

**Supplementary Table S2.** PI3K pathway alterations in pure high-grade DCIS, high-grade DCIS components adjacent to IBC, and in synchronous IBC components.

	Pure DCIS	DCIS adj IBC	p-value	DCIS adj IBC	IBC	p-value
PTEN loss	9/89 (10%)	14/119 (12%)	0.824	14/119 (12%)	14/119 (12%)	1.000
INPP4B loss	12/67 (18%)	7/103 (7%)	<b>0.044</b>	7/103 (7%)	13/110 (12%)	0.245
<i>PIK3CA</i> mut	4/89 (4%)	18/119 (15%)	<b>0.021</b>	18/119 (15%)	19/119 (16%)	1.000
<i>AKT1</i> mut	0/89 (0%)	1/119 (1%)	1.000	1/119 (1%)	1/119 (1%)	1.000
pAKT pos	54/89 (61%)	80/119 (67%)	0.380	80/119 (67%)	77/119 (65%)	0.785
pS6 pos	11/77 (14%)	11/87 (13%)	0.821	11/87 (13%)	20/89 (22%)	0.113

Adj, adjacent to; DCIS, ductal carcinoma *in situ*; IBC, invasive breast cancer; mut, mutant.