**Table S2** Correlation of SPAG5 expression and clinical features of breast cancer patients

|  |  |  |
| --- | --- | --- |
| Variable | Overall (N=183) |  SPAG5 |
| Low expression (N=105) | High expression (N=78) | 　 |
| 　 | N | % | N | % | N | % | *P* |
| **Age, years** | 　 | 　 | 　 | 　 | 　 | 　 | 0.359 |
| ≤50 | 101 | 55.19  | 61 | 58.10  | 40 | 51.28  | 　 |
| >50 | 82 | 44.81  | 44 | 41.90  | 38 | 48.72  | 　 |
| **Tumor size, cm** | 　 | 　 | 　 | 　 | 　 | 　 | 0.501 |
| <2 | 87 | 47.54  | 49 | 46.67  | 38 | 48.72  | 　 |
| 2≤T<5 | 87 | 47.54  | 49 | 46.67  | 38 | 48.72  | 　 |
| ≥5 | 9 | 4.92  | 7 | 6.67  | 2 | 2.56  | 　 |
| **Histological grade** | 　 | 　 | 　 | 　 | 　 | 　 | 0.93 |
| I/II | 132 | 72.13  | 76 | 72.38  | 56 | 71.79  | 　 |
| III | 51 | 27.87  | 29 | 27.62  | 22 | 28.21  | 　 |
| **Node status** | 　 | 　 | 　 | 　 | 　 | 　 | 0.648 |
| pN0 (none) | 89 | 48.63  | 48 | 45.71  | 41 | 52.56  | 　 |
| pN1 (1-3) | 50 | 27.32  | 29 | 27.62  | 21 | 26.92  | 　 |
| pN2 (4-9) | 17 | 9.29  | 12 | 11.43  | 5 | 6.41  | 　 |
| pN3 (≥10) | 25 | 13.66  | 14 | 13.33  | 11 | 14.10  | 　 |
| pNX | 2 | 1.09  | 2 | 1.90  | 0 | 0.00  | 　 |
| **Molecular subtype** | 　 | 　 | 　 | 　 | 　 | 　 | 0.251 |
| Luminal A | 48 | 26.23  | 32 | 30.48  | 16 | 20.51  |  |
| Luminal B | 44 | 24.04  | 23 | 21.90  | 21 | 26.92  | 　 |
| Her2 subtype | 49 | 26.78  | 30 | 28.57  | 19 | 24.36  | 　 |
| TNBC | 42 | 22.95  | 20 | 19.05  | 22 | 28.21  | 　 |
| **Local recurrence** | 　 | 　 | 　 | 　 | 　 | 　 | **＜0.001** |
| absence | 174 | 95.08  | 105 | 100.00  | 69 | 88.46  | 　 |
| presence | 9 | 4.92  | 0 | 0.00  | 9 | 11.54  | 　 |
| **Distant Metastasis** | 　 | 　 | 　 | 　 | 　 | 　 | 0.337 |
| absence | 162 | 88.52  | 95 | 90.48  | 67 | 85.90  |  |
| presence | 21 | 11.48  | 10 | 9.52  | 11 | 14.10  | 　 |