

Table S1. Statistical differences in the expression of MPC, chondrocyte and hypertrophic chondrocyte markers between BM - MSC commercial cell line and OA grades (Mild, Moderate, Severe).

Markers	BM-MSC vs. Mild	BM-MSC vs. Moderate	BM-MSC vs. Severe	Mild vs. Moderate	Mild vs. Severe	Moderate vs. Severe
MPC markers						
CD105	ns	ns	p= 0.0105, *	ns	Ns	p= 0.0245, *
CD166	p= 0.0480, *	p= 0.0037, **	p= 0.0014, **	ns	Ns	ns
Notch – 1	ns	p= 0.0417, *	ns	ns	Ns	ns
Sox – 9	p= 0.0043, **	p= 0.0010, **	p= 0.0015, **	p= 0.0106 **↑	p= 0.0041, **↑	ns
Chondrocyte markers						
Col II	p= 0.0238, *	p= 0.0081, **	p= 0.0077, **	ns	Ns	ns
Acan	p= 0.0025, **	p= 0.0010, **	p= 0.0009, ***	ns	Ns	p= 0.0282, *
Hypertrophic chondrocyte markers						
Col I	ns	ns	ns	ns	Ns	ns
MMP13	p= 0.0095, **	p= 0.0032, **	p= 0.0032, **	ns	Ns	ns
ALPL	p= 0.0101, *	p= 0.0081, **	p= 0.0056, **	ns	Ns	ns

Table S2. Statistical differences in the expression of MPC, chondrocyte and hypertrophic chondrocyte markers in between D0 and D14 in mild OA derived cells.

MILD OA			
Markers	D0 vs. D14	D0 vs. D35	D14 vs. D35
MPC markers			
CD105	p= 0.0079, **	ns	p= 0.0079, **
CD166	p= 0.0079, **	ns	p= 0.0079, **
Notch – 1	p= 0.0159, *	ns	p= 0.0079, **
Sox – 9	p= 0.0357, *	ns	p= 0.0159, *
Chondrocyte markers			
Col II	ns	p= 0.0357, *	p= 0.0317, *
Acan	p= 0.0159, *	p= 0.0159, *	p= 0.0159, *
Hypertrophic chondrocyte marker			
Col I	ns	ns	ns

Table S3. Statistical differences in the expression of MPC, chondrocyte and hypertrophic chondrocyte markers in between D0 and D14 in moderate OA derived cells.

MODERATE OA			
Markers	D0 vs. D14	D0 vs. D35	D14 vs. D35
MPC markers			
CD105	p= 0.0002, ***	p= 0.0159, *	p< 0.0001, ** *
CD166	p < 0.0001, ***	p < 0.0001, ***	p= 0.0002, ** *
Notch – 1	p < 0.0001, ***	p < 0.0001, ***	p= 0.0494, *
Sox – 9	ns	ns	p= 0.0098, **
Chondrocyte markers			
Col II	p = 0.0003, ***	p= 0.0391, *	p< 0.0001, ** *
Acan	ns	p= 0.0146, *	p= 0.0186, *
Hypertrophic chondrocyte marker			
Col I	ns	p < 0.0001, ***	p < 0.0001, ***

Table S4. Statistical differences in the expression of MPC, chondrocyte and hypertrophic chondrocyte markers in between D0 and D14 in severe OA derived cells.

SEVERE OA			
Markers	D0 vs. D14	D0 vs. D35	D14 vs. D35
MSC markers			
CD105	p= 0.0005, ***	ns	p= 0.0008, ** *
CD166	p= 0.0028, **	p= 0.0002, ***	p= 0.0076, **
Notch – 1	ns	ns	p< 0.0001, ** *
Sox – 9	ns	ns	ns
Chondrocyte markers			
Col II	p < 0.0001, ***	p= 0.0004, ***	ns
Acan	p < 0.0001, ***	p < 0.0001, ***	p= 0.0455, *
Hypertrophic chondrocyte marker			
Col I	ns	ns	ns