**Supplementary Table 1. Clinical and pathological characteristics of SCNEC patients**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **FIGO 2009 system** | | | | ***P*** | **FIGO 2018 system** | | | | | | | ***P*** |
| **IB1** | **IB2** | **IIA1** | **IIA2** | **IB1** | **IB2** | **IB3** | **IIA1** | **IIA2** | **IIIC1** | **IIIC2** |
| **Age (years，n=64)** |  |  |  |  | 0.698 |  |  |  |  |  |  |  | 0.082 |
| **＜30** | 4  8.9% | 0  0.0% | 0  0.0% | 0  0.0% |  | 3  14.3% | 1  5.3% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% |  |
| **30-39** | 13  28.9% | 3  30.0% | 1  20.0% | 2  50.0% |  | 8  38.1% | 2  10.5% | 1  50.0% | 0  0.0% | 0  0.0% | 7  46.7% | 0  0.0% |  |
| **40-49** | 16  35.6% | 3  30.0% | 2  40.0% | 0  0.0% |  | 5  23.8% | 10  52.6% | 0  0.0% | 1  33.3% | 1  50.0% | 3  20.0% | 1  50.0% |  |
| **50-59** | 8  17.8% | 4  40.0% | 1  20.0% | 2  50.0% |  | 3  14.3% | 6  31.6% | 1  50.0% | 0  0.0% | 1  50.0% | 4  26.7% | 1  50.0% |  |
| **≥60** | 4  8.9% | 0  0.0% | 1  20.0% | 0  0.0% |  | 2  9.5% | 0  0.0% | 0  0.0% | 2  66.7% | 0  0.0% | 1  6.7% | 0  0.0% |  |
| **HPV (n=30)** |  |  |  |  | 0.072 |  |  |  |  |  |  |  | 0.803 |
| **Negative** | 1  4.5% | 1  33.3% | 0  0.0% | 0  0.0% |  | 0  0.0% | 0  0.0% | 0  0.0% | 1  33.3% | 1  16.7% | 0  0.0% | 0  0.0% |  |
| **16** | 0  0.0% | 1  33.3% | 0  0.0% | 0  0.0% |  | 0  0.0% | 1  9.1% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% |  |
| **18** | 12  54.5% | 1  33.3% | 2  66.7% | 2  100.0% |  | 6  75.0% | 5  45.5% | 1  100.0% | 1  33.3% | 3  50.0% | 6  75.0% | 1  100.0% |  |
| **Unclassified** | 9  40.9% | 0  0.0% | 1  33.3% | 0  0.0% |  | 2  25.0% | 5  45.5% | 0  0.0% | 1  33.3% | 2  33.3% | 2  25.0% | 0  0.0% |  |
| **Histological homology(n=64)** |  |  |  |  | 0.766 |  |  |  |  |  |  |  | 0.319 |
| **Pure** | 25  55.6% | 7  70.0% | 3  60.0% | 3  75.0% |  | 10  47.6% | 13  68.4% | 2  100.0% | 1  33.3% | 2  100.0% | 8  53.3% | 2  100.0% |  |
| **Mixed** | 20  44.4% | 3  30.0% | 2  40.0% | 1  25.0% |  | 11  52.4% | 6  31.6% | 0  0.0% | 2  66.7% | 0  0.0% | 7  46.7% | 0  0.0% |  |
| **Surgical margins (n=64)** |  |  |  |  | 0.139 |  |  |  |  |  |  |  | 0.001 |
| **Positive** | 1  2.2% | 1  10.0% | 1  20.0% | 1  25.0% |  | 0  0.0% | 0  0.0% | 0  0.0% | 2  66.7% | 0  0.0% | 2  13.3% | 0  0.0% |  |
| **Negative** | 44  97.8% | 9  90.0% | 4  80.0% | 3  75.0% |  | 21  100.0% | 19  100.0% | 2  100.0% | 1  33.3% | 2  100.0% | 13  86.7% | 2  100.0% |  |
| **LNM\* (n=64)** |  |  |  |  | 0.023 |  |  |  |  |  |  |  | ＜0.001 |
| **No** | 37  82.2% | 5  50.0% | 4  80.0% | 1  25.0% |  | 21  100.0% | 19  100.0% | 2  100.0% | 3  100.0% | 2  100.0% | 0  0.0% | 0  0.0% |  |
| **Yes** | 8  17.8% | 5  50.0% | 1  20.0% | 3  75.0% |  | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 15  100.0% | 2  100.0% |  |
| **Parametrial (n=64)** |  |  |  |  | ＜0.001 |  |  |  |  |  |  |  | 0.012 |
| **Positive** | 1  2.2% | 1  10.0% | 0  0.0% | 3  75.0% |  | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 4  26.7% | 1  50.0% |  |
