Immune response models tested

The different alternative models can be written as:

$$\text{Infectivity} \begin{cases} \dfrac{dT}{dt} = -\beta(1 - \phi T \dfrac{F}{F+\theta})V_i T & \text{(1a)} \\ \dfrac{dI_1}{dt} = \beta(1 - \phi T \dfrac{F}{F+\theta})V_i T - kI_1 & \text{(1b)} \end{cases}$$

$$\text{Cytotoxicity} \quad \frac{dI_2}{dt} = kI_1 - \delta I_2 - \phi I_2 \frac{F}{F+\theta} \tag{2}$$

$$\text{Viral production} \begin{cases} \dfrac{dV_{ni}}{dt} = p(1 - \phi \dfrac{F}{F+\theta})(1-\mu)I_2 - cV_{ni} & \text{(3a)} \\ \dfrac{dV_i}{dt} = p(1 - \phi \dfrac{F}{F+\theta})\mu I_2 - cV_i & \text{(3b)} \end{cases}$$

$$\text{Viral clearance} \begin{cases} \dfrac{dV_{ni}}{dt} = p(1-\mu)I_2 - cV_{ni} - \phi V_{ni} \dfrac{F}{F+\theta} & \text{(4a)} \\ \dfrac{dV_i}{dt} = p\mu I_2 - cV_i - \phi V_i \dfrac{F}{F+\theta} & \text{(4b)} \end{cases}$$

$$\text{Other models tested} \begin{cases} \dfrac{dT}{dt} = -\beta V_i T & \text{if } \theta \text{ is set to } \infty \quad \text{(5a)} \\ \dfrac{dT}{dt} = -\beta V_i T - \phi T & \text{if } \theta \text{ is set to } 0 \quad \text{(5b)} \end{cases}$$