

Construction of a Fibroblast-Associated Tumor Spheroid Model Based on a Collagen Drop Array Chip

Hyewon Roh ¹, Hwisoo Kim ¹ and Je-Kyun Park ^{1,2,*}

¹ Department of Bio and Brain Engineering, Korea Advanced Institute of Science and Technology (KAIST), 291 Daehak-ro, Yuseong-gu, Daejeon 34141, Korea; hyewonr@kaist.ac.kr (H.R.); hwiss@kaist.ac.kr (H.K.)

² KAIST Institute for Health Science and Technology, 291 Daehak-ro, Yuseong-gu, Daejeon 34141, Korea

* Correspondence: jekyun@kaist.ac.kr; Tel.: +82-42-350-4315

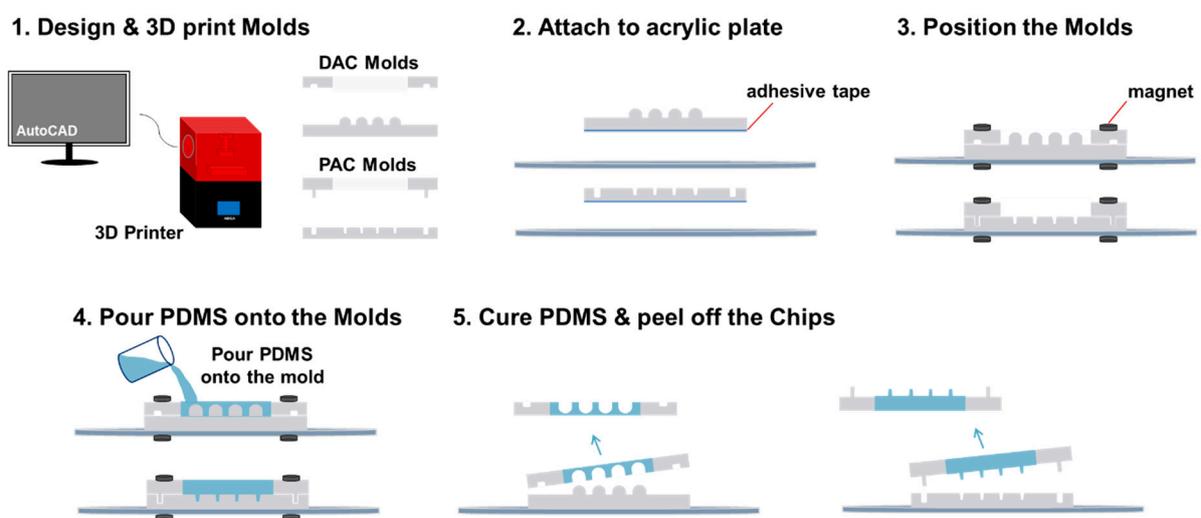


Figure S1. Schematic illustration of the fabrication process of the DAC with alignment stopper holes and the PAC with alignment stoppers, starting from printing the mods using a 3D printer to curing and peeling the devices from the molds.

