Nintedanib

National Cancer Institute

Source

National Cancer Institute. Nintedanib. NCI Thesaurus. Code C62765.

An orally bioavailable, indolinone-derived, receptor tyrosine kinase (RTK) inhibitor with potential antiangiogenic and antineoplastic activities. Multitargeted tyrosine kinase inhibitor BIBF 1120 selectively binds to and inhibits vascular endothelial growth factor receptor (VEGFR), fibroblast growth factor receptor (FGFR) and platelet-derived growth factor receptor (PDGFR) tyrosine kinases, which may result in the induction of endothelial cell apoptosis; a reduction in tumor vasculature; and the inhibition of tumor cell proliferation and migration. In addition, this agent also inhibits members of the Src family of tyrosine kinases, including Src, Lck, Lyn, and FLT-3 (fms-like tyrosine kinase 3). VEGFR, FGFR and PDGFR RTKs play key roles in tumor angiogenesis.