How to reduce costs of biological treatments in patients with Rheumatoid Arthritis: The Dutch experience

Piet L.C.M. van Riel

Mediterr J Rheumatol 2016; 27(2):34-5
How to reduce costs of biological treatments in patients with Rheumatoid Arthritis: The Dutch experience

Piet L.C.M. van Riel

Department of Rheumatology Bernhoven, The Netherlands and Radboud University Medical Center, Radboud Institute for Health Sciences, IQ Healthcare, Nijmegen, The Netherlands

The management of Rheumatoid Arthritis (RA) has changed dramatically in the past decades. From "go low, go slow" with only a few Disease Modifying Anti-Rheumatic Drugs (DMARDs), currently in the management of RA terms like “intensive/aggressive, Treat to Target, Tight Control" are being used and applied. In addition, presently, more than 15 different treatment options are available ranging from conventional synthetic DMARDs (csDMARDs) costing a few hundred Euros annually, to biological DMARDs (bDMARDs), costing 10-15.000 Euros per patient per year. Recently, a targeted synthetic DMARD, the JAK kinase inhibitor tofacitinib, has been added to the armamentarium of the treatment of RA and many will follow in the coming years.

Many studies have shown the superior efficacy of the current strategy: less cumulative disease activity, less radiographic damage, less joint replacement surgery, better functionality, increased quality of life and more participation in the community. In addition, as RA is a systemic disease, these benefits don’t only apply to the joints. Since the new treatment strategies are being used, it appears that less comorbidities, for instance, less cardiovascular disease and fewer lymphomas, are being observed.

The downside of these new treatment strategies, mainly if bDMARDs are involved, are the costs. As health care professionals we are obliged to offer our patients the best possible, cost effective treatments. There are several ways to minimize the costs while keeping the benefits of these approaches. In the following, the experience from Dutch research and practice is discussed.

Keywords: Rheumatoid Arthritis, DMARDs, csDMARDs, bDMARDs, biosimilars, tapering, biological treatment, remission.

Corresponding author:
Piet L.C.M. van Riel, MD, PhD
Rheumatologist
Department of Rheumatology
Bernhoven, The Netherlands
and Radboud University Medical Center, Radboud Institute for Health Sciences, IQ Healthcare
P.O. Box 9101
6500 HB Nijmegen, The Netherlands
Tel.: +31-243-611-111
E-mail: P.vanriel@Bernhoven.nl

© van Riel P

Cite this article as: van Riel P. How to reduce costs of biological treatments in patients with Rheumatoid Arthritis: The Dutch experience. Mediterr J Rheumatol 2017;27(2):34-5.
stopping or stopping the biological is a realistic option. In those patients restarting the TNF inhibitor because of a relapse, 80% achieved a state of remission or low disease activity in a short time period. In 20% of the patients, another treatment was needed.

b. Tapering
In a single center in the Netherlands, a tapering study was performed in 180 patients with RA who were on a stable dose of adalimumab or etanercept for at least 6 months and had low disease activity. Patients were randomised between tapering (n=121) and usual care (59). Dose reduction occurred in 63% of the patients in the Tapering group and in 8% of the patients in the usual care group. There was no difference in flares between the two groups, although the cumulative disease activity and radiological progression was higher in the tapering group.

BIOSIMILARS
Recently, several biosimilars both for infliximab as well as for etanercept have been introduced. Randomised controlled studies have shown similarities with respect to efficacy and toxicity for these agents with the respective originals. The costs for these agents are about 30-40% lower than for the original product. Therefore, when starting a TNF inhibitor in a patient for the first time, it seems logical to start with the cheapest available option which might be a biosimilar. However, before we start substituting the originator for a biosimilar in patients already treated with a TNF inhibitor, we do need more studies showing that this is safe also on the long term. Data about this may arise from other countries, e.g. Norway, where substitution is already practiced in some health districts.

CONCLUSION
In a high percentage of patients with RA, remission can be achieved with csDMARDs. In case of insufficient response, adding biological DMARDs is an effective approach. When patients have reached a state of low disease activity or remission for at least 6 months, tapering or stopping the biological is a realistic option. Although we do not have long term data yet from a cost-effectiveness point of view, it is very attractive to stop or taper TNF inhibitors in patients who are on stable low disease activity or remission, as at least 50% of the patients will continue in their low disease activity state without biological treatment. Whether the interruption of the treatment in those patients that do experience a relapse leads to more joint destruction or to damage of extra-articular structures - like the cardiovascular system - is not known. Therefore, it would be very important to continue to monitor those patients in the long term.

CONFLICT OF INTEREST
The author declares no conflict of interest.

REFERENCES