

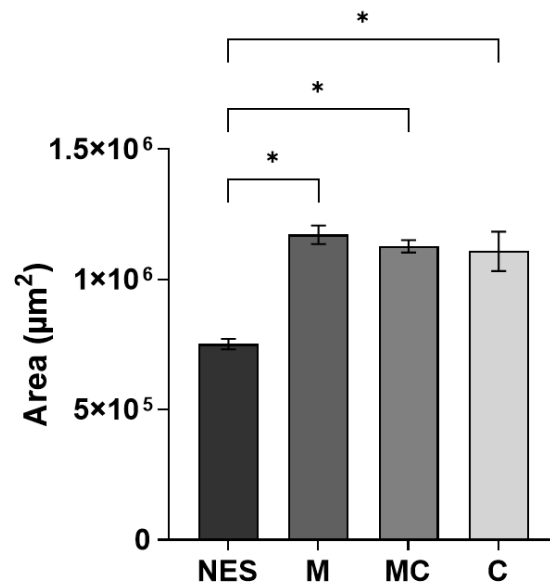
## Supplementary Information

### Dynamic cell culture modulates colon cancer cell migration in a novel 3D cell culture system

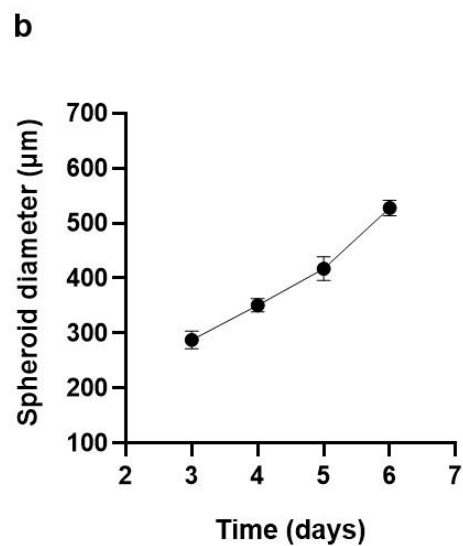
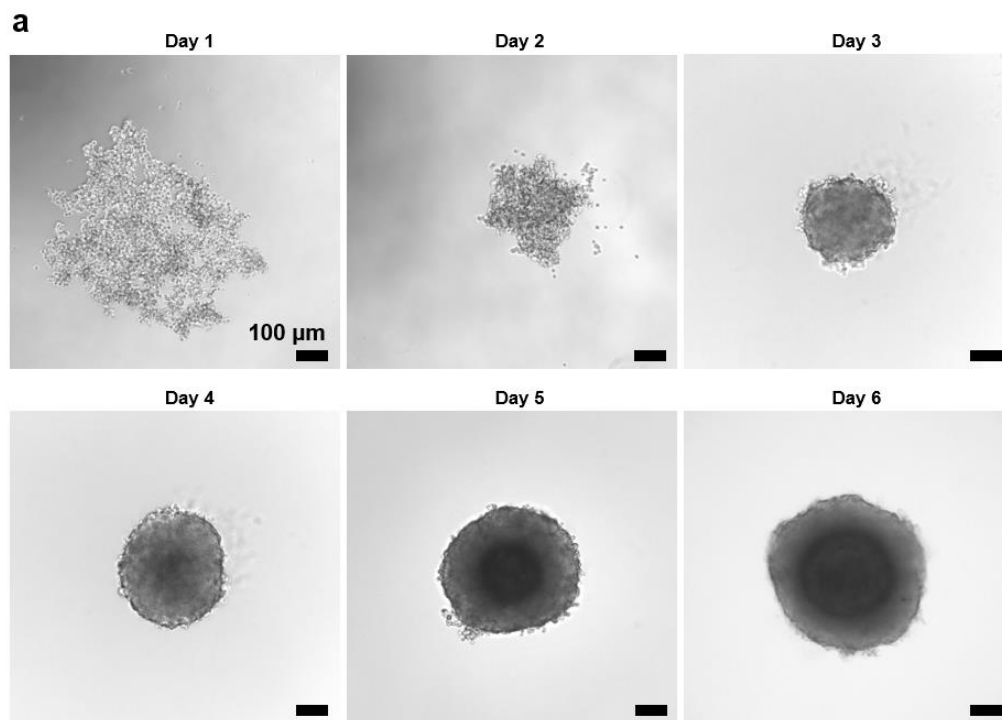
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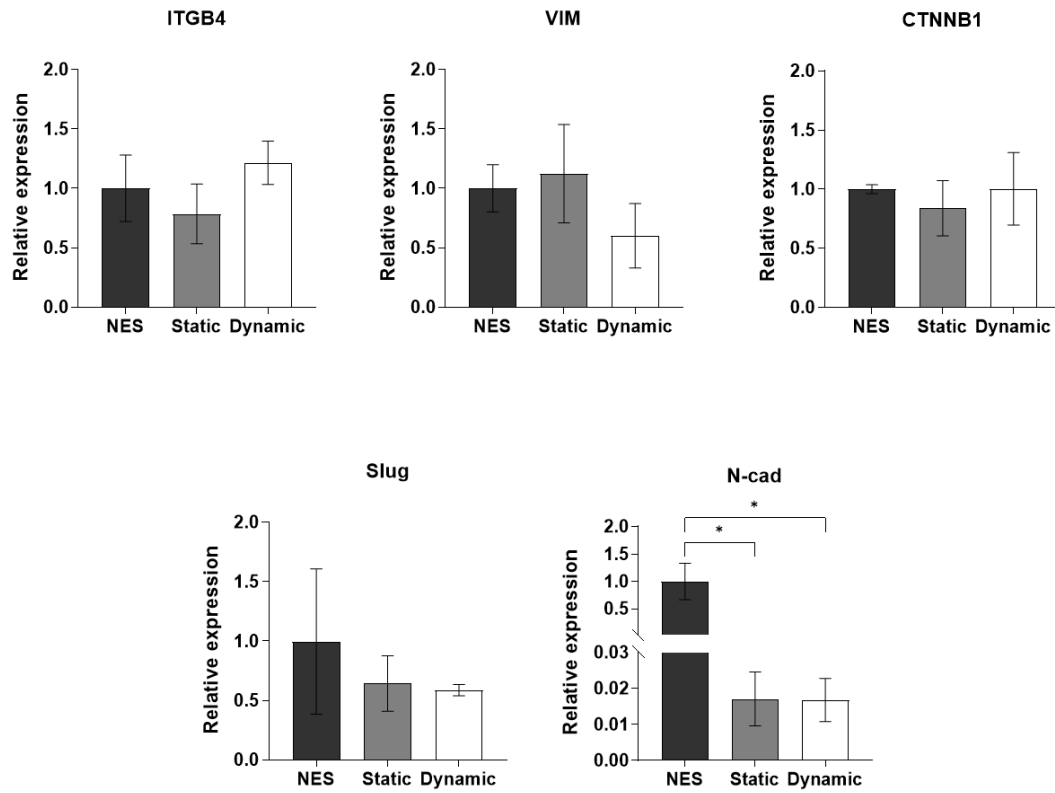
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**Figure S1.** Area of HCT-116-GFP spheroids in different matrices. NES: non-embedded spheroids, M: Matrigel®, C: collagen I and MC: mixture of Matrigel® and collagen I on day 7, n = 3. Data are shown as mean ± SD (\* = P < 0.05)



**Figure S2.** Generation of HCT-116-GFP spheroid in 96 well-plate. (a) Representative images of HCT-116-GFP spheroids during 6 days. The spheroids were fully developed and large enough by day 4, thus they were chosen for transfer and embedding in collagen gel. Scale bar: 100  $\mu\text{m}$ . (b) Diameter of spheroids in different days.  $n = 3$ . Data are shown as mean  $\pm$  SD.



**Figure S3.** Gene expression analysis of HCT-116 spheroids in static and dynamic culture conditions on day 7. ITGB4: Integrin beta-4, VIM: Vimentin, CTNNB1: Catenin beta-1, Slug: Slug, N-cad: N-cadherin. Gene expression was analyzed by qPCR using HSP90AB as reference gene ( $2^{-\Delta\Delta CT}$  method). Data are shown as mean  $\pm$  SD. n = 3 (\* p < 0.05).