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Taselisib

National Cancer Institute

Source

National Cancer Institute. *Taselisib*. NCI Thesaurus. Code C116876.

An orally bioavailable inhibitor of the class I phosphatidylinositol 3-kinase (PI3K) alpha isoform (PIK3CA), with potential antineoplastic activity. Taselisib selectively inhibits PIK3CA and its mutant forms in the PI3K/Akt/mTOR pathway, which may result in tumor cell apoptosis and growth inhibition in PIK3CA-expressing tumor cells. By specifically targeting class I PI3K alpha, this agent may be more efficacious and less toxic than pan PI3K inhibitors. Dysregulation of the PI3K/Akt/mTOR pathway is frequently found in solid tumors and causes increased tumor cell growth, survival, and resistance to both chemotherapy and radiotherapy. PIK3CA, which encodes the p110-alpha catalytic subunit of the class I PI3K, is mutated in a variety of cancer cell types and plays a key role in cancer cell growth and invasion.