**Supplementary Table 1.** Characteristics of endometrial cancer patients in four datasets

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 　Items | Characteristics | TCGA (*n*=543) | CPTAC (*n*=96) | GEO (*n*=91) | In-house (*n*=25) |
| Age (years) |  | 64±11 | 62±24 | 64±27 | 61±13 |
| Molecular subtype | POLE | 17（7.33） | 7 (7.29) |  |  |
|  | MSI | 65（28.02） | 26 (27.08） |  |  |
|  | CNL | 90（38.79） | 44 (45.83） |  |  |
|  | CNH | 60（25.86） | 19 (19.79） |  |  |
| Histological type | Endometrioid | 399（73.48） | 86 (89.58） | 79 (86.81) | 25（100） |
|  | serous | 133（24.49） | 10 (10.42) | 12 (13.19) |  |
| FIGO stage | Ⅰ | 339（62.43） | 69 (71.88) | 91 (100) | 20 (80.00) |
|  | Ⅱ | 51（9.39） | 11 (11.46) |  | 2 (8.00) |
|  | Ⅲ | 124（22.84） | 14 (14.58) |  | 2 (8.00) |
|  | Ⅳ | 29（5.34） | 2 (2.08) |  | 1 (4.00) |
| Pathology grade | G1 | 98（18.05） | 37 (38.54) | 30 (32.97) | 5 (20.00) |
|  | G2 | 120（22.10） | 41 (42.71) | 36 (39.56) | 10 (40.00) |
|  | G3 | 325（59.85） | 18 (18.75) | 25 (27.47) | 10 (40.00) |
| Peritoneal wash status | Negative | 350（86.00） |  |  |  |
|  | Positive | 57（14.00） |  |  |  |
| Lymph node status | Negative | 364（67.03） |  |  |  |
| 　 | Positive | 179（32.97） | 　 | 　 | 　 |

 Data are expressed as mean ± standard deviation or *n* (%).

**Supplementary Table 2.** Primers used for qPCR

|  |  |  |
| --- | --- | --- |
| *Gene* | Forward primer | Reverse primer |
| *SRARP* | CAAAGGCACCATCCGTGAG | CCCGTGGGTGCAGTCAATA |
| *FLNA* | GGGTCCAGTAGGCGTCAATG | ACACCTTGATCTTGCTGAGGT |
| *FSCN1* | TGGCAAGTTTGTGACCTCCA | CGCGGAACACGATGATGG |
| *CDH1* | GCCTGTCGAAGCAGGATTGC | GCTCTTTGACCACCGCTCTC |
| *CDH2* | CCATCCAGACCGACCCAAAC | TTCTGCAGCAACAGTAAGGAC |
| *WNT7A* | CTTCGCCAAGGTCTTTGTGG | ATTCCAGCTTCATGTTCTCCTC |
| *FKBP5* | TCCAAACGAAGGAGCAACAGT | GGAATGTCGTGGTCTTCTCCT |
| *HAND2* | AGAAGACCGACGTGAAAGAGG | TTCTTGTCGTTGCTGCTCACT |
| *MIG6* | GCGAAGGATCTGCCAGTAAG | TCCAGGTATGGTGGTCGTTC |
| *PAEP* | AGATCATGCAGGGATTCATCAG | CGGCACGGCTCTTCCATC |
| *PGR* | CTTACCTGTGGGAGCTGTAAG | TCAACGATGCAGTCATTTCTTC |
| *GAPDH* | TCTGACTTCAACAGCGACAC | GCCAAATTCGTTGTCATACC |



**Supplementary Figure 1:** Comparison of the expression levels of *SRARP* in representative tissue samples and EC cell lines detected by qRT-PCR. N: normal endometrium; 1: Grade 1, stage I, endometrioid EC tissue; 2: Grade 2, stage I, endometrioid EC tissue; 3: Grade 3, stage I, endometrioid EC tissue. \*\*\*P ≤ 0.001. 50B: HEC50B; EC: Endometrial cancer; ISK: Ishikawa; qRT-PCR: Quantitative real-time polymerase chain reaction; *SRARP*: Steroid receptor associated and regulated protein.