

Open Peer Review on Qeios

Anti-BCMA/CD3 BiTE Antibody AMG 420

National Cancer Institute

Source

National Cancer Institute. <u>Anti-BCMA/CD3 BiTE Antibody AMG 420</u>. NCI Thesaurus. Code C159652.

A short half-life bispecific T-cell engager (BiTE) antibody composed of two single-chain variable fragments (scFv), one directed against the tumor-associated antigen (TAA) human B-cell maturation antigen (BCMA; TNFRSF17), fused to one that is directed against the CD3 antigen found on T-lymphocytes, with potential immunostimulating and antineoplastic activities. Upon administration of anti-BCMA/CD3 BiTE antibody AMG 420, this bispecific antibody binds to both CD3 on cytotoxic T-lymphocytes (CTLs) and BCMA found on BCMA-expressing tumor cells. This activates and redirects CTLs to BCMA-expressing tumor cells, which results in the CTL-mediated cell death of BCMA-expressing tumor cells. BCMA, a member of the tumor necrosis factor receptor superfamily that is specifically overexpressed on malignant plasma cells, plays a key role in promoting plasma cell survival.