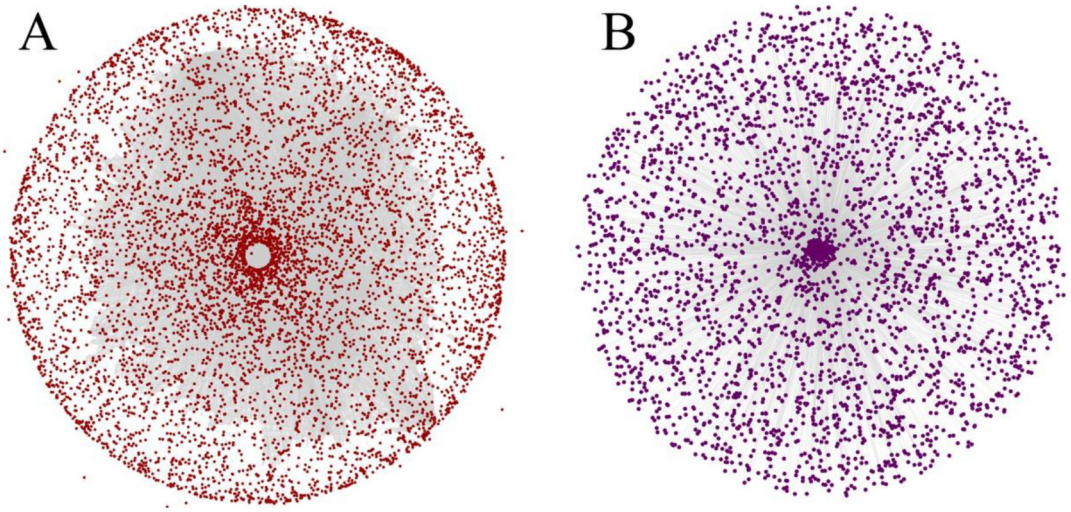
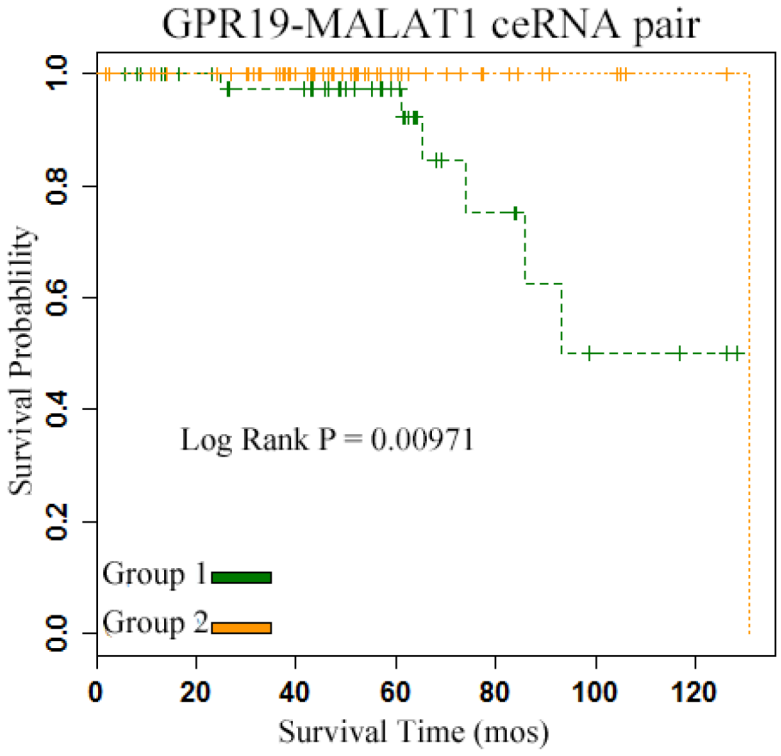
# The gain and loss of long noncoding RNA associated-competing endogenous RNAs in prostate cancer

## SUPPLEMENTARY FIGURES AND TABLES




**Supplementary Figure S1: Cancer and normal ceRNA networks. A.** cancer ceRNAs network; **B.** normal ceRNAs network.




**Supplementary Figure S2: ceRNA pairs were significantly correlated with the overall survival of PC patients in the gain ceRNA networks.**

