

Supplementary materials

Table 1. The gene-disease network parameters.

Shared name	Stress	Degree	Betweenness
<i>VEGFA</i>	327104	61	0.21018934
<i>SERPINE1</i>	63058	22	0.06730401
<i>PTGS2</i>	612124	102	0.41865882
<i>PGR</i>	19374	10	0.01603795
<i>NOTCH1</i>	102682	20	0.06518813
<i>GSTP1</i>	213548	36	0.10127241
<i>ESR2</i>	47314	18	0.03649152
<i>ESR1</i>	151496	35	0.10189387
<i>EGFR</i>	243690	44	0.12611847
<i>EGF</i>	58976	19	0.03959679
<i>CSF1</i>	6686	2	0.00666667
<i>CDH13</i>	15654	8	0.00971709
<i>CCND1</i>	152822	34	0.08052398
<i>CCNA1</i>	12086	3	0.00682774
<i>BRCA1</i>	47820	18	0.05325804
<i>BCL2</i>	232832	46	0.15708805
<i>ABCB1</i>	156564	37	0.1348579
<i>ABCG2</i>	40290	8	0.01756229
Max	612124	102	0.41865882
Average	139117.6	29.05556	0.091625171

Table S2: The gene-drug network parameters.

Name	Stress	Degree	Betweenness
<i>VEGFA</i>	119738	14	0.18563528
<i>SERPINE1</i>	0	1	0
<i>PTGS2</i>	200482	59	0.31819843
<i>PGR</i>	168016	38	0.18228367
<i>GSTP1</i>	52190	16	0.07583039
<i>ESR2</i>	388122	42	0.10486904
<i>ESR1</i>	477798	79	0.41961072
<i>EGFR</i>	179772	37	0.19924206
<i>CSF1</i>	2	2	1
<i>CCND1</i>	6306	3	0.01213952
<i>BRCA1</i>	12958	8	0.03741261
<i>BCL2</i>	128632	14	0.22115822
<i>ABCG2</i>	7446	4	0.01818148
<i>ABCB1</i>	539750	65	0.66664994
<i>NOTCH1</i>	0	1	0
Max	539750	79	1
Average	152080.8	25.533333	0.229414091