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Bcr-Abl Kinase Inhibitor K0706

National Cancer Institute

Source

National Cancer Institute. *Bcr-Abl Kinase Inhibitor K0706*. NCI Thesaurus. Code C132173.

An orally bioavailable, Bcr-Abl tyrosine kinase inhibitor (TKI), with potential antineoplastic activity. Upon administration, Bcr-Abl kinase inhibitor K0706 selectively targets and binds to the Bcr-Abl fusion oncoprotein, including various Bcr-Abl mutant forms, such as those with the 'gatekeeper' resistance mutation T315I. This inhibits proliferation of Bcr-Abl-expressing tumor cells. The Bcr-Abl fusion protein is an aberrantly activated tyrosine kinase produced by certain leukemia cells. T315I, an amino acid substitution where threonine (T) has been mutated to isoleucine (I) at position 315 in the tyrosine-protein kinase ABL1 portion of the Bcr-Abl fusion protein, plays a key role in resistance to certain chemotherapeutic agents and its expression is associated with poor prognosis.