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2-Hydroxyestrone

National Cancer Institute

Source

National Cancer Institute. *2-Hydroxyestrone*. NCI Thesaurus. Code C63947.

A metabolite formed during the catabolism of estrone by the liver through the hydroxylation of the carbon at position 2 by cytochrome P450 (CYP) enzymes, including CYP1A1 and 1A2, with potential anticarcinogenic activity. The mechanism of action for the antitumor activity of 2-hydroxyestrone is not known but this metabolic product has minimal estrogenic activity compared to the parent compound and other estrone metabolites. Additionally, O-methylation of this compound produces 2-methoxyestradiol (2-MeOE2), which is a potent inhibitor of both cell proliferation and angiogenesis.