

## Supplementary Materials

### Progenitor Cells Activated by Platelet Lysate in Human Articular Cartilage as a Tool for Future Cartilage Engineering and Reparative Strategies

Simonetta Carluccio <sup>1,†</sup>, Daniela Martinelli <sup>1,†</sup>, Maria Elisabetta Federica Palamà <sup>1</sup>, Rui Cruz Pereira <sup>1,2</sup>, Roberto Benelli <sup>3</sup>, Ana Guijarro <sup>1</sup>, Ranieri Cancedda <sup>4</sup> and Chiara Gentili <sup>1,5,\*</sup>

<sup>1</sup> Regenerative Medicine Laboratory, Department of Experimental Medicine (DIMES), University of Genova, via Leon Battista Alberti 2, 16132 Genova, Italy. [simonetta.carluccio@edu.unige.it](mailto:simonetta.carluccio@edu.unige.it) (S.C.); [daniela\\_martinelli7@hotmail.com](mailto:daniela_martinelli7@hotmail.com) (D.M.); [elisabettapalama@gmail.com](mailto:elisabettapalama@gmail.com) (M.E.F.P.); [ana.isabel.guijarro.anton@edu.unige.it](mailto:ana.isabel.guijarro.anton@edu.unige.it) (A.G.-A.); [chiara.gentili@unige.it](mailto:chiara.gentili@unige.it) (C.G)

<sup>2</sup> Neurobiology of miRNA, Fondazione Istituto Italiano di Tecnologia, 16163 Genoa, Italy; [rui.pereira@iit.it](mailto:rui.pereira@iit.it)

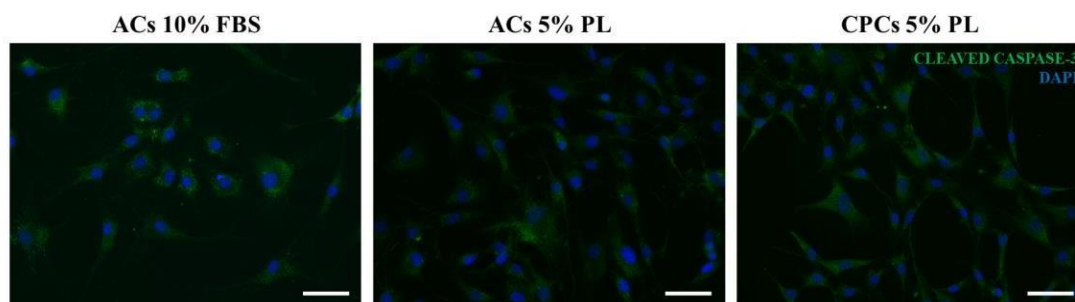
<sup>3</sup> UOSD Oncologia Molecolare e Angiogenesi, IRCCS Ospedale Policlinico San Martino, largo Rosanna Benzi 10, 16132 Genoa, Italy; [roberto.benelli@hsanmartino.it](mailto:roberto.benelli@hsanmartino.it)

<sup>4</sup> Endolife S.r.l., Piazza della Vittoria 15/23, 16121 Genova, Italy; [ranieri.cancedda@unige.it](mailto:ranieri.cancedda@unige.it)

<sup>5</sup> Center for Biomedical Research (CEBR), University of Genova, viale Benedetto XV 9, 16132 Genova, Italy. [chiara.gentili@unige.it](mailto:chiara.gentili@unige.it) (C.G)

\* Correspondence: [chiara.gentili@unige.it](mailto:chiara.gentili@unige.it)

† These authors contributed equally to this work.



**Figure S1.** Immunofluorescence staining for cleaved-caspase 3 in ACs-FBS, ACs-PL and CPCs-PL. All scale bars correspond to 100  $\mu$ m.

**Table S1.** In vitro analysis of ACs and CPCs secretory profiles. Quantification of the mean pixel density for each identified cytokine (analyte) in the three experimental groups (ACs-FBS, ACs-PL and CPCs-PL). Data were represented as mean and uncertainty in measurement for each spot couple in the array membranes.

Analyte	ACs 10% FBS		ACs 5% PL		CPCs 5% PL	
ApoA1	4050	± 300	35950	± 140	32110	± 820
Angiogenin	63830	± 200	60010	± 2800	61420	± 400
BAFF	31440	± 250	6610	± 160	14850	± 2780
CD14	11960	± 1470	24200	± 1380	3950	± 320
CHI3L1	62230	± 960	33390	± 170	50280	± 190
CST3	17320	± 2620	15700	± 1530	29710	± 160
Dkk-1	660	± 100	3940	± 470	35070	± 160
DPPIV	240	± 60	180	± 80	31030	± 1410
CD147	28060	± 80	42260	± 1390	38410	± 840
CXCL5	420	± 140	61640	± 130	32760	± 930
CD105	38630	± 100	32210	± 830	21220	± 250
GDF-15	45850	± 660	54810	± 270	38110	± 2610
CXCL1	2670	± 520	51050	± 1000	494520	± 1180
IGFBP-2	61570	± 560	51520	± 540	8780	± 90
IGFBP-3	48000	± 700	47660	± 960	52660	± 170
IL-6	17780	± 310	58410	± 100	8860	± 1010
IL-8	44810	± 540	60480	± 220	57810	± 490
LIF	3130	± 20	25830	± 1180	7610	± 200
NGAL	11630	± 250	38030	± 70	9190	± 340
CCL2	53880	± 960	55070	± 360	58590	± 680
CCL7	41990	± 320	49180	± 540	53730	± 340
MIF	30690	± 250	33900	± 40	38280	± 1370
CCL20	1140	± 60	61020	± 1690	1270	± 120
MMP9	2340	± 120	47430	± 340	14830	± 1990
OPN	58280	± 570	54770	± 1080	7360	± 250
PTX3	51560	± 910	53010	± 380	58290	± 170
CXCL4	220	± 120	42060	± 120	2060	± 1340
CCL5	430	± 40	43340	± 560	45400	± 330
RBP-4	40060	± 760	46900	± 540	2570	± 450
CXCL12	2000	± 400	18470	± 850	37250	± 1630
Serpin E1	55880	± 280	29490	± 310	30500	± 200
ST2	41350	± 600	36380	± 830	1520	± 290
THBS1	43860	± 490	40080	± 720	27430	± 1000
uPAR	27150	± 1080	49840	± 120	42230	± 810
VEGF	48520	± 100	56910	± 650	60110	± 740
VDB	5630	± 700	32990	± 1200	18530	± 630
CD106	58460	± 10	54230	± 580	28480	± 190

