Open Peer Review on Qeios

Vadastuximab Talirine

National Cancer Institute

Source

National Cancer Institute. <u>Vadastuximab Talirine</u>. NCI Thesaurus. Code C111039.

An immunoconjugate consisting of a humanized monoclonal antibody that is engineered to contain cysteine residues that are conjugated to the synthetic, DNA cross-linking, pyrrolobenzodiazepine dimer SGD-1882, via the protease-cleavable linker maleimidocaproyl-valine-alanine dipeptide, with potential antineoplastic activity. The monoclonal antibody portion of vadastuximab talirine specifically binds to the cell surface antigen CD33. This causes the internalization of SGN-CD33A, and the release of the cytotoxic moiety SGD-1882. SGD-1882 binds to and crosslinks DNA, which results in both cell cycle arrest and the induction of apoptosis in CD33-expressing tumor cells. CD33, a transmembrane receptor, is expressed on myeloid leukemia cells.