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(54) **Title:** ISOLATION OF STEM/PROGENITOR CELLS FROM AMNIOTIC MEMBRANE OF UMBILICAL CORD.

(57) **Abstract:** The present invention relates to a method for isolating stem/progenitor cells from the amniotic membrane of umbilical cord, wherein the method comprises separating the amniotic membrane from the other components of the umbilical cord *in vitro,* culturing the amniotic membrane tissue under conditions allowing cell proliferation, and isolating the stem/progenitor cells from the tissue cultures. The isolated stem cell cells can have embryonic stem cell-like properties and can be used for various therapeutic purposes. In one embodiment, the invention relates to the isolation and cultivation of stem cells such as epithelial and/or mesenchymal stem/progenitor cells under conditions allowing the cells to undergo mitotic expansion. Furthermore, the invention is directed to a method for the differentiation of the isolated stem/progenitor cells into epithelial and/or mesenchymal cells.