



COVID-19 Vaccination for People with autoimmune inflammatory rheumatic diseases (AIRD) 07 September 2021

Why is it important for me to have the vaccine?

Some diseases (including rheumatoid arthritis) are caused by the body's immune system, which usually protects us from infection. When the immune system is affected by arthritis or drugs to treat the condition, the risk from COVID-19 may be increased.

If you get vaccinated, you will be less likely to get COVID-19. Even if you are infected, it is more likely to be a milder illness.

People who catch COVID-19 can become very unwell. Many people will need hospital treatment even if they do not have a health condition.

What vaccine will be available?

Two COVID-19 vaccines are currently available in Australia – the AstraZeneca (Vaxzevria/Oxford) vaccine and the Pfizer (Comirnaty) vaccine. **Both are suitable for rheumatology patients whose immune system may not be strong.** The AstraZeneca vaccine is a viral vector vaccine. The Pfizer vaccine uses messenger RNA (mRNA).

Other vaccines are likely to be available in Australia later in 2021. The COVID-19 vaccines which will be available in Australia are safe for people with arthritis and people taking drugs that suppress the immune system, even if the condition is active. This is because none of these is a "live" vaccine.

The Australian Technical Advisory Group on Immunisation (ATAGI) currently recommends the use of the Pfizer vaccine over the AstraZeneca vaccine in adults aged < 60 years who have not already received a first dose of AstraZeneca vaccine. The Pfizer vaccine is also the preferred vaccine in patients with: a past history of cerebral venous sinus thrombosis (CVST), a past history of heparin-induced thrombocytopenia (HITT), a past history of idiopathic splanchic (mesenteric, portal, splenic) vein thrombosis and antiphospholipid syndrome with thrombosis.

The AstraZeneca vaccine can be used in adults aged under 60 years where the benefits are likely to outweigh the risks for that individual and the person has made an informed decision based on an understanding of the risks and benefits.

People who have had their first dose of the COVID-19 AstraZeneca vaccine without any serious adverse events or allergic reactions can safely be given their second dose. This includes adults under the age of 60. People who have had blood clots associated with low platelet levels after their first dose of COVID-19 AstraZeneca should not be given the second dose.

People over the age of 60 can receive either vaccine (provided that they don't have the conditions listed above) as the benefits of the AstraZeneca vaccine continue to outweigh the risk of adverse effects in this age group.

When will people with rheumatology conditions receive the vaccine?

In Australia anyone with rheumatology conditions aged >12 years can now receive the vaccine.

Protection from COVID-19 and the “opening up” of Australia

Both the AstraZeneca and Pfizer COVID-19 vaccines are very good at stopping symptoms caused by COVID-19.

This is what real world use of the vaccines has shown so far:

- Both the AstraZeneca (Oxford) and Pfizer (Comirnaty) vaccines prevented COVID-19 symptoms in 55-70% of people after the first dose and in 85-90% of people after the second dose.
- Antibody levels are generally lower in immunocompromised people however, it is likely that the vaccines still offer some protection against COVID-19.
- Some countries are recommending a third dose of the vaccine in patients who are severely or moderately immunocompromised. This is not currently recommended in Australia.

Need for a second dose

The AstraZeneca vaccine requires a second dose, usually 4-12 weeks after the first dose.

The Pfizer vaccine requires a second dose, usually 21 days after the first dose.

The first dose does provide some protection. The second dose gives more long-term protection from COVID-19.

Will the drugs that I take for my condition affect the way the vaccine works?

Some people who are taking drugs that suppress the immune system may be given advice to continue avoiding exposure to COVID-19 after they have had the vaccine. This is because their medications could mean their immune system doesn't respond as strongly to the vaccine as people who don't take these drugs. **This does not mean you should stop your treatment, because this can result in a flare of your condition which puts you at greater risk from COVID-19.** Everyone in Australia will need to follow Government advice on reducing the spread of COVID-19, even after they have had the vaccine.

Can I have other vaccines (e.g. influenza vaccine) at the same time as the COVID-19 vaccine?

The administration of any other vaccine on the same day as the COVID-19 vaccine is generally not recommended. The preferred minimal interval between the COVID-19 vaccine and the influenza vaccine is 7 days (previously 14 days). In some situations a shorter interval is acceptable (including co-administration) You do not need to delay your influenza vaccine until you complete the course of two COVID-19 vaccines.

Should I delay my rituximab treatment so that I can have the COVID-19 vaccine?

To ensure the best response to the COVID-19 vaccine, it is recommended that vaccination is performed towards the end of a rituximab dosing cycle or before initiation of rituximab therapy. Please discuss the timing with your rheumatologist.

Should I continue to take methotrexate when I have the COVID-19 vaccine?

There is some evidence that responses to the COVID-19 vaccine are reduced in people treated with methotrexate. Therefore, interruption of methotrexate therapy during COVID-19 vaccination may be considered, but only in patients with stable rheumatic disease at low risk of flare, or those for whom protection from COVID-19 is of particular importance. **This decision to hold methotrexate for one or two doses following each vaccination should be individualised and discussed with your treating rheumatologist.**

What about other disease modifying antirheumatic drugs (DMARDs)?

A number of anti-rheumatic drugs can reduce the response to the COVID-19 vaccine. Please follow the advice of your rheumatologist.

