon4:c.394C>T:p.R132C 19.5%
5	GRIN2A:NM_001134407:exon13:c.2714C>T:p.S905F 18.8%
5	CTNNB1:NM_001904:exon3:c.131_133del:p.S45del 2.9%
6	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 26%
7	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 7.3%
7	NOTCH2:NM_024408:exon34:c.6562G>A:p.A2188T 48%
8	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 32,8%
8	EGFR-AS1 52.8%
9	CDKN2A NM_000077:exon2:c.457+1G>A 8%
9	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 71%
10	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 51%
10	BRAF:NM_004333:exon15:c.1798_1799delinsAA:p.V600K 5.2%
10	NOTCH1:NM_017617:exon33:c.6149A>G:p.N2050S 6%
10	MAP2K1:NM_002755:exon3:c.371C>T:p.P124L 4%
11	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 52.9%
12	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 35.5%
12	SERPIN3:NM_006919:exon4:c.284C>T:p.S95F 35.6%
13	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 19.8%
13	AKT1:NM_005163:exon3:c.138C>A:p.D46E 52.3%
14	BRAF :NM_004333:exon15:c.1799T>A:p.V600E 31%
14	MET NM_001127500:exon2:c.11C>T:p.P4L 6%
15	NOTCH2:NM_024408:exon34:c.6094C>A:p.H2032N 50%
15	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 58%
16	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 33.5%
17	BRAF:NM_004333:exon15:c.1798_1799delinsAG:p.V600R 30%
17	FGFR3:NM_000142:exon7:c.905G>A:p.G302D 19%
18	PI3KCA:NM_006218.3:exon7:c.1173A>G:p.I391M 39%
18	BRAF :NM_004333:exon15:c.1799T>A:p.V600E 70%
19	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 38%
20	BRAF:NM_004333:exon15:c.1798_1799delinsAA:p.V600K 18.6%
20	NOTCH2:NM_024408:exon34:c.7223T>A:p.L2408H 46.2%
21	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 30%
22	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 11%
23	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 32%
24	BRAF:NM_004333:exon15:c.1799T>A:p.V600E 30%