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Ponatinib

National Cancer Institute

Source

National Cancer Institute. *Ponatinib*. NCI Thesaurus. Code C95777.

An orally bioavailable multitargeted receptor tyrosine kinase (RTK) inhibitor with potential antiangiogenic and antineoplastic activities. Ponatinib inhibits unmutated and all mutated forms of Bcr-Abl, including T315I, the highly drug therapy-resistant missense mutation of Bcr-Abl. This agent also inhibits other tyrosine kinases including those associated with vascular endothelial growth factor receptors (VEGFRs) and fibroblast growth factor receptors (FGFRs); in addition, it inhibits the tyrosine kinase receptor TIE2 and FMS-related tyrosine kinase receptor-3 (Flt3). RTK inhibition by ponatinib may result in the inhibition of cellular proliferation and angiogenesis and may induce cell death. Bcr-Abl is a fusion tyrosine kinase encoded by the Philadelphia chromosome.