More information on the use of other immunomodulatory medicines with the COVID-19 vaccine is available here: <https://drive.google.com/file/d/16uiV5Ug51NiuPi5m1TolsXMfrhxbqgFX/view>

Can I have denosumab (Prolia) at the same time as the COVID-19 vaccine?

There is currently no evidence to support separating the doses of denosumab and the COVID-19 vaccine. If they are to be given on the same day it would be advised to use different injection sites for both to minimise the possibility of an injection site reaction.

Can I have surgery after having the COVID-19 vaccine?

Surgery guidelines recommend people do not have major surgery and vaccines within one week of each other. This is because both surgery and the vaccine can cause a fever.

Can I have the COVID-19 vaccine if I am pregnant or breastfeeding?

The Australian Government recommends the use of the Pfizer vaccine in pregnant women at any stage of their pregnancy. This is because the risk of severe outcomes from COVID-19 is significantly higher for pregnant women and their unborn baby. Women who are trying to become pregnant do not need to delay vaccination or avoid becoming pregnant after vaccination. More information can be found here; <https://www.health.gov.au/news/joint-statement-between-ranzcog-and-atagi-about-covid-19-vaccination-for-pregnant-women>

Either the AstraZeneca or Pfizer vaccine can be given to women who are breastfeeding.

Breastfeeding women do not need to stop breastfeeding to receive the vaccine. More information can be found here; https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/News/RANZCOG-ABA-NZBA-COVID-19-vaccination-and-breastfeeding-infographic-final.pdf

You can talk to your midwife and/or rheumatology healthcare team if you are not sure what to do.

Can children have the COVID-19 vaccine?

All children > 12 years will be eligible from the 12 Sept 21 to receive the COVID-19 vaccine. More information can be found here: [ATAGI statement on the use of COVID-19 vaccines in all young adolescents in Australia | Australian Government Department of Health](#)

Are there any side effects?

Some people will get mild side effects. These can include pain where the injection goes in, tiredness, headache and aching of muscles. Serious reactions like allergic reactions are extremely rare. People with a history of severe allergic reactions can be vaccinated but should be monitored for 30 minutes after receiving the AstraZeneca vaccine. If you have any concerns about the vaccine, ask your doctor, nurse or pharmacist.

In the 2 weeks after your vaccine if you have severe, persistent headaches that are different from "usual" and do not settle with paracetamol or other painkillers seek medical advice as soon as possible.

If I didn't have a side effect does this mean that the vaccine didn't work?

Not everybody will have side effects from the COVID-19 vaccine. If you don't get any side effects this does not mean that the vaccine did not work.

What about reports of blood clots (thrombosis) with the AstraZeneca vaccine?

ATAGI and the Thrombosis and Haemostasis Society of Australia and New Zealand (THANZ) released a statement on the 23 May 21 regarding thrombosis with thrombocytopenia syndrome (TTS) with the AstraZeneca vaccine. This statement outlines that there is unlikely to be an increased risk of TTS in people with the following conditions, and **people in these groups can receive the AstraZeneca vaccine**:

- History of blood clots in typical sites
- Increased clotting tendency that is not immune mediated
- Family history of blood clots
- History of ischaemic heart disease or stroke
- Current or past thrombocytopenia (low platelet count)
- Those receiving anticoagulation therapy (for e.g. apixaban, dabigatran, rivaroxaban, warfarin)

However, if you have a past history of; CVST, HITT, idiopathic splanchnic (mesenteric, portal, splenic) vein thrombosis and antiphospholipid syndrome with thrombosis, the Pfizer vaccine is recommended.

TTS can now be treated very effectively. Due to better awareness, early diagnosis and appropriate treatment, the outcome and prognosis of the majority of those who have experienced this syndrome is good. More information can be found here; <https://www.health.gov.au/news/joint-statement-from-atagi-and-thanz-on-thrombosis-with-thrombocytopenia-syndrome-tts-and-the-use-of-covid-19-vaccine-astrazeneca>

Should I take aspirin before having my COVID-19 vaccine to reduce my risk of getting blood clots?

There is no evidence that taking low-dose aspirin before having a COVID-19 vaccine will reduce your risk of blood clots.

What should I do if I take “blood thinners”?

Continue to take your medicines as prescribed by your doctor. There is no reason to stop or change your dose of blood thinners before the COVID-19 vaccine.

Do you still need to have the vaccine if you have had COVID-19?

It is possible for people who have already had COVID-19 to have the vaccine for it. It is not known yet how long the antibodies made by your body in response to COVID-19 last, so a vaccine could offer more protection or boost any antibodies your body has already made.

Please encourage your household members and other close contacts to have the COVID-19 vaccine once they are eligible as this may offer you further protection from getting COVID-19. This is known as the “ring” vaccination concept.

An Australian Government COVID vaccine fact checker is available at;

<https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/is-it-true>

More information for your treating doctors can be found here;

<https://drive.google.com/file/d/16uiV5Ug51NiuPi5m1TolsXMfrhxbqgFX/view>

<https://app.magicapp.org/#/guideline/LqRV3n/rec/EZ6z8E/practical>

The ARA will update this advice as new information becomes available.

The information in this document has been obtained from various sources and has been reviewed by the Australian Rheumatology Association. It is intended as an educational aid and does not cover all aspects of the topic. This information is not intended as medical advice for individual problems nor for making an individual assessment of the risks and benefits. It can be reproduced in its entirety but cannot be altered without permission from the ARA