**Supplementary Material**

**Table S4. Parameters for estimating disease burden due to human papillomavirus (HPV)-related cancers**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cancer site** | **Percentage attributed to HPV**  | **Stage** | **Percentage at diagnosis** | **Severity weight for diagnosis\*** | **Five-year survival** | **Surgery only** | **Radiation only** | **Surgery & radiation** | **Chemotherapy and radiation** | **Surgery, chemotherapy & ratiation** |
| Cervix  | 99.7[1] | I | 52 | 0.109 | 80[2] | 60[3] |  |  | 25 | 15 |
|  | II | 21 | 0.147 | 65 |  |  |  | 100 |  |
|  | III/IV | 27 | 0.191 | 30 |  | 10 |  | 90 |  |
| Vulva | 36–40[4] | I/II | 66 | 0.109 | 85 | 80[3] |  |  | 10 | 10 |
|  | III/IV | 34 | 0.191 | 25 | 35 |  |  | 50 | 15 |
| Vagina | 90[4] | All | 100 | 0.147 | 54[5] |  | 10[3] |  | 90 |  |
| Anal canal | 85[4] | I/II | 56 | 0.109 | 80[6] |  | 5[6] | 95 |  |  |
|  | III/IV | 44 | 0.147 | 55 |  | 5 | 85 |  | 10 |
| Penis | 50[4] | All | 100 | 0.109 | 85 | 100 |  |  |  |  |
| Oropharynx | 33–72[4] | I/II | 18 | 0.109 | 85[7,8] |  | 100[9] |  |  |  |
|  | III/IV | 82 | 0.147 | 70 |  | 40 |  | 60 |  |

Note: for ranges, the midpoint was used in estimates

\*SW for Dx was dependent on prognosis (i.e., five-year survival)

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