

Patient Name/ Addressograph

Date

9<sup>th</sup> October 2018

Dear Doctor,

## INFLUENZA IMMUNISATION GUIDANCE

In accordance with Department of Health Guidelines and the available evidence, it is recommended that all adult patients receiving or about to start chemotherapy or systemic steroids, leading to immuno-suppression, receive influenza immunisation.

Systemic steroids are defined as treatment for more than one month at a dose equivalent to prednisolone 20mg (dexamethasone 3mg is equivalent) or more per day (adults).

Patients who are asplenic or have a dysfunction of the spleen should receive influenza immunisation.

Consideration should also be given to the vaccination of household contacts of immunocompromised individuals i.e. individuals who expect to share living accommodation on most days over the winter and therefore for whom continuing close contact is unavoidable.

This year patients will be offered seasonal flu vaccination dependant on their age;

Age 18-64 years	Quadrivalent inactivated flu vaccine
Age 65-74 years	Trivalent inactivated vaccine
Age 75 years or more	Adjuvanted trivalent inactivated flu vaccine

Your patient is scheduled to receive chemotherapy - \_\_\_\_\_(Date)

*(Hospital clinic staff – please insert anticipated start date or next cycle date and frequency of cycles)*

### Timing of immunisation with respect to chemotherapy

Patients yet to start chemotherapy or high dose steroids	Immunise at least 2 weeks before chemotherapy, chemo-radiotherapy or high dose steroids with the <b>Seasonal Flu Vaccine</b> .
Patient on 3-week cycle of chemotherapy	Consider immunisation in the third week of cycle with the <b>Seasonal Flu Vaccine</b> .
Patient on a 2-week cycle of chemotherapy	Consider immunisation between days 9 and 12 of the cycle with the <b>Seasonal Flu Vaccine</b> .
Patient on weekly cycle of chemotherapy	Consider immunisation day before treatment.

**It is important that the schedule above is followed to reduce the risk of haematoma/bruising arising from a low platelet count.**

### Contra-indications

Influenza vaccine is contra-indicated in people who have had

- A confirmed anaphylactic reaction to a previous dose of the vaccine, or
- A confirmed anaphylactic reaction to any component of the vaccine (other than ovalbumin – see cautions)

Individuals with Aplastic anaemia should have influenza vaccination discussed with their Haematology

Consultant.

### **Cautions**

Individuals who have received Stem Cell Transplantation should not be given the influenza vaccine until 6 months post transplant.

Individuals with a bleeding disorder (including thrombocytopenia, hereditary haemorrhagic disorders or on anticoagulation) should be given the vaccine by deep subcutaneous injection to reduce the risk of bleeding.

There is limited data available on the administration of vaccines to patients undergoing Anti-PD-1 Immunotherapy (e.g. nivolumab, pembrolizumab). The use of any killed or attenuated vaccine for the prevention of influenza was permitted within the trials of each drug with no reported adverse outcomes. Live vaccines should not be administered for at least 30 days prior to treatment or at any time during treatment. As such, vaccination with the inactivated influenza vaccine is acceptable but the intranasal live attenuated influenza vaccine should not be given.

Pregnant women in particular should preferably receive a thiomersal-free influenza vaccine.

There is no egg-free vaccine available in 2018-19, however a low-egg content vaccine is available. Studies show that low-egg content vaccines may be used safely in adults with egg allergy excepting those with severe anaphylaxis to egg which has previously required intensive care who should be referred to specialists for immunisation in hospital. Individuals with an egg-allergy should discuss vaccination with their General Practitioner.

All children aged 2-5 and all primary school aged children will be offered immunisation with Fluenz Tetra® – a live attenuated nasal flu vaccine. There is a theoretical potential for transmission of live attenuated influenza virus to severely immunocompromised contacts for one to two weeks following vaccination. In the US, where there has been extensive use of the live attenuated influenza vaccine, there have been no reported instances of illness or infections from the vaccine virus among immunocompromised patients inadvertently exposed. Where close contact with very severely immunocompromised patients (e.g. bone marrow transplant patients requiring isolation) is likely or unavoidable (for example, household members), appropriate alternative inactivated influenza vaccines should be considered.

### **PNEUMOCOCCAL IMMUNISATION GUIDANCE**

If indicated pneumococcal vaccination may be given at least 2 weeks prior to commencing chemotherapy. If this is not possible then immunisation should be delayed until at least 3 months after completion of therapy. Individuals who have had Stem Cell transplantation should not receive the vaccine until at least 15 months post transplantation and should have immunisation discussed with their Haematology Consultant.

### **SHINGLES (HERPES ZOSTER) IMMUNISATION GUIDANCE**

Individuals who have undergone immunosuppressive chemotherapy should not receive the shingles vaccine until 6 months after completion of therapy. Individuals who have received Stem Cell transplantation should have vaccination discussed with their Haematology Consultant.

When there is doubt, appropriate advice should be sought from an immunisation co-ordinator, consultant in communicable disease control or consultant paediatrician, so that the period the individual is left unvaccinated is minimised.

If you have any queries concerning these recommendations please contact either:-

Oncology Day Unit, Ward 310 ARI	01224 551232
Haematology Day Unit, Ward 307 ARI	01224 553357
Oncology/Haem Inpatients, Ward 112/114 ARI	01224 555114

Please also refer to SGHD/CMO(2017)11– Seasonal Influenza Vaccination Programme, [http://www.sehd.scot.nhs.uk/cmo/CMO\(2018\)7.pdf](http://www.sehd.scot.nhs.uk/cmo/CMO(2018)7.pdf) or <https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book> for more information.