Galápagos

About rheumatoid arthritis

Rheumatoid arthritis (RA) is a chronic disease, mainly affecting the joints. The disease is characterized by inflammation of the affected joint, which can result in chronic pain, swelling and stiffness, and later, joint destruction and disability. RA is the most debilitating form of arthritis and the most common inflammatory joint disease. It is estimated that 1-2% of the population has RA, and although it can occur at any age, onset usually begins between the ages of 25 and 50. Women are three times more likely than men to be affected by RA[1].

RA patients are in need of safe, effective medicines, and represent a market currently estimated at €7 billion annually; this is expected to approach €9 billion by 2011[2].

Disease progression

RA is an autoimmune disease, meaning the body's immune system attacks itself, causing inflammation and joint damage. This attack results in the swelling around the joints, causing pain and stiffness. In later stages, the bone and joint tissue gets damaged, often resulting in loss of movement.

Current treatments

Drugs that suppress the inflammation have been the mainstay of the treatment of rheumatoid arthritis. While these drugs relieve the symptoms of arthritis - such as pain and swelling - they do not change the course of the disease.

A recent improvement in the treatment of rheumatoid arthritis has been the introduction of new antibody-based medicines. Examples of these therapeutics include Enbrel®, Humira® and Remicade®. However, these drugs need to be injected, which is not preferable for patients with a chronic disease.

Galapagos' RA research

The aim of Galapagos' RA drug discovery program is to find a medicine that inhibits joint destruction and inflammation, which can be taken as a tablet.

Galapagos has discovered new drug targets in cells from rheumatoid arthritis patients. These targets are involved in the disease process and new molecules that change the activity of these targets form the basis for a candidate medicine against RA. This approach will be a major improvement in the treatment of RA. Galapagos aims to develop candidate medicines that have a better safety profile and ease of use than the currently available drugs mentioned. Based on the highly encouraging results shown thus far with its lead candidate medicine in RA, Galapagos anticipates initiation of preclinical studies in late 2007, with a candidate drug expected to enter human clinical trials (Phase I) in 2008.

For more information about RA, visit:

www.arthritis.org

www.paremanifesto.org

www.eular.org

[1] Nature Reviews Drug Discovery, 4, 11-12 (January 2005)

[2] Rheumatoid Arthritis: Market Trends and R&D Insights, Arrowhead Publishers (September 2006)