

Human platelet lysate-loaded PEG hydrogels induce stem cell chemotaxis *in vitro*

Supporting information

Aman S. Chahal †, *Manuel Gómez-Florit* ‡, *Rui M. A. Domingues* ‡, *Manuela E. Gomes* ‡,

Hanna Tiainen †

†Department of Biomaterials, Institute of Clinical Dentistry, University of Oslo, Geitmyrsveien 69-71, 0455 Oslo, Norway.

‡3B's Research Group, I3Bs – Research Institute on Biomaterials, Biodegradables and Biomimetics, University of Minho, Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, Avepark – Parque de Ciência e Tecnologia, Zona Industrial da Gandra, 4805-017 Barco – Guimarães, Portugal

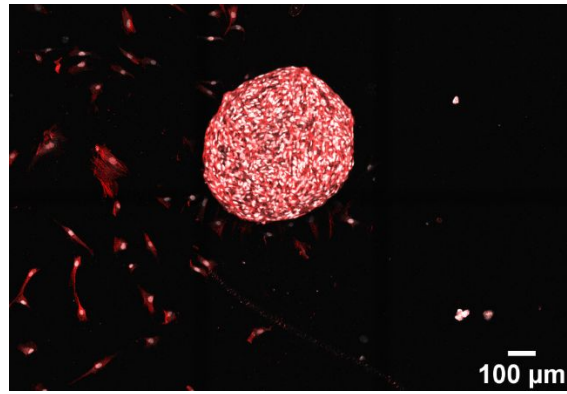


Figure S1: CLSM image of an hMSC spheroid encapsulated within an SDF1 α -PEG hydrogel. Actin filaments are shown in red and nuclei in white.

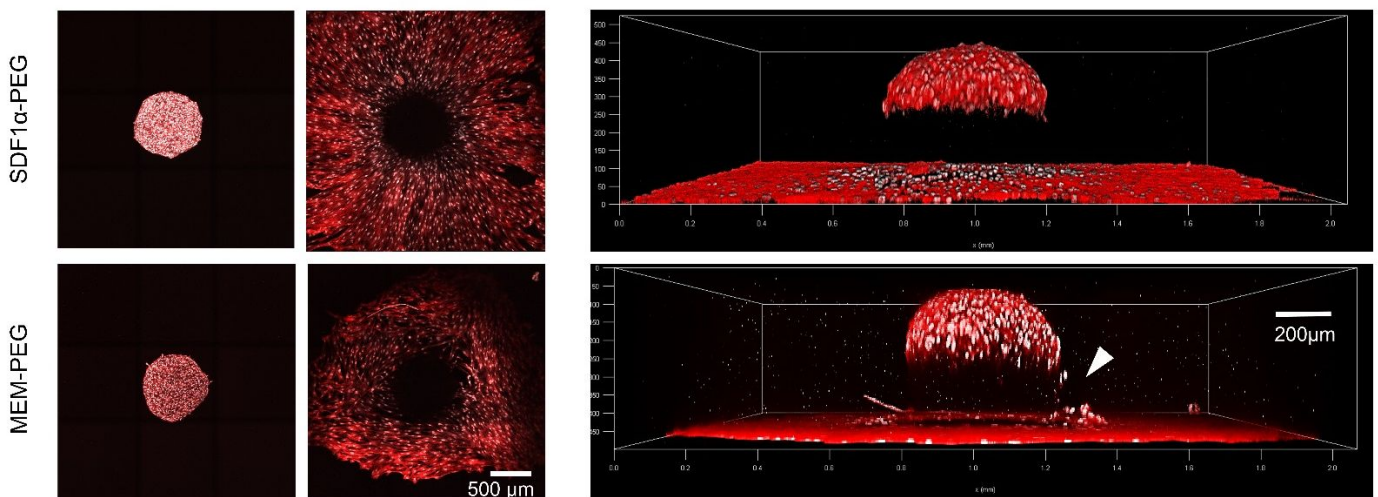


Figure S2: CLSM images of spheroids encapsulated in SDF-1 α and MEM loaded hydrogels. Images illustrate that the spheroid and cells around the spheroid exist on different z-planes. Cross-sectional panels on the right show only part of the spheroid, due to focal distance limitations. Cells appear to detach from the spheroid in MEM-PEG hydrogels, indicated by the white arrowhead.

Table S1: Mean concentrations of chemokines in stock platelet lysates. Max release refers to the maximum concentration of each chemokine or growth factor that can be released from each PL-PEG hydrogel. Mean \pm SD (n =3). * indicates values that are above the detection limit of the assay.

Chemokine/Growth Factor	Stock Concentration (pg/mL)	Max release (100%) (pg/mL)
PDGF-BB	*	6796.2 \pm 2608.4
IL-8	1009.2 \pm 384.4	135.0 \pm 1.5
EGF	1154.4 \pm 646.8	165.1 \pm 3.0
VEGF	183.0 \pm 34.6	22.6 \pm 5.6
CCL3	144.3 \pm 6.8	58.5 \pm 0.0
IL-4	30.0 \pm 3.7	10.6 \pm 0.8
FGF2	187.5 \pm 19.1	35.1 \pm 1.3
PDGF-AA	3078.8 \pm 161.5	835.1 \pm 92.3
CCL2	161.7 \pm 10.6	20.6 \pm 0.4