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(54) Title: GENERATION OF A MESENCHYMAL STROMAL CELL BANK FROM THE POOLED MONONUCLEAR CELLS OF MULTIPLE BONE MARROW DONORS

(57) Abstract: The present invention pertains to an improved mesenchymal stromal cell (MSC) preparation and a method for producing the same. The invention provides a new strategy to isolate MSC from bone marrow mononuclear cells (BM-MNCs) by pooling BM-MNCs of multiple unrelated (third-party) bone marrow donors. The MSC preparation manufactured in accordance with the methodology of the invention is characterized by a stable proliferative capability and an increased immunosuppressive potential when compared to individual donor MSC preparations or a pool of individual MSCs generated from multiple donors. The MSCs prepared ac- cording to the invention are particularly useful for medical applications such as the treatment of graft-versus-host disesase (GvHD) in recipients with hematopoietic stem cell transplants, patients with autoimmune disorders and as a cell-based therapy in regenerative medicine.