**Supplemental Table 3. The demographic and treatment data of patients with or without surgery**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characteristics | 　 | With surgery (N = 12289) | 　 | Without surgery (N = 43029) |
| 　 | VEOPC (N = 346) | 　 | Older PC (N = 11943) | 　 | VEOPC (N = 1040) | 　 | Older PC (N = 41989) |
| 　 | No. of patients | % | 　 | No. of patients | % | 　 | No. of patients | % | 　 | No. of patients | % |
| T stage | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| T1-T2 | 　 | 67 | 19.4% | 　 | 2100 | 17.6% | 　 | 208 | 20.0% | 　 | 9674 | 23.0% |
| T3-T4 | 　 | 268 | 77.5% | 　 | 9675 | 81.0% | 　 | 597 | 57.4% | 　 | 23626 | 56.3% |
| Unknown | 　 | 11 | 3.2% | 　 | 168 | 1.4% | 　 | 235 | 22.6% | 　 | 8689 | 20.7% |
| N stage | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| NO | 　 | 112 | 32.4% | 　 | 4156 | 34.8% | 　 | 491 | 47.2% | 　 | 22689 | 54.0% |
| N1 | 　 | 230 | 66.5% | 　 | 7689 | 64.4% | 　 | 354 | 34.0% | 　 | 11636 | 27.7% |
| Unknown | 　 | 4 | 1.2% | 　 | 98 | 0.8% | 　 | 195 | 18.8% | 　 | 7664 | 18.3% |
| M stage | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| M0 | 　 | 312 | 90.2% | 　 | 11082 | 92.8% | 　 | 270 | 26.0% | 　 | 15488 | 36.9% |
| M1 | 　 | 32 | 9.3% | 　 | 755 | 6.3% | 　 | 754 | 72.5% | 　 | 24923 | 59.4% |
| Unknown | 　 | 2 | 0.6% | 　 | 106 | 0.9% | 　 | 16 | 1.5% | 　 | 1578 | 3.8% |
| Chemotherapy | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| No | 　 | 73 | 21.1% | 　 | 3563 | 29.8% | 　 | 239 | 23.0% | 　 | 17023 | 40.5% |
| Yes | 　 | 273 | 78.9% | 　 | 8380 | 70.2% | 　 | 801 | 77.0% | 　 | 24966 | 59.5% |
| Radiotherapy | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| No | 　 | 199 | 57.5% | 　 | 7392 | 61.9% | 　 | 822 | 79.0% | 　 | 34891 | 83.1% |
| Yes | 　 | 147 | 42.5% | 　 | 4551 | 38.1% | 　 | 218 | 21.0% | 　 | 7098 | 16.9% |