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(54) Title: FEEDER INDEPENDENT EXTENDED CULTURE OF EMBRYONIC STEM CELLS

(57) Abstract: Previous methods for culturing human embryonic stem cells have required either fibroblast feeder cells or a medium which has been exposed to fibroblast feeder cells in order to maintain the stem cells in an undifferentiated state. It has now been found that if an antagonist of bone morphogenic protein is added to the medium in which the stem cells are cultured, together with fibroblast growth factor, the stem cells will remain undifferentiated indefinitely, even without feeder cells or conditioned medium.