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Review on Noval Anticancer Drug

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Abstract: *Paclitaxel is One of the most significant lead compound to come from a natural source is paclitaxel. Paclitaxel is mostly derived from the bark of a slow-growing Western yew because to its unique and complex chemistry. Even if paclitaxel's complete chemical synthesis has been accomplished, it might not be financially viable. The paclitaxel has a minimal therapeutic index: it is nearly insoluble in water and extremely lipophilic. The injection that is sold commercially preparation is a sterile mixture of dehydrated alcohol and the medication in Cremophor. Current cancer Hypersensitivity responses are common when paclitaxel is used in chemotherapy. Taxol, also known as paclitaxel, is frequently used in clinical settings to treat a range of malignancies. It needs ethanol and Cremophor EL(polyethoxylated castor oil) as a carrier due to its poor water solubility. When administered intravenously, these substances result in severe allergic responses. Paclitaxel was covalently bonded to human serum albumin in this investigation. TheAfter succinic anhydride was used to esterify the drug's 29-hydroxyl group, it was derivative to yield the N-hydroxy-3-sulfo-Succinimide active ester, which reacts strongly with the protein's lysyl amino groups. Two distinct populations of conjugates (with six orEach albumin molecule has 30 average drug molecules attached to it, which were produced, purified, and described. The conjugations were stable in serum and physiological solution, however the addition of liver extract or proteases caused . paclitaxel is used in the chemotherapy treatment for breast cancer and ovarian cancer.*

Keywords: Introduction of paclitaxel, essential properties, MOA of paclitaxel, Analytical methods of paclitaxel, uses of Paclitaxel

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