

Immunocompromising conditions for which third primary dose of COVID-19 vaccine is recommended

- Active haematological malignancy
- Non-haematological malignancy with current active treatment including chemotherapy, radiotherapy, and/or hormonal therapy, but excluding immunotherapy with immune checkpoint inhibitors
- Solid organ transplant with immunosuppressive therapy
- Haematopoietic stem cell transplant (HSCT) recipients or chimeric antigen receptor T-cell (CAR-T) therapy within 2 years of transplantation.
 - These patients require **revaccination with 3 additional doses** of COVID-19 vaccine, irrespective of doses given prior to transplantation, commencing generally ≥ 3 -6 months after their transplant after discussion with their treating specialist.
 - Those beyond 2 years from transplant should discuss with their treating specialist about the need for a 3rd dose.
- Immunosuppressive therapies including:
 - High dose corticosteroid treatment equivalent to >20 mg/day of prednisone for ≥ 14 days in a month, or pulse corticosteroid therapy.
 - Multiple immunosuppressants where the cumulative effect is considered to be severely immunosuppressive.
 - Selected conventional synthetic disease-modifying anti-rheumatic drugs (csDMARDs):
 - including mycophenolate, methotrexate (>0.4 mg/kg/week), leflunomide, azathioprine (>3 mg/kg/day), 6-mercaptopurine (>1.5 mg/kg/day), alkylating agents (e.g. cyclophosphamide, chlorambucil), and systemic calcineurin inhibitors (e.g. cyclosporin, tacrolimus)
 - excluding hydroxychloroquine or sulfasalazine when used as monotherapy
 - Biologic and targeted therapies anticipated to reduce the immune response to COVID-19 vaccine:
 - including B cell depleting agents (e.g. anti-CD20 monoclonal antibodies, BTK inhibitors, fingolimod), anti-CD52 monoclonal antibodies (alemtuzumab), anti-complement antibodies (e.g. eculizumab), anti-thymocyte globulin (ATG) and abatacept
 - excluding agents with likely minimal effect on vaccine response such as immune checkpoint inhibitors, anti-integrins, anti-TNF- α , anti-IL1, anti-IL6, anti-IL17, anti-IL4 and anti-IL23 antibodies
- Primary immunodeficiency including combined immunodeficiency and syndromes, major antibody deficiency (e.g., common variable immune deficiency (CVID) or agammaglobulinemia), defects of innate immunity (including phagocytic cells), defects of immune regulation, complement deficiencies and phenocopies of primary immunodeficiencies.
- Advanced or untreated HIV with CD4 counts $<250/\mu\text{L}$ or those with a higher CD4 count unable to be established on effective antiretroviral therapy
 - a 3rd primary dose is not required for people living with HIV, receiving ART with CD4 counts $\geq 250/\mu\text{L}$
- Long term haemodialysis or peritoneal dialysis