Table S5.1. Results of expression concordance analysis applied to normal human mammary epithelial cells and MDAMB-231 cells grown on conventional plastic or on a 3D collagen matrix after exclusion of totally silent genes (TPM = 0.0). MDAMB-231 cells grown on the 3D 6.0 mg/ml collagen matrix exhibited a vasculogenic mimicry phenotype.

Dataset	TAD database	z_e	$p(z_e)$	$p(z_e)_{adj}$	z_c	$p(z_c)$	$p(z_c)_{adj}$	C
Breast	TADMap	-0.626	5.313e-01	NA	-0.435	3.318e-01	NA	NS
MDAMB-231 plastic	TADMap	-1.158	2.471e-01	NA	-0.880	1.896e-01	NA	NS
MDAMB-231 3D 2.5 mg/ml	TADMap	-4.945	7.615e-07	1.523e-06	-1.376	8.445e-02	0.08445	NS
MDAMB-231 3D 6.0 mg/ml	TADMap	-4.051	5.105e-05	5.105e-05	-1.453	7.309e-02	0.08445	NS
Breast	ConsensusTAD	-0.305	7.601e-01	NA	-0.104	4.585e-01	NA	NS
MDAMB-231 plastic	ConsensusTAD	-0.927	3.540e-01	NA	-0.381	3.517e-01	NA	NS
MDAMB-231 3D 2.5 mg/ml	ConsensusTAD	-5.553	2.812e-08	5.624e-08	-1.707	4.386e-02	0.04386	NS
MDAMB-231 3D 6.0 mg/ml	ConsensusTAD	-4.851	1.227e-06	1.227e-06	-2.142	1.611e-02	0.03222	0.0993

For all datasets presented, H=0.5 was assigned by the fallback procedure, so the reported concordance estimates C were obtained using the corresponding calibration; NS – non-significant; bold marks the statistically significant results; p_{adj} – BH-adjusted p-values. TAD databases: TADMap, ConsensusTAD (see Methods 4.1). Concordance tests for Breast and MDAMB-231 plastic cells address separate biological questions, so no multiple-testing correction was applied for these conditions. Results highlighted in green can be considered statistically robust because both the unadjusted and BH-adjusted p-values fall below the left-tailed significance threshold (p = 0.05 for $p(z_e)$ and p = 0.025 for $p(z_c)$).

Table S5.2. Results of expression concordance analysis applied to normal human mammary epithelial cells and MDAMB-231 cells grown on conventional plastic or on a 3D collagen matrix after exclusion of low-expression genes (TPM < 0.5). MDAMB-231 cells grown on the 3D 6.0 mg/ml collagen matrix exhibited a vasculogenic mimicry phenotype.

Dataset	TAD database	z_e	$p(z_e)$	$p(z_e)_{adj}$	z_c	$p(z_c)$	$p(z_c)_{adj}$	C
Breast	TADMap	-0.780	4.353e-01	NA	-0.459	3.231e-01	NA	NS
MDAMB-231 plastic	TADMap	-1.507	1.317e-01	NA	-1.125	1.304e-01	NA	NS
MDAMB-231 3D 2.5 mg/ml	TADMap	-4.253	2.113e-05	4.226e-05	-0.916	1.798e-01	0.17980	NS
MDAMB-231 3D 6.0 mg/ml	TADMap	-3.710	2.074e-04	2.074e-04	-1.165	1.221e-01	0.17980	NS
Breast	ConsensusTAD	-0.329	7.419e-01	NA	-0.038	4.847e-01	NA	NS
MDAMB-231 plastic	ConsensusTAD	-1.153	2.489e-01	NA	-0.702	2.414e-01	NA	NS
MDAMB-231 3D 2.5 mg/ml	ConsensusTAD	-4.253	2.109e-05	4.218e-05	-1.182	1.185e-01	0.11850	NS
MDAMB-231 3D 6.0 mg/ml	ConsensusTAD	-3.958	7.549e-05	7.549e-05	-1.567	5.862e-02	0.11724	NS

C – evaluated concordance; NS – non-significant; p_{adj} – BH-adjusted p-values. TAD databases: TADMap, ConsensusTAD (see Methods 4.1). Concordance tests for Breast and MDAMB-231 plastic cells address separate biological questions, so no multiple-testing correction was applied for these conditions.