Supplementary material

Supplementary Table 1. HPV infection rate by age (urine samples).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Urine | Total | 10–14 years | 15–19 years | 20–24 years | 25–29 years | 30–34 years | 35–39 years | 40–44 years | 45–49 years | 50–54 years | 55–59 years | 60–64 years | 65–69 years | ≥70 years |
| Infection number | 156 | 0 | 2 | 21 | 46 | 30 | 26 | 12 | 7 | 7 | 2 | 2 | 1 | 0 |
| Infection rate1 | 1.7 | 0.0 | 0.0 | 0.2 | 0.5 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Infection rate by high risk type2 | 44.2 | 0.0 | 50.0 | 23.8 | 47.8 | 60.0 | 50.0 | 41.7 | 14.3 | 28.6 | 0.0 | 50.0 | 100.0 | 0.0 |
|  | 16 type | 9.0 | 0.0 | 0.0 | 9.5 | 8.7 | 10.0 | 15.4 | 8.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 type | 4.5 | 0.0 | 0.0 | 0.0 | 8.7 | 0.0 | 3.8 | 8.3 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 |
| 31 type | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 33 type | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35 type | 2.6 | 0.0 | 50.0 | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 100.0 | 0.0 |
| 39 type | 3.2 | 0.0 | 0.0 | 0.0 | 6.5 | 3.3 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 45 type | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 51 type | 7.1 | 0.0 | 0.0 | 0.0 | 8.7 | 13.3 | 7.7 | 8.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52 type | 7.1 | 0.0 | 0.0 | 4.8 | 2.2 | 16.7 | 7.7 | 16.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 56 type | 1.9 | 0.0 | 0.0 | 0.0 | 4.3 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 58 type | 1.9 | 0.0 | 0.0 | 4.8 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 59 type | 3.8 | 0.0 | 0.0 | 4.8 | 4.3 | 6.7 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Infection rate by non-high risk type 3 | 55.8 | 0.0 | 50.0 | 76.2 | 52.2 | 40.0 | 50.0 | 58.3 | 85.7 | 71.4 | 100.0 | 50.0 | 0.0 | 0.0 |

1Number of positive person\_urine (n = 156)/Total number of positive person (n = 9428).

2Number of high risk type positive person/Total number of positive person\_urine (n = 156).

3Number of low risk type positive person/Total number of positive person\_urine (n = 156).

Supplementary Table 2. Selected primer sequences for HPV genotyping.

|  |  |  |
| --- | --- | --- |
| Genotype | Sense primer sequence | Anti-sense primer sequence |
| HPV11 | TTAGGCGTTGGTGTTAGTGG | AAAATTCATAGCACCAAAGC |
| HPV16 | TTAGGTGTGGGCATTAGTG | AAAGTCCATAGCACCAAAGC |
| HPV18 | TTAGGTGTTGGCCTTAGTG | AAAGTCCATGGCACCATAT |
| HPV31 | TTAGGTGTAGGTATTAGTG | AAAATCCATAGCTCCAAAG |

HPV: Human papillomavirus.