# Autologous Anti-BCMA CAR-transduced T-cells KITE-585

National Cancer Institute

## Source

*National Cancer Institute. Autologous Anti-BCMA CAR-transduced T-cells KITE-585. NCI Thesaurus. Code C155883.*

A preparation of autologous T-lymphocytes that have been genetically modified to express a chimeric antigen receptor (CAR) containing a single chain variable fragment (scFv) derived from a human monoclonal antibody specific for the human tumor-associated antigen (TAA) B-cell maturation antigen (BCMA; tumor necrosis factor receptor superfamily member 17; TNFRSF17) fused, via an as of yet unknown linker, to the co-stimulatory domain of CD28, with potential immunostimulating and antineoplastic activities. Upon administration, the autologous anti-BCMA CAR transduced T-cells KITE-585 specifically recognize and induce selective toxicity in BCMA-expressing tumor cells. BCMA, a receptor for both a proliferation-inducing ligand (APRIL) and B-cell activating factor (BAFF), is a member of the tumor necrosis factor receptor superfamily (TNFRSF). BCMA is found on the surfaces of plasma cells, is overexpressed on malignant plasma cells and plays a key role in plasma cell proliferation and survival. The CD28 co-stimulatory domain optimizes T-cell expansion and function.