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Tofacitinib

National Cancer Institute

Source

National Cancer Institute. *Tofacitinib*. NCI Thesaurus. Code C95800.

An orally available inhibitor of Janus kinases (JAK), with immunomodulatory and anti-inflammatory activities. Upon administration, tofacitinib binds to JAK and prevents the activation of the JAK-signal transducers and activators of transcription (STAT) signaling pathway. This may decrease the production of pro-inflammatory cytokines, such as interleukin (IL)-6, -7, -15, -21, interferon-alpha and -beta, and may prevent both an inflammatory response and the inflammation-induced damage caused by certain immunological diseases. JAK kinases are intracellular enzymes involved in signaling pathways affecting hematopoiesis, immunity and inflammation.