Allogeneic CD34+-enriched and CD45RA-depleted PBSCs

National Cancer Institute

Source

National Cancer Institute. Allogeneic CD34+-enriched and CD45RA-depleted PBSCs. NCI Thesaurus. Code C160621.

A preparation of donor-derived peripheral blood stem cells (PBSCs) that have been enriched with CD34-positive stem cells and have been depleted of CD45RA-positive cells, that can potentially be used for immune reconstitution purposes. CD45RA depletion results in a cellular product that contains a high amount of memory T-cells (Tm). Upon infusion of the allogeneic CD34+-enriched and CD45RA-depleted PBSCs after a hematopoietic cell transplantation (HCT), these cells provide Tm recovery and are able to prevent viral infections. The depletion of the CD45RA-positive cells reduces the risk of graft-versus-host disease (GvHD) upon infusion. CD45RA is expressed on naive T-cells (Tn), whereas Tm cells are CD45RA-negative. Tn cells have the potential to induce more severe GvHD than Tm cells.