2. Introduction

Background

Inflammatory arthritis (IA) is characterised by abnormal inflammation in the joints, ligaments and tendons, resulting in pain, stiffness, swelling and loss of function. Uncontrolled inflammation may result in irreversible joint damage. There are many types of IA including rheumatoid arthritis (RA), spondyloarthritis (SpA), psoriatic arthritis (PsA), crystal arthritis (including gout and pseudogout) and autoimmune connective tissue diseases such as systemic lupus erythematosus (SLE). In most cases, there is no cure for IA, so treatments aim to relieve pain and stiffness, improve ability to move, and prevent damage to the joints.

Disease-modifying anti-rheumatic drugs (DMARDs) are the cornerstone of pharmacologic treatment for IA. DMARDs control the inflammation and thus reduce symptoms and prevent joint damage. They are categorised according to their structure and mechanisms of action:

- Conventional synthetic DMARDs (csDMARDs) e.g. methotrexate, sulfasalazine and hydroxychloroquine - do not target a specific molecular structure
- Targeted synthetic DMARDs (tsDMARDs) e.g. tofacitinib and baricitinib (a newer class of medications) - designed to target a specific molecular structure
- Biologic DMARDs (bDMARDs) are derived biologically - designed to target specific cells or proteins involved in the inflammatory response present in IA. However, as the complex structure of biologically derived proteins cannot be reproduced exactly, bDMARDs are further classified into bio-originator and biosimilar DMARDs, to specify whether they were made by the first or subsequent manufacturers.

Purpose

The objective of this living guideline is to present the best available, current scientific evidence for pharmacological management of the most common forms of IA, namely RA, PsA and axial SpA. Topics and questions identified as having highest clinical relevance to medical practitioners who treat IA are being prioritised. These questions include choice of DMARD, switching, combination therapy, down-titration of treatment and perioperative DMARD use, as well as the management of other medications, such as opioids, glucocorticoids and vaccination. As a living guideline, questions will continue to be addressed, new recommendations developed, and existing recommendations updated on an ongoing basis. Recommendations are intended as guides to courses of action subject to clinical judgement and patient preferences.

Target population and audience

This living guideline applies to all adults diagnosed with RA, PsA or SpA. It is intended for use by medical practitioners who treat IA. This is primarily rheumatologists; however, the guideline will also be relevant to GPs and others involved in the care of patients with IA and also for pharmacists and consumers. This is reflected in the multidisciplinary composition of the guideline development working group that includes experts in rheumatology, general medicine, clinical immunology, health advocacy, pharmacy, rheumatology nursing and allied health.

The recommendations in this living guideline apply to all healthcare settings in Australia including public and private healthcare settings.

About this living guideline

This living guideline is being produced by the Australia and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network, the Australian Rheumatology Association (ARA) and Cochrane Musculoskeletal. Since inception in 2019, funding to support the development of the guideline has been provided by:

- Australia and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network (2018 onwards)
- Australian Department of Health, Value in Prescribing (VIP) bDMARDs Program Grant, awarded to the Targeted Therapies Alliance led by NPS MedicineWise (2019 to 2022)
- Cochrane Musculoskeletal (which has NHMRC Cochrane editorial base funding until mid-2026)
- Victorian Government via the Australian Living Evidence Consortium (ALEC) (2022 to 2024)
- NHMRC Australia and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network Centre of Research Excellence (2018 to 2022; 2023 until 2027)

Updating

Evidence searches underpinning living recommendations will be conducted every three months and the results presented in an evidence summary update. The emergence of new impactful evidence will be reflected in the publication of a new version of a recommendation. The new version may involve changes to the recommendation itself and/or to the text supporting the recommendation. The nature of any changes to a recommendation or supporting text will be highlighted with specific labels. For example, the label might read 'Updated' or 'Evidence updated, no change to recommendation'. A review of each living recommendation will be conducted annually to ensure the currency of information relating to the evidence to decision criteria, the ongoing applicability of the evidence search terms and whether further living updates are warranted.

Guideline monitoring and auditing

Initial guideline implementation is being monitored through programs and interventions managed by NPS MedicineWise as part of the VIP program grant. ANZMUSC and ARA will aim to build on these interventions beyond the life of the grant. To date, evaluation indicators include website traffic analysis, attendance/participation rates at webinars and survey feedback.

Publication approval