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Tamibarotene

National Cancer Institute

Source

National Cancer Institute. *Tamibarotene*. NCI Thesaurus. Code C71025.

An orally active, synthetic retinoid, developed to overcome all-trans retinoic acid (ATRA) resistance, with potential antineoplastic activity. As a specific retinoic acid receptor (RAR) alpha/beta agonist, tamibarotene is approximately ten times more potent than ATRA in inducing cell differentiation and apoptosis in HL-60 (human promyelocytic leukemia) cell lines in vitro. Due to a lower affinity for cellular retinoic acid binding protein (CRABP), tamibarotene may show sustained plasma levels compared to ATRA. In addition, this agent may exhibit a lower toxicity profile than ATRA, in part, due to the lack of affinity for the RAR-gamma receptor, the major retinoic acid receptor in the dermal epithelium.