Ningetinib Tosylate

National Cancer Institute

Source


The tosylate salt form of ningetinib, an orally available inhibitor of the receptor tyrosine kinases c-MET/hepatocyte growth factor receptor (HGFR), vascular endothelial growth factor receptor 2 (VEGFR2 KDR), Axl (UFO), Mer, and Fms-like tyrosine kinase 3 (Flt3; CD135; STK1; FLK2), with antineoplastic activity. Upon administration, ningetinib binds to a variety of kinases, including c-Met, VEGFR2, Axl, Mer and Flt3, thereby inhibiting their signaling pathways. This inhibits growth, angiogenesis and metastasis of tumor cells that overexpress these kinases. c-Met, VEGFR2, Axl, Mer and Flt3 are overexpressed by many tumor cell types and play key roles in tumor cell proliferation, survival, invasion and metastasis.