Australian Rheumatology Association

NPS MEDICINEWISE

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DR SAM SAMPLE

4 May 2022

Rheumatoid arthritis: Quality use of b/tsDMARDs and other medicines

Dear Dr Sample,

The Australian Rheumatology Association (ARA) and NPS MedicineWise as part of the *Targeted Therapies Alliance*, have collaborated to produce this Practice Review. You may have received a previous Practice Review in Oct 2020 and based on feedback, we have revised and updated the data for this report.

In this Practice Review, you will find your individual data of medicines dispensed on the PBS for your patients with rheumatoid arthritis (RA) who were treated with a b/tsDMARD. It provides an opportunity for you to reflect on your current practice including how it compares to that of your peers. The data are provided alongside distillations of best practice guidelines, recent evidence[1–3] and resources.

The aim of this report is to improve the quality use of medicines in the management of (RA) by providing insights into the prescribing of the following medicines used for patients with RA:

- biological disease-modifying antirheumatic drugs (bDMARDs)
- targeted synthetic DMARDs (tsDMARDs)
- conventional synthetic DMARDs (csDMARDs)
- glucocorticoids
- opioids.

Your PBS data are provided confidentially to you only and are intended for personal reflection on your practice. Data are not used for any regulatory auditing purposes. This report is being sent to rheumatologists and immunologists who prescribed b/tsDMARDs for RA in 2021.

For RACP Fellows, the time you spend using this report to review and adjust your practice meets the requirements for a category 3 (measuring outcomes) CPD activity.

Additional resources
As part of the *Targeted Therapies Alliance*, additional resources developed as part of the ViP bDMARDs program such as the living guidelines are also available. For more information, visit our website at: nps.org.au/bdmards/rheumatology.

We hope this PBS Practice Review will be of value to you and welcome your feedback on this report.

Yours sincerely,

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President, Australian Rheumatology Association

Ms Katherine Burchfield
Chief Executive Officer, NPS MedicineWise

TARGETED THERAPIES ALLIANCE

Helping consumers and health professionals make safe and wise therapeutic decisions about biological disease-modifying antirheumatic drugs (bDMARDs) and other specialised medicines. Funded by the Australian Government Department of Health through the Value in Prescribing bDMARDs Program Grant.

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Contents

Notes about the data:

The data provided in this report are from Services Australia and include the following medicines that you (and others where specified) prescribed and that were dispensed based on PBS item codes entered at the point of dispensing:

- csDMARD[a] use in patients who went on to a b/tsDMARD for RA: methotrexate (MTX), sulfasalazine, hydroxychloroquine for any indication, leflunomide for RA.
- b/tsDMARDs for RA: adalimumab (separated by originator and biosimilars), certolizumab, etanercept (separated by originator and biosimilars), golimumab, infliximab, baricitinib, tofacitinib, upadacitinib, rituximab, abatacept, tocilizumab
- glucocorticoids for any indication for patients who are on a b/tsDMARD
- opioids for chronic non-cancer pain for patients who are on a b/tsDMARD. For the full list of opioid medicines included in this report see nps.org.au/pbs-bdmards.

Your PBS data snapshot

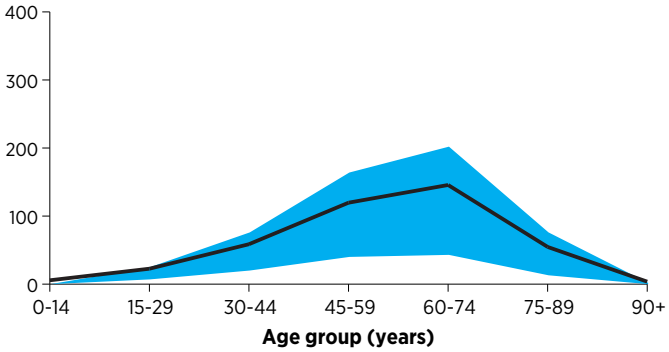
From 1 Jan 2020 to 31 Dec 2021 you had:

- **85** patients for whom you prescribed a b/tsDMARD for RA (starting or continuation of treatment). Of these, **43** patients were started on b/tsDMARD treatment by you. See page 8 for definition of starting treatment.

