

<b>Title</b>	Drugs for the Management of Rheumatoid Arthritis: Clinical Evaluation
<b>Agency</b>	CADTH Suite 600, 865 Carling Avenue, Ottawa, Ontario K1S 5S8, Canada Phone: 1 613 226 2553, Fax: 1 613 226 5392; <a href="http://www.cadth.ca">www.cadth.ca</a>
<b>Reference</b>	Drugs for the management of rheumatoid arthritis: clinical evaluation. Ottawa: CADTH; 2018 Mar. (CADTH health technology assessment; No. 146). ISSN: 2369-7377. Available from: <a href="https://cadth.ca/drugs-management-rheumatoid-arthritis">https://cadth.ca/drugs-management-rheumatoid-arthritis</a>

### **Aim**

The aim of this report was to review the evidence regarding the benefits and harms of drugs used in adult patients with moderate to severe rheumatoid arthritis in whom treatment with methotrexate has failed or who are intolerant to methotrexate.

### **Conclusions and results**

This report included 91 unique studies. The outcomes that were included in the report and for which sufficient data were available are: disease response, disease activity, disability, remission, serious adverse events, and withdrawal due to adverse events.

For rheumatoid arthritis patients with moderate to severe disease in whom treatment with methotrexate has failed or who are intolerant to methotrexate, conventional synthetic disease-modifying antirheumatic drugs (alone or in combination), biologics (including biosimilars), and targeted synthetic disease-modifying antirheumatic drugs appear to be effective for different clinical outcomes. The review was not able to identify if any one treatment has overall greater benefits than the others because not all treatments had data available for each of the outcomes and there were often no clinically important differences in the head-to-head comparison results of these treatments.

It should be noted that the results of the review are limited to the shorter-term, evidence from observational studies was not included in the review, and the majority of included studies had a high or unclear risk of bias. Because of these limitations, results should be interpreted with caution.

### **Recommendations**

Not applicable.

### **Methods**

A literature search was performed on May 3, 2016 in MEDLINE, Embase, the Cochrane Library (Wiley), Cochrane CENTRAL, and PubMed. Regular database search alerts were established to update the search until March 1, 2017. References of three Cochrane reviews were also considered. Two reviewers independently selected included studies according to predetermined selection criteria; data extraction and Cochrane Risk of Bias assessments were performed by one reviewer and verified by a second reviewer.

A systematic review of published clinical evidence and a network meta-analysis were conducted. Input from patient groups, clinicians, and other stakeholders was considered and incorporated into the review. Sensitivity analyses were conducted to explore the robustness of the findings.

### **Further research and reviews required**

Not applicable.

### **Written by**

CADTH, Canada