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## **A multi-centre retrospective study to describe the real world effectiveness of golimumab for treating ankylosing spondylitis (AS) in UK clinical practice**

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Background

Tumour necrosis factor- $\alpha$  inhibitors (anti-TNF- $\alpha$ s) have been shown to be highly effective in reducing inflammation in the treatment of Ankylosing Spondylitis (AS)<sup>1</sup> and are recommended by the National Institute for Health and Care Excellence (NICE) for patients who still have evidence of active spinal disease after anti-inflammatory treatment<sup>2</sup>. The clinical effectiveness of golimumab has been demonstrated in the GO-RAISE trial<sup>3</sup> but there are limited Real World Data in a UK-based population.

Objectives

The aims of this study were to describe the real world clinical effectiveness of golimumab and impact of golimumab on NHS resource use. This abstract presents the real world clinical effectiveness data.

Methods

This multicentre observational study of consenting adult patients was carried out in 6 UK NHS hospital rheumatology departments between November 2015 and October 2016. Inclusion criteria included a diagnosis of AS, anti-TNF- $\alpha$ -naïve, treated with at least three doses of golimumab for AS, with first dose at least 12 months before data collection. Effectiveness was measured using the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI; total score and sub-scores), Spinal Pain Visual Analogue Scale (VAS) and Bath

Ankylosing Spondylitis Functional Index (BASFI). Data were collected through a retrospective medical chart review at the following time points: closest observation prior to golimumab initiation (A), 6 months (B) and 12 months (C) post golimumab initiation.

## Results

The study enrolled 47 eligible patients 35 (74%) of whom were male, with a mean age of 46.2 years. Overall mean BASDAI score reduced (improved) by 4.2 points from (A) to (B) [n=43], and by 4.5 points from (A) to (C) [n=39] (Mann-Whitney  $p<0.001$ ). From (A) to (C), 25/39 (64%) achieved a treatment response, as defined by BASDAI 50 (change of at least 50% in BASDAI score) and 33/39 (85%) achieved a reduction of two points or more<sup>2</sup>. Improvements were seen in level of fatigue (reduction in 3.3 points between (A) and (C) [n=28]), pain and discomfort and morning stiffness. 21/26 (81%) of patients achieved a reduction in spinal pain VAS by 2cm or more from (A) to (C) indicating a treatment response. Overall mean BASFI score reduced (improved) by 4.5 points from (A) to (B) [n=28], and by 3.8 points from (A) to (C) [n=24] (Mann-Whitney  $p<0.001$ ).

## Conclusion

Golimumab has been shown to produce clinically meaningful outcomes in a UK population that are sustained during the first 12 months of treatment, supporting clinical trial evidence that it is a clinically effective treatment choice for people with AS.

## References

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