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Netupitant

National Cancer Institute

Source

National Cancer Institute. *Netupitant*. NCI Thesaurus. Code C96745.

A selective neurokinin 1 (NK1) receptor antagonist with potential antiemetic activity. Netupitant competitively binds to and blocks the activity of the human substance P/NK1 receptors in the central nervous system (CNS), thereby inhibiting NK1-receptor binding of the endogenous tachykinin neuropeptide substance P (SP), which may result in the prevention of chemotherapy-induced nausea and vomiting (CINV). SP is found in neurons of vagal afferent fibers innervating the brain-stem nucleus tractus solitarius and the area postrema, which contains the chemoreceptor trigger zone (CTZ), and may be elevated in response to chemotherapy. The NK-receptor is a G-protein receptor coupled to the inositol phosphate signal-transduction pathway and is found in both the nucleus tractus solitarius and the area postrema.