

Supplementary Table S3. *PIK3CA* mutations and mutation frequencies in pure high-grade DCIS and high-grade DCIS associated with IBC.

	Case ID	Component	ER	PR	HER2	<i>PIK3CA</i> mutation	Allele	WT frequency	Mutation frequency
1	D026	Pure DCIS	-	-	-	H1047R	G	0.45	0.55
2	D077	Pure DCIS	-	-	+	H1047R	G	0.79	0.21
3	D090	Pure DCIS	-	-	+	H1047R	G	0.61	0.39
4	D094	Pure DCIS	-	-	-	H1047R	G	0.38	0.62
5	I111	DCIS adj IBC	+	+	-	N345K	A	0.602	0.398
6	I089	DCIS adj IBC	+	+	-	E542K	A	0.550	0.450
7	I118	DCIS adj IBC	+	+	-	E542K	A	0.561	0.439
8	I037	DCIS adj IBC	+	+	+	E545K	A	0.731	0.269
9	I071	DCIS adj IBC	-	-	+	E545K	A	0.744	0.256
10	I101	DCIS adj IBC	+	+	-	E545K	A	0.613	0.387
11	I112	DCIS adj IBC	+	+	-	E545K	A	0.541	0.459
12	I114	DCIS adj IBC	+	+	-	E545K	A	0.530	0.470
13	I003	DCIS adj IBC	+	+	+	H1047R	G	0.563	0.437
14	I014	DCIS adj IBC	+	-	+	H1047R	G	0.419	0.581
15	I038	DCIS adj IBC	+	+	+	H1047R	G	0.750	0.250
16	I041	DCIS adj IBC	+	+	+	H1047R	G	0.404	0.596
17	I050	DCIS adj IBC	-	-	+	H1047R	G	0.667	0.333
18	I068	DCIS adj IBC	-	-	+	H1047R	G	0.692	0.308
19	I076	DCIS adj IBC	-	-	+	H1047R	G	0.675	0.325
20	I106	DCIS adj IBC	+	+	-	H1047R	G	0.715	0.285
21	I125	DCIS adj IBC	+	+	-	H1047R	G	0.735	0.265
22	I129	DCIS adj IBC	-	-	-	H1047R	G	0.698	0.302

Adj, adjacent to; DCIS, ductal carcinoma *in situ*; ER, estrogen receptor; IBC, invasive breast cancer; WT, wild-type.