

**Table S4. Contingency table of infection events for one week of TDF-based PrEP with 300mg started around the time of exposure (1w-PrEP/PEP).**

|     | Time lapse between drug intake and viral exposure |                         |                         |                         |                         |
|-----|---|-------------------------|-------------------------|-------------------------|-------------------------|
|     | 6hr before  | 1hr before              | 1hr after               | 6hr after               | 48hr after              |
| 1   | (1866;134)  | (1850;150)              | (1850;150)              | (1831;169)              | (1813;187)              |
| 5   | (1393;607)  | (1338;662)              | (1290;710)              | (1260;740)              | (1213;787)              |
| 20  | (537;1463)  | (408;1592)              | (354;1646)              | (289;1711)              | (252;1748)              |
| 100 | (26;1974)   | (4;1996)                | (3;1997)                | (0;2000)                | (0;2000)                |
|     | p < 0.01 <sup>+++</sup>                           | p < 0.01 <sup>+++</sup> | p < 0.01 <sup>+++</sup> | p < 0.01 <sup>+++</sup> | p < 0.01 <sup>+++</sup> |

Predictions are based on 2000 'virtual patients' simulations respectively. The first number in the brackets in columns 2-6 indicates the number of 'virtual patients' that remained uninfected after viral challenge, whereas the second number indicates the number of patients that became infected. For example, when 300mg TDF is taken 6 hours before viral challenge, continued for one week and patients are challenged with inoculum size one (one virus reaches a target cell environment), 1866 'virtual patients' remained uninfected, whereas 134 became infected. <sup>+++</sup> Inoculum size has a significant impact on the number of infections at the p < 0.01 level ( $\chi^2$ -test).