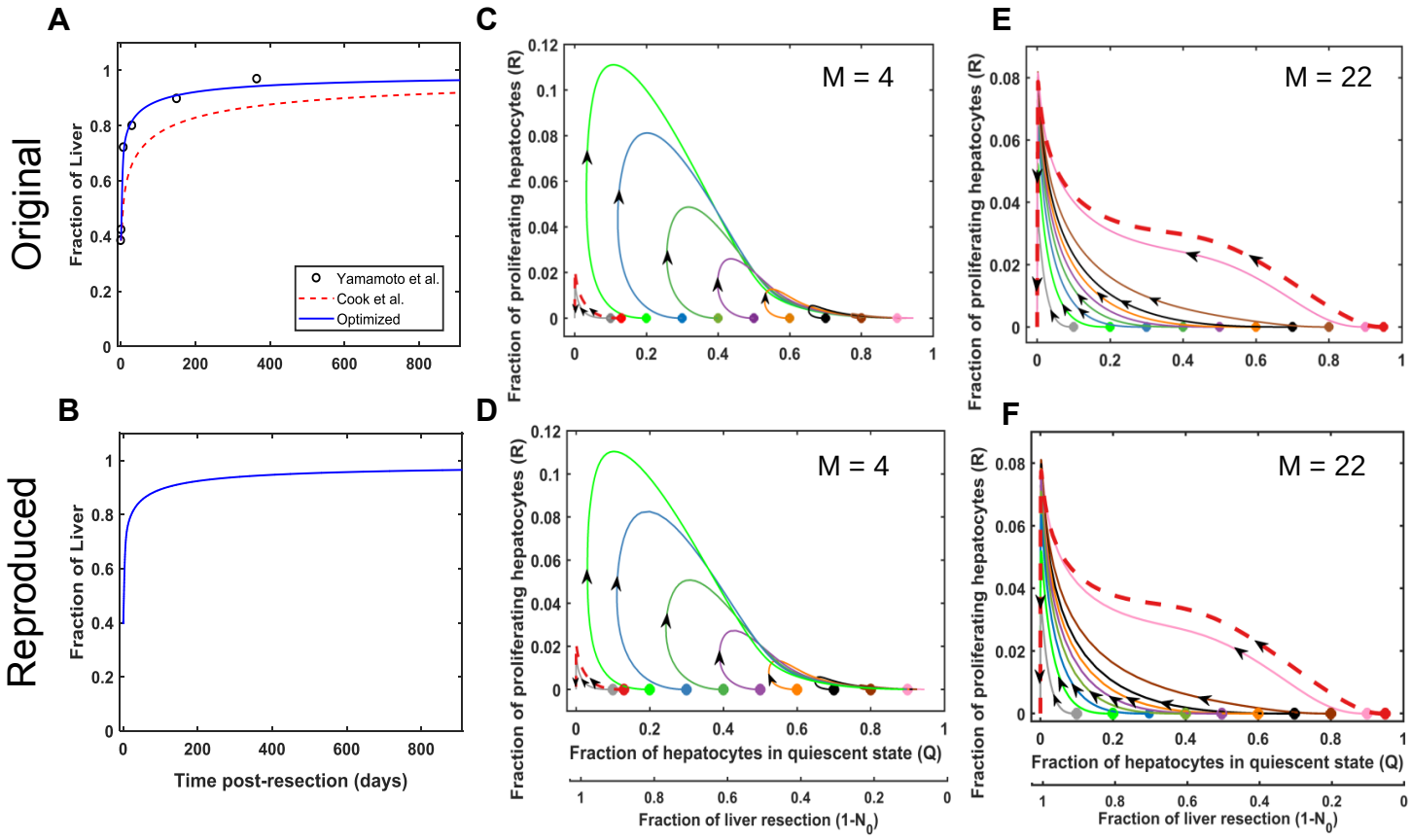

Figure S6: Model reproducibility. The simulation results presented in this work were independently reproduced using the model equations and the parameters given in the main text. **(A-B)**: Original and reproduced regeneration profiles are shown in panels (A) and (B), respectively. Optimized parameter values given in Table 1 of the main text were used to reproduce the regeneration profile. **(C-F)** show that the reproduced phase plane yields the same behavior as the original phase plane for the virtual patients with optimized parameters given in Table 1 of the main text and the metabolic load as mentioned in the figure.