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Enadenotucirev-expressing Anti-CD40 Agonistic Monoclonal Antibody NG-350A

National Cancer Institute

Source

National Cancer Institute. <u>Enadenotucirev-expressing Anti-CD40 Agonistic Monoclonal</u>
<u>Antibody NG-350A</u>. NCI Thesaurus. Code C159599.

An oncolytic adenoviral vector, enadenotucirev (EnAd), that expresses a full-length agonistic anti-CD40 monoclonal antibody, with potential immunomodulating and antineoplastic activities. Upon intratumoral administration of NG-350A, enadenotucirev specifically infects and replicates in tumor cells and not in normal, noncancerous tissue, and selectively expresses the agonistic anti-CD40 antibody. The locally expressed anti-CD40 antibody targets and binds to CD40 on a variety of immune cells, including B-cells, T-cells and dendritic cells (DCs) in the tumor microenvironment (TME). This induces CD40-dependent signaling pathways, which activates these immune cells and induces a cytotoxic T-lymphocyte (CTL)-mediated antitumor immune response and leads to tumor cell death. CD40, a cell surface receptor and member of the tumor necrosis factor receptor superfamily (TNFRSF), is expressed on various immune cells and plays a key role in the activation of the immune system.

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