**Supplementary Table S1: highly expressed lncRNAs in cancer and normal samples.**

**See Supplementary File 1**

**Supplementary Table S2: Gain ceRNA network.**

**See Supplementary File 2**

**Supplementary Table S3: Loss ceRNA network.**

**See Supplementary File 3**

**Supplementary Table S4: Tumor suppressor mRNAs and lncRNAs in loss ceRNA network**

| Gene name | Gene type |
|---|---|
| CAV1 | protein_coding |
| IER3 | protein_coding |
| VWA5A | protein_coding |
| ZNF185 | protein_coding |
| VSNL1 | protein_coding |
| ZBTB4 | protein_coding |
| TNFRSF12A | protein_coding |
| IGFBP4 | protein_coding |
| LIMA1 | protein_coding |
| EFNA5 | protein_coding |
| GJA1 | protein_coding |
| MEG3 | lncRNA |

**Supplementary Table S5: ceRNA pairs significantly correlated with overall survival of PC patients in gain network.**

**See Supplementary File 4**

**Supplementary Table S6: ceRNA pairs significantly correlatied with overall survival of PC patients in loss network**

| Log Rank P value | mRNA | miRNA | lncRNA |
|---|---|---|---|
| 0.00297 | MBTPS1 | hsa-miR-22 | MEG3 [13] |
| 0.00364 | AQP3 [14] | hsa-miR-204 | MEG3 |
| 0.00585 | STOX2 | hsa-miR-590-5p | MEG3 |
| 0.0137 | PPARGC1A | hsa-miR-206 | MEG3 |
| 0.0137 | PPARGC1A | hsa-miR-222 | MEG3 |
| 0.0149 | GLTP | hsa-miR-7 | MEG3 |
| 0.0255 | DUOX1 | hsa-miR-140-5p | MEG3 |
| 0.0294 | CYBRD1 | hsa-miR-143 | MEG3 |
| 0.0331 | PPFIBP1 | hsa-miR-23a | MEG3 |
| 0.0331 | PPFIBP1 | hsa-miR-34a | MEG3 |
| 0.0331 | PPFIBP1 | hsa-miR-132 | MEG3 |
| 0.0331 | PPFIBP1 | hsa-miR-10a | MEG3 |
| 0.0331 | PPFIBP1 | hsa-miR-19b | MEG3 |
| 0.0333 | CNN1 | hsa-miR-15a | RP11-475O6.1 |
| 0.0405 | UST | hsa-miR-7 | MEG3 |
| 0.0477 | SYT1 | hsa-miR-206 | MEG3 |

**Supplementary Table S7: Small molecules drug regulate miRNA expression**

| miRNA | Small Melocule | Expression pattern of miRNA |
|---|---|---|
| has-miR-200c [15-17] | Paclitaxel+Cyclopamine | up-regulated [18] |
| has-miR-200c | 17beta-estradiol (E2) | up-regulated [19] |
| has-miR-205 [16, 20-22] | 1,2,6-Tri-O-galloyl-beta-D-glucopyranose (TGGP) | up-regulated [23] |
| has-miR-200a [24] | 17beta-estradiol (E2) | up-regulated [25] |
| has-miR-106a [26] | 17beta-estradiol (E2) | up-regulated [27] |
| has-miR-200c | Reversine | up-regulated [28] |
| has-miR-106a | Cisplatin | down-regulated [29] |
| has-miR-16 | Estrogen | down-regulated [30] |
| has-miR-27a [31, 32] | Budesonide | down-regulated [33] |
| has-miR-27a | 17beta-estradiol (E2) | down-regulated [25] |
| has-miR-27a | 1,2,6-Tri-O-galloyl-beta-D-glucopyranose (TGGP) | down-regulated [23] |
| has-miR-27a | Genistein | down-regulated [34] |
| has-miR-150 | 1,2,6-Tri-O-galloyl-beta-D-glucopyranose (TGGP) | down-regulated [23] |
| has-miR-150 | Cisplatin | down-regulated [35] |

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