Practice profile

The practice profile is provided to help you interpret your prescribing data. This is based on the number of patients dispensed a prescription written by you for a b/tsDMARD for RA or csDMARD for any indication, between 1 Jan 2020 and 31 Dec 2021.

Fig. 1 – Age profile of your patients (1 Jan 2020 to 31 Dec 2021)



The black line represents the age profile of patients in your practice based on dispensing of medicines as described above. The shaded area lies between the 25th and 75th percentile for included rheumatologists and immunologists nationally.

See page 8 for more information about the data included in this report.

[a] The indication for csDMARD prescribing cannot be determined from PBS data except for leflunomide. This report only considers the prescribing of leflunomide for RA.

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Use of csDMARDs before starting b/tsDMARD treatment

MTX remains the first line DMARD for RA.[1–3]

- Consider using methotrexate in combination with other DMARDs as initial therapy in people with rheumatoid arthritis.[4]
- Switching from oral to subcutaneous MTX is highly effective: In a study of over 2600 patients 72% of patients who switched from oral to subcutaneous remained on subcutaneous MTX for the duration of the 5-year observational period without the addition of a biologic.[5]

Updated guidelines

The 2021 American College of Rheumatology (ACR) guideline[3] for the treatment of RA reinforces the role of MTX as the anchor drug in RA, and advocates for maximising the use of MTX prior to switching or adding DMARDs. The guidelines recommend:

- Initiating oral MTX, and titrating to a weekly dose of at least 15mg within 4–6 weeks
- to potentially improve GI tolerance of MTX try:
  - Splitting the dose of oral MTX over 24 hours
  - Increasing the dose of folic/folinic acid
  - Switching to subcutaneous MTX
- Switching to subcutaneous MTX is recommended over adding or switching to alternative DMARDs for patients who are not reaching treatment target on oral MTX.

Consider your prescribing practices in line with your prescribing data below (figures 2,3)

Fig. 2 – Types of csDMARD dispensed *before starting* b/tsDMARD treatment for RA

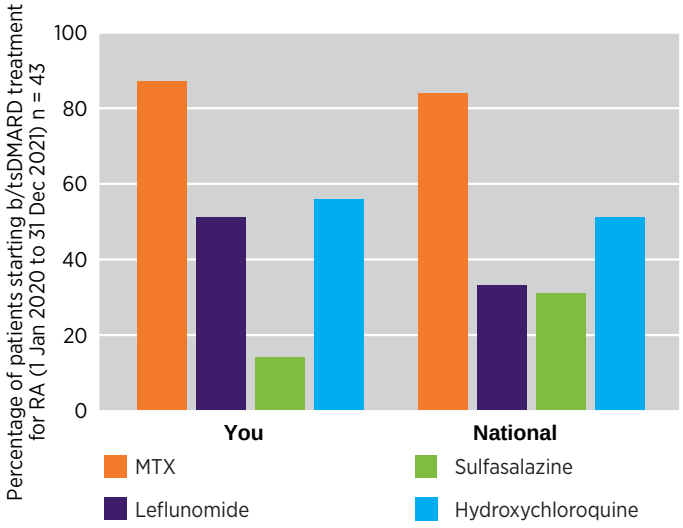
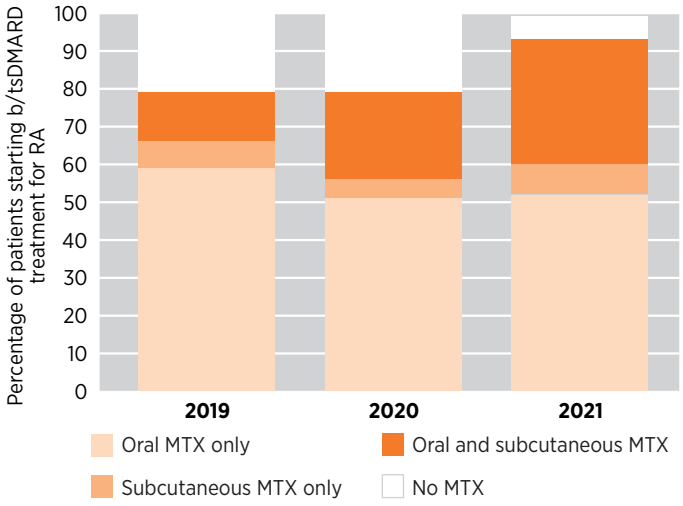


