ACUTE HCV INFECTION

- Incubation period ($I_j$)
- Acute HCV Infection ($A_j$)
- Monoinfected HIV population ($X_j$)
- Chronic HCV Infection ($C_j$)

CHRONIC HCV INFECTION

- Successfully treated patients/Spontaneous clearance ($S_j$)
- HCV patients under DAA ($T_j$)

PARAMETERS:

- $\theta$: Incubation period parameter
- $\mu$: Mortality rate
- $\beta_j$: Transmission rate
- $\sigma$: Recovery rate
- $\gamma\psi$: Transition rate
- $\delta_j$: Progression rate
- $\alpha\omega$: Clearance rate
- $(1-\alpha)\omega$: Treatment rate
- $(1-\gamma)\psi$: Clearance rate
- $\tau_1$: Treatment duration
- $\tau_2$: Incubation period

- $\mu$: Mortality rate
- $\beta_j$: Transmission rate
- $\sigma$: Recovery rate
- $\gamma$: Clearance rate
- $\delta_j$: Progression rate
- $\alpha$: Treatment efficacy
- $\omega$: Clearance rate
- $\tau_1$: Treatment duration
- $\tau_2$: Incubation period