Liposomal Vinorelbine

National Cancer Institute

Source

A formulation of the semisynthetic vinca alkaloid, vinorelbine, encapsulated within liposomes, with antineoplastic activity. Vinorelbine binds to tubulin and prevents formation of the mitotic spindle, resulting in cell cycle arrest in metaphase. Like other vinca alkaloids, vinorelbine may also interfere with the metabolism of nucleic acids, lipids, amino acids, cAMP, and glutathione, as well as other biological processes including calmodulin-dependent Ca2+-transport, ATPase activity, or cellular respiration. Liposomal delivery of vinorelbine improves drug penetration into tumors and decreases drug clearance, thereby increasing the duration of therapeutic effects while lowering the toxicity profile.