Fig. 3 – Types of MTX dispensed *before starting* b/tsDMARD for RA in 2019–2021



	Very likely	Moderately likely	Somewhat likely	Not likely
After reviewing the evidence and your practice, how likely are you to titrate the MTX dose up to 20mg/week within 6 weeks of initiation?				
How likely are you to use strategies to improve MTX tolerance before moving to a different therapy?				
How likely are you to prescribe subcutaneous MTX before initiating a b/tsDMARD?				
Is your practice in line with current guideline recommendations? If not, what steps could you take?				

Resources:

ARA Podcast: The contemporary role of methotrexate and glucocorticoids in RA. (4th May, 2021)
rheumatology.org.au/For-Healthcare-Professionals/Podcasts

[a] The indication for csDMARD prescribing cannot be determined from PBS data except for leflunomide. This report only considers the prescribing of leflunomide for RA.
[b] csDMARDs prescribed by any prescriber and dispensed between mid-2017 and Dec 2021 are considered here.

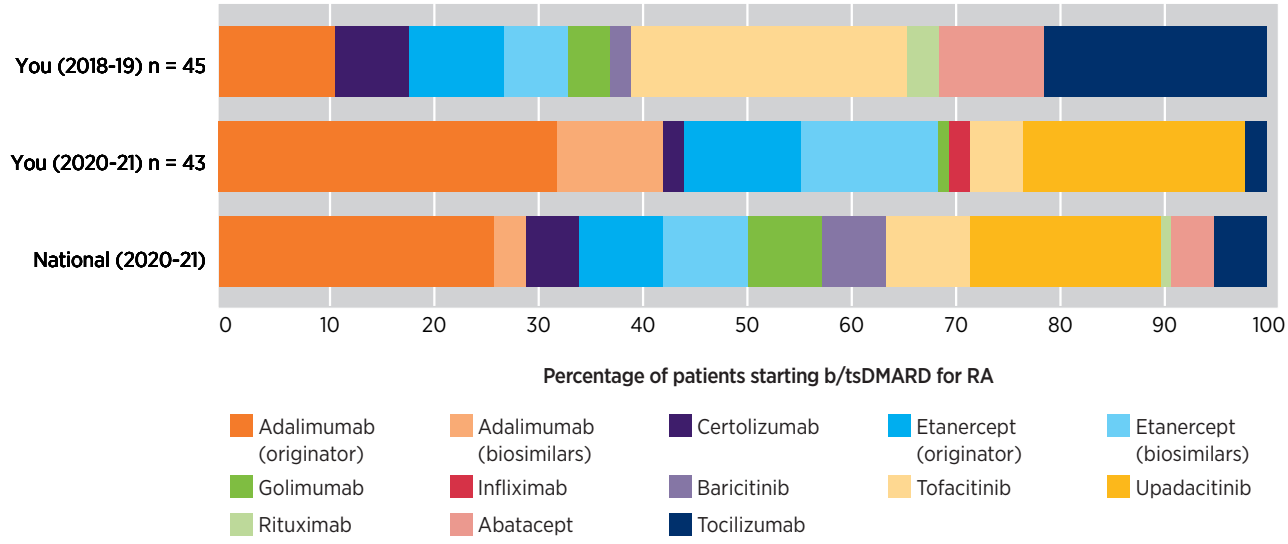
Choice of b/tsDMARD prescribing

Compare your choice of b/tsDMARDs and prescribing of biosimilars with the practice of your peers.

- b/tsDMARDs are generally considered to have comparable efficacy for RA[1,2] and choice of therapy should be informed by factors including patient preferences and comorbidities.
- Biosimilar medicines have demonstrated equivalent safety and efficacy to the originator for patients starting bDMARD therapy.[6] Safety and efficacy of a single switch from originator to biosimilar has also been demonstrated, although there is limited data regarding repeated switches between agents.[6,7]
- ARA advice regarding the use of biosimilars can be found at: https://tinyurl.com/2p844a3p

Consider your prescribing of b/tsDMARDs dispensed for your patients (Fig 4 and Fig 5) and compare with national data (Fig 4 and Fig 6)

Fig. 4 – First-line choice of b/tsDMARD treatment for patients with RA



* Biosimilar medicines for etanercept and adalimumab became available on the PBS for RA in 2017 and 2021 respectively.

