

Supplementary Information

Rocking- and diffusion-based culture of tumor spheroids on a chip

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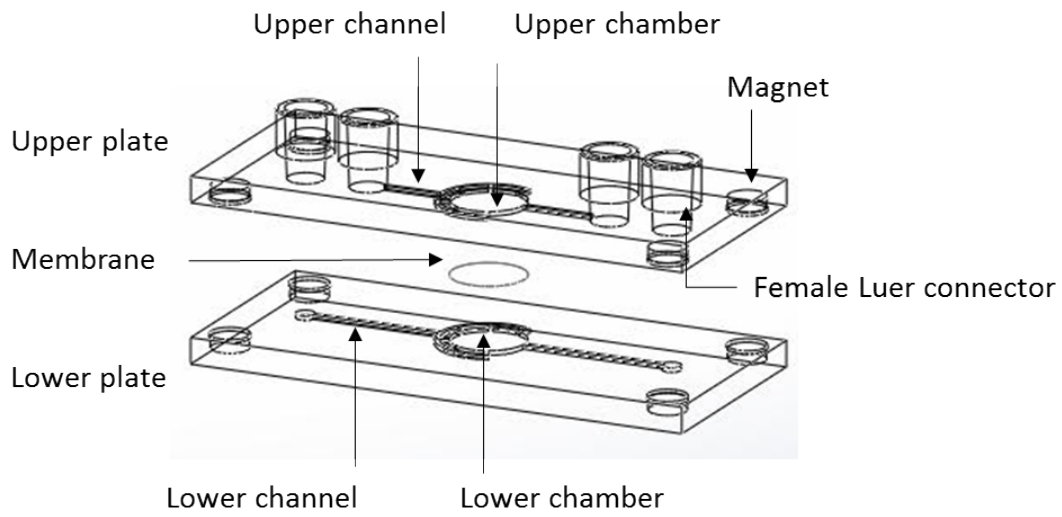


Figure S1. Schematic view of the microfluidic device for organ-on-a-chip applications.

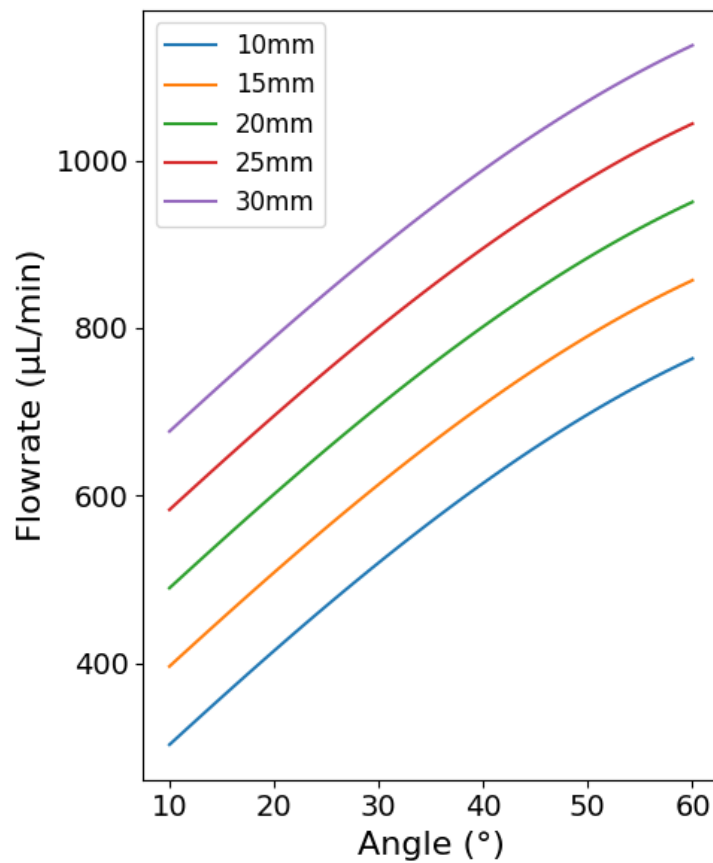


Figure S2. Calculated flowrate as a function of tilt angle of the chip in a rocking system for different heights of liquid injection in the left-side syringe tube.

