Dynamic granular hydrogels to assess pancreatic cancer cell fate

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Supporting information

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Table S1. The PDI of microgels sampled from formation at increasing oil phase flow rates. (PDI values calculated from diameters of microgels at: 30 µL/min: n = 50, 40 µL/min: n = 69, 50 µL/min: n = 72, 60 µL/min: n = 73.)

Oil Flow Rate (µL/min)	PDI
30	0.044098
40	0.012498
50	0.006171
60	0.002315

Table S2. The PDI of microgels sampled from formations at increasing throughput conditions. (PDI values calculated from diameters of microgels at: 14 µL/min: n = 133, 16 µL/min: n = 138, 18 µL/min: n = 139, 20 µL/min: n = 154, 30 µL/min: n = 168, 40 µL/min: n= 162.)

Aqueous Flow Rate (µL/min)	PDI
14	0.002089
16	0.001799
18	0.002198
20	0.003508
30	0.004432
40	0.007021

Table S3. The PDI of microgels sampled from dynamic stiffening via oDex incubation. (PDI values calculated from diameters of microgels at: 0%: n = 45, 0.0125%: n = 49, 0.025%: n = 74, 0.05%: n = 67, 0.1%: n = 147.)

[oDex] (wt%)	PDI
0	0.008725
0.0125	0.010577
0.025	0.011526
0.05	0.007756
0.1	0.017767

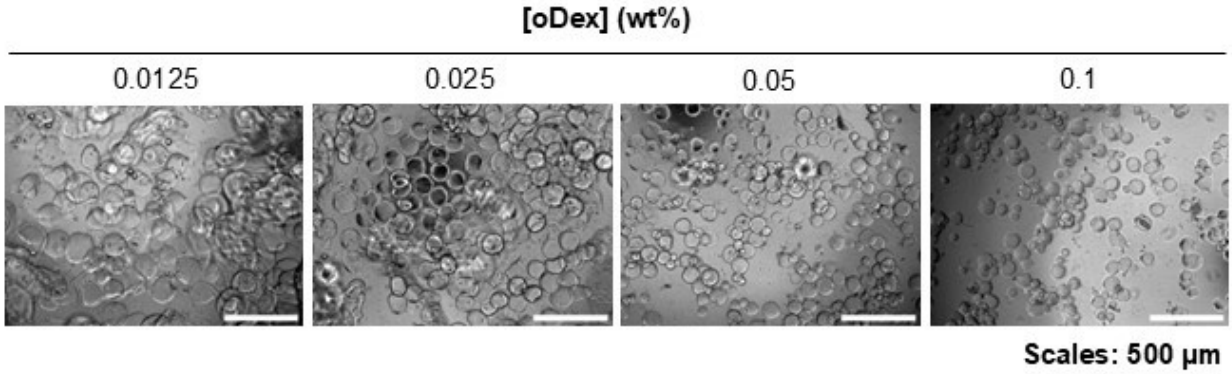

Figure S1. Representative images of oDex-stiffened microgels. Increasing concentration of oDex by wt.% decreases the diameter of microgels. Quantification shown in **Figure 4D**.

