

Open Peer Review on Qeios

Quizartinib

National Cancer Institute

Source

National Cancer Institute. Quizartinib. NCI Thesaurus. Code C68936.

An orally available small molecule with potential antineoplastic activity. Quizartinib selectively inhibits class III receptor tyrosine kinases, including FMS-related tyrosine kinase 3 (FLT3/STK1), colony-stimulating factor 1 receptor (CSF1R/FMS), stem cell factor receptor (SCFR/KIT), and platelet derived growth factor receptors (PDGFRs), resulting in inhibition of ligand-independent leukemic cell proliferation and apoptosis. Mutations in FLT3, resulting in constitutive activation, are the most frequent genetic alterations in acute myeloid leukemia (AML) and occur in approximately one-third of AML cases.