Cost-Effectiveness of Tofacitinib-Containing Sequences for Rheumatoid Arthritis Patients in Spain


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BACKGROUND

Current available therapies for rheumatoid arthritis (RA) treatment include conventional disease-modifying antirheumatic drugs (typically, methotrexate [MTX]), biological agents (usually tumor necrosis factor [TNF] inhibitors) and Janus kinase (JAK) inhibitors. 1 Tofacitinib, is an oral JAK inhibitor, approved for patients with moderate to severe RA which are intolerant or with inadequate response to MTX. 2

OBJECTIVE

To determine the cost-effectiveness of initiating tofacitinib treatment in patients with moderate to severe RA showing an inadequate response (IR) to MTX and a 2nd line therapy with any anti-TNF (TNF-IR population), in comparison to alternative treatment sequences excluding tofacitinib.

METHODS

A patient-level microsimulation model was used to estimate the lifetime costs and quality-adjusted life years (QALY) associated to different sequences of therapies starting with tofacitinib (5mg BID) followed by biological therapies to be compared with sequences of biological treatments only (excluding initial tofacitinib). 3

The sequences were defined by a panel of experts, according the clinical practice in Spain. (Figure 1)

RESULTS

In scenario 1, initial treatment with tofacitinib+MTX provided greater efficacy (0.16 additional QALY) than the sequence only with biological drugs. The tofacitinib-containing sequence resulted in lower total cost (-€34,475) compared the comparator sequence, being a dominant option. (Table 3)

In scenario 2, the tofacitinib-containing sequence resulted less effective (-0.06 incremental QALY) but remained a cost-saving option versus the alternative sequence (-€31,158 incremental cost). (Table 3)

CONCLUSION

Positioning tofacitinib as initial second-line therapy followed by other biologicals, resulted a cost-saving strategy compared to the continuation of treatment with biologicals only, in moderate to severe RA, TNF-IR patients, in Spain.

REFERENCES

2 Yajello SM, PC. www.eur.org/ema/ema/
3 Glarton L, et al. CMOJ. 2016;11:2
8 Statistics National Institute. www.iva.es
11 BGT Plus. www.portaltara.com
13 et al. Okejii consulting. www.okejii.com

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