**Table S1** **Clinical data of genes related to pyrolysis in UCEC**

|  | High risk | Low risk | p |
| --- | --- | --- | --- |
| n | 271 | 271 |  |
| FIGO stage, n (%) |  |  | < 0.001 |
| Stage I | 147 (27.1%) | 191 (35.2%) |  |
| Stage II | 24 (4.4%) | 27 (5%) |  |
| Stage III | 79 (14.6%) | 45 (8.3%) |  |
| Stage IV | 21 (3.9%) | 8 (1.5%) |  |
| Fertility, n (%) |  |  | 0.200 |
| 0 | 29 (7.8%) | 36 (9.7%) |  |
| 1 | 23 (6.2%) | 28 (7.6%) |  |
| 2 | 54 (14.6%) | 60 (16.2%) |  |
| 3 | 32 (8.6%) | 34 (9.2%) |  |
| 4+ | 46 (12.4%) | 28 (7.6%) |  |
| Histological grade, n (%) |  |  | < 0.001 |
| G1 | 36 (6.6%) | 62 (11.4%) |  |
| G2 | 36 (6.6%) | 84 (15.5%) |  |
| G3 | 199 (36.7%) | 125 (23.1%) |  |
| Pathological type, n (%) |  |  | < 0.001 |
| Adenocarcinoma | 0 (0%) | 1 (0.2%) |  |
| Carcinoma, undifferentiated | 1 (0.2%) | 1 (0.2%) |  |
| Clear cell adenocarcinoma, | 1 (0.2%) | 0 (0%) |  |
| Endometrioid adenocarcinoma | 153 (28.2%) | 247 (45.6%) |  |
| Papillary serous cystadenoc | 3 (0.6%) | 1 (0.2%) |  |
| Serous cystadenocarcinoma | 112 (20.7%) | 21 (3.9%) |  |
| Serous surface papillary | 1 (0.2%) | 0 (0%) |  |
| Race, n (%) |  |  | 0.034 |
| american indian or alaska native | 2 (0.4%) | 2 (0.4%) |  |
| asian | 10 (1.8%) | 10 (1.8%) |  |
| black or african american | 68 (12.5%) | 38 (7%) |  |
| native hawaiian or other pacific islander | 4 (0.7%) | 5 (0.9%) |  |
| not reported | 18 (3.3%) | 14 (2.6%) |  |
| white | 169 (31.2%) | 202 (37.3%) |  |
| Neoadjuvant chemotherapy, n (%) |  |  | 1.000 |
| No | 270 (49.8%) | 270 (49.8%) |  |
| Yes | 1 (0.2%) | 1 (0.2%) |  |
| Menopause, n (%) |  |  | 0.598 |
| Indeterminate | 26 (4.8%) | 20 (3.7%) |  |
| Peri | 9 (1.7%) | 8 (1.5%) |  |
| Post | 216 (39.9%) | 228 (42.1%) |  |
| Pre | 20 (3.7%) | 15 (2.8%) |  |
| Diabetes, n (%) |  |  | 0.882 |
| NO | 127 (34.9%) | 138 (37.9%) |  |
| YES | 49 (13.5%) | 50 (13.7%) |  |
| Hypertension, n (%) |  |  | 0.643 |
| NO | 77 (19.7%) | 85 (21.8%) |  |
| YES | 115 (29.5%) | 113 (29%) |  |
| Age, meidan (IQR) | 67 (57.5, 73) | 62 (56.5, 69) | < 0.001 |
| BMI, meidan (IQR) | 31.24 (25.61, 38.09) | 33.24 (27.18, 39.82) | 0.055 |
| Muscular infiltration, meidan (IQR) | 30 (0, 54.5) | 33 (10, 55) | 0.223 |