## Open Peer Review on Qeios

## Anti-hCD70-CAR Retroviral Vectortransduced Autologous PBLs

National Cancer Institute

## Source

National Cancer Institute. <u>Anti-hCD70-CAR Retroviral Vector-transduced Autologous</u> <u>PBLs</u>, NCI Thesaurus. Code C129593.

A preparation of autologous human peripheral blood lymphocytes (PBLs) transduced with a retroviral vector encoding for a T-cell chimeric antigen receptor (CAR) gene specific for the human cluster of differentiation 70 (CD70), with potential immunostimulatory and antineoplastic activities. Autologous PBLs from a patient with CD70-positive cancer are transduced with a retroviral vector that encodes the CAR gene specific for CD70. After expansion in culture and reintroduction into the patient, antihCD70-CAR retroviral vector-transduced autologous PBLs bind to the CD70 antigen on tumor cell surfaces; subsequently, CD70-expressing tumor cells are lysed. CD70, the ligand for the costimulatory receptor CD27, is overexpressed on the surfaces of various cancer cell types.