

Noah's Ark Children's Hospital for Wales

Paediatric Post Standard

Chemotherapy Immunisation Protocol (Solid Cancers and Leukaemia)

PROTOCOL :		
Time Post Treatment	Details	
6 months	1. Diphtheria, Tetanus, Pertussis, Polio, Haemophilus influenzae type b (DTaP/IPV/Hib) with additional Hepatitis B for under 10 yr olds	One injection (Vaxelis® or Infanrix hexa®)
	2. Meningitis C (Men C)	One Injection (MenQuadfi) ¹
	3. Pneumococcal conjugate vaccine (PCV)	One injection (Prevenar13®)
	4. Meningococcal B Vaccine ⁷	One injection (Bexsero®)
	5. MMR ³	One injection (Priorix® or M-M-RVaxPRO®)
	6. Human Papilloma Virus (HPV) ⁴	One injection (Gardasil 9®)
	7. Varicella Zoster Virus (VZV)	One injection (Varilix® or Varivax®)
8 months	1. Varicella Zoster Virus (VZV)	One injection (Varilix® or Varivax®)
12 months	1. MMR ³	One injection (Priorix® or M-M-RVaxPRO®)
	3 Hib	One Injection (Infanrix hexa® or Vaxelis®)

Notes:

- Give Men ACWY to teenagers (i.e. 13-14 year olds). Conjugate vaccine (MenQuadfi) for children (any age) with splenic dysfunction/asplenia/complement deficiency: Uncommon. 2 Menitorix is no longer available. Nimenrix is licenced from 6 weeks of age, MenQuadfi from 12 months of age, Menveo from 2 years of age ,
- Give one dose if the patient has received 2 doses prior to the start of chemotherapy. If unimmunized, or has received only one dose, they should receive 2 doses after completion of chemotherapy. The second dose should be given 6 months after the first dose but can be given sooner in case of Measles outbreak.
- Boys and Girls >13 to 14 years only. If teenager completely vaccinated against HPV before chemo need only one booster. If partially immunised (ie cancer diagnosed around time of routine vaccination) or remains immunocompromised then 3 doses should be given at 6-, 8- and 12-months post treatment, with all 3 vaccines given within a 12 month period.
- Influenza vaccine is recommended annually in autumn for all patients receiving chemotherapy, and their household contacts. Inactivated vaccine (IIV) for those still on chemo, and for those still within 6 months of completion of chemotherapy and parents/other adults. Live vaccine (Flu nasal spray) can usually be given to siblings/other children, except where close contact with a very severely immunocompromised patient is likely or unavoidable, IIV should be considered. Household contacts can also receive MMR and Varicella (even when patient on chemo)
- BCG Vaccine: If patient has previously had BCG and is considered to be at high risk of tuberculosis: perform mantoux test and if negative, re-vaccinate. If patient has not previously had BCG vaccinate according to local policy.
- Single dose if previously vaccinated. Children born before 1 May 2015 will need a full primary course of two doses. If Men B has never been received then give 1 month apart if age 1-9y or 2 months apart if age 10 and over.

General Notes:

During treatment, administration of non-live vaccines (ie vaccines other than MMR, LAIV, BCG, VZV) may be considered, following the content and timing of the universal childhood immunisation schedule as closely as possible, provided that the child's general condition is stable (ie free from infection and major organ toxicity) and is expected to stay so for 3 weeks from immunisation. Although it is likely that responses will be suboptimal, some patients may achieve protective antibody levels. This may be important, for example, if the patient is at higher than usual risk of tetanus exposure.

Routine booster doses will not be needed if scheduled to be given within 1 year of above schedule.

Reference:

- Immunisation of the Immunocompromised Child- Best Practice Statement (Royal College of Paediatrics and Child Health) 2002 [ISBN 1-900954-67-2](#)
- Vaccinations For Paediatric Patients Treated With Standard-Dose Chemotherapy And Hematopoietic Stem Cell T ransplantation (HSCT) Recipients. Dr Soonie R. Patel and Professor Paul T. Heath. (CCLG FINAL Version 10-12-14)