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Noscapine Hydrochloride

National Cancer Institute

Source

National Cancer Institute. *Noscapine Hydrochloride*. NCI Thesaurus. Code C61103.

The orally available hydrochloride salt of the opioid agonist noscapine, a phthalideisoquinoline alkaloid derived from the opium poppy *Papaver somniferum*, with mild analgesic, antitussive, and potential antineoplastic activities. Noscapine binds to tubulin and alters its conformation, resulting in a disruption of the dynamics of microtubule assembly (by increasing the time that microtubules spend idle in a paused state) and subsequently, the inhibition of mitosis and tumor cell death. Unlike other tubulin inhibitors such as the taxanes and vinca alkaloids, noscapine does not affect microtubule polymerization.