Supplementary table 1. The annual incidence of cervical cancer in women aged ≥65 and <65 during 2004-2015

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Aged ≥65 | | |  | Aged <65 | | | *P* value |
| Number of patients | Total population | Incidence (/100000) |  | Number of patients | Total population | Incidence (/100000) |
| 2004 | 674 | 9266902 | 7.3 |  | 2804 | 71615977 | 3.9 | **<0.001** |
| 2005 | 694 | 9124866 | 7.6 |  | 2695 | 70153478 | 3.8 | **<0.001** |
| 2006 | 654 | 9492864 | 6.9 |  | 2822 | 72455841 | 3.9 | **<0.001** |
| 2007 | 668 | 9667726 | 6.9 |  | 2838 | 72946290 | 3.9 | **<0.001** |
| 2008 | 690 | 9924059 | 6.9 |  | 2877 | 73499630 | 3.9 | **<0.001** |
| 2009 | 663 | 10163003 | 6.5 |  | 2818 | 74093162 | 3.8 | **<0.001** |
| 2010 | 660 | 10405272 | 6.3 |  | 2749 | 74613238 | 3.7 | **<0.001** |
| 2011 | 676 | 10662369 | 6.3 |  | 2678 | 75027635 | 3.5 | **<0.001** |
| 2012 | 677 | 11140793 | 6.1 |  | 2733 | 75237149 | 3.6 | **<0.001** |
| 2013 | 639 | 11548160 | 5.5 |  | 2601 | 75445756 | 3.4 | **<0.001** |
| 2014 | 688 | 11962192 | 5.8 |  | 2781 | 75677603 | 3.6 | **<0.001** |
| 2015 | 676 | 12377108 | 5.4 |  | 2840 | 75894460 | 3.7 | **<0.001** |

The results were in bold if *P* value <0.05.

Supplementary table 2 Univariable and multivariable COX regression for cervical cancer patients aged <65

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Characteristics | Univariate | |  | Multivariate | |
| HR (95% CI) | *P* value |  | HR (95% CI) | *P* value |
| Race |  |  |  |  |  |
| White | Reference |  |  | Reference |  |
| Black | 1.540 (1.448-1.638) | **<0.001** |  | 1.301 (1.206-1.404) | **<0.001** |
| Other | 1.026 (0.946-1.113) | 0.531 |  | 1.115 (1.010-1.230) | **0.030** |
| Marital status |  |  |  |  |  |
| Married | Reference |  |  | Reference |  |
| Unmarried | 1.524 (1.451-1.601) | **<0.001** |  | 1.219 (1.149-1.294) | **<0.001** |
| Histology |  |  |  |  |  |
| Squamous cell carcinoma | Reference |  |  | Reference |  |
| Adenocarcinoma | 0.623 (0.583-0.665) | **0.004** |  | 1.100 (1.013-1.195) | **0.024** |
| Other | 1.477 (1.380-1.581) | **<0.001** |  | 1.450 (1.327-1.584) | **<0.001** |
| Grade |  |  |  |  |  |
| I | Reference |  |  | Reference |  |
| II | 2.657 (2.340-3.018) | **<0.001** |  | 1.455 (1.268-1.670) | **<0.001** |
| III | 4.772 (4.213-5.406) | **<0.001** |  | 1.961 (1.710-2.249) | **<0.001** |
| IV | 5.706 (4.797-6.787) | **<0.001** |  | 1.993 (1.646-2.413) | **0.006** |
| FIGO |  |  |  |  |  |
| I | Reference |  |  | Reference |  |
| II | 4.703 (4.295-5.149) | **<0.001** |  | 2.499 (2.213-2.822) | **<0.001** |
| III | 8.323 (7.718-8.976) | **<0.001** |  | 4.461 (3.960-5.025) | **<0.001** |
| IV | 26.703 (24.773-28.783) | **<0.001** |  | 12.620 (11.200-14.221) | **<0.001** |
| Regional lymph node |  |  |  |  |  |
| Negative | Reference |  |  | Reference |  |
| Positive | 4.244 (4.041-4.457) | **<0.001** |  | 0.985 (0.915-1.062) | 0.698 |
| Surgery |  |  |  |  |  |
| No | Reference |  |  | Reference |  |
| Yes | 0.159 (0.151-0.168) | **<0.001** |  | 0.413 (0.385-0.444) | **<0.001** |
| Radiotherapy |  |  |  |  |  |
| No | Reference |  |  | Reference |  |
| Yes | 3.595 (3.397-3.805) | **<0.001** |  | 0.992 (0.904-1.090) | 0.874 |
| Chemotherapy |  |  |  |  |  |
| No | Reference |  |  | Reference |  |
| Yes | 3.908 (3.702-4.126) | **<0.001** |  | 0.828 (0.758-0.904) | **<0.001** |

Supplementary table 3 The distributions of treatments in cervical cancer patients aged ≥65 and <65

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| FIGO | Treatment | ≥65 | |  | <65 | | *P* value |
| N | P (%) |  | N | P (%) |
| I | Surgical treatment | 1513 | 70.31 |  | 14365 | 89.17 | **<0.001** |
| Non-surgical treatment | 459 | 21.33 |  | 1317 | 8.18 |  |
| No treatment | 180 | 8.36 |  | 428 | 2.65 |  |
| II | Surgical treatment | 365 | 26.78 |  | 1251 | 32.78 | **<0.001** |
| Non-surgical treatment | 916 | 67.20 |  | 2494 | 65.36 |  |
| No treatment | 82 | 6.02 |  | 71 | 1.86 |  |
| III | Treatment | 1452 | 89.35 |  | 6118 | 97.22 | **<0.001** |
| No treatment | 173 | 10.65 |  | 175 | 2.78 |  |
| IV | Treatment | 1078 | 71.20 |  | 3469 | 87.98 | **<0.001** |
| No treatment | 436 | 28.80 |  | 474 | 12.02 |  |