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# Vactosertib

National Cancer Institute

## Source

National Cancer Institute. *Vactosertib*. NCI Thesaurus. Code C116357.

An orally bioavailable inhibitor of the serine/threonine kinase, transforming growth factor (TGF)-beta receptor type 1 (TGFR1), also known as activin receptor-like kinase 5 (ALK5), with potential antineoplastic activity. Upon oral administration, vactosertib inhibits the activity of TGFR1 and prevents TGF-beta/TGFR1-mediated signaling. This suppresses tumor growth in TGFR1-overexpressing tumor cells. TGFR1, which is overexpressed in a variety of tumor cell types, plays a key role in tumor cell proliferation. Expression of TGF-beta promotes tumor cell proliferation, enhances the migration of tumor cells and suppresses the response of the host immune system to tumor cells.