**Supplementary table 1. Newly detected HPV DNA among 248 men living with HIV, measured over 18 months follow-up, stratified by same type HPV seropositivity at enrolment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **All participants** | **Seronegative at enrolment** | **Seropositive at enrolment** | **Risk ratio (95% CI)** | **P-value** |
|  | **N1** | **n (%)2** | **N1** | **n (%)2** | **N1** | **n (%)2** |  |  |
| ***Any Alpha-9 HR-HPV types*** |  |  |  |  |  |  |  |
| **HPV16** | 229 | 2 (0.9) | 190 | 1 (0.5) | 39  | 1 (2.6) | 4.87 (0.31-76.2) | 0.32 |
| **HPV31** | 251 | 0 (0.0) | 221 | 0 (0.0) | 30 | 0 (0.0) | - | - |
| **HPV33** | 246 | 1 (0.4) | 219 | 0 (0.0) | 27 | 1 (3.7) | - | - |
| **HPV35** | 225 | 3 (1.3) | 186 | 2 (1.1) | 39 | 1 (2.6) | 2.34 (0.22-25.65) | 0.43 |
| **HPV52** | 240 | 5 (2.1) | 177 | 5 (2.8) | 63 | 0 (0.0) | - | - |
| **HPV58** | 237 | 2 (0.8) | 169 | 1 (0.6) | 68 | 1 (1.5) | 2.49 (0.16-39.17) | 0.49 |
| ***Any Alpha-7 HR-HPV types*** |  |  |  |  |  |  |  |
| **HPV18** | 237 | 2 (0.8) | 229 | 2 (0.9) | 8 | 0 (0.0) | - | - |
| **HPV39** | 245 | 2 (0.8) | 225 | 2 (0.9) | 20 | 0 (0.0) | - | - |
| **HPV45** | 237 | 3 (1.3) | 228 | 3 (1.3) | 9 | 0 (0.0) | - | - |
| **HPV59** | 236 | 3 (1.3) | 216 | 3 (1.4) | 20 | 0 (0.0) | - | - |
| **HPV68** | 237 | 1 (0.4) | 223 | 1 (0.5) | 14 | 0 (0.0) | - | - |
| ***Other HPV types*** |  |  |  |  |  |  |  |
| **HPV56**  | 247 | 0 (0.0) | 233 | 0 (0.0) | 14 | 0 (0.0) |  |  |
| **LR-HPV types** |  |  |  |  |  |  |  |  |
| **HPV6** | 223 | 1 (0.5) | 189 | 1 (0.5) | 34 | 0 (0.0) | - | - |
| **HPV11** | 239 | 2 (0.8) | 212 | 2 (0.9) | 27 | 0 (0.0) | - | - |
| **HPV73** | 245 | 1 (0.8) | 241 | 1 (0.4) | 4 | 0 (0.0) | - | - |
|  |  |  |  |  |  |  |  |  |
| **Any HPV**  | 119 | 6 (5.0) | 45 | 2 (4.4) | 74 | 4 (5.4) | 1.2 1 (0.23-6.30) | 0.59 |

1Number of men negative for that type at baseline; 2number of incident infections among men negative or that type at enrolment;

HR= high-risk HPV; LR = low-risk HPV

**Supplementary table 2. Sero-incidence and Sero-persistence among 248 men living with HIV with HPV serology results at both enrolment and 18- months visit**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **Sero-negative at enrolment, N** | **Incident events, n (%)** | **Sero-positive at enrolment, N** | **Persistence, n (%)** |
| **Bi/Quadrivalent** |  |  |  |  |
| **HPV6** | **201** | 7 (3.5) | **47** | 36 (76.6) |
| **HPV11** | **214** | 11 (5.1) | **34** | 23 (67.6) |
| **HPV16** | **205** | 17 (8.3) | **43** | 38 (88.4) |
| **HPV18** | **240** | 15 (6.3) | **8** | 7 (87.5) |
| **Other HR nonavalent** |  |  |  |  |
| **HPV31** | **219** | 20 (9.1) | **29** | 24 (82.8) |
| **HPV33** | **218** | 11 (5.0) | **30** | 26 (86.7) |
| **HPV45** | **237** | 9 (3.8) | **11** | 7 (63.6) |
| **HPV52** | **182** | 24 (13.2) | **66** | 56 (84.8) |
| **HPV58** | **175** | 22 (12.6) | **73** | 59 (80.8) |
| **Non vaccine HR types** |  |  |  |  |
| **HPV35** | **207** | 16 (7.7) | **41** | 26 (63.4) |
| **HPV39** | **228** | 2 (0.9) | **20** | 13 (65.0) |
| **HPV56** | **233** | 13 (5.6) | **15** | 12 (80.0) |
| **HPV59** | **223** | 7 (3.1) | **25** | 19 (76.0) |
| **HPV68** | **232** | 1 (0.4) | **16** | 13 (81.1) |
| **Non vaccine LR types** |  |  |  |  |
| **HPV73** | **244** | 6 (2.5) | **4** | 3 (75.0) |
|  |  |  |  |  |
| **Any HPV** | **83** | 28 (33.7) | **167** | 148 (88.6) |
| **Any HR-HPV** | **95** | 26 (27.3) | **153** | 136 (88.9) |

HR= high-risk HPV; LR = low-risk HPV