

The antineoplastic agent estramustine and the derivative estramustine-phosphate inhibit secretion of interleukin-3 in leukemic cells.

## Possible roles of MAPs

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The antineoplastic drug estramustine is an adduct of estradiol and nor-nitrogen mustard. It has been shown that this drug interferes with microtubule assembly, an effect mediated by estramustine interaction with microtubule-associated proteins (MAPs). In the present report we demonstrate that estramustine and the phosphorylated derivative of the drug, estramustine-phosphate, inhibit the secretion of interleukin-3 by WEHI-3B cells. These studies also show that the estramustine derivative specifically interacts with a MAPs component found in these cells, which exhibited characteristics resembling those of tau protein isoforms. Western blots using a unique monoclonal antibody MTB6.22 that recognizes microtubule-binding domains on MAPs, indicated that this WEHI protein factor contained the antigenic determinant that are functionally significant for microtubule assembly. ELISA assays using this antibody, also showed a decrease in the levels of the immunoreactive protein in WEHI cells after