

# Baseline Predictors of Remission, Pain and Fatigue in Rheumatoid Arthritis: The TITRATE Trial

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## Research article

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# Abstract

**Background** Clinical trials show intensive treatment to induce remission is effective in patients with highly active rheumatoid arthritis (RA). The TITRATE trial showed that the benefits of intensive treatment also extend to moderately active RA. However, many patients failed to achieve remission or show improvements in pain and fatigue. We investigated whether baseline predictors could identify treatment non-responders. **Methods** The impact of obesity, depression, anxiety and illness perception on RA outcomes, including disease activity, remission, pain and fatigue were determined using a pre-planned secondary analysis of the TITRATE trial data. **Results** Body mass index was associated with disease activity levels and remission: obese patients had a higher overall disease activity and fewer obese patients achieved remission. Intensive management was not associated with increased remission in these patients. Obesity was also associated with increased overall pain and fatigue. Anxiety, depression and health perceptions had no discernible impact on disease activity but were associated with high levels of pain and fatigue. There was a strong association between anxiety and high pain scores; and between depression and high fatigue scores; and health perception was strongly related to both. None of the predictors had an important impact on pain and fatigue reduction in cross-sectional analysis. **Conclusions** Disease activity is higher in obese patients and they have fewer remissions over 12 months. Anxiety, depression and health perceptions were associated with higher pain and fatigue scores. Intensive management strategies need to account for these baseline features as they impact significantly on clinical and psychological outcomes.

# Full Text

This preprint is available for [download as a PDF](#).

# Figures

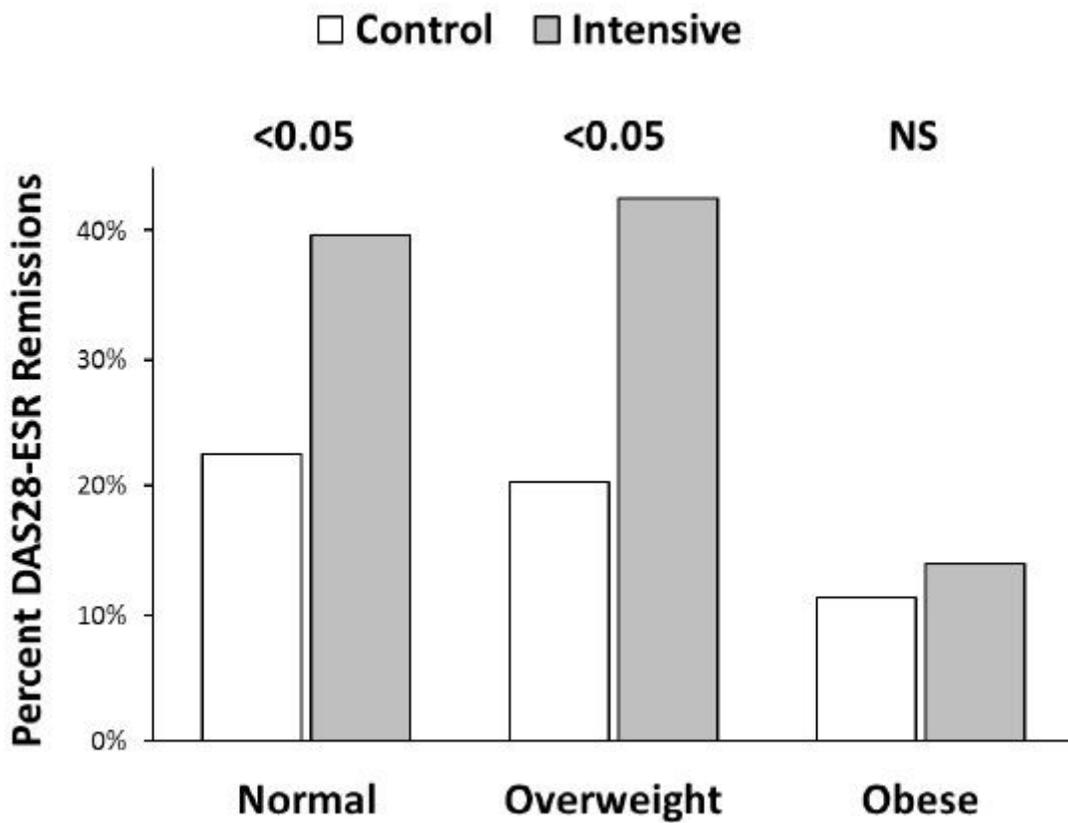


Figure 1

Impact of Baseline BMI on 12 Month DAS28-ESR Remission by Obesity Status. BMI: Normal  $<25 \text{ kg/m}^2$ , Overweight  $25\text{-}30 \text{ kg/m}^2$ , Obese  $>35 \text{ kg/m}^2$ . Significance by Fisher's Exact Test

## Supplementary Files

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- [Supplementaryonlinematerial27.02.2021.pdf](#)