

Key points for COVID-19 immunisation providers:

1. **All people offered the COVID-19 AstraZeneca vaccine** should be advised of the risk of TTS, the symptoms to watch out for in the 4 to 42 days following vaccination, and when to seek medical advice.
2. **Thrombosis with thrombocytopenia syndrome (TTS)** is a rare, newly identified condition associated with the COVID-19 AstraZeneca and Janssen (Johnson & Johnson) vaccines.
3. TTS usually involves **thrombosis, thrombocytopenia** ($<150 \times 10^9$) and/or a **high d-dimer** (typically $> 5 \times$ upper limit of normal) with onset of symptoms **4 to 42 days after COVID-19 AstraZeneca vaccination**.
4. TTS can be treated effectively. **If TTS is suspected**, investigate with appropriate blood tests and imaging, seek haematologist advice and notify your local public health unit. Do not give heparin-based anticoagulants or platelet transfusions. The latest guidance is available from the [ACEM](#) and [THANZ](#).

- On 24 July the Australian Technical Advisory Group on Immunisation (ATAGI) provided updated advice that all individuals aged 18 years and above in greater Sydney should strongly consider getting vaccinated with any available vaccine including COVID-19 AstraZeneca vaccine.
- ATAGI advises that adults younger than 60 years old who do not have immediate access to Comirnaty (Pfizer) should re-assess the benefits to them and their contacts from being vaccinated with COVID-19 AstraZeneca vaccine, versus the rare risk of a serious side effect.
- Comirnaty (Pfizer) vaccine is still the preferred COVID-19 vaccine for pregnant women at any stage of pregnancy.
- People of any age who have received their first dose of COVID-19 AstraZeneca vaccine should be offered the second dose of AstraZeneca vaccine, unless they experienced a serious adverse event following the first dose.
- In COVID-19 outbreak areas, people can receive the second dose of AstraZeneca vaccine at 4 to 8 weeks (rather than 12 weeks) to bring forward optimal protection.
- People aged 18 years and over can access the COVID-19 AstraZeneca vaccine, with **fully informed consent**, through a NSW Health clinic or participating general practice or pharmacy.
- All people offered the COVID-19 AstraZeneca vaccine should be advised of the risk of TTS, symptoms to watch for in the 4 to 42 days following vaccination, and when to seek medical advice. Patient information following COVID-19 AstraZeneca vaccine is available:
<https://www.health.gov.au/resources/publications/patient-information-sheet-on-astrazeneca-covid-19-vaccine-and-thrombosis-with-thrombocytopenia-syndrome-tts>

Clinical reminder:

People presenting with symptoms of TTS in the 4 to 42 days after vaccination should be urgently investigated as per the latest [ACEM](#) and [THANZ](#) guidance.*

Symptoms and signs of TTS include new onset of:

- Persistent headaches with/without vision changes, focal neurology, seizure-like activity or coma
- Abdominal pain
- Leg swelling or pain with or without associated colour change or coldness in the limb
- Chest pain and/or shortness of breath (without a clear alternative cause)
- Petechiae or unusual bleeding or bruising.

Suspect TTS in patients with TTS symptoms 4 to 42 days after COVID-19 AstraZeneca vaccination and:

- Presence of any thrombosis such as cerebral venous sinus thrombosis (CVST);
- Presence of thrombocytopenia ($<150 \times 10^9$); AND/OR
- Presence of a high d-dimer (typically $> 5 \times$ upper limit of normal).

*Latest guidance on TTS investigation and management is available here:

ACEM: https://acem.org.au/getmedia/0bb52115-4510-42a1-b596-153b1cc6820c/TTS-following-COVID-vacc-guidelines_R5

THANZ: <https://www.thanz.org.au/resources/covid-19/covid-19-related-resources>

An adverse event following immunisation (AEFI) is a notifiable condition under the NSW Public Health Act (2010). **All uncommon, unexpected or serious AEFIs must be notified** by health professionals to the local NSW Health public health unit (PHU) on **1300 066 055**. COVID-19 vaccination information for clinicians is available here:

<https://www.health.nsw.gov.au/Infectious/covid-19/vaccine/Pages/clinicians.aspx>