Open Peer Review on Qeios

Mavelertinib

National Cancer Institute

Source

National Cancer Institute. <u>Mavelertinib</u>. NCI Thesaurus. Code C120307.

An orally available inhibitor of the epidermal growth factor receptor (EGFR) mutant form T790M, with potential antineoplastic activity. Mavelertinib specifically binds to and inhibits EGFR T790M, a secondary acquired resistance mutation, which prevents EGFR-mediated signaling and leads to cell death in EGFR/T790M-expressing tumor cells. Compared to some other EGFR inhibitors, PF-06747775 may have therapeutic benefits in tumors with T790M-mediated drug resistance. This agent shows minimal activity against wild-type EGFR (WT EGFR), and does not cause dose-limiting toxicities that occur during the use of non-selective EGFR inhibitors, which can inhibit WT EGFR. EGFR, a receptor tyrosine kinase mutated in many tumor cell types, plays a key role in tumor cell proliferation and tumor vascularization.