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ACTION

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(54) Title: HUMAN CORD BLOOD DERIVED UNRESTRICTED SOMATIC STEM CELLS (USSC)

(57) Abstract: A composition in human cord and placental blood which comprises unrestricted somatic stem cells is described here which can be amplified in vitro to large quantities sufficient for medical applications as regenerative medicines. Initiation and maintenance as well as ex vivo expansion protocols of such stem cells from cord blood is described.Furthermore, it is shown that from these cells employing varying differentiation induction protocols distinct lineage progenitors for hematopoiesis and endothel, as well as mesenchymal progenitors for muscle bone, cartilage and fat as well as neural progenitors can be cultured and expanded for use in regenerative medicine.