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# Navoximod

National Cancer Institute

## Source

National Cancer Institute. *Navoximod*. NCI Thesaurus. Code C113793.

An orally available inhibitor of indoleamine 2,3-dioxygenase 1 (IDO1), with potential immunomodulating and antineoplastic activities. Upon administration, navoximod targets and binds to IDO1, a cytosolic enzyme responsible for the oxidation of the essential amino acid tryptophan into kynurenine. By inhibiting IDO1 and decreasing kynurenine in tumor cells, this agent increases tryptophan levels, restores the proliferation and activation of various immune cells, including dendritic cells (DCs), natural killer (NK) cells, and T-lymphocytes, and causes a reduction in tumor-associated regulatory T-cells (Tregs). Activation of the immune system, which is suppressed in many cancers, may induce a cytotoxic T-lymphocyte (CTL) response against the IDO1-expressing tumor cells. IDO1 is overexpressed by a variety of tumor cell types and plays an important role in immunosuppression. Tryptophan depletion is associated with immunosuppression caused by T-cell suppression.