

**Table S6.** *BRCA1* classification results of basal-like *BRCA1* ( $n = 20$ ) and basal-like sporadic ( $n = 10$ ) tumors obtained using leave-one-out cross-validation. See Materials and methods section for more details. Mutations are all known pathogenic mutation described using HGVS nomenclature.

SampleID	Group	Age	Prediction	Type	Grade	Mutation	Functional effects
A018	<i>BRCA1</i>	25	<i>BRCA1</i>	IDC	2	<i>BRCA1</i> c.181T>G, Exon5, p.(Cys61Gly)	MS
A136	<i>BRCA1</i>	31	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.5266dupC, Exon20, p.(Gln1756Profs*74)	FS
A089	<i>BRCA1</i>	32	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.181T>G, Exon5, p.(Cys61Gly)	MS
A140	<i>BRCA1</i>	32	<i>BRCA1</i>	ILC	NA	<i>BRCA1</i> c.1505delT, Exon11, p.(Leu502*)	NS
A122	<i>BRCA1</i>	36	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.3319G>T, Exon11, p.(Glu1107*)	NS
A002	<i>BRCA1</i>	36	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.1556delA, Exon11, p.(Lys519Argfs*13)	FS
A017	<i>BRCA1</i>	37	<i>BRCA1</i>	NA	NA	<i>BRCA1</i> c.2476delA, Exon11, p.(Thr826Glnfs*20)	FS
A134	<i>BRCA1</i>	38	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.5266dupC, Exon20, p.(Gln1756Profs*74)	FS
A014	<i>BRCA1</i>	40	Sporadic	IDC	3	<i>BRCA1</i> c.5266dupC, Exon20, p.(Gln1756Profs*74)	FS
A087	<i>BRCA1</i>	41	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.5089T>C, Exon18, p.(Cys1697Arg)	MS
A142	<i>BRCA1</i>	41	Sporadic	IDC	2	<i>BRCA1</i> c.5089T>C, Exon18, p.(Cys1697Arg)	MS
A112	<i>BRCA1</i>	42	Sporadic	IDC	3	<i>BRCA1</i> c.5213G>A, Exon20, p.(Gly1738Glu)	MS
A156	<i>BRCA1</i>	45	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.3319G>T, Exon11, p.(Glu1107*)	NS
A015	<i>BRCA1</i>	46	<i>BRCA1</i>	Medullary	NA	<i>BRCA1</i> c.5213G>A, Exon20, p.(Gly1738Glu)	MS
A006	<i>BRCA1</i>	52	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.5089T>C, Exon18, p.(Cys1697Arg)	MS
A051	<i>BRCA1</i>	55	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.5143A>C, Exon18, p.(Ser1715Arg)	MS
A138	<i>BRCA1</i>	55	<i>BRCA1</i>	IDC	3	<i>BRCA1</i> c.2475delC, Exon11, p.(Asp825Glufs*21)	FS
A126	<i>BRCA1</i>	56	<i>BRCA1</i>	IDC	2	<i>BRCA1</i> c.5213G>A, Exon20, p.(Gly1738Glu)	MS
A145	<i>BRCA1</i>	60	<i>BRCA1</i>	IDC	2	<i>BRCA1</i> c.5153-?_5193+?del, Exon19, p.(Trp1718Serfs*2)	Exon del (FS)
A131	<i>BRCA1</i>	61	<i>BRCA1</i>	Medullary	NA	<i>BRCA1</i> c.3400G>T, Exon11, p.(Glu1134*)	NS
K005	Sporadic	53	Sporadic	IDC	3		
K085	Sporadic	55	Sporadic	IDC	3		
K018	Sporadic	60	<i>BRCA1</i>	IDC	3		
K073	Sporadic	66	Sporadic	IDC	3		
K170	Sporadic	69	Sporadic	IDC	3		
K053	Sporadic	75	Sporadic	IDC	3		
K041	Sporadic	75	<i>BRCA1</i>	IDC	3		
K145	Sporadic	76	Sporadic	IDC	NA		
K001	Sporadic	76	Sporadic	IDC	3		
K177	Sporadic	87	Sporadic	IDC	1		

Abbreviations: MS, missense mutation; FS, frameshift mutation; NS, nonsense mutation