

New Drug in Development for Rheumatoid Arthritis

Rheumatoid arthritis is an immune disease that causes pain, swelling, stiffness and loss of function in your joints. It can affect any joint but is common in the wrist and fingers. Medications are available that can treat the pain and slow joint damage.

In the past, doctors focused on just treating pain and swelling by prescribing antiinflammatory nonsteroidal drugs like ibuprofen (Motrin), but this approach did not affect progression of the disease. Then, disease-modifying antirheumatic drugs (DMARDs) that suppress various immune responses were shown to slow progression of the disease. As a result, DMARDs such as methotrexate began to be commonly used. During the past decade, new medicines for rheumatoid arthritis have targeted specific chemicals that produce inflammation, called cytokines. Interference with the actions of these inflammatory cytokines is the latest treatment strategy, and numerous cytokine targets have been identified.



One drug being investigated in clinical trials is tocilizumab (Actemra), which targets an inflammatory cytokine called interleukin-6 (IL-6). IL-6 seems to be important in the development and progression of rheumatoid arthritis and other immune diseases that affect the joints. Tocilizumab binds to the protein that normally attaches to IL-6, preventing IL-6 from binding and triggering inflammation.

In clinical studies, tocilizumab has been administered intravenously as often as every 2 weeks. Patients have been evaluated for the drug's effects on swollen and tender joints and

FOR MORE INFORMATION

Mayo Clinic
www.mayoclinic.com/health/rheumatoid-arthritis/DS00020/DSECTION=treat

Medline Plus
www.nlm.nih.gov/medlineplus/rheumatoidarthritis.html

National Institute of Arthritis and Musculoskeletal and Skin Diseases
www.niams.nih.gov/Health_Info/Rheumatic_Disease/default.asp

the patients' ability to function, and for changes in inflammatory markers of rheumatoid arthritis (eg, C-reactive protein, erythrocyte sedimentation rate) that are assessed by blood tests. Treatment with tocilizumab has been associated with a reduction in the number of swollen and tender joints, improvement in patients' health and activity, and a return to normal results on tests of C-reactive protein and erythrocyte sedimentation rate. Tocilizumab has even been effective in patients who had not responded to other drugs, and the new medicine appears to stop progression of the disease.

Like other drugs that interfere with normal immune functions, tocilizumab has the potential to cause side effects. Serious infections, diarrhea, vomiting, musculoskeletal disorders, headaches, abnormal liver function, high cholesterol, and low white blood cell counts have been associated with use of this medication.

Tocilizumab is still being studied and has not yet been approved for use in the United States, but if you suffer from rheumatoid arthritis you may want to be aware of this new therapy on

the horizon. If tocilizumab is approved, patients who take the drug will probably need regular blood tests to monitor liver function, white blood cell counts, and cholesterol levels.

COMMONLY USED MEDICATIONS FOR RHEUMATOID ARTHRITIS

Disease Modifying Anti-Rheumatic Drugs

Hydroxychloroquine (Plaquenil)

Leflunomide (Arava)

Methotrexate (Rheumatrex)

Biologics

Abatacept (Orencia)

Adalimumab (Humira)

Anakinra (Kineret)

Etanercept (Enbrel)

Infliximab (Remicade)

Rituximab (Rituxan)