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(54) **Title:** OSTEOGENIC DIFFERENTIATION OF BONE MARROW STEM CELLS AND MESENCHYMAL STEM CELLS USING A COMBINATION OF GROWTH FACTORS

(57) **Abstract:** The invention relates to methods for osteogenic differentiation of human bone marrow stem cells (BMSC) or mesenchymal stem cells (MSC), in particular using human plasma or serum and FGF and TGFB growth factors. The invention also provides the so-obtained cells and cell populations, as well as further products comprising such and uses thereof in bone therapy.