**Table 1.**

**The** **patients’ demographic and clinicopathologic information** **and analysis of impact factors on the SLNB detection rate**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **N(356)** | **frequence (%)** | **SLN detection rate(%)** | ***P*** |
| **Mean age (range)** | 46(23-68) |  |  | 0.63 |
| <50 | 221 | 62.08 | 91.86 |  |
| ≥50 | 135 | 37.92 | 90.37 |  |
| **Histologic diagnosis** |  |  |  | 0.062a |
| Squamous | 317 | 89.04 | 92.43 |  |
| Adenocarcinoma | 39 | 10.96 | 82.05 |  |
| **Grade of differentiation** |  |  |  | 0.055 |
| G1 | 69 | 19.38 | 98.55 |  |
| G2 | 190 | 53.37 | 90 |  |
| G3 | 97 | 27.25 | 88.66 |  |
| **Tumor size** |  |  |  | 0.000 |
| <20mm | 267 | 75 | 97.75 |  |
| ≥20mm | 89 | 25 | 71.91 |  |
| **FIGO stage** |  |  |  | 0.055 |
| Ia2-Ib1 | 259 | 72.75 | 93.05 |  |
| Ib2-IIa2 | 97 | 27.25 | 86.60 |  |
| **Depth of** **stromal invasion** |  |  |  | 0.107 |
| <50% | 187 | 52.53 | 93.58 |  |
| ≥50% | 169 | 47.47 | 88.76 |  |
| **Prior** **chemotherapy** |  |  |  | 0.235 |
| Yes | 64 | 17.98 | 87.5 |  |
| No | 292 | 82.02 | 92.12 |  |
| **Menopause** |  |  |  | 0.471 |
| Yes | 74 | 20.79 | 89.19 |  |
| No | 282 | 79.21 | 91.84 |  |
| **LVSI** |  |  |  | 0.009 |
| Yes | 120 | 33.71 | 85.83 |  |
| no | 236 | 66.29 | 94.07 |  |
| **Surgical approach** |  |  |  | 0.639 |
| Laparoscopy | 198 | 55.62 | 91.92 |  |
| Robotic | 158 | 44.38 | 90.51 |  |

**Table 2.**

**Diagnostic values of SLNB using carbon nanoparticle suspension**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SLNB (N=325)** | | | | |
|  | **PLN positive** | **PLN negative** | **Total** | DR=91.29%(325/356) |
| **SLN positive** | 26 | 18 | 44 | PPV=59.09%(26/44) |
| **SLN negative** | 2 | 279 | 281 | NPV=99.29%(279/281) |
| **Total** | 28 | 297 | 325 | Ac=93.85%(305/325) |
|  | Se=92.86%(26/28) | Sp=93.94%(279/297) | FNR=7.14%(2/28) |  |
|  |  |  |  |  |
| **SLNB with tumor size less than 20 mm (N=267)** | | | | |
|  | **PLN** **positive** | **PLN negative** | **Total** | DR=97.75%(261/267) |
| **SLN positive** | 8 | 6 | 14 | PPV=57.14%(8/14) |
| **SLN negative** | 0 | 247 | 247 | NPV=100%(247/247) |
| **Total** | 8 | 253 | 261 | Ac=97.70%(255/261) |
|  | Se=100%(8/8) | Sp=97.63%(247/253) | FNR=0%(0/8) |  |