Vaccines After Cellular Therapy (Stem Cell Transplant and CAR-T)

A stem cell transplant (SCT) and CAR-T therapy are both considered to be a form of cellular therapy. In this document both SCT and CAR-T will be referred to as cellular therapy.

During the cellular therapy process, you will lose the cells involved with immune memory. This means that you will no longer have the immunity from your childhood vaccines. In the US, vaccines have reduced or gotten rid of many diseases. The viruses and bacteria that cause these diseases still exist and you can still get them if you are not vaccinated.

Vaccines (also known as immunizations) are very important for people who have a weakened immune system, as happens after cellular therapy. Getting vaccines will help prevent you from getting and spreading serious diseases.

Vaccines work with your body's natural defenses to help you safely gain immunity to disease. For instance:

- Hepatitis B vaccine lowers your risk of liver cancer.
- HPV vaccine lowers your risk of cervical cancer, head and neck cancers.
- Flu & COVID vaccines lowers your risk of infection-related heart attacks or other problems.

We **strongly recommend you get a yearly flu shot and the COVID series and boosters.** Getting these vaccines can greatly decrease **your** risk of severe illness or death.

While most vaccines are safe for people after cellular therapy, there is risk from getting live vaccines. It is **not** recommended to get the Sabin oral polio vaccine (OVP), BCG, yellow fever or smallpox vaccines after cellular therapy.

Vaccine Insurance Coverage

You may be able to get your vaccines closer to home or you may have to receive them at the UW pharmacy. Your insurance will decide where you can get your vaccines.

Medicare (alone or with a supplement plan): Medicare **does not** cover vaccines as part of preventative care (except for flu shots). This means that any vaccines given in clinic will not be covered by Medicare.

- If Medicare is your primary insurer, your vaccines should be given at the UW pharmacy so they are less expensive. If you have a supplement plan, the vaccine cost may be less however you may still have a co-pay for **each** vaccine.
- Most pharmacies **do not** carry the pediatric versions of the vaccines that you need after cellular therapy. You can get the correct vaccines through the UW pharmacy. Your team will help you get this coordinated after cellular therapy.

Commercial Insurance or Medicaid: Most commercial insurers view vaccines as preventative and will cover the cost of these vaccines given in clinic.

- You can receive your vaccines at UW during your follow up visits, or we can ask your local primary care doctor to give them.

Vaccine Schedule

You will start your vaccines about 3 to 6 months after cellular therapy and will continue until about 2 years after. It is your job to work with our team to get the vaccines and stay on schedule (see next page for schedule of vaccines). Talk to your team about where you will receive your vaccines and any concerns you may have.

After cellular therapy, people don't make as many antibodies as someone who didn't have cellular therapy. A titer is a blood test to show how high your antibody level is to a specific vaccine. We will check your titers after your vaccines are given. If the titer is too low, you may need a booster shot to give you the best protection and help your immune system make more antibodies.

Vaccine Information for Family Members and Household Contacts

Members of your household should be up-to-date on their vaccines.

- **Flu (Influenza) & COVID**: It is strongly recommended that all household members get the flu vaccine yearly & the COVID vaccine and boosters. This will help prevent them from spreading the flu or COVID before they have symptoms. These vaccines can greatly decrease **your** risk for severe illness or death.

Only live vaccines containing present a small potential risk to others. Below are specific recommendations for each vaccine.

- **Nasal-spray influenza vaccine (FluMist)**. Avoid contact during the first 7 days following vaccination.
- **Smallpox –** should **not** be given to someone who has a household or other close contact with a weakened immune system.
- **Polio vaccine:** Within the patient's first year after cellular therapy, the inactivated vaccine should be used for family members and household contacts. If the oral live vaccine is given, close contact between the household member and the cellular therapy patient should be avoided for 2 months after. Be very careful to avoid exposure to fecal-oral contamination, by practicing good personal hygiene and hand washing.
- **MMR (measles, mumps and rubella):** The viruses in MMR do not spread from a vaccinated person to others, so close contact is okay. A person who has been vaccinated with the MMR vaccine cannot infect other people, even if they develop a rash after getting the vaccine.
- **Varicella:** If the vaccine recipient gets a rash or lesions, avoid direct contact with the cellular therapy receipient until the rash is gone**.**
- **Rotavirus:** Avoid changing diapers for 4 weeks after the child has received the vaccine. Household members should wash their hands after changing diapers of an infant who has received rotavirus vaccine.

To find out more about vaccines and vaccine safety, go to the Center for Disease Control's website at www.cdc.gov/vaccines.

This is **only** a summary of the vaccines you need. Have your provider ask for the complete UW Health post-cellular therapy vaccine schedule if receiving your vaccines outside of UW Health.

Adult Re-vaccination Schedule								
Months Post Cellular Therapy	**3 mo**	**4 mo**	**6 mo**	**12 mo**	**14 mo**	**24 mo**	**26 mo**	**27 mo**
COVID-19	X	X	X	Then annually				
Pneumococcal Conjugate (PCV20)	X	X	X	X		Pneumococcal titer	If negative: booster dose	
Influenza	If flu season: give at 3 months w/ booster dose 1 month later If not flu season: give once at 6 months			Then annually				
Diphtheria Tetanus and Pertussis toxoid (DTaP)				X	X	X	Tetanus Titer	If negative: booster dose
Inactivated poliovirus (IPV)				X	X	X		
Haemophilus influenzae (HIB)				X	X	X		
Human papillomavirus vaccine (HPV)				(if under 46)	(if under 46)	(if under 46)		
Hepatitis B				X	X	Hep B titer (or dose #3 of non-adjuvant vaccine)	If negative: repeat series	
Meningococcal, Conjugate				X	X	Meningococcal Titer	If negative: booster dose	
Shingrix (may be delayed if continuing acyclovir)				Consider for Auto/CART (2 doses)		Consider for Allos (2 doses)		
MMR (measles, mumps, rubella)						Measles Titer	If measles negative: Booster dose	If measles negative: second booster dose

Please call the UW Cancer Clinics at 608-265-1700 with questions