

**S6 Table. Simulation parameters.** Here, the simulation parameters for the proposed CCM pathway model are given.

Simulation Time

Start Time	10 s
Stop Time	30000 s

Solver option

Type	Variable-step
Solver	Ode45(Dormand-Prince)
Max step size	Auto
Min step size	Auto
Relative tolerance	$1 \times 10^{-3}$
Initial step size	Auto
Absolute tolerance	Auto
Shape preservation	Disable all
Number of consecutive min steps	1

Zero-crossing options

Zero-crossing control	Use local settings
Algorithm	Nonadaptive
Time tolerance	$10 \times 128 \times \text{eps}$
Signal threshold	Auto
Number of consecutive zero crossings	1000