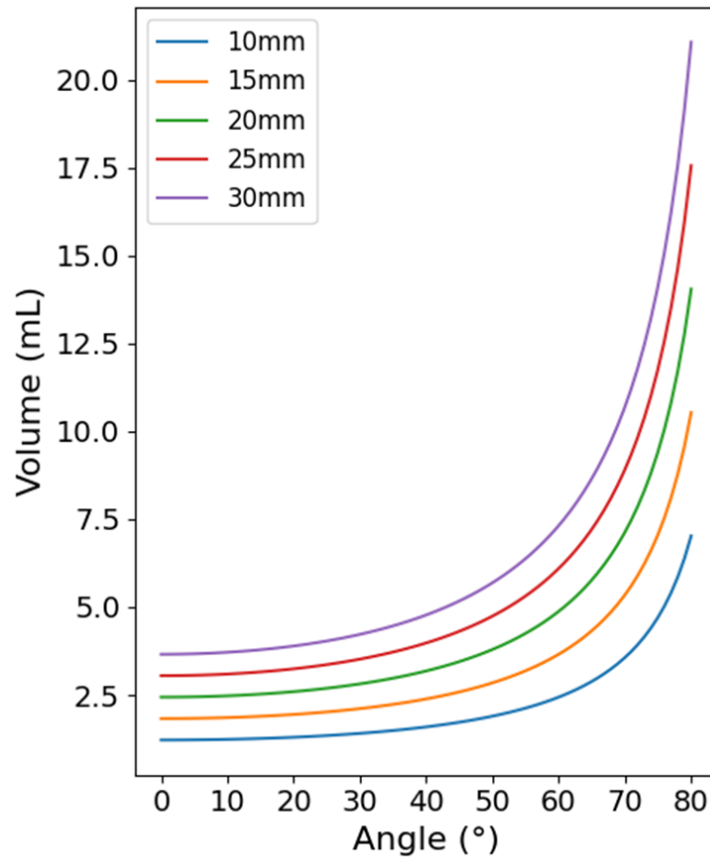


Figure S3. Calculated volume of the injected liquid in a syringe tube of 12.64 mm diameter as a function of tilt angle of the chip in a rocking system for different heights of liquid injection.

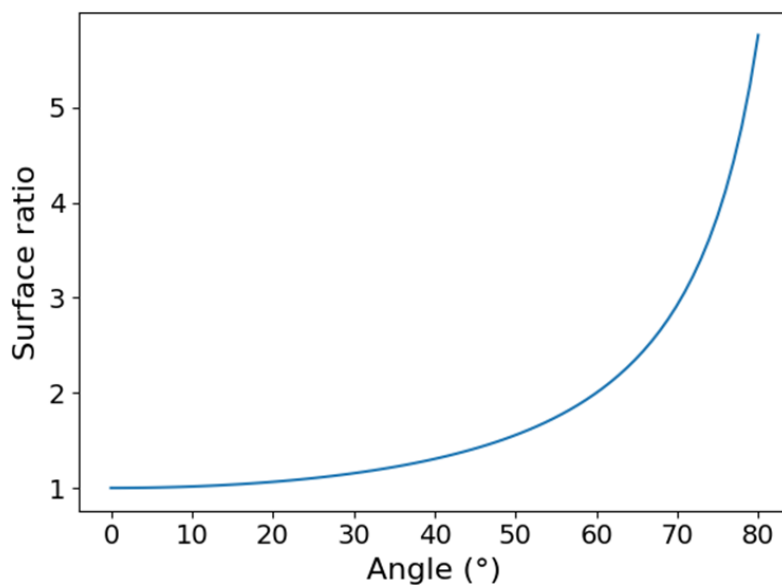


Figure S4. Surface ratio of the liquid in a syringe tube with and without chip tilting in a rocking system.

