Randomised controlled trial of Tumour necrosis factor inhibitors Against Combination Intensive Therapy with conventional disease-modifying antirheumatic drugs in established rheumatoid arthritis: the TACIT trial and associated systematic reviews

David L Scott,[1]* Fowzia Ibrahim,[1] Vern Farewell,[2] Aidan G O'Keeffe,[2] Margaret Ma,[1] David Walker,[3] Margaret Heslin,[4] Anita Patel[4] and Gabrielle Kingsley[1]

[1]Department of Rheumatology, King's College London School of Medicine, London, UK
[2]MRC Biostatistics Unit, Cambridge Institute of Public Health, Cambridge, UK
[3]Musculoskeletal Unit, Freeman Hospital, Newcastle upon Tyne, UK
[4]Centre for the Economics of Mental and Physical Health, Institute of Psychiatry, King's College London, London, UK

*Corresponding author

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Plain English summary

TACIT trial and associated systematic reviews

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Patients with rheumatoid arthritis (RA) usually take methotrexate or similar conventional drugs to modify the course of their disease. These treatments are called disease-modifying antirheumatic drugs (DMARDs). If conventional DMARDs are insufficient patients try high-cost biological treatments. The main biologics are tumour necrosis factor inhibitors (TNFis).

As conventional DMARDs can be given in combination, it is possible that combination DMARDs (cDMARDs) may be equally as effective as but less expensive than TNFis.

We compared these approaches in a trial [Tumour necrosis factor inhibitors Against Combination Intensive Therapy (TACIT)]. We studied patients at 24 specialist centres to ensure that the findings apply throughout England. The trial lasted 12 months. Patients not helped by cDMARDs switched to TNFis after 6 months.

The trial showed that patients starting cDMARDs and patients starting TNFis do equally well. Disability decreased in both groups and quality of life improved over 1 year. Disease activity also fell in both groups. Joint damage stayed much the same. The chance of having side effects and the severity of side effects were similar in both groups. However, cDMARDs cost much less.

When the TACIT trial was completed we looked at all of the other trials published in the field. We did this systematically to make sure that we did not miss any out. These trials also showed that the two approaches give similar improvements over periods ranging from 6 months to 2 years.

We think that cDMARDs and TNFis are equally good in active RA. However, cDMARDs cost much less. As only a few patients underwent long-term remission neither treatment approach seemed ideal.

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Editorial contact: nihredit@southampton.ac.uk

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