**Influenza Vaccine Guideline**

Reason for Guideline:

To ensure that patients with cancer and/or on treatment receive appropriate influenza immunization advice.

1. Patients on active chemotherapy, targeted therapy, immunotherapy (including checkpoint inhibitors) or radiation therapy can receive influenza immunization with an inactivated vaccine if not medically contraindicated.

2. Patients should not receive LIVE attenuated vaccine during treatment and for at least 6 months afterwards. This includes the intranasal form of the vaccine such as FluMist®.

3. Patients on active chemotherapy are recommended to receive the influenza vaccine within **two or three days prior** to their next chemotherapy cycle. The optimal timing is not known. If patients are on targeted therapy, they can receive the influenza vaccine at any time.

4. Checkpoint inhibitors include PD-1 inhibitors (eg, pembrolizumab, nivolumab, PD-L1 inhibitors (eg, atezolizumab) and CTLA-4 inhibitor (eg, ipilimumab).
   - Patients receiving PD-1 or PD-L1 inhibitors can receive the annual influenza vaccine which is an inactivated virus and is safe in this population. However, the intranasal form of the influenza vaccine (FluMist®) contains LIVE attenuated virus and should not be used in this patient population.
   - Patients on ipilimumab monotherapy or combination checkpoint inhibitors (e.g. ipilimumab plus nivolumab) **should not** receive any vaccines within 6-8 weeks of starting treatment or within 6-8 weeks of the last dose.
   - Patients on maintenance nivolumab following combination therapy should discuss the timing of vaccination with their doctor.

5. Patients on radiation therapy can receive influenza vaccine at any time during their treatment. The injection should be given on the opposite side if unilateral treatment is given.

6. Families and care providers of patients with cancer should be encouraged to consider receiving an influenza vaccine if not contraindicated.