

Hematopoietic Stem Cell Transplant Teaching Sheet

Vaccination Schedule for Patients Post Hematopoietic Stem Cell Transplant (HSCT)

Vaccination or Toxoid (May use combined vaccines)	Time Post Stem Cell Transplant							Notes
	6 months	8 months	10 months	12 months	18 months	24 months	26 - 36 months	
Inactivated Influenza	Yearly seasonal, September through March. Give 3-6 months post-HSCT.							
Diphtheria, Tetanus, Acellular Pertussis	DTaP	DTaP	DTaP	Titers		Titers		TDap Booster at age 11-12 years, then TD every 10 years thereafter
H. Influenzae Type B	HiB	HiB	HiB	Titers		Titers		
Hepatitis B	Hep B	Hep B	Hep B	Titers				
Pneumococcal-Conjugate (PCV13)*	PCV13	PCV13	PCV13	Titers	PCV13	Titers		
Pneumococcal-Polysaccharide (PPV23)					or PPV23			
Inactivated Polio Virus	IPV	IPV	IPV					
Hepatitis A				Hep A	Hep A			
Meningococcal Conjugate ** (age >11, unless asplenic)				MCV				Booster recommended at age 16-18 years
Human Papillomavirus (ages 9-26 years)				HPV	HPV	HPV		
MMR (live attenuated)***	No Live Vaccines are given until at least 2 years post-HSCT and then only when other clinical criteria are met***					MMR	MMR	Second dose can be given one month later
Varicella (live attenuated) ***						VZV	VZV	
Palivizumab****	Administered q28 days from November to April, ONLY in patients that meet clinical criteria							

*If patient remains on systemic immunosuppression, or has chronic GVHD, please check pre and post vaccine pneumococcal titers for each PPV13 dose given, and consider giving a fourth dose of PPV13 at 24 months, rather than PPV23.

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**MCV should be administered to patients > 11 years of age, per standard CDC immunization guidelines, but should be given earlier to any patient who is asplenic

***Administration of MMR and VZV should be deferred until patients are 2 years post SCT, off systemic immunosuppression for at least one year, and at least 5 months since last dose of IVIG. For inactivated "dead" virus vaccine, vaccination should be at least 2 months post last dose of IVIG

**** Criteria for Palivizumab administration: 1) < 2 years of age and within one year of allogeneic transplant 2) < 2 years of age and within 6 months of autologous transplant 3) any patient with pulmonary GVHD who remains on systemic immunosuppression

References for Immunizations Post-HSCT

CDC:

- Kroger AT, Sumaya CV, Pickering LK, Atkinson WL. General recommendations on immunization --- recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recommendations and reports: Morbidity and mortality weekly report Recommendations and reports / Centers for Disease Control. 2011; 60 (2): 1-64.

IDSA:

- Rubin LG, Levin MJ, Ljungman P, Davies EG, Avery R, Tomblyn M, Bousvaros A, Dhanireddy S, Sung L, Keyserling H, Kang I. 2013 IDSA Clinical Practice Guideline for Vaccination of the Immunocompromised Host. CID. 2014; 58: e44-e100.

ASBMT:

- -Majhail NS, Rizzo JD, Lee SJ, et al. Recommended screening and preventive practices for long-term survivors after hematopoietic cell transplantation; Center for International Blood and Marrow Transplant Research (CIBMTR), American Society for Blood and Marrow Transplantation (ASBMT), European Group for Blood and Marrow Transplantation (EBMT), Asia-Pacific Blood and Marrow Transplantation Group (APBMT), Bone Marrow Transplant Society of Australia and New Zealand (BMTSANZ), East Mediterranean Blood and Marrow Transplantation Group (EMBMT) and Sociedade Brasileira de Transplante de Medula Ossea (SBTMO). Co-published in Biol Blood Marrow Transplant, 2012, 18(3): 348-371; Bone Marrow Transplant, 2012, 47(3): 337-341; and Hematol Oncol Stem Cell Ther, 2012, 5(1): 1-30.
- Tomblyn M, Chiller T, Einsele H, et al. Guidelines for preventing infectious complications among hematopoietic cell transplantation recipients: A global perspective. Biol Blood Marrow Transplant. 2009; 15(10): 1143-1238

Fred Hutch Long-Term Follow Up Guidelines:

<https://www.fredhutch.org/content/dam/public/Treatment-Suport/Long-Term-Follow-Up/physician.pdf>

NMDP: <https://bethematchclinical.org/workarea/downloadasset.aspx?id=4793>

Contact Us

For patient care assistance, please call the following phone numbers:

- Jimmy Fund Clinic (617) 632-3270
Business Hours 8 a.m. to 5 p.m., Monday through Friday
- Page Operator (617) 632-3352
Off hours: weekdays after 5 p.m., holidays, and weekends
Page pediatric hematology/oncology fellow on call
- Life Threatening Emergencies dial 911