IgG4ward!
PAVING A PATH 4WARD

Fireside Chat Reading Guide:

Vaccine Basics in IgG4-RD

- Vaccines protect against specific pathogens (measles, chickenpox, flu)
- The immune system's goal: to create specific antibodies for each pathogen (humoral immunity)
- B-cell depletion therapies target the cells that make antibodies, thereby impairing antibody production and vaccine responses, inhibiting our ability to respond to vaccines and guard against infections
- Optimal vaccine timing: **2-4 weeks before** the next B-cell depletion dose. Vaccination immediately after B-cell depletion should be avoided whenever possible.
- On the other hand, even if the timing of vaccination is not optimal for ensuring a good antibody response to the vaccine, it is usually wise to get the vaccine on schedule and then perhaps consider a booster dose in the future.

Antibody Testing for Immunity

- Frequently used: **Varicella IgG** (chickenpox/shingles virus) and **Measles IgG.** This testing can guide vaccination if history is incomplete or unknown
- Less valuable or not recommend are:
    - Covid-19 spike protein antibodies
    - Pneumococcal antibody panels

Key Vaccine Recommendations

- Shingles (Shingrix): 2 doses for all immunocompromised adults, even under 50; safe for people on immunosuppression
- COVID-19: every 6 months for immunocompromised individuals
- Influenza: annually, best in late October-November for peak coverage
- Measles (MMR): safe only **if not** immunosuppressed
- Household members should be fully vaccinated to help protect ("cocoon") the patient

Timing vs. B-cell Counts

- Checking B-cell counts before vaccination is not necessary; timing vaccines 2-4 weeks before the next infusion is preferred
- If vaccinated during a period of strong immunosuppression (for example, right after B cell depletion), then boosters may be considered later

Shingles: Why Prevention Matters

- Caused by reactivation of the *Varicella zoster* (chickenpox) virus, which hides in nerve tissue near the spinal cord for decades following childhood infection with chickenpox
- Can cause severe pain, nerve damage, and rare complications such encephalitis (a brain infection)
- Shingrix is non-live vaccine that is safe and effective for use even in immunocompromised adults

Measles Considerations

- Outbreaks in several states; testing for measles IgG may be warranted if vaccination history is unclear
- If measles immunity is lacking and the patient is immunocompromised, the live MMR vaccine **is not safe.** Vaccine therapy should be deferred in such cases.

COVID-19 Guidance

- Fall vaccine expected to target current variants
- No clear advantage to mixing mRNA vaccine brands
- Novavax is a non-mRNA vaccine option
- IgG4 levels may rise after vaccination as a natural response to the vaccine but do not indicate worsening of IgG4-RD

Frequency Summary:

- **Shingles (Shingrix):** 2 doses, then complete
- **Flu:** yearly, timed for October or November
- **COVID-19:** every 6 months if immunocompromised
- **RSV:** one time vaccine at age 50+ for immunocompromised adults