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# Ammonium Trichlorotellurate

National Cancer Institute

## Source

National Cancer Institute. *Ammonium Trichlorotellurate*. NCI Thesaurus. Code C1006.

A synthetic non-toxic tellurium derivative, structurally similar to cisplatin, with immunostimulatory and anti-hair loss properties. Ammonium trichlorotellurate induces production of colony stimulating factor (CSF), interleukin-2 (IL-2), and IL-2 receptors by increasing the calcium ion influx through the cell membrane and subsequently exerts its immunostimulatory effects through the CSF-mediated increase in macrophage/granulocytes. This agent is also a potent inducer of interferon and a spectrum of cytokines such as IL-1, IL-6, and tumor necrosis factor (TNF). In animal studies, ammonium trichlorotellurate exerts its anti-hair loss effect by inducing anagen and obstructing spontaneous catagen via promoting follicular keratinocyte proliferation and interfering with terminal differentiation, respectively.