

Table S1. Significant correlations between mRNA expressions of *CDH1* and EMT genes in different types of BC patient's samples

| Sample | Gene | Gene | Correlation coefficient (r) | P-value |
|----------|---------------|---------------|-----------------------------|---------|
| C-breast | <i>TWIST1</i> | <i>SNAI2</i> | 0.710 | 0.049 |
| | | <i>ZEB2</i> | 0.830 | 0.011 |
| | <i>SNAI2</i> | <i>CDH1</i> | 0.995 | 0.005 |
| | <i>ZEB1</i> | <i>SNAI2</i> | 0.818 | 0.024 |
| | <i>ZEB2</i> | <i>SNAI2</i> | 0.776 | 0.005 |
| | | <i>ZEB1</i> | 0.847 | 0.016 |
| TU-C | <i>TWIST1</i> | <i>CDH1</i> | 0.468 | 0.018 |
| | | <i>SNAI1</i> | 0.493 | 0.009 |
| | <i>ZEB1</i> | <i>SNAI1</i> | 0.568 | 0.005 |
| | | <i>SNAI2</i> | 0.553 | 0.005 |
| | <i>ZEB2</i> | <i>SNAI1</i> | 0.587 | 0.002 |
| | | <i>SNAI2</i> | 0.775 | < 0.000 |
| TU-IF | <i>SNAI2</i> | <i>SNAI1</i> | 0.479 | 0.013 |
| | | <i>CDH1</i> | 0.430 | 0.046 |
| | | <i>SNAI1</i> | 0.500 | 0.021 |
| | | <i>SNAI2</i> | 0.672 | <0.000 |
| | <i>ZEB2</i> | <i>TWIST1</i> | 0.426 | 0.034 |
| | | <i>SNAI1</i> | 0.431 | 0.032 |
| LNM | | <i>SNAI2</i> | 0.579 | 0.002 |
| | | <i>ZEB1</i> | 0.462 | 0.027 |
| | <i>TWIST1</i> | <i>SNAI2</i> | 0.831 | 0.002 |
| | | <i>CDH1</i> | 0.683 | 0.007 |
| | <i>ZEB1</i> | <i>TWIST1</i> | 0.686 | 0.041 |
| | | <i>SNAI1</i> | 0.628 | 0.038 |
| C-blood | | <i>SNAI2</i> | 0.725 | 0.008 |
| | | <i>SNAI1</i> | 0.958 | 0.010 |
| | <i>TWIST1</i> | <i>SNAI1</i> | 0.981 | 0.001 |
| | | <i>SNAI1</i> | 0.840 | 0.009 |
| | <i>ZEB2</i> | <i>TWIST1</i> | 0.947 | 0.004 |
| | | <i>SNAI1</i> | 0.831 | 0.011 |
| CTC- | <i>ZEB2</i> | <i>ZEB1</i> | 0.940 | < 0.000 |
| | | <i>ZEB1</i> | 0.607 | 0.010 |
| CTC+ | <i>ZEB1</i> | <i>SNAI1</i> | 0.798 | 0.002 |

Abbreviations: C-breast, non-neoplastic breast tissue controls; TU-C, tumor central region, TU-IF, tumor invasive front; LNM, lymph node metastasis; C-blood, CD45-depleted blood fractions from healthy women; CTC- and CTC+, CD45-depleted blood fractions from patients without and with identified epithelial and mesenchymal markers, respectively.