**Supplementary Table 1. Effects of ER and PR on AR expression across the 20th, 45th, 60th and 80th quantiles**

**of the AR expression distribution**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 　 | Coefficient | Std. Error | t | *p*-value | 95% Confidence Interval |
| 20th quantile | 　 | 　 | 　 | 　 | 　 | 　 |
| (Intercept) | -16.909  | 16.434  | -1.029  | 0.304  | -49.202  | 15.384  |
| ER% | 0.400  | 0.195  | 2.056  | 0.040  | 0.018  | 0.782  |
| PR% | 0.455  | 0.111  | 4.093  | 0.000  | 0.236  | 0.673  |
| 40th quantile | 　 | 　 | 　 | 　 | 　 | 　 |
| (Intercept) | 3.189  | 3.069  | 1.039  | 0.299  | -2.842  | 9.220  |
| ER% | 0.680  | 0.036  | 18.709  | 0.000  | 0.608  | 0.751  |
| PR% | 0.013  | 0.021  | 0.606  | 0.545  | -0.028  | 0.053  |
| 60th quantile | 　 | 　 | 　 | 　 | 　 | 　 |
| (Intercept) | 16.396  | 4.430  | 3.701  | 0.000  | 7.692  | 25.101  |
| ER% | 0.544  | 0.052  | 10.364  | 0.000  | 0.441  | 0.647  |
| PR% | 0.021  | 0.030  | 0.691  | 0.490  | -0.038  | 0.079  |
| 80th quantile | 　 | 　 | 　 | 　 | 　 | 　 |
| (Intercept) | 16.706  | 5.623  | 2.971  | 0.003  | 5.657  | 27.755  |
| ER% | 0.622  | 0.067  | 9.350  | 0.000  | 0.492  | 0.753  |
| PR% | 0.182  | 0.038  | 4.785  | 0.000  | 0.107  | 0.256  |

**Abbreviations**

AR, androgen receptor; ER, estrogen receptor; PR, progesterone receptor