**Supplementary File 1. Within-host model parameter estimates.** We used a nonlinear mixed-effects method to fit a within-host model of viral kinetics to the viral titer measurements from 208 patients, 104 were treated with Paxlovid and 104 did not receive any antiviral drugs [(Traynard et al., 2020)](https://paperpile.com/c/R88YH4/MRaJj). The reported medians and variation across individuals (95% interpercentile ranges) integrate both fixed and random effects estimates for each parameter.

| **Parameter** | **Estimated median [95% interpercentile range] across infected individuals** |
| --- | --- |
| Cell infection ratein 10-9 mL/Copies in days-1 ($β$) | 17.14 [12.60, 21.75] |
| Rate in log10 for the interferon-induced conversion of target cells to refractory cells (Φ) | -9.78 [-10.68, -5.54] |
| Rate in 10-3 at which refractory cells become target cells again (𝜌) | 5.27 [4.63, 6.00] |
| Infected cell clearance rate in days-1 ($δ$) | 0.48 [0.28, 1.02] |
| Virus production rate inCopies/ mL in days-1 (𝜋) | 69.39 [55.75, 78.63] |
| Maximum antiviral efficacy ($ϵ\_{max}$) | 0.91 [0.91, 0.92] |