

**S4 Table.** Chi-square test results of the association between histomorphological features and molecular subtypes

	Between all four subtypes (statistically significant: $p < 0.05$ )	Between two subtypes (statistically significant: $p < 0.008^a$ )					
		LA, LB	LA, HER-2	LA, TNBC	LB, HER-2	LB, TNBC	HER-2, TNBC
<b>Tumor</b>							
High-grade nucleus	< 0.001	0.258	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	0.006 <sup>b)</sup>
Tumor necrosis	< 0.001	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	0.184	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	0.001 <sup>b)</sup>
Intratumoral TILs	0.007	0.044	0.003 <sup>b)</sup>	0.001 <sup>b)</sup>	0.179	0.123	0.877
<b>Non-tumor</b>							
Lymphoid aggregates	< 0.001	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	0.029	< 0.001 <sup>b)</sup>	0.014
Collagen fibers	< 0.001	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	< 0.001 <sup>b)</sup>	0.273	0.009

HER-2, human epidermal growth factor receptor 2; LA, luminal A; LB, luminal B; TILs, tumor-infiltrating lymphocytes; TNBC, triple-negative breast cancer.

<sup>a)</sup> For pairwise comparisons between the two subtypes, the p-value was adjusted using Bonferroni correction, <sup>b)</sup> Statistically significant p-values.