

Table SI. Summary of actionable mutations among 108 Taiwanese patients with breast cancer assayed with the TruSight Oncology 500.

Gene	Alteration (type)	Number of samples
<i>AKT1</i>	E17K (MISSENSE)	4
<i>BRCA1</i>	FUSION (FUSION)	1
	G1350C (MISSENSE)	1
	M1783L (MISSENSE)	2
	N909S (MISSENSE)	1
	R1203* (TRUNC)	1
	R1583K (MISSENSE)	1
	R762S (MISSENSE)	1
	S1286Rfs (TRUNC)	1
	S1389N (MISSENSE)	1
	S405* (TRUNC)	1
	S632Ifs* (TRUNC)	1
	V191I (MISSENSE)	1
<i>BRCA2</i>	C315S (MISSENSE)	1
	E1571Gfs (TRUNC)	1
	F2254Yfs (TRUNC)	1
	FUSION (FUSION)	1
	G2508S (MISSENSE)	1
	G2901D (MISSENSE)	1
	GAIN (CNA)	1
	H523R (MISSENSE)	1
	HETLOSS (CNA)	1
	I1929V (MISSENSE)	5
	N2135Kfs (TRUNC)	1
	N72S (MISSENSE)	2
	P3292L (MISSENSE)	1
	R2108C (MISSENSE)	5
	R2842H (MISSENSE)	1
	S521* (TRUNC)	1
	V2109I (MISSENSE)	2
	V2151Ffs (TRUNC)	1
	V783A (MISSENSE)	1
<i>ERBB2</i>	A240S (MISSENSE)	1
	AMP (CNA)	3
	E1124K (MISSENSE)	1
	GAIN (CNA)	4
	L725F (MISSENSE)	1
	L725S (MISSENSE)	1
	L811V (MISSENSE)	1

	L839R (MISSENSE)	1
	P1140A (MISSENSE)	1
	Q798H (MISSENSE)	1
	T298K (MISSENSE)	1
	V743_M74 (INFRAME)	1
	Y742_A74 (INFRAME)	1
<i>ERBB3</i>	A1030T (MISSENSE)	1
	A182T (MISSENSE)	1
	E1317D (MISSENSE)	1
	F249L (MISSENSE)	1
	GAIN (CNA)	1
	M433T (MISSENSE)	1
	P590S (MISSENSE)	1
	R1202W (MISSENSE)	1
	R488Q (MISSENSE)	3
	T160A (MISSENSE)	1
<i>ESR1</i>	G145S (MISSENSE)	1
	GAIN (CNA)	1
	HETLOSS (CNA)	1
<i>MDM2</i>	AMP (CNA)	1
	HETLOSS (CNA)	1
<i>NTRK1</i>	E193Q (MISSENSE)	1
	E245A (MISSENSE)	1
	INSRR_V1 (MISSENSE)	1
	K167R (MISSENSE)	1
	M530T (MISSENSE)	1
	Q259E (MISSENSE)	10
	R190Q (MISSENSE)	1
	R190W (MISSENSE)	2
	V252I (MISSENSE)	1
<i>PIK3CA</i>	AMP (CNA)	1
	D350N (MISSENSE)	1
	D725N (MISSENSE)	1
	E453Q (MISSENSE)	1
	E542K (MISSENSE)	4
	E542Q (MISSENSE)	1
	E545G (MISSENSE)	1
	E545K (MISSENSE)	4
	E545Q (MISSENSE)	1
	E726K (MISSENSE)	2
	FUSION (FUSION)	6
	G1049R (MISSENSE)	1

	GAIN (CNA)	12
	H1047L (MISSENSE)	2
	H1047R (MISSENSE)	11
	H1047Y (MISSENSE)	1
	K733R (MISSENSE)	2
	N1068Kfs (TRUNC)	1
	N345I (MISSENSE)	1
	Q546R (MISSENSE)	1
<i>PTEN</i>	E150* (TRUNC)	1
	E150Gfs* (TRUNC)	1
	E43Gfs*7 (TRUNC)	1
	G127_G12 (INFRAME)	1
	HETLOSS (CNA)	6
	HOMDEL (CNA)	1
	P38Kfs*1 (TRUNC)	1
	Q245* (TRUNC)	1
	R130* (TRUNC)	1
	S226F (MISSENSE)	1
	V290Sfs* (TRUNC)	1

TRUNC/*, truncating; CNA, copy number alteration; AMP, amplification; GAIN, copy number gain; LOSS, copy number loss; HETLOSS, heterozygous deletion; HOMDEL, homozygous deletion; fs, frameshift.

Table SII. Summary of actionable mutations among 108 Taiwanese patients with breast cancer assayed with the OncoPrint Comprehensive Assay Plus v3.

Gene	Alteration (type)	Number of samples
<i>AKT1</i>	AMP (CNA)	2
	E17K (MISSENSE)	3
<i>BRCA1</i>	R1203* (TRUNC)	1
	S1180fs (TRUNC)	1
	S1286fs (TRUNC)	1
	S405* (TRUNC)	1
	S632fs (TRUNC)	1
	T1376fs (TRUNC)	1
	W321* (TRUNC)	1
<i>BRCA2</i>	E1571fs (TRUNC)	1
	E33* (TRUNC)	1
	N2135fs (TRUNC)	1
	N372H (MISSENSE)	3
	S3041fs (TRUNC)	1
	S3147fs (TRUNC)	1
	S521* (TRUNC)	1
	S538fs (TRUNC)	1
	S973fs (TRUNC)	1
	T598fs (TRUNC)	1
T912fs (TRUNC)	1	
<i>ERBB2</i>	AMP (CNA)	1
	I655V (MISSENSE)	18
	L755S (MISSENSE)	1
	L841V (MISSENSE)	1
	L869R (MISSENSE)	1
<i>NTRK1</i>	AMP (CNA)	5
<i>PIK3CA</i>	AMP (CNA)	2
	E453Q (MISSENSE)	1
	E542K (MISSENSE)	4
	E542Q (MISSENSE)	1
	E545K (MISSENSE)	4
	E545Q (MISSENSE)	1
	E726K (MISSENSE)	2
	FUSION (FUSION)	2
	G1049R (MISSENSE)	1
	H1047L (MISSENSE)	2
	H1047R (MISSENSE)	12
	H1047Y (MISSENSE)	1
	N345I (MISSENSE)	1
Q546R (MISSENSE)	1	
<i>PTEN</i>	E150* (TRUNC)	1
	E43fs (TRUNC)	1
	G129E (MISSENSE)	1
	P38fs (TRUNC)	1
	Q245* (TRUNC)	1
	R130* (TRUNC)	1

TRUNC/*, truncating; CNA, copy number alteration; AMP, amplification; fs, frameshift.