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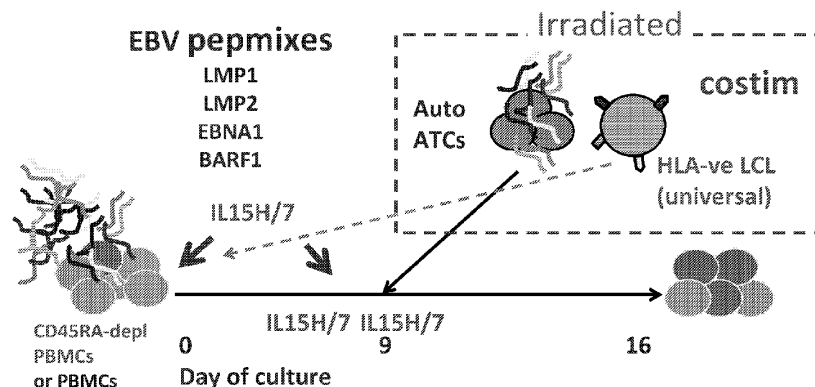
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(54) Title: PLATFORM FOR ACTIVATION AND EXPANSION OF VIRUS-SPECIFIC T-CELLS



Day 0: Optional: Deplete CD45RA+ T-cells from PBMC
Pulse PBMCs or CD45RA-depleted PBMCs with viral peptides
Optional: Use irradiated HLA-ve LCL in first stimulation
Day 9: 2nd stimulation with peptide-pulsed irradiated autologous ATCs and HLA-ve LCLs
Day 16: Cryopreserve

(57) Abstract: Embodiments of the disclosure concern methods and compositions for immunotherapy for diseases and malignancies associated with viruses other than HPV or with non-virus-associated diseases and malignancies, such as wherein the VST encodes a CAR specific for a non-viral cancer and the VST can be stimulated *in vitro* or *in vivo* using viruses, viral vaccines or oncolytic viruses. In specific embodiments, methods concern production of immune cells that target one or more antigens of HIV, EBV, CMV, adenovirus, vaccinia virus, and/or VZV, including methods with stimulation steps that employ IL-7 and IL-15, but not IL-2, IL-4, or both. Other specific embodiments utilize stimulations in the presence of certain cells, such as costimulatory cells and certain antigen presenting cells.

[Continued on next page]

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