

SUPPLEMENTARY TABLES

Supplementary Table 3. Pearson correlation coefficient.

| Gene | Pearson r | 95% confidence interval | R squared | P value | P value summary |
|---------|-----------|-------------------------|-----------|---------|-----------------|
| POU4F1 | -0.5424 | -0.6168 to -0.4584 | 0.2942 | <0.0001 | **** |
| NOVA1 | -0.3723 | -0.4648 to -0.2719 | 0.1386 | <0.0001 | **** |
| SLCO4C1 | -0.4212 | -0.509 to -0.3247 | 0.1774 | <0.0001 | **** |
| IZUMO2 | -0.7123 | -0.7633 to -0.6525 | 0.5074 | <0.0001 | **** |
| MAGEA1 | -0.358 | -0.4517 to -0.2565 | 0.1282 | <0.0001 | **** |

Supplementary Table 4. 9 genes selected in multi-variation cox regression through Akaike Information Criterion.

| | coef | exp(coef) | se(coef) | z | p-value |
|-----------|----------|-----------|----------|--------|----------|
| SLCO4C1 | -0.22759 | 0.79645 | 0.05719 | -3.979 | 6.91E-05 |
| MAGEA1 | 0.10437 | 1.11001 | 0.04248 | 2.457 | 0.01402 |
| AFAP1.AS1 | 0.06345 | 1.06551 | 0.02872 | 2.21 | 0.02714 |
| POU4F1 | 0.21784 | 1.24339 | 0.05376 | 4.052 | 5.08E-05 |
| EPHX4 | -0.0948 | 0.90955 | 0.06291 | -1.507 | 0.13185 |
| IZUMO2 | -0.12456 | 0.88288 | 0.04751 | -2.622 | 0.00875 |
| EPHX3 | 0.11068 | 1.11704 | 0.06058 | 1.827 | 0.06771 |
| NOVA1 | 0.13369 | 1.14304 | 0.04786 | 2.793 | 0.00522 |
| AXIN2 | -0.1214 | 0.88568 | 0.06292 | -1.929 | 0.05367 |