

SUPPLEMENTARY FIG. S2. Bioartificial liver schematic illustrating circuit containing fluidized bed bioreactor and connection to a patient. The fluidized bed containing alginate-encapsulated liver spheroids is under sufficient flow to maintain even fluid mixing and a homogenous bed. There is a low-flow primary circuit in which blood from the patient is separated into plasma and red cells. The plasma enters a high-flow secondary circuit, which recirculates through the fluidized bed bioreactor several times; $\sim 10\%$ of the plasma returns to the patient continually via the low flow primary circuit, mixing with the red cells.