

Implementation of Precision Oncology for Patients with Metastatic Breast Cancer in an Interdisciplinary MTB Setting

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Table S1. List of Gene Targets in Oncomine Comprehensive Assay v3—161 gene panel.

Hotspot Genes					
AKT1	CTNNB1	GATA2	KNSTRN	NFE2L2	RHOA
AKT2	DDR2	GNA11	KRAS	NRAS	ROS1
AKT3	EGFR	GNAQ	MAGOH	NTRK1	SF3B1
ALK	ERBB2	GNAS	MAP2K1	NTRK2	SMAD4
AR	ERBB3	H3F3A	MAP2K2	NTRK3	SMO
ARAF	ERBB4	HIST1H3B	MAP2K4	PDGFRA	SPOP
AXL	ERCC2	HNF1A	MAPK1	PDGFRB	SRC
BRAF	ESR1	HRAS	MAX	PIK3CB	STAT3
BTB	EZH2	IDH1	MDM4	PIK3CA	TERT
CBL	FGFR1	IDH2	MED12	PPP2R1A	TOP1
CCND1	FGFR2	JAK1	MET	PTPN11	U2AF1
CDK4	FGFR3	JAK2	MTOR	RAC1	XPO1
CDK6	FGFR4	JAK3	MYC	RAF1	
CHEK2	FLT3	KDR	MYCN	RET	
CSF1R	FOXL2	KIT	MYD88	RHEB	
Full-Length Genes					
ARID1A	CDKN1B	FBXW7	NOTCH1	PTEN	SETD2
ATM	CDKN2A	MLH1	NOTCH2	RAD50	SLX4
ATR	CDKN2B	MRE11	NOTCH3	RAD51	SMARCA4
ATRX	CHEK1	MSH6	PALB2	RAD51B	SMARCB1
BAP1	CREBBP	MSH2	PIK3R1	RAD51C	STK11
BRCA1	FANCA	NBN	PMS2	RAD51D	TP53
BRCA2	FANCD2	NF1	POLE	RNF43	TSC1
CDK12	FANCI	NF2	PTCH1	RB1	TSC3
Copy Number Genes					
AKT1	CCND2	ESR1	IGF1R	MYCN	PPARG
AKT2	CCND3	FGF19	KIT	NTRKN1	RICTOR
AKT3	CCNE1	FGF3	KRAS	NTRK2	TERT
ALK	CDK2	FGFR1	MDM2	NTRK3	
AXL	CDK4	FGFR2	MDM4	PDGFRA	
AR	CDK6	FGFR3	MET	PDGFRB	
BRAF	EGFR	FGFR4	MYC	PIK3CB	
CCND1	ERBB2	FLT3	MYCL	PIK3CA	
Gene Fusions (Inter- and Intragenic)					
AKT2	ERBB2	FGFR3	NF1	PDGFRB	RELA

<i>ALK</i>	<i>ERBB4</i>	<i>FGR</i>	<i>NOTCH1</i>	<i>PIK3CA</i>	<i>RET</i>
<i>AR</i>	<i>ERG</i>	<i>FLT3</i>	<i>NOTCH4</i>	<i>PRKACA</i>	<i>ROS1</i>
<i>AXL</i>	<i>ESR1</i>	<i>JAK2</i>	<i>NRG1</i>	<i>PRKACB</i>	<i>RSPO2</i>
<i>BRCA1</i>	<i>ETV1</i>	<i>KRAS</i>	<i>NTRK1</i>	<i>PTEN</i>	<i>RSPO3</i>
<i>BRCA2</i>	<i>ETV4</i>	<i>MDM4</i>	<i>NTRK2</i>	<i>PPARG</i>	<i>TERT</i>
<i>BRAF</i>	<i>ETV5</i>	<i>MET</i>	<i>NTRK3</i>	<i>RAD51B</i>	
<i>CDKN2A</i>	<i>FGFR1</i>	<i>MYB</i>	<i>NUTM1</i>	<i>RAF1</i>	
<i>EGFR</i>	<i>FGFR2</i>	<i>MYBL1</i>	<i>PDGFRA</i>	<i>RB1</i>	

Table S2. List of Gene Targets in Oncomine Focus Assay—52 gene panel.

Hotspot Genes			
<i>ABL1</i>	<i>ERBB2</i>	<i>GNAQ</i>	<i>MYC</i>
<i>AKT1</i>	<i>ERBB4</i>	<i>HRAS</i>	<i>MYCN</i>
<i>AKT3</i>	<i>ERBB3</i>	<i>IDH1</i>	<i>NRAS</i>
<i>ALK</i>	<i>ERG</i>	<i>IDH2</i>	<i>NTRK1</i>
<i>AR</i>	<i>ESR1</i>	<i>JAK1</i>	<i>NTRK2</i>
<i>AXL</i>	<i>ETV1</i>	<i>JAK2</i>	<i>NTRK3</i>
<i>BRAF</i>	<i>ETV4</i>	<i>JAK3</i>	<i>PDGFRA</i>
<i>CCND1</i>	<i>ETV5</i>	<i>KIT</i>	<i>PIK3CA</i>
<i>CDK4</i>	<i>FGFR1</i>	<i>KRAS</i>	<i>PPARG</i>
<i>CDK6</i>	<i>FGFR2</i>	<i>MAP2K1</i>	<i>RAF1</i>
<i>CTNNB1</i>	<i>FGFR3</i>	<i>MAP2K2</i>	<i>RET</i>
<i>DDR2</i>	<i>FGFR4</i>	<i>MET</i>	<i>ROS1</i>
<i>EGFR</i>	<i>GNA11</i>	<i>MTOR</i>	<i>SMO</i>