



Figure S1. Flow cytometry analysis of BM-MSCs cultured in the control medium α MEM and in a medium supplemented with BMP-2 and/or FGF-2 for 7 and 14 days (a, b). Cell surface markers of BM-MSCs are similar in all culture conditions and incubation times.

Table S1. Antibodies used for flow cytometry and immunofluorescence.

| Antigen | Antibody clone | Company | Dilution |
|------------------------------------|-----------------------|---------------------------------|-----------------|
| Direct flow cytometry | | | |
| CD 73 PE | TY/23 | BD Pharmingen, California, USA | 1:5 |
| CD 105 PE | MJ7/18 | BD Pharmingen, California, USA | 1:5 |
| HLA-DR PE | 37.68 | Novus Biologicals, Abingdon, UK | 1:250 |
| Isotype control PE | | Abcam, Cambridge, UK | 1:50 |
| Indirect flow cytometry | | | |
| CD34 | EP373Y | Abcam, Cambridge, UK | 1:250 |
| CD45 | CACTB51A | Novus Biologicals, Abingdon, UK | 1:250 |
| Goat Anti-Rabbit FITC | | Abcam, Cambridge, UK | 1:500 |
| Goat Anti-Mouse FITC | | Abcam, Cambridge, UK | 1:500 |
| Immunofluorescence staining | | | |
| Anti-Collagen I | Rabbit polyclonal | Abcam, Cambridge, UK | 1:100 |
| Anti-Osteocalcin | OCG3 | Abcam, Cambridge, UK | 1:100 |

Table S2. Primers used in PCR assays.

| Gene | Primer Sequences (5'-3') | Fragment size (bp) | Cycles | T_m (°C) |
|------------------------|--|---------------------------|---------------|---------------------------|
| RT-PCR assay | | | | |
| <i>GAPDH</i> | F: CCTGCACCACCAACTGCTTG R: TTGAGCTCAGGGATGACCTTG | 224 | 30 | 55 |
| <i>CD90</i> | F: AGGACACAGGAAGCCACAAG R: CCCTCACTCTCCATCAGGTC | 311 | 30 | 56 |
| qRT-PCR assay | | | | |
| <i>GAPDH</i> | F: GCAAGTTCCACGGCACAG R: GGTTACGCCCCATCACAA | 249 | 40 | 58 |
| <i>BMP-2</i> | F: ATGGTTTCGTGGTGGAGGTAG R: ACTTGAGGCGTTTCCGCTGTT | 210 | 40 | 58 |
| <i>Runx2</i> | F: TCGCCTCACAAACAACCA R: AGGGACCTGCGGAGATTA | 102 | 40 | 53 |
| <i>Osterix</i> | F: CAGCGGCGTGCAGTAAAT R: CTGGGAACGAGTGGGAAAA | 240 | 40 | 56 |
| <i>Collagen type I</i> | F: CAAGAAGAAGACATCCCACC R: AGATCACGTCATCGCACA | 133 | 40 | 55 |
| <i>Osteocalcin</i> | F: AGATGCAAAGCCTGGTGATGC R: CTCCTGGAAGCCGATGTGGT | 211 | 40 | 60 |
| <i>Osteopontin</i> | F: TCCCACTGACATTCCAACAA R: CTGTGGCATCTGGACTCTCA | | 40 | 60 |