| **Negative** | 44  97.8% | 9  90.0% | 5  100.0% | 1  25.0% |  | 21  100.0% | 19  100.0% | 2  100.0% | 3  100.0% | 2  100.0% | 11  73.3% | 1  50.0% |  |
| **LVSI& (n=64)** |  |  |  |  | 0.139 |  |  |  |  |  |  |  | 0.044 |
| **Yes** | 27  60.0% | 9  90.0% | 3  60.0% | 4  100.0% |  | 10  47.6% | 12  63.2% | 2  100.0% | 1  33.3% | 2  100.0% | 14  93.3% | 2  100.0% |  |
| **No** | 18  40.0% | 1  10.0% | 2  40.0% | 0  0.0% |  | 11  52.4% | 7  36.8% | 0  0.0% | 2  66.7% | 0  0.0% | 1  6.7% | 0  0.0% |  |
| **Depth invasion(n=63)** |  |  |  |  | 0.072 |  |  |  |  |  |  |  | 0.010 |
| **＜1/3** | 23  52.3% | 0  0.0% | 2  40.0% | 1  25.0% |  | 15  71.4% | 10  52.6% | 0  0.0% | 1  33.3% | 0  0.0% | 0  0.0% | 0  0.0% |  |
| **1/3-2/3** | 2  4.5% | 0  0.0% | 0  0.0% | 0  0.0% |  | 1  4.8% | 1  5.3% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% |  |
| **＞2/3** | 19  43.2% | 10  100.0% | 3  60.0% | 3  75.0% |  | 5  23.8% | 8  42.1% | 2  100.0% | 2  66.7% | 2  100.0% | 14  100.0% | 2  100.0% |  |
| **Tumor size（cm,n=64）** |  |  |  |  | ＜0.001 |  |  |  |  |  |  |  | ＜0.001 |
| **≤2** | 25  55.6% | 0  0.0% | 3  60.0% | 1  25.0% |  | 21  100.0% | 0  0.0% | 0  0.0% | 3  100.0% | 0  0.0% | 3  20.0% | 2  100.0% |  |
| **＞2，≤4** | 19  42.2% | 2  20.0% | 1  20.0% | 2  50.0% |  | 0  0.0% | 19  100.0% | 0  0.0% | 0  0.0% | 0  0.0% | 5  33.3% | 0  0.0% |  |
| **＞4** | 1  2.2% | 8  80.0% | 1  20.0% | 1  25.0% |  | 0  0.0% | 0  0.0% | 2  100.0% | 0  0.0% | 2  100.0% | 7  46.7% | 0  0.0% |  |
| **Lower uterine involvement (n=64)** |  |  |  |  | 0.014 |  |  |  |  |  |  |  | 0.089 |
| **Positive** | 4  8.9% | 4  40.0% | 0  0.0% | 2  50.0% |  | 0  0.0% | 4  21.1% | 0  0.0% | 0  0.0% | 0  0.0% | 5  33.3% | 1  50.0% |  |
| **Negative** | 41  91.1% | 6  60.0% | 5  100.0% | 2  50.0% |  | 21  100.0% | 15  78.9% | 2  100.0% | 3  100.0% | 2  100.0% | 10  66.7% | 1  50.0% |  |
| **Adjuvant therapy# (n=64)** |  |  |  |  | 0.859 |  |  |  |  |  |  |  | 0.809 |
| **Chemotherapy only** | 6  14.6% | 1  10.0% | 0  0.0% | 1  33.3% |  | 5  26.3% | 1  5.9% | 0  0.0% | 0  0.0% | 0  0.0% | 2  15.4% | 0  0.0% |  |
| **Chemoradiotherapy** | 33  80.5% | 8  80.0% | 4  100.0% | 2  66.7% |  | 12  63.2% | 15  88.2% | 2  100.0% | 3  100.0% | 2  100.0% | 11  84.6% | 2  100.0% |  |
| **none** | 2  4.9% | 1  10.0% | 0  0.0% | 0  0.0% |  | 2  10.5% | 1  5.9% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% | 0  0.0% |  |
| **Involvement of vagina (n=62)** |  |  |  |  | 0.225 |  |  |  |  |  |  |  | ＜0.001 |
| **Yes** | 4  9.3% | 1  10.0% | 2  40.0% | 1  25.0% |  | 0  0.0% | 0  0.0% | 0  0.0% | 3  100.0% | 1  50.0% | 4  26.7% | 0  0.0% |  |
| **No** | 39  90.7% | 9  90.0% | 3  60.0% | 3  75.0% |  | 19  100.0% | 19  100.0% | 2  100.0% | 0  0.0% | 1  50.0% | 11  73.3% | 2  100.0% |  |

\*LNM, lymph node metastasis, including pelvic and para-aortic metastasis (among them, four cases underwent para-aortic lymphadenectomy and 2/4 cases were positive); LVSI, lymph-vascular space invasion

# Postoperative adjuvant therapy: none of the patients who received adjuvant therapy chose only radiotherapy