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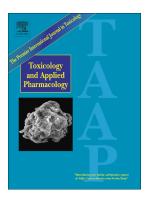
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## **ACCEPTED MANUSCRIPT**

# Comparative Study of anti-VEGF Ranibizumab and interleukin-6 receptor antagonist Tocilizumab in Adjuvant-Induced Arthritis

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#### Abstract:

Although the precise etiology of Rheumatoid arthritis (RA) remains obscure, heightened immune response is thought to play a vital role in provoking joint inflammation and bone erosion. This study aims at comparatively evaluating the effects of two monoclonal antibodies Ranibizumab (RANI) as anti-VEGF antibody and Tocilizumab (TCZ) as interleukin-6 receptor (IL-6R) antagonist, against adjuvant induced arthritis in rats. CFA-induced arthritic rats were treated for three consecutive weeks with Methotrexate (MTX), TCZ and RANI monotherapy. Clinical assessment of RA, bone erosion, inflammatory, angiogenic and apoptotic markers were determined to assess the anti-arthritic effect. Liver enzymes and histopathological examination of liver and spleen were assessed to evaluate the toxicity profile of the tested therapeutic agents. MTX, TCZ and RANI monotherapy significantly

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