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(71) Applicant *(for all designated States except US)*: **GERON CORPORATION** [US/US]; 230 Constitution Drive, Menlo Park, CA 94025 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **THIES, R., Scott** [US/US]; 1053 Riesling Drive, Pleasanton, CA 94566 (US).

(74) Agent: **SCHIFF, J., Michael**; Geron Corporation, 230 Constitution Drive, Menlo Park, CA 94025 (US).

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(54) Title: CHONDROCYTE PRECURSORS DERIVED FROM HUMAN EMBRYONIC STEM CELLS

(57) Abstract: This invention provides a system for obtaining cells of the chondrocyte lineage by differentiating primate pluripotent stem cells. The process involves culturing the cells as a micromass or other aggregate form in a cocktail of differentiation agents that facilitates outgrowth of the desired cell type. Progeny are capable of synthesizing Type II collagen or aggrecan, or other products that are characteristic of the chondrocyte lineage. Chondrocytes and chondrocyte precursor cells obtained according to this disclosure are suitable for use in both research and clinical therapy.