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**Review article**

**Targeted therapy against cytokines and chemokines in cancer  
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**Abstract:**

Cytokines are a diverse group of non-antibody proteins that act as mediators between cells.They mediate & regulate amplitude and duration of immune & inflammatory responses.They are important specifically in host responses to infection, immune responses, inflammation, trauma, sepsis, cancer, and reproduction. The interaction between cytokines & chemokines and their receptors forms a network at tumour site responsible for tumour progression and induction of anti tumour responses and tumour rejection. These affect multiple pathways of tumour progression including leucocyte recruitment, cellular scenescence, tumour cell proliferation & survival, angiogenesis, invasion and metastasis. These also have role in cancer cachexia, act as anti tumour agents and as prognostic markers. Cytokine therapy is given to manipulate the immune response in such a way as to generate the appropriate immune effector cells to eradicate various solid tumors.There have been clinical trials executed involving the administration of interferon-gamma, interferon-alpha, interleukin-2, tumor necrosis factor-alpha, and Interleukin-12. Cytokine-based anticancer agents and antagonists to chemokines possess high potential for the development of therapeutic agents to treat various types of malignant cancer. Important ones are Aldesleukin, Sunitinib, Bevacizumab, Maraviroc and many more. Future applications of cytokine therapy may involve a combination of cytokines in the treatment of advanced malignancies. In particular, the combination of IL-2 and IL-12 may prove to be the most effective regimen.