

Vaccination advice for patients receiving treatment for prostate cancer (Urology unit)

The immune system serves as the body's defence against infections caused by bacteria and viruses. Vaccines help protect patients from certain infections by stimulating the immune system to recognise and respond rapidly to future exposures. Cancer and cancer treatment can weaken the immune system and can increase the likelihood of developing an infection. Therefore, vaccinations are often important to have, to provide as much protection as possible especially whilst having anticancer therapy. The timing of vaccinations is important to maximise the immune response to a vaccine whilst receiving certain anti-cancer treatments. This guide provides important information about some of the key vaccines:

1. Timing of Vaccinations:

- **Before treatment** – Ideally, any necessary vaccines should be administered **before** starting systemic cancer treatment. This allows you to develop better immunity.
- **During treatment** – Live vaccines are **not recommended** if you are receiving cancer treatment that may suppress your immune system (e.g. chemotherapy) due to the risk of infection from the vaccine. However, **inactivated or non-live vaccines** may be given, depending on your overall health, immune status and type of cancer therapy.
- **After treatment**- Vaccination can be resumed after treatment, but timing will depend on your immune recovery.

2. Live vs. Inactivated Vaccines

- **Live vaccines** – These contain weakened versions of the virus or bacteria and should be **avoided** if your immune system is weakened due to the risk of severe or fatal infections.

Examples include:

MMR -Measles, Mumps and Rubella (Priorix, MMRVaxPro)

Varicella (chickenpox) (Varilrix, Varilvax)

Shingles vaccine (Zostavax)

Rotavirus vaccine (Rotarix)

BCG vaccine

Live influenza vaccine (nasal spray) (Fluenz Tetra)

Oral typhoid vaccine (Ty21a)

Yellow Fever vaccine



- **Inactivated vaccines** – These do not contain live viruses or bacteria and are **generally safe** for patients during treatment, although they may be less effective during treatment as your immune system may be weaker than usual.

Examples include:

Influenza vaccine (injectable form)

Pneumococcal vaccine

RSV (Respiratory syncytial virus)

Covid-19

Shingles recombinant zoster vaccine for shingles - Shingrix

3. Specific Vaccinations to consider

- **Influenza (Flu) vaccine** – an annual inactivated flu vaccine is strongly recommended for cancer patients, especially during flu season, as they are at higher risk of complications. The recommended version for flu vaccines in patients with cancer are the injectable inactivated versions (non-live). This can be obtained from your local pharmacy/GP. This should ideally be administered 2 to 3 days prior to chemotherapy.
- **Pneumococcal vaccine** – This vaccine helps protect against serious illnesses like pneumonia and meningitis. It's recommended for people at higher risk of these illnesses, such as adults aged 65 and over and for those with weakened immune systems, including cancer patients. This should ideally be administered 2 to 3 days prior to chemotherapy.
- **Covid-19 vaccine** – cancer patients, particularly those on immunosuppressive treatment like chemotherapy, are at higher risk of severe Covid-19, so vaccination is encouraged. This should ideally be administered 2 to 3 days prior to chemotherapy.
- **Shingles (Zoster) vaccine** – cancer patients over 50 may be advised to receive the recombinant zoster vaccine (Shingrix), as it is non-live. If you are eligible for the vaccine or it has been recommended by your consultant, you should have the shingles vaccine preferably a month before starting chemotherapy. Where this is not possible, the vaccine course should be commenced at least 14 days before starting chemotherapy. If treatment is subsequently commenced after the first dose of Shingrix is given, the second dose may be given 8 weeks to 6 months later.



General rule:

It is crucial that vaccination decisions for cancer patients are made with the oncology team to ensure vaccinations are appropriately timed and deemed safe.

Patients who are on hormonal treatment (LHRH analogue injections, Androgen receptor pathway inhibitors (ARPI)s e.g. Apalutamide, Enzalutamide and Darolutamide) can receive vaccines at any point during treatment as these drugs are not immunosuppressive.

For patients receiving chemotherapy, we recommend a few days prior to the next cycle of chemotherapy when the blood counts are at their highest for vaccinations which are required whilst on treatment.

Always check with your vaccinator if the vaccine you are receiving is live before proceeding with the vaccination.

Family members/carers and close contacts should stay up to date with their own vaccinations to provide an additional layer of protection for you.

If you are planning any foreign travel, please speak to your oncology team/GP about travel vaccinations before making any arrangements.

Please remember that every patient is different, and your healthcare team is your best resource for personalised advice.

References:

- NHS – Vaccines for People with Cancer

Available at: <https://www.nhs.uk>

- Cancer Research UK – Vaccinations and Cancer

Available at: <https://www.cancerresearchuk.org>

- Macmillan Cancer Support – Vaccines and Cancer Treatment

Available at: <https://www.macmillan.org.uk>

Contact details: Please contact us if you have any questions or concerns:

Clinical Nurse Specialist:

Tel: 0208 661 3831, Email: urologynurses@rmh.nhs.uk

Contactable Mon-Fri, 9AM – 5PM, except weekends and bank holidays

Alternatively, please call:

The Royal Marsden Macmillan Hotline:

Tel: 0208 8915 6899 Available 24 hours a day, 7 days a week

