

# Clinical Pearls

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## Clinical Pearl 23/03/21

Each week we will aim to bring out a concise email that provides 4-5 key pieces of information addressing a specific issue in clinical therapeutics.

**This week: Covid-19 Vaccine – Administration Precautions and Adverse Effects**

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More than 300 million people have been vaccinated so far and fortunately there have been no safety concerns found in older people, but the Therapeutics Goods Administration (TGA) will continue to review and monitor reports from Australia and overseas. Whilst there is always a risk with side effects from any medication, the evidence thus far suggests that these vaccines are very safe in the general community and the older population too.

### **Administration**

Prior to administering either the Pfizer or the Astra Zeneca (AZ) vaccine, the name of and batch number of the vaccine given should be recorded in the Australian Immunisation Register against the resident's name.

Once the vaccine has been administered the individual should be kept under close supervision for at least 15 minutes.

Both vaccines are for **multidose** use.

To avoid wastage, it is important to ensure that there are enough people available who require the vaccine so that the full vial can be used.

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More detailed information on administration and other general information about the vaccines can be found by clicking on the following links:

[AstraZeneca vaccine](#)

[Pfizer vaccine](#)

**Pfizer – requires diluting** once thawed with 1.8mL normal saline prior to administering a 0.3mL dose. The diluted vial contains 6 doses.

**AZ – requires no dilution.** The 5mL vial contains 10 doses of 0.5mL each.

Vaccination should be delayed if the person is suffering from acute severe febrile illness or acute infection. Minor infection or low-grade fever should NOT delay vaccination.

## Contraindications

The only absolute contraindications to a COVID-19 vaccine are:

- anaphylaxis after a previous dose of the same vaccine
- anaphylaxis to any component of the vaccine, including
  - polyethylene glycol (PEG) for Comirnaty (Pfizer vaccine)
  - polysorbate 80 for COVID-19 Vaccine AstraZeneca

## Hypersensitivity and anaphylaxis

Independent expert review of recently reported cases of suspected anaphylaxis following the AstraZeneca ChAdOx1-S COVID-19 vaccine has concluded that there is no increased risk of anaphylaxis associated with the vaccine above the expected rate for any other vaccine. Anaphylaxis is a very rare side effect that can occur with any vaccine.

The TGA advises that appropriate medical treatment should be readily available in the rare case the individual receiving the vaccine has an anaphylactic reaction.

## Bleeding risk

The vaccine should be administered **intramuscularly** so there is a **small** risk of a haematoma forming at the injection site in those people taking an anticoagulant or antiplatelet medication.

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The recommendation in this population (those on anticoagulants or antiplatelets) is to use a **fine** gauge needle (23G or smaller) and following the injection apply firm pressure to the site for at least 2 minutes, without rubbing.

## **Common adverse reactions include:**

Headache, arthralgia, myalgia, fatigue, chills, pyrexia, pain or swelling at the injection site.

## **Risk of blood clots**

The TGA is working closely with the European Medicines Agency and as of 19/03/21 advises that a link between blood clots and the AZ vaccine has NOT been confirmed and the incidence is no greater that would be expected to see in the general population.

Of the 17 million people vaccinated in Europe and the UK, there have been 15 reports of deep-vein thrombosis and 22 of pulmonary embolisms.

There is a background risk of developing clots in the Australian population of around 50 people per day regardless of vaccination status.

Their recommendation, and that of the EMA and the United Kingdom (UK) Medicines and Healthcare products Regulatory Agency (MHRA) is that all eligible adults continue to receive the Covid-19 vaccinations.

The TGA will continue to monitor the safety of the AZ vaccine and if any safety concerns are detected they will take rapid action to address it and provide prompt information to the public.

Further information can be found [here](#) and [here](#)

Further information about the vaccines in relation to aged care can be found [here](#)

Please consider these issues when preparing or interpreting RMMR reports or education sessions. Contributions of content or suggested topics are welcome and should be sent directly to [natalie@wardmm.com.au](mailto:natalie@wardmm.com.au)