CLL Society’s Official Statement Concerning SARS-CoV-2 Vaccine in CLL Patients
(3/26/2021)

Are the three available SARS-CoV-2 vaccines safe for CLL patients?

There is no reason to believe that there should be any safety concerns with the two mRNA vaccines that have been authorized for emergency use (Moderna and Pfizer). These are not “live” vaccines and have been thoroughly reviewed by the FDA before being made available to the public. The Johnson and Johnson (J&J) vaccine was authorized on 2/27/21 after a similar thorough review by the FDA. It is a viral vector vaccine where the virus has been genetically modified not to replicate in humans. It is not a live attenuated or weakened vaccine and is also considered to be safe for CLL patients.

Are the vaccines effective for CLL patients?

The vaccines are extremely effective in the general population. Immunocompromised patients were not tested. Based on the response of CLL patients to the actual COVID-19 infection and to other vaccines for novel infections, the response may be less predictable for CLL patients, but we really don’t know.

Should I adjust or hold any medications before taking the vaccine?

This needs to be discussed with your doctor. Some medications such as monoclonal antibodies (e.g., rituximab or obinutuzumab) and BTK inhibitors (e.g., ibrutinib or acalabrutinib) may blunt immune response to other vaccines but there are no data for the COVID-19 vaccines. The sequencing of vaccination and treatment deserves careful planning. The FDA/CDC has not given guidance to physicians to hold any anti-cancer or immune-suppressive medications prior to vaccines to increase efficacy.

What are the side effects and are there any contradictions to the vaccines?

There is no chance of getting COVID-19 from any of the currently available vaccines, as there is no live replicating or killed virus present. Sore and/or swollen arm around the injection site, fever, chills, headaches, fatigue, and malaise are common. Lymph nodes may also swell up temporarily, as can frequently occur with all vaccines in CLL patients. Allergic reactions are rare but can be serious. Avoid the vaccine if you are allergic to any of its components. If you have doubts about your circumstances, ask your doctor. There have been no confirmed vaccine-related deaths.

I have heard that the vaccine can cause immune thrombocytopenia (ITP) and lower my platelet count. Is that true?

The condition known as ITP (immune thrombocytopenia or sometimes called idiopathic thrombocytopenia) can occur in anyone with any vaccination. The rare incidence of this happening in response to the COVID-19 vaccine will likely occur at the same rate as with all other vaccines. There is zero evidence that CLL patients are more at risk for developing ITP in response to vaccines, even though they are more at risk of ITP in general.

How do the Moderna and Pfizer vaccines work?

The Moderna and Pfizer vaccines are made with a new and very clever vaccine technology that uses messenger RNA (mRNA) to teach our cells how to recognize the SARS-CoV-2 spike protein, and thus prevents infection. They do not alter the DNA in the cells.

Is one vaccine preferable?

All vaccines are expected to be safe and effective. You should plan to receive whichever vaccine is first available.
There are new vaccines that may be authorized soon. Are they safer or better? Should I wait for them?

The AstraZeneca/Oxford vaccine may soon be authorized in the United States and is already in use in several countries. Other vaccines may follow. Similar to the J&J vaccine, the AstraZeneca/Oxford vaccine is also a viral vector vaccine that has been genetically modified not to replicate in humans, and to carry into our immune cells the SARS-CoV-2’s spike protein that confers immunity. Unlike attenuated (weakened) live vaccines such as measles, which are not recommended for CLL patients, these are thought to be safe. Similar to the authorized vaccines, there are no CLL-specific data yet on safety or efficacy due to CLL patients being largely excluded from the trials. Both the J&J and AstraZeneca/Oxford vaccines have fewer data in older patients.

Again, we recommend that you get vaccinated with whatever you are offered. Do not vaccine shop or wait to get a particular vaccine. Results for CLL patients will be forthcoming from several trials but as of now there are no data to suggest a preference for one vaccine over another in CLL. The J&J vaccine has the convenience of being a single dose.

Should I get the vaccine?

Even though the immune response may be less predictable with chronic lymphocytic leukemia, CLL Society is joining AACR, ASCO, ASH, and many other cancer organizations in recommending that all CLL patients get vaccinated ASAP. Regardless of disease or treatment status, and only with doctor’s approval, As Dr. Fauci stated at the ASH 2020 Annual Meeting, “Some immunity is better than none.” We recommend CLL patients be included in the earliest vaccination tiers possible, as their case fatality rate is among the highest, even when compared to other high-risk groups with different comorbidities.

Should I get tested after vaccination to see if the vaccine worked?

Because there are no data yet that link formation of antibodies to protection from the vaccine, many CLL experts are not recommending that follow-up labs be done. Positive antibodies may not mean that you are fully protected, and lack of antibodies may not mean you are not. T cells directed against COVID may play an important role in immune defense and they are not easily measured. If you do decide to get tested, wait until four weeks after the last vaccine, and be sure your doctor orders the serology test for the spike (S) protein and not the more common COVID nucleocapsid (N) antibody test.

After I get the vaccine, can I stop my COVID-19 safety precautions?

No. After vaccination, it is extremely important that you do not stop any of your COVID-19 safety precautions including mask-wearing, social distancing, and handwashing until your doctor considers your circumstances and advises you that it is safe to do so in your community.

Brian Koffman, MDCM (retired), MS Ed, Executive VP, Chief Medical Officer, CLL Society Inc.

Anthony Mato, MD, MSCE
Director, CLL Program, Memorial Sloan Kettering Cancer Center