What is Thrombosis with Thrombocytopenia Syndrome (TTS)?

Thrombosis with Thrombocytopenia Syndrome (TTS) is a very rare side effect of the AstraZeneca (Vaxzevria) and Janssen COVID-19 vaccines. Pfizer (Comirnaty) vaccine has not been associated with TTS. This information sheet will help you understand more about TTS. It is not a substitute for talking with your doctor, nurse or pharmacist.

What is a thrombosis?

Thrombosis is a medical word for a blood clot. Blood clots can form in a blood vessel (vein or artery) in any part of the body. Some blood clots are life-threatening if they stop blood and oxygen from reaching vital organs. For example:

- a pulmonary embolism is a blood clot in the lungs
- a heart attack can be caused by a blood clot in the heart
- a stroke can be caused by a blood clot in the brain.

What is thrombocytopenia?

Thrombocytopenia is a medical word for low platelets. Platelets are blood cells that stop bleeding by clumping and forming plugs in blood vessel injuries. If you have low platelets you can bleed more easily and for a longer time than normal.

What is Thrombosis with Thrombocytopenia Syndrome (TTS)?

Thrombosis with Thrombocytopenia Syndrome (TTS) is a new health condition. It was discovered after the start of COVID-19 immunisation programmes worldwide. TTS is different from the other blood clotting disorders described above. In TTS, blood clots and low platelet levels happen at the **same** time. The condition can be life threatening.

TTS is thought to be triggered by the immune system responding to non-replicating viral vector COVID-19 vaccines, such as the AstraZeneca and Janssen vaccines. TTS does **not** happen with mRNA vaccines, such as the Pfizer COVID-19 vaccine Comirnaty.

Are some people more likely to get TTS?

No specific risk factors have been detected. However, most cases of TTS have occurred:

- in females under 60 years of age
- 4 to 42 days after vaccination.

TTS is very rare

TTS has occurred in approximately 1 in 100,000 people who have received the AstraZeneca vaccine. Fewer people get TTS with the Janssen vaccine.

How many people get blood clots every year?

Every year, about 80 in 100,000 people have a blood clot in New Zealand. Blood clots may form for many reasons, such as:

- surgery
- prolonged sitting or bed rest
- obesity
- smoking
- taking certain medicines.

MEDSAFE
New Zealand Medicines and Medical Devices Safety Authority

Te Kāwanatanga o Aotearoa
New Zealand Government

MINISTRY OF HEALTH
MANATŪ HAUORA

What are the signs and symptoms of TTS?

Call 111 or go straight to the emergency department and tell the doctor about your COVID-19 vaccination if you get **any** of the following in the three weeks after vaccination:

• severe or long-lasting headache

• shortness of breath

• chest pain

• leg swelling

• long-lasting tummy pain

• unusual bruising

• confusion

• seizure (fit).

Do people get blood clots after Comirnaty?

There have been reports of blood clots after vaccination with the Pfizer vaccine Comirnaty. These reports do not mean the vaccine caused the blood clot. These events can occur by chance. The COVID-19 Vaccine Independent Safety Monitoring Board (CV-ISMB) has looked at the evidence. CV-ISMB did not find a link between Comirnaty vaccination and blood clots.

Where can I find more information?

Consumer Medicine Information:

Comirnaty: medsafe.govt.nz/Consumers/CMI/c/comirnaty.pdf

Janssen vaccine: medsafe.govt.nz/Consumers/CMI/c/COVID19VaccineJanssen.pdf

AstraZeneca vaccine: medsafe.govt.nz/Consumers/CMI/c/Covid19VaccineAstraZeneca.pdf

Please see Medsafe's vaccine safety reports for more information on events reported after administration of COVID-19 vaccines in New Zealand. The information on reported events should not be used to make a decision on whether to have a vaccine, as it not known if the vaccine caused the reported events. The safety reports are available at: medsafe.govt.nz/COVID-19/vaccine-report-overview.asp

Unite against COVID-19 website: covid19.govt.nz

How do I report a side effect after a COVID-19 vaccination?

Please report any side effects after vaccination to the Centre for Adverse Reactions Monitoring.

The reporting form is available at: https://report.vaccine.covid19.govt.nz/s/