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(54) Title: HYPOIMMUNOGENIC CELLS COMPRISING ENGINEERED HLA-E OR HLA-G

(57) Abstract: Disclosed herein are engineered cells and/or hypoinmunogenic cells including hypoinmunogenic stem cells, hypoinmunogenic cells differentiated therefrom, and hypoinmunogenic CAR-T cells and related methods of their use and generation comprising one or more exogenous receptors selected from the group consisting of a human leukocyte antigen E (HLA-E) variant protein, a human leukocyte antigen G (HLA-G) variant protein, and an exogenous PD-L1 protein. Provided herein are cells further exhibiting reduced expression of MHC I and MHC II human leukocyte antigens and T-cell receptors.



WO 2022/251367 A1