Fig. 5 – Numbers of patients dispensed b/tsDMARD prescriptions (counts include original and repeats) in each calendar year prescribed by you

Class	b/tsDMARD	2017	2018	2019	2020	2021
TNF inhibitors	Adalimumab (originator)	67	72	62	63	80
	Adalimumab (any biosimilar)	0	0	0	0	19
	Certolizumab	14	14	16	12	12
	Etanercept (originator)	42	39	43	42	46
	Etanercept (any biosimilar)	0	4	4	6	20
	Golimumab	10	8	12	7	6
	Infliximab[c]	0	0	0	0	2
JAK inhibitors	Baricitinib	0	0	2	0	0
	Tofacitinib	5	9	40	46	31
	Upadacitinib	0	0	0	22	37
B lymphocyte modulator	Rituximab[c,d]	3	4	4	4	6
T lymphocyte modulator	Abatacept	10	20	22	20	18
IL-6 inhibitor	Tocilizumab	44	57	60	49	45

[c] Data for infliximab and rituximab is not separated into originator and biosimilars.
[d] Rituximab originator product (MabThera) was removed from the PBS April 2021, only biosimilars are PBS funded.

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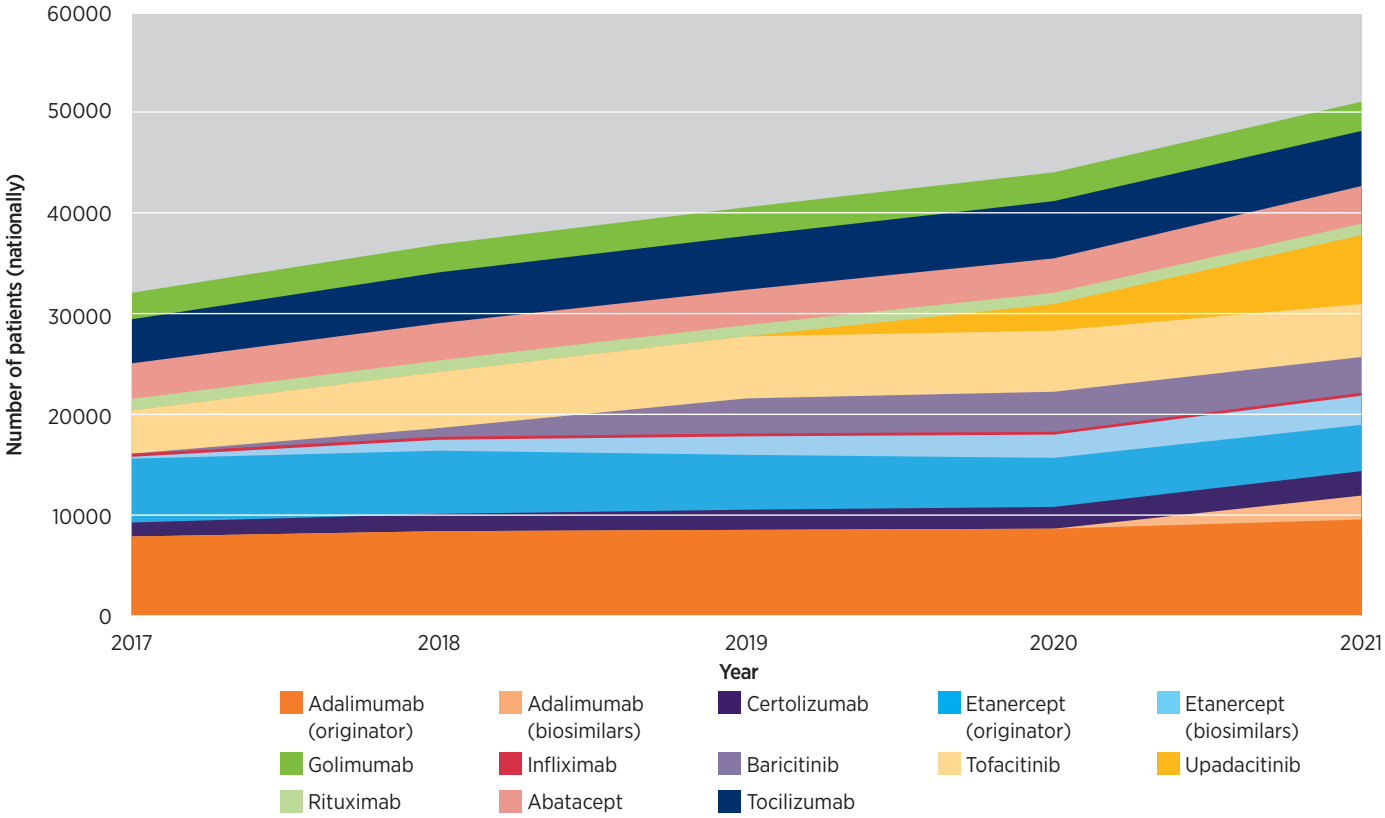
National trends of b/tsDMARDs prescribing

