**Advice Sheet for GPs on Chemotherapy and Immunization**

Dear Colleague,

Your patient is planned to start cytotoxic chemotherapy at the Oxford Cancer and Haematology Centre.
The DoH recommends that during the influenza season, all patients with cancer receiving immunosuppressive chemotherapy should be vaccinated against influenza and pneumococcus.

We would be grateful if you could consider this, when the patient contacts you as we have advised

Details and timings are given in the box below

**Influenza vaccination**

* Influenza vaccination should be given to patients treated with chemotherapy between October and March (influenza season)
* Influenza vaccination with inactivated vaccine should ideally be given two weeks prior to chemotherapy. If this is not possible, vaccination a shorter time before or during chemotherapy is recommended. As fever secondary to vaccination may be confused with neutropenic sepsis, vaccination within 72 hours following chemotherapy (for intravenous regimens), before significant myelosuppression occurs, is advised
* Almost all influenza vaccines are inactivated and are safe during chemotherapy, however, live attenuated influenza vaccine (Fluenz®) should not be given.

**Pneumococcal vaccination**

* Pneumococcal vaccination should be given to patients treated with chemotherapy who have not previously been vaccinated against pneumococcus
* Conjugate vaccine Prevenar13 (preferred over Pneumovax due to increased response) should ideally be given two weeks prior to chemotherapy and can be given alongside influenza vaccine. If this is not possible, vaccination a shorter time before or during chemotherapy is recommended, with the same considerations regarding timing as for influenza vaccination
* Subsequent Pneumovax vaccination should be delayed until a minimum of three months following completion of chemotherapy, to maximize immune response to the polysaccharide vaccine (Pneumovax is recommended in addition to protect against minority of pneumococcal strains not covered by Prevenar13)

**Other Recommendations**

To make chemotherapy as safe as possible, we also advise that gaps in the routine immunization schedule should also be addressed (ie a catch-up program) and consideration given to updating the immunization status of close household contacts. Please see box below

**Catch-up Immunization**We recommend that chemotherapy patients are immunized to the level of the current UK schedule

If required, catch up immunizations should be given at least two weeks prior to chemotherapy

See <http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947406156> *or*

[http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/VaccinationImmunisation/Guidelines/](http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/VaccinationImmunisation/Guidelines/%22%20%5Ct%20%22_parent)

Please note that catch-up vaccinations are not recommended during chemotherapy unless clinically indicated.

If given, these doses should be discounted when considering long-term protection

**Vaccination of close household contacts**

As close contacts can be a source of infection to the immuno-compromised, our recommendations are:

* Influenza immunization of close contacts > 6 months old
* Varicella Zoster Virus (VZV) immunization of close contacts according to the following rules
* Those aged ≥16 years
If both patient and contact have not had chickenpox and have negative VZV serology on testing
Please note that both patient and contact should be tested
* Those aged <16 years
If patient and child have not had chickenpox and patient has negative VZV serology (ie person <16 is not tested)

**Live vaccines**

Do not give live vaccines to the patient for two weeks before, during and for six months after chemotherapy and indefinitely if persistent immunosuppression following treatment

Live vaccines for close household contacts pose no risk to the patient

Further advice can be obtained from The Vaccine Advice for Clinicians Service (VACCSline) at:

E-mail: vaccsline@ovg.ox.ac.uk, Tel: 0845 279 9878.

Thank you for your help in improving care for our patients.