Glossary A-Z

A B C D E F G H I K L M N O P Q R W T U V Z

Wirkstoffe K

KTE-X19 (autologous anti-CD19 CAR-CD28 T cells)

Navigation überspringen A B C D E F G H I K L M N O P Q R W T U V Z

According to the NCI website, the autologous anti-CD19 CAR-CD28 T cells KTE-X19 are a preparation of autologous peripheral blood T lymphocytes (PBTL) that have been transduced with a retroviral vector expressing a chimeric antigen receptor (CAR) consisting of an anti-CD19 single chain variable fragment (scFv) coupled to the costimulatory signaling domain CD28 and the zeta chain of the T-cell receptor (TCR)/CD3 complex (CD3 zeta), with potential immunostimulating and antineoplastic activities. Upon intravenous infusion and re-introduction of autologous anti-CD19 CAR-CD28 T cells KTE-X19 into the patient, these cells bind to and induce selective toxicity in CD19-expressing tumor cells. CD19 antigen is a B-cell-specific cell surface antigen that is expressed in all B-cell lineage malignancies. CD3 zeta is one of several membrane-bound polypeptides found in the TCR/CD3 complex; it regulates both the assembly and cell surface expression of TCR complexes. CD28 is essential for CD4+ T-cell proliferation, interleukin-2 production, and T-helper type-2 (Th2) development. KTE-X19 has the same construct as axicabtagene ciloleucel, but differs in the manufacturing process in that KTE-X19 includes specific T-cell selection and lymphocyte enrichment necessary for activity against certain B-cell malignancies.

Link to National Cancer Institute

Link to European Medicines Agency (EMEA)