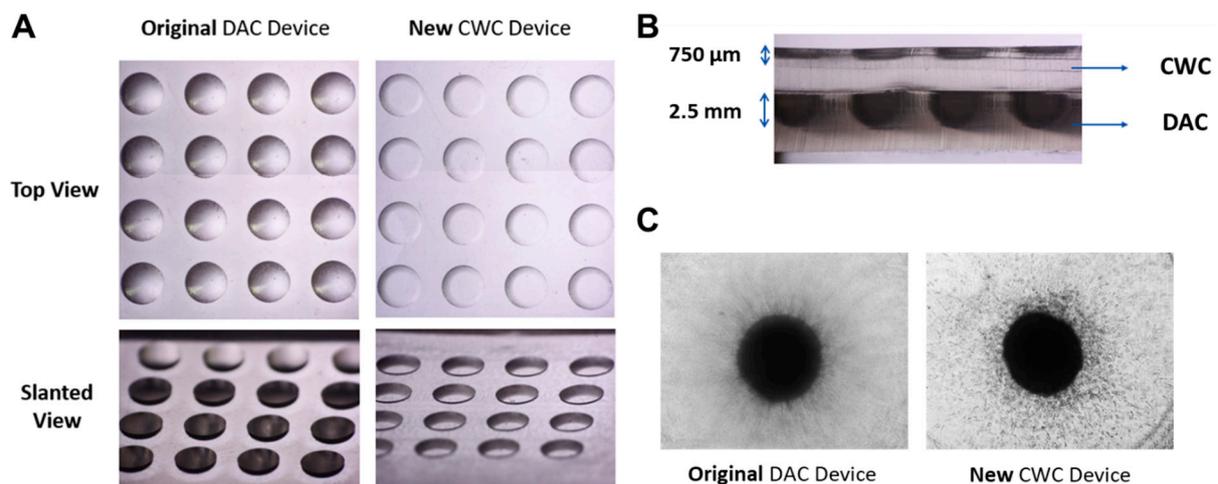


Figure S2. Comparison of a collagen well chip (CWC) with an original drop array chip (DAC). (A) Top and slanted views of the original DAC and the newly designed CWC. (B) Side view of the two devices. The height of the CWC is 750 μm, while the height of the DAC is 2.5 mm. (C) Invasion of the spheroid-hydrogel model in the original DAC and the new CWC.

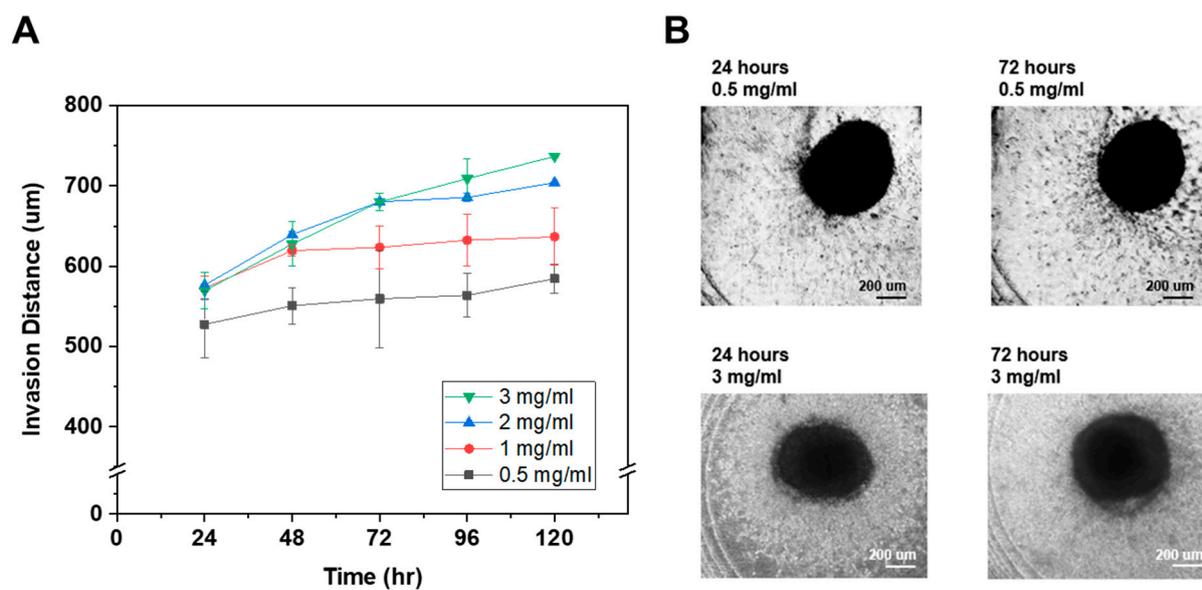


Figure S3. The effect of collagen concentration on the spheroid invasion. (A) The graph of invasion distance of the spheroids based on the concentration of the collagen. (B) The microscopic images showing the spheroid invasion at 24 h and 72 h under 0.5 mg/mL and 3 mg/mL.