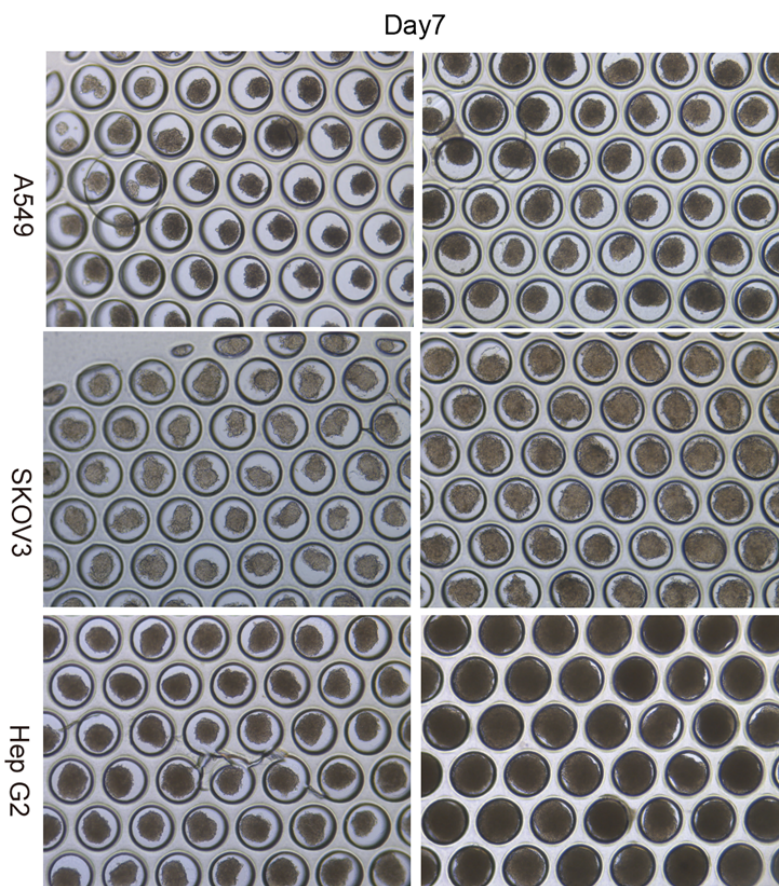


Figure S5. Microphotograph images of three types of tumor spheroids (HepG2, SKOV3, and A549) in 250 μm diameter hydrogel microwells of a thin membrane, cultured for 7 days under two different conditions.

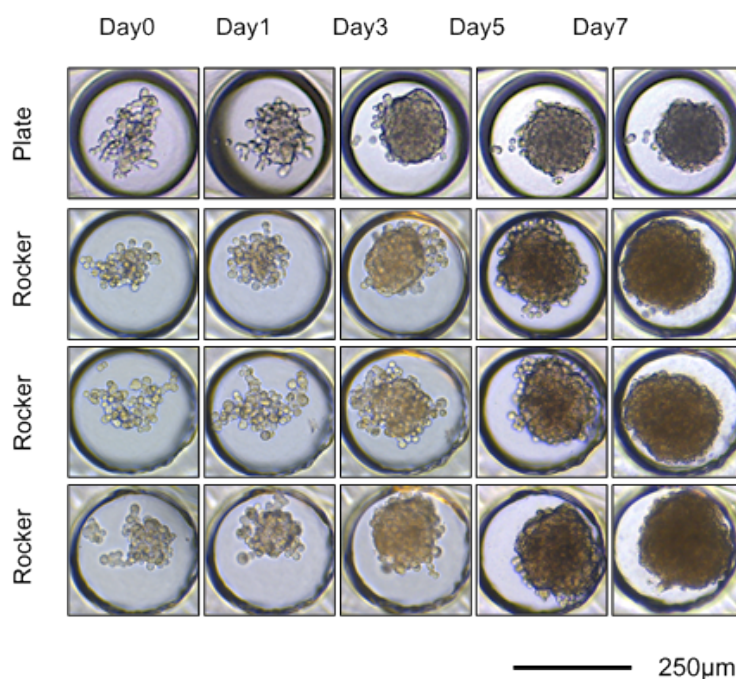


Figure S6. Growth behaviors of A549 tumor spheroids in 250 μm diameter hydrogel microwells of a thin

membrane, cultured under two different conditions and imaged on days 0, 1, 3, 5 and 7.