

## Achieving Remission in Rheumatoid Arthritis

### What is 'remission'?

In general terms, remission describes the point when the symptoms of a disease are either greatly reduced or no longer evident. For people with rheumatoid arthritis (RA), this means that all or most symptoms of the disease, such as inflammation, pain, and fatigue, have gone away and further damage to the joints has stopped.

### Measuring disease activity and remission

One of the most widely accepted methods of defining disease activity in RA is the Disease Activity Score 28, known as the 'DAS28' scoring system.<sup>1</sup>

The DAS28 scoring system takes into account several measures:

- The number of tender and swollen joints (this can be between 0 and 28)
- A blood test to measure the level of inflammation in the body, with either the erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP)
- The patient's own assessment of their general health which they are asked to rate on a visual scale (this can range from 'very good' to 'very bad')

The results of the above measures are used to calculate a DAS28 score between 0 and 10. A patient is considered to be in remission when they have a score of DAS28 <2.6 out of 10.<sup>i</sup>

### Achieving remission: Treating RA early

People with RA suffer permanent joint damage early on in the disease, and this occurs most rapidly within the first six months.<sup>ii</sup> Therefore, a major goal of disease management is to begin treatment as soon as possible after diagnosis in order to prevent this damage from occurring in the first place and to give people with RA the best chance of achieving a rapid and long-lasting remission.

## Patient expectations

A recent survey of people with RA showed that 65% did not recall ever having discussed remission with their doctor,<sup>iii</sup> demonstrating the ongoing need for patients to be made aware of the goal of remission and the potential to achieve this as a result of their treatment.

Getting the right treatment to achieve remission

Some RA treatments provide relief from the signs and symptoms of RA but do not prevent the worsening of RA in the joints and around the body.<sup>iv</sup>

Newer treatments reduce the signs and symptoms of RA and may slow down or stop the joint damage from occurring, helping people with RA to achieve or move closer to remission.<sup>v</sup> One example is the biologic class of therapy, which are genetically-engineered drugs that have specific targets within the immune system such as cytokines.<sup>v,vi</sup> Cytokines are chemical messengers which contribute to the pain and inflammation of RA, and impact other parts of the body, causing symptoms such as fatigue and anaemia.<sup>vi</sup> Many of the currently available 'biologic' therapies target the cytokine tumour necrosis factor alpha (TNF $\alpha$ ). These treatments are known as TNF inhibitor therapies.<sup>v</sup>

One of the most recent biologic therapies to become available targets a different cytokine called interleukin-6 (IL-6). This treatment has been developed by Roche and Chugai as ACTEMRA (tocilizumab, RoACTEMRA within the EU). Clinical trial data to date has shown that more than half the RA patients treated with ACTEMRA (tocilizumab) achieved disease remission (as defined by DAS28 <2.6)<sup>vii</sup>.

## References

---

<sup>i</sup> National Rheumatoid Arthritis Society, The DAS28 score [http://www.rheumatoid.org.uk/article.php?article\\_id=475](http://www.rheumatoid.org.uk/article.php?article_id=475) Last accessed 21<sup>st</sup> May 2009

<sup>ii</sup> Fex E, Jonsson K, Johnson U and Eberhardt K. Development of radiographic damage during the first 5-6 yr of rheumatoid arthritis. A prospective follow-up study of a Swedish cohort. *Br J Rheumatol* 1996;35:1106-1115

<sup>iii</sup> Opinion Health Online Survey of 474 People with Rheumatoid Arthritis Investigating Quality of Life, September 2008. Funded by Roche. Data on file.

<sup>iv</sup> Patient UK: Management of Rheumatoid Arthritis. <http://www.patient.co.uk/showdoc/40025263/> Last accessed 21<sup>st</sup> May 2009

<sup>v</sup> National Rheumatoid Arthritis Society Website: Getting Established on DMARD Therapy.

[http://www.rheumatoid.org.uk/article.php?article\\_id=171](http://www.rheumatoid.org.uk/article.php?article_id=171) Last accessed 21<sup>st</sup> May 2009

<sup>vi</sup> Odeh M. Role of cytokines in rheumatoid arthritis. *Drug News Perspect* 1998;11(6):331

<sup>vii</sup> Smolen, J. *et al.* Efficacy of Tocilizumab (TCZ) in Rheumatoid Arthritis (RA): Interim analysis of long-term extension trials of up to 2.5 years. Abstract presented at EULAR 2009