

Table S2: Model parameters categorized according to the effect on the liver response outcome in the Cook et al. [8] model. Due to numerical difficulties in integrating the Cook et al. [8] model for certain parameter values, the effects of variation in the parameters M , k_{IL6} , k_{prol} , θ_{ap} , β_{ap} were evaluated in a more restricted range than the present model.

Only recovery		Both recovery and failure	
Sensitive		Insensitive	
Improves recovery	Decelerate recovery		
$k_{IL6}, [prosSTAT3],$ $\kappa_{SOCS3}, K_I^{SOCS3}, V_{IE},$ $k_{deg}, k_{GF}, k_{QP}, k_{PR},$ $k_{prol}, \beta_{req}, k_G$	$\kappa_{IL6}, K_M^{JAK}, \kappa_{JAK},$ $K_M^{ST3}, V_{SOCS3},$ $K_M^{SOCS3}, K_M^{IE}, \kappa_{IE},$ $\kappa_{ECM}, \kappa_{GF}, k_{up},$ k_{RQ}, k_{req}	$V_{JAK}, V_{ST3}, \kappa_{ST3},$ θ_{req}, k_{ap}	M, β_{ap} θ_{ap}