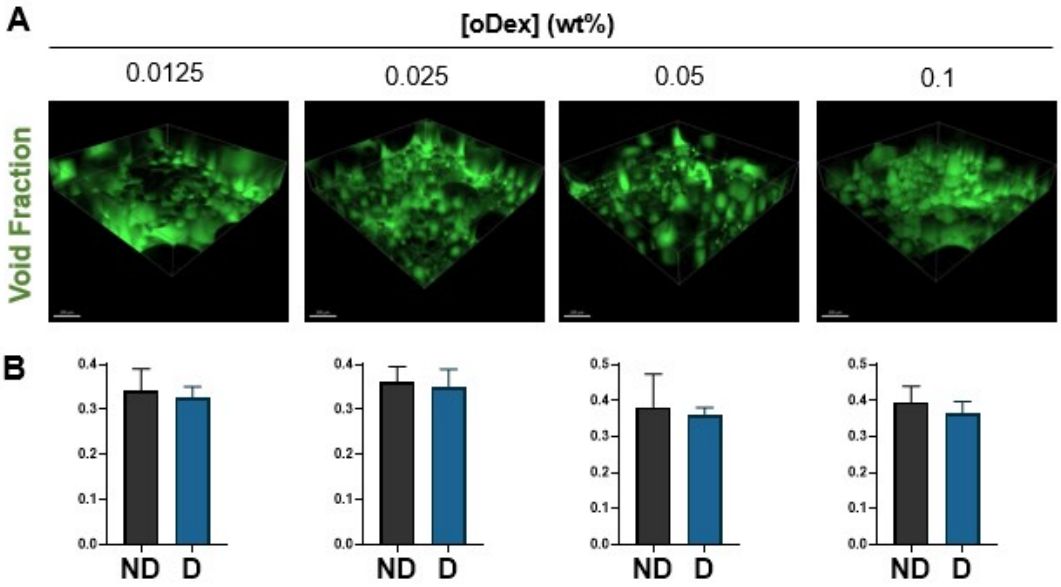

Figure S2. **Comparison of void fraction between scaffold formation processes.** (A) Photographs of void fraction for granular hydrogel scaffolds formed with pre-stiffened microgels. (B) Quantification of void fraction between non-dynamic (ND), and dynamic (D) granular hydrogel scaffolds. No significance was reported from any comparison group.

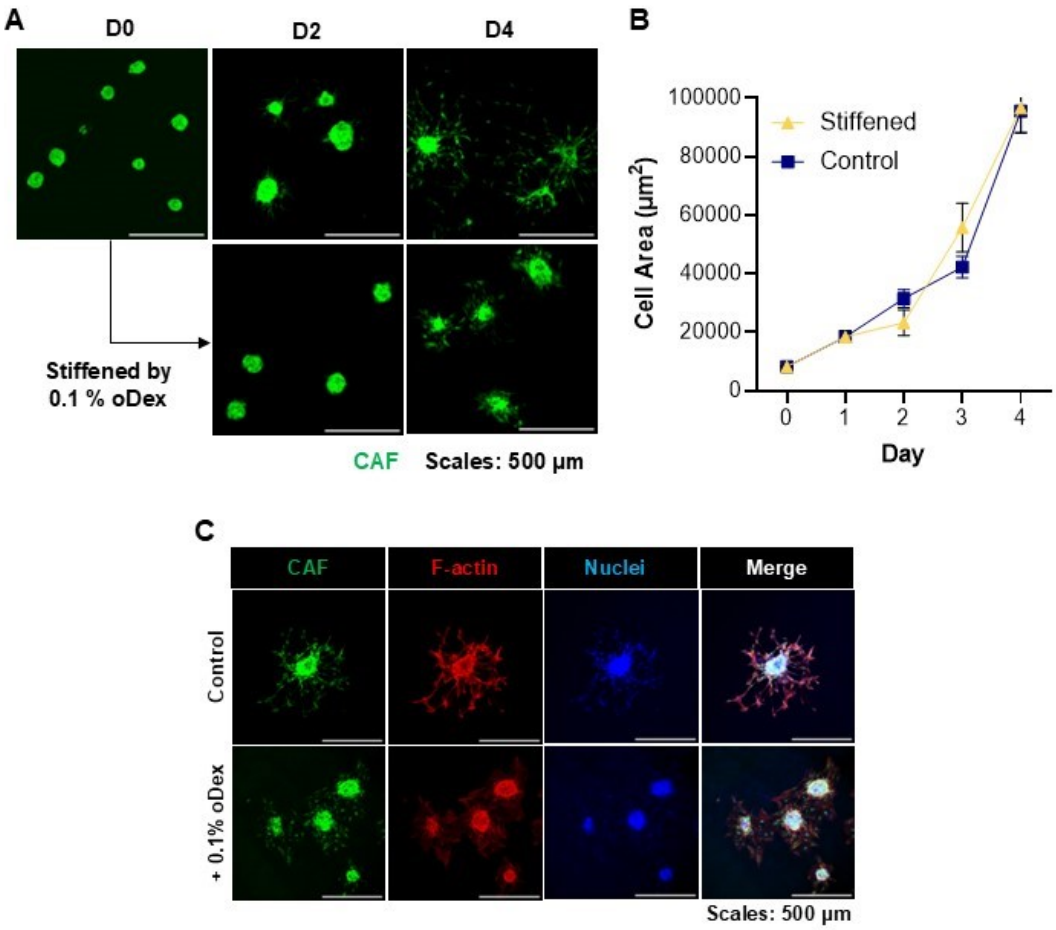

Figure S3. CAF spheroid culture on 2D hydrogels. (A) Representative images of CAF spheroids seeded on soft or stiffened bulk hydrogels. (B) Maximum-intensity projection area measurements of CAF spheroids over four days of culture (n > 30 spheroids per timepoint per condition). (C) Representative images of F-actin/nuclei immunostaining of CAF spheroids fixed on culture day 4.