

Rheumatoid arthritis: cheaper biological treatments on the horizon?

INTRODUCTION

In recent years the so-called 'biological' treatments have marked a major step forward in the treatment of rheumatoid arthritis. Now a new study has looked at a similar treatment that may be cheaper and, therefore, available to more people.

WHAT DO WE KNOW ALREADY?

Research into rheumatoid arthritis has moved very quickly in the last 10 years or so. New medicines-and even new types of medicines-have become available. This is important because there seems to be no one drug that helps everyone who has the condition. Treating rheumatoid arthritis often involves a process of trial and error to see which medicine or combination of medicines suits individual people, and which causes the least-serious side effects.

One major advance has been the development of the so-called 'biological' medicines. (You may have heard some of these medicines referred to as TNF [tumour necrosis factor] inhibitors.) Biological treatments, which are made from genetically engineered human proteins, have been shown to help many people who don't respond much to more established treatments such as methotrexate. But these newer treatments are expensive, which means they are often only recommended when other drugs haven't worked. This can be extremely frustrating for people who want to get the most effective treatment as soon as possible.

The new study looked at a medicine called CT-P13. This is a kind of drug known as a monoclonal antibody. It is produced from human cells in a similar but not identical way to the innovator infliximab (INX, brand name Remicade), and it works in a similar way. So CT-P13 is called a 'biosimilar' biological disease-modifying antirheumatic drug. Biosimilar biological drugs are expected to be cheaper than the originator biological agents..

In the study, the researchers randomly divided about 600 people with active rheumatoid arthritis who were not responding well to methotrexate into two groups. One group was given INX in addition to methotrexate. The second group was given methotrexate alongside the new drug, CT-P13. After 30 weeks, the researchers looked to see how many people in each group had improved using a measurement called the American College of Rheumatology 20%, or ACR 20.

People being treated for rheumatoid arthritis may not have heard of this measurement, as it's usually only used by researchers comparing treatments in studies, and usually not by doctors treating patients. The ACR 20 assesses how many people have 20 percent fewer tender and swollen joints (and 20% improvement in at least 3 of 5 other measures) at the end of a study.

WHAT DOES THE NEW STUDY SAY?

The new study found that CT-P13 worked just as well as INX. For both medicines, about 60 in 100 people met the ACR 20 target. However, the researchers found that CT-P13 worked slightly more quickly than INX. There were no major differences in side effects between the two groups, which suggests that the new medicine is no less safe to use than INX.

HOW RELIABLE ARE THE FINDINGS?

This was a well-conducted study that was big enough for the results to carry quite a lot of weight. Indeed, the European Medicines Agency (EMA) approved CT-P13 for use in people with rheumatoid arthritis based on its findings, which suggest that CT-P13 works as well as the originator infliximab and that its side effects are no worse. However, longer-lasting studies will also be needed, as well as studies into how biosimilar drugs compare with originator biologicals with regard to what's called 'antidrug antibodies'. In some people, the immune system produces antidrug antibodies to fight the medicine, the way they would fight an infection. This then stops the medicine from working.

WHAT DOES THIS MEAN FOR ME?

New treatments for rheumatoid arthritis that work as well as established biological medicines would be very welcome-especially if they prove cheaper and easier to access. CT-P13 is still being tested. Its availability in different countries will depend on when the patent for Remicade expires.

Disclaimer: This is a summary of a scientific article written by a medical professional ("the Original Article"). The Summary is written to assist non medically trained readers to understand general points of the Original Article. It should not be relied on in any way whatsoever, (which also means the Summary is not medical

advice), and is simply supplied to aid a lay understanding of general points of the Original Article. It is supplied “as is” without any warranty. You should note that the Original Article (and Summary) may not be accurate as errors can occur and also may be out of date as medical science is constantly changing. **It is very important that readers not rely on the content in the Summary and consult their medical professionals for all aspects of their health care. Do not use this Summary as medical advice even if the Summary is supplied to the reader by a medical professional.** Please view our full [Website Terms and Conditions](#).

Date summary prepared: October 2013

Summary based on research article published on: 16th May 2013

From: Dae Hyun Yoo, Pawel Hrycaj, Pedro Miranda, *et al.* A randomised, double-blind, parallel-group study to demonstrate equivalence in efficacy and safety of CT-P13 compared with innovator infliximab when coadministered with methotrexate in patients with active rheumatoid arthritis: the PLANETRA study. *Annals of the Rheumatic Diseases* 2013;72:1613–1620. doi:10.1136/annrheumdis-2012-203090Laysummary

Copyright © 2015 BMJ Publishing Group Ltd & European League Against Rheumatism. Medical professionals may print copies for their and their patients and students non commercial use. Other individuals may print a single copy for their personal, non commercial use. For other uses please contact our [Rights and Licensing Team](#).