

Targeting Therapy for Inflammatory Diseases by Anti-TNF α Biologics

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TNF α (tumor necrosis factor-alpha) plays critical role in the pathogenesis of inflammatory diseases including rheumatoid arthritis and Crohn's disease. Infliximab (Remicade[®]) is a chimeric monoclonal antibody that recognizes human TNF α . Clinical trials have been persuasive that infliximab (Remicade[®]) is effective and far superior to the conventional drug therapy in various inflammatory diseases. Combination of infliximab (Remicade[®]) plus methotrexate is effective in patients with active rheumatoid arthritis who have not responded adequately to traditional disease-modifying anti-rheumatic drugs, and producing significant improvement in clinical, radiographic, and functional outcomes. Infliximab (Remicade[®]) is also an important treatment option in patients with active Crohn's disease who have not responded to conventional therapy and in patients with Crohn's disease who have fistulae. Moreover, Infliximab (Remicade[®]) treatment resulted in effective suppression of ocular inflammation in patients with refractory uveoretinitis due to Behçet's disease. Thus, biologics targeting TNF α have revolutionized the therapy of inflammatory diseases.

Here, current status and future prospects of anti-TNF α biologics will be discussed.