Dynamics of HIV-1 coinfection in different susceptible target cell populations during cell-free infection

Yusuke Ito , Alexandra Tauzin , Azaria Remion , Keisuke Ejima , Fabrizio Mammano , Shingo Iwami

PII: S0022-5193(18)30325-4
DOI: 10.1016/j.jtbi.2018.06.025
Reference: YJTBI 9520

To appear in: *Journal of Theoretical Biology*

Received date: 25 March 2018
Revised date: 24 May 2018
Accepted date: 28 June 2018

Please cite this article as: Yusuke Ito , Alexandra Tauzin , Azaria Remion , Keisuke Ejima , Fabrizio Mammano , Shingo Iwami , Dynamics of HIV-1 coinfection in different susceptible target cell populations during cell-free infection, *Journal of Theoretical Biology* (2018), doi: 10.1016/j.jtbi.2018.06.025

Highlights

- We built an ordinary differential equation model incorporating the heterogeneity of target cell populations in cell culture during cell-free infection.
- We found that dividing cell population into two subpopulations with different susceptibilities could explain our HIV-1 coinfection experimental data.
- We revealed that around 98% of the coinfected cells emerged from the most susceptible target cell subpopulation.