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Proceedings of the COVID-19 and Lymphoma Panel: February 22, 2022

A LYMPHOMA RESEARCH FOUNDATION WHITE PAPER

Introduction

On February 22, 2022, the Lymphoma Research Foundation convened an expert panel of medical and scientific advisors as part of a monthly meeting series, to discuss the current state of research regarding the COVID-19 vaccine and people with lymphoma. The panel discussed recommendations for oncologists caring for people with these cancers, as well as related scientific research and education programming.

This white paper reflects the panel discussion and the state of research as of the date of the above. Oncologists and other healthcare providers are encouraged to consult the most recent guidance from the Centers for Disease Control and Prevention (CDC) and other federal healthcare agencies when making treatment recommendations. Patients should consult with their own healthcare providers when making treatment decisions.

For additional information, members of the lymphoma community are also encouraged to visit the Lymphoma Research Foundation's COVID-19 Learning Center at lymphoma.org/covid19 and/or contact the LRF Helpline at 800-500-9976 or helpline@lymphoma.org.

The Foundation is grateful to the friends and family of Dr. Robert Schroeder whose support made this program possible.

Panel Participants

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Stanford University School of Medicine

Ash Alizadeh, MD, PhD
Stanford University School of Medicine

Jeff Block
Vice Chair, LRF Board of Directors

Bruce D. Cheson, MD, FACP, FAAAS, FASCO
LRF Scientific Advisory Board
Panel Steering Committee Member

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Mayo Clinic, Rochester
Panel Steering Committee Member

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National Cancer Institute
Panel Steering Committee Member

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University of Chicago
Panel Steering Committee Member and Chair, LRF Scientific Advisory Board

Eduardo M. Sotomayor, MD
Tampa General Hospital Cancer Institute

Andrew D. Zelenetz, MD, PhD,
Memorial Sloan Kettering Cancer Center
Panel Steering Committee Chair

Presentations

Letter to Federal Policy Makers: Update and Response

Since the previous COVID-19 Vaccine Panel meeting, held in January 2022, the Lymphoma Research Foundation (LRF) contacted the co-chairs of the bipartisan Congressional Caucus to Cure Blood Cancers and Other Blood Disorders, to discuss the concerns of the panel and to gain their support for a letter to the administration. Meghan Gutierrez reported that both co-chairs are receptive and wish to be supportive of the panel's efforts. To this end, two options were recommended:

- Convene a congressional briefing to educate policy makers about the unique challenges lymphoma patients face in the COVID-19 era.
- Develop a report to congress outlining current policies, areas of unmet needs, and how potential policies could make an impact. Such a report would likely focus on the entire immunocompromised population (not just those with hematologic malignancies), which could be an opportunity to engage other groups to contribute to the report.

The focus of this meeting was for panelist to determine which of these vehicles would be most effective to address the needs of their patient population and apply sufficient pressure to enact change, and to identify important points of discussion for these efforts.

CDC-ASH Meeting

Panel members then discussed efforts by others in the community to advocate for a more nuanced definition of "immunocompromised" when establishing vaccine and COVID-19 treatment policies. Panelists were particularly interested in whether lymphoma patients would be eligible for revaccination after completing treatment. As recommendations currently stand, patients who were vaccinated prior to or during receipt of chimeric antigen receptor (CAR)-T cell therapy or hematopoietic cell transplant are eligible to completely restart their COVID-19 vaccination series.[1]

Discussion

Congressional Briefing

Panelists were most interested in pursuing a virtual congressional briefing to communicate the unique needs of lymphoma patients. Dr. Ash Alizadeh of Stanford University School of Medicine noted that while other government entities, including the CDC and the Advisory Committee on Immunization Practices (ACIP), have been very receptive to efforts from physicians to address the needs of immunocompromised patients, representation of lymphoma patients has been far lower than it needs to be to enact meaningful change. While this group is much smaller than the broader immunocompromised population, he emphasized that they are more profoundly immunosuppressed and therefore require specific representation. Panelists agreed that while including more immunocompromised states in the discussion would generate the biggest area of attraction, there is a need for policy makers to understand the unique needs of individuals with hematologic malignancies when guiding distribution of COVID-19 preventatives and treatments.

Panelists agreed that the briefing should include presentations or discussions from the following experts:

- **An epidemiologist**, to discuss COVID-19, variants, and what the future of the pandemic may look like.
- **A lymphoma (or myeloma) physician**, to discuss the nature of hematologic malignancies, the therapies used to treat these cancers, and how these combine to hamper the immune response. This individual should lay the foundation for how these diseases affect antibody production, highlighting that the cancer cells are inseparable from healthy cells. They can also discuss how lymphoma patients and others with hematologic malignancies are unique within the immunocompromised space.
- **A patient with lymphoma or chronic lymphocytic leukemia (CLL)**, to share their personal experiences with their disease and treatment in the COVID-19 pandemic and how it has impacted their quality of life.

Revaccination of Lymphoma Patients

Many individuals with lymphoma who were on active therapy were vaccinated during the early stages of the pandemic based on recommendations from infectious disease experts, despite having no detectable levels of B cells. Most of these patients failed to make antibody responses after vaccination, and while it's now known that many have developed T-cell responses to vaccination, it remains unclear how protective these responses are. Some of these patients are now wondering if they should restart the vaccination series. Panelists agree that these patients should be eligible for revaccination but emphasized that institutional policies may not allow for this and that many community pharmacists refuse to revaccinate. Such policies are often based on CDC guidelines, which do not explicitly include patients with hematologic malignancies as eligible for revaccination as currently written. Dr. Sonali Smith, chair of the LRF Scientific Advisory Board, indicated that there may be a need for specific guidance for patients who have received B cell-depleting therapies within the larger immunocompromised landscape.

To this end, there is a need to establish when patients should be revaccinated versus when they should be prioritized for Evusheld treatment (or retreatment, after 6 months). Evusheld treatment is expensive and limited, so panelists would prefer to revaccinate patients rather than readminister Evusheld once B cells are reconstituted. However, this requires an individualized approach, as anecdotal experiences from the group and emerging research from ASH suggest the B cell depletion persists for much longer than expected for some individuals, particularly those treatment with obinutuzumab. While it is clear who should be screen for B cell depletion (i.e., patients who received CAR-T cell, anti-CD38, anti-CD20, or anti-BCMA therapy), measuring lymphocyte populations is expensive. Antibody titers are less expensive but are unreliable as a measure of immunity as there are many different assays that have

not been cross validated. At present, the approach is to use Evusheld for anyone who is suspected of not mounting a sufficient response, but panelists would prefer to have an affordable, quantitative assay to reliable determine antibody levels or lymphocyte subsets to establish which patients should be revaccinated. This could be applied even earlier in the vaccination series as well to determine which patients should receive a 4th dose/booster in the initial vaccine series.

Education Initiatives

Dear Doctor Letter

The LRF Helpline has received many requests from community physicians to provide clarity on current guidelines for the management of individuals with lymphoma in the COVID-19 pandemic. In previous meetings, panