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# Denibulin Hydrochloride

National Cancer Institute

## Source

National Cancer Institute. *Denibulin Hydrochloride*. NCI Thesaurus. Code C72736.

The hydrochloride salt of denibulin, a small molecular vascular disrupting agent, with potential antimitotic and antineoplastic activities. Denibulin selectively targets and reversibly binds to the colchicine-binding site on tubulin and inhibits microtubule assembly. This results in the disruption of the cytoskeleton of tumor endothelial cells, ultimately leading to cell cycle arrest, blockage of cell division and apoptosis. This causes inadequate blood flow to the tumor and eventually leads to a decrease in tumor cell proliferation. Denibulin, a small molecule vascular disrupting agent (VDA), with potential antimitotic and antineoplastic activity. Denibulin selectively targets and reversibly binds to the colchicine-binding site on tubulin and inhibits microtubule assembly. This results in the disruption of the cytoskeleton of tumor endothelial cells (EC), ultimately leading to cell cycle arrest, blockage of cell division and apoptosis. This causes inadequate blood flow to the tumor and eventually leads to a decrease in tumor cell proliferation.