Fig. 6 – Number of unique patients dispensed prescriptions for b/tsDMARDs for RA (Australia wide, 2017–2021)



* In September 2021, the US Food and Drug Administration issued a Drug Safety Communication[8] warning that JAK inhibitors may be associated with an increased risk for major cardiovascular events and malignancy.
In July 2021, global shortages of tocilizumab occurred due to its use in treating severe COVID-19.[9]

	Very likely	Moderately likely	Somewhat likely	Not likely	I already prescribe biosimilars
After considering the evidence, how likely are you to prescribe biosimilars?					

How does this compare with the practice of your peers?

Updated guidelines

The Australian Living Guideline for the Pharmacological Management of Inflammatory Arthritis[4] (http://mskguidelines.org/) conditionally recommends:

- Considering stepwise reduction in the dose of b/tsDMARD in people with RA who have been in sustained low disease activity or remission for at least 6 months.
- Not ceasing b/tsDMARDs abruptly without prior dose reduction.

Resources: b/tsDMARD down-titration

Use the b/tsDMARD down-titration algorithm and factsheet to assist with shared decision making.
Available at www.nps.org.au/bdmards/rheumatology.

Glucocorticoid use

Avoid use of glucocorticoids for longer than 6 months and clearly communicate to GPs how to manage glucocorticoids for your patients.

Updated guidelines

- The Australian Living Guidelines (http://mskguidelines.org/) conditionally recommend against the routine use glucocorticoids as a long-term (>6 months) adjunct to DMARDs for the treatment of RA.[4]
- The 2021 ACR Guidelines conditionally recommend commencing csDMARDs **without** glucocorticoids in DMARD-naïve patients.[3]

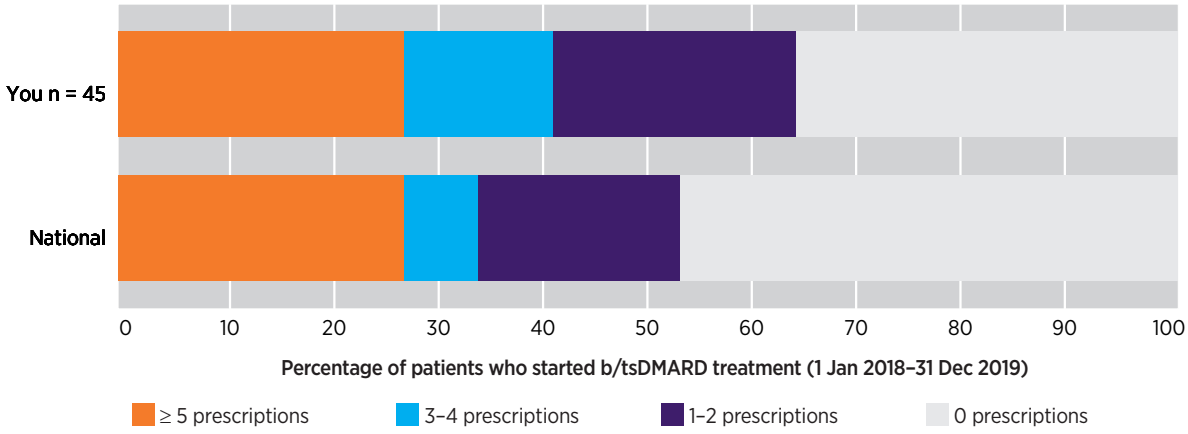
Consider the data below (Figure 7) for glucocorticoid use in your patients with RA on b/tsDMARDs and compare with national data.

Between 1 Jan 2018 and 31 Dec 2019 you started b/tsDMARD treatment for RA for **45** patients. Of these **45** patients, after 6 months or more of b/tsDMARD treatment:

- **29** (**64%**) were dispensed prescriptions for glucocorticoids prescribed **by any prescriber** including you during the following 18 months (see Fig. 7)
- **13** (**29%**) were dispensed prescriptions for glucocorticoids that were prescribed **by you** during the following 18 months.

Approximately 53% of patients nationally were prescribed at least one glucocorticoid prescription ≥ 6 months after starting b/tsDMARD treatment.

Fig. 7 – Dispensing of glucocorticoid[e] ≥ 6 months after starting b/tsDMARD treatment for RA



How does the rate of glucocorticoid use in your patients compare with the practice of your peers?

Is the rate of glucocorticoid use in your patients in keeping with current guideline recommendations? What steps will you take to reduce long-term glucocorticoid use in your patients?

Resources: managing flares

The Australian Living Guidelines conditionally recommend the use of glucocorticoids for the treatment of flares, in the lowest possible dose for the shortest possible time.[4]

A flare action plan template, which can include non-pharmacological and pharmacological strategies, is available at: nps.org.au/flares

[e] Glucocorticoid prescriptions include all oral (tablet and liquid) preparations of prednisone and prednisolone. Prescribing of glucocorticoids by any prescriber is included.

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Opioid use

Discuss the limited role of opioids for patients with RA and identify patients who would benefit from opioid tapering.

Updated guidelines

The Australian Living Guideline for the Pharmacological Management of Inflammatory Arthritis[4] (http://mskguidelines.org/) conditionally recommends:

- Not routinely using opioids for the treatment of pain in RA.
- A brief course of a short-acting opioid may be considered for severe pain when other analgesic options have failed.

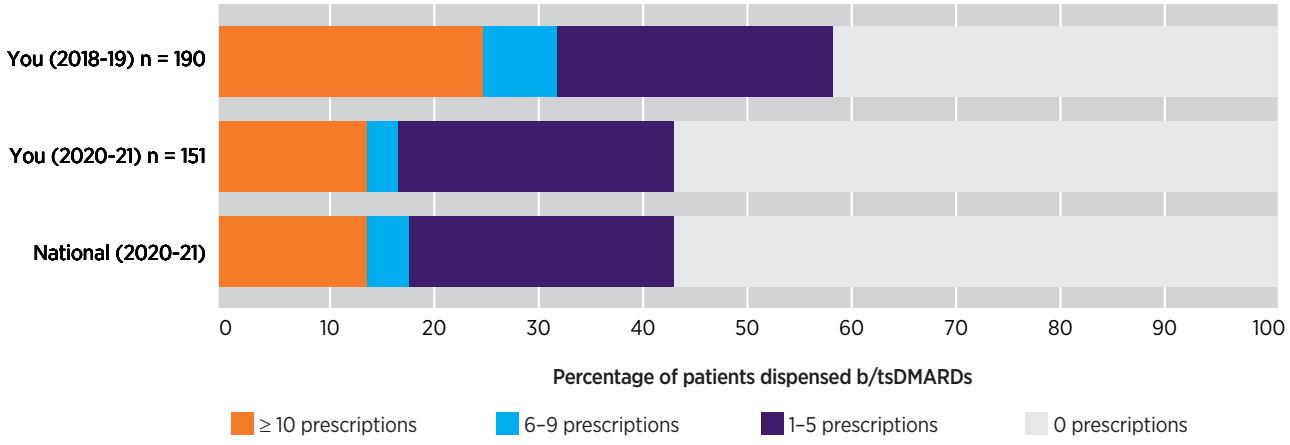
Consider your prescribing data below and compare with national data.

Note, whilst the indication for the opioids cannot be determined based on PBS data available, consider the need to review concurrent opioid use in your patients with RA.

	1 Jan 2018 – 31 Dec 2019	1 Jan 2020 – 31 Dec 2021
Prescribed b/tsDMARDs for RA	190 patients	151 patients
▹ dispensed prescriptions for opioids[f,g] prescribed **by any prescriber** including you (see Fig. 8)	112 (59%)	62 (41%)
▹ dispensed prescriptions for opioids[f,g] prescribed **by you**	35 (18%)	10 (7%)

Approximately 43% of patients nationally who were already prescribed b/tsDMARDs for RA were also prescribed opioids.[f,g]

Fig. 8 – Prescribing of opioids[f,g] for patients also prescribed b/tsDMARDs for RA



How does the rate of opioid use in your patients compare with the practice of your peers?

Is the rate of opioid use in your patients in keeping with current guideline recommendations? What steps will you take to reduce opioid use in your patients?

Resources:

- ARA Webinar: Opioids and Inflammatory Arthritis. (17 February 2021) https://rheumatology.org.au/For-Healthcare-Professionals/Past-Webinar-Recordings/ViPP-webinars
- A range of resources for health professionals and patients to assist with appropriate prescribing and tapering of opioids for chronic non-cancer pain is available: https://www.nps.org.au/professionals/opioids-chronic-pain

[f] To focus on opioid use likely to be for chronic non-cancer pain, PBS codes related to medicines indicated for opioid dependence, palliative care, dental pain and cancer pain are not included.

[g] To be included, both the opioid and the b/tsDMARD prescriptions must have been dispensed in the indicated time period AND the opioid prescription must have been dispensed after the earliest b/tsDMARD. Prescribing of opioids by any prescriber is included.

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About the data

Your prescribing data

Your data are compared to national aggregate data in this report as minimal variation was seen between states (see **nps.org.au/pbs-bdmards** for state-level data). Prescriptions for medicines both above and below co-payment are included.

Where timeframes are given, there may be a difference between the time you wrote the prescription and the date the prescription was dispensed. Data reflect the date the prescription was dispensed, and do not reflect the duration of use of the medicine by the patient.

Indication for use of medicines

The indication for prescribing of b/tsDMARDs and leflunomide is known to be for RA (based on PBS authority item codes). The indication for prescribing of MTX, sulfasalazine, hydroxychloroquine, glucocorticoids and opioids cannot be determined from PBS data, however this report only looks at the use of these medicines for patients who also went on to use, or previously used b/tsDMARDs for RA.

Starting b/tsDMARD treatment

This refers to patients for whom you started a b/tsDMARD medicine for the treatment of RA in the time period specified. Between February 2017 and this time, these patients had not had another prescription dispensed for a b/tsDMARD for RA from you or any other prescriber.

References available online at: **nps.org.au/pbs-bdmards**

Acknowledgments and contributions

Developed with the guidance of ARA representatives: Prof Catherine Hill, Dr Claire Barrett and Dr Premarani Sinnathurai, together with members of the Targeted Therapies Alliance (ARA, NPS MedicineWise and University of South Australia).

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About NPS MedicineWise

Independent, not-for-profit and evidence-based, NPS MedicineWise enables better decisions about medicines, medical tests and other health technologies.

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For queries about your data or any of this information, contact NPS MedicineWise: 02 8217 8700 info@nps.org.au

Updating your details

If provided, this Practice review was sent to your preferred email and mailing address. If no email or mailing address was provided, it was sent to your mailing address as held at Services Australia. To update your preferred mailing address with Services Australia:

Log in to your Health Professional Online Services (HPOS) account and change your details
https://www.servicesaustralia.gov.au/organisations/health-professionals/services/medicare/hpos

OR

Send your full name, provider number and new preferred mailing address to **provider.registration@servicesaustralia.gov.au** from a personal email address that clearly identifies you, or is the email address stored on the Medicare Provider Directory.

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