COVID-19 Vaccination Bulletin for Immunocompromised Patients

Children and adolescents with COVID-19 infection tend to have mild disease compared with adults. They may have respiratory symptoms, fever, cough, sore throat or sneeze, or have no symptoms at all. In younger children, symptoms can be very mild, and even include gastrointestinal symptoms like diarrhoea or vomiting.

However, patients who are undergoing cancer therapy, or have other medical conditions as a result of cancer or cancer treatment, will be at increased risk of contracting COVID-19, and at greater risk of developing severe disease and complications from COVID-19. We therefore recommend all children aged 5 years and over and adolescents receive the Pfizer COVID-19 vaccine. Patients who have completed treatment and their family should have the vaccine, and if eligible, booster dose, as soon as possible. Comirnaty™ (COVID-19 mRNA vaccine, Pfizer-BioNTech) has been approved by Medsafe for use in all aged 5 years and older to prevent against COVID-19. Patients who are very immunocompromised may not mount the same vaccine response as people with a healthy immune system, and hence may have reduced infection protection from the vaccine.

Immunocompromised individuals 12 years of age and older will receive three doses as their primary vaccination course, each a full vaccine dose of 0.3mL (30µg). The second dose should be given after a minimum interval of 3 weeks. The third dose can be given from 8 weeks after the second dose, with a minimum interval period of 4 weeks in exceptional circumstances. To access a third dose, you need a prescription from your primary oncology treating centre (Starship or Christchurch), your regional shared care team or GP. The third dose completes the primary course.

Children age 5 to 11 years of age will receive the paediatric formulation of the Pfizer vaccine, which is a smaller dose and volume (0.2mL or 10µg). Two vaccine doses 8 weeks apart are recommended, however this can be shortened to 3 weeks for patients who are about to start, or are receiving immunosuppression treatment.

From 6 May 2022 **it is recommended that** children aged 5 to 11 who are severely immunocompromised receive a **third** primary dose of the Pfizer COVID-19 vaccine. The third primary dose should be given 8 weeks after the second dose but may be given after 4 weeks depending on current or planned immunosuppressive therapies. To access a third dose, you need a prescription from your primary oncology treating centre (Starship or Christchurch), your regional shared care team or GP. The third dose completes the primary course. If a child's second or third vaccination occurs after they have turned 12 years, they should still complete their primary vaccination course with the paediatric formulation of the Pfizer vaccine.

9 May 2022

General Advice

- If feasible, for patients planned for, but not yet on cancer therapy, time the first dose of the vaccine to be at least 2 weeks prior to start of therapy, if that does not delay commencing therapy
- If feasible, for patients already on chemotherapy, time the first dose of vaccine in between chemotherapy cycles, and away from neutropenia
- If feasible, for patients completing chemotherapy, time the first dose of vaccine to be given after therapy is completed and neutropenia resolved
- Vaccination should be delayed for at least three months after stem cell transplantation or B cell depleting therapy such as Rituximab

Boosters

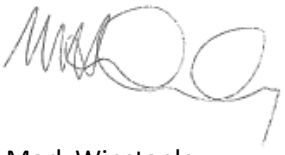
- Individuals **aged 18 or over** who have completed their primary vaccination course at least **3 months** ago, are eligible for a booster.
- Individuals **aged 16 or 17** who have completed their primary vaccination course at least **6 months** ago, are eligible for a booster. Only Pfizer is approved for this age group.
- Boosters are not currently recommended for the 5 to 15 year old group.

PEG-Asparaginase allergy

For patients with Acute Lymphoblastic Leukaemia (ALL) who are receiving treatment, or who have received treatment for ALL in the past, it should be noted that both the Pfizer and Moderna vaccines contain elements of a form of polyethylene glycol (PEG). In patients who have developed an allergic reaction to PEG-asparaginase during treatment, most are allergic to the asparaginase component of the chemotherapy, rather than the PEG component. If the patient has a known PEG asparaginase anaphylaxis, the recommendation remains to vaccinate against COVID-19, but **must** proceed with caution. In this circumstance vaccines should only be given in larger vaccination centres or with close proximity to hospital. **A post-vaccination observation time of a minimum of 30 minutes is needed**.

For families: If you are unsure whether your child has an allergy to PEG-asparaginase, please speak to your Nurse Specialist or Oncologist. All of the patients that we have records of as having PEG allergy who were not contacted previously, due to their age being younger than 12 years, will be contacted directly.

The Australasian and New Zealand Children's Haematology/Oncology Group (ANZCHOG) has released updated guidance on the vaccine and contains advice from paediatric haematologists and oncologists, infectious disease experts, immunologist and cardiologists. Please refer to this as well as the NZ Ministry of Health website for information, or discuss with your Oncologist or Nurse Specialist if you have any questions.



Mark Winstanley
Paediatric Oncologist
Service Clinical Director,
Starship Blood and Cancer Centre (SBCC)

Andrew Dodgshun
Paediatric Oncologist
Clinical Director,
Children's Haematology & Oncology Centre (CHOC)

Stephen Laughton
Paediatric Oncologist
Clinical Lead,
National Child Cancer Network

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