

TUMOR NECROSIS FACTOR (TNF), ALPHA, SERUM (CLIA)	-	pg/mL	< 8.1
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Comments

TNF- α is a proinflammatory cytokine with an ability to kill tumor cells and induce hemorrhagic necrosis. Mainly macrophages and monocytes produce TNF but activated T cells, mast cells and keratinocytes may also produce it to a lesser extent. TNF- α has a number of effects including apoptosis, adhesion and cellular trafficking, angiogenesis, myocyte proliferation, fibrosis, phagocytosis, cytokine production, leucocyte / macrophage function, inflammation and tumor control.

Effect of TNF α on tumor control

- Direct cytotoxic effect on tumor cells, but not on normal cells
- Modification of vasculature to enhance migration of lymphocytes into tumors
- Stimulation of immune response by activating cells that mediate anti-tumor immunity.

Therapeutic applications

- Certain diseases related directly to excessive TNF- α production are Septic shock, Graft versus host disease & Lupus nephritis. These diseases may be amenable to treatment with anti TNF- α antibodies or anti-inflammatory agents that reduce TNF production.
- Chemotherapy of certain tumors like Melanomas and advanced neoplastic disease have shown limited success on administration of TNF- α .