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Anti-ETBR/MMAE Antibody-Drug Conjugate DEDN6526A

National Cancer Institute

Source

National Cancer Institute. <u>Anti-ETBR/MMAE Antibody-Drug Conjugate DEDN6526A</u>. NCI Thesaurus. Code C116742.

An antibody-drug conjugate (ADC) composed of a humanized immunoglobulin (Ig) G1 monoclonal antibody against anti-endothelin B receptor (ETBR) and covalently linked to monomethyl auristatin E (MMAE), an auristatin derivative and a potent microtubule disrupting agent, with potential antineoplastic activity. Upon administration, the monoclonal antibody moiety of DEDN6526A binds to ETBR-expressing tumor cells and is internalized, thereby delivering MMAE intracellularly. Proteolytic cleavage releases MMAE, which then binds to tubulin and inhibits its polymerization, resulting in G2/M phase arrest and tumor cell apoptosis. ETBR, a G-protein coupled receptor that can activate RAF/MEK signaling, is overexpressed in a variety of tumor cell types and plays a key role in tumor cell proliferation, invasion, epithelial-mesenchymal transition (EMT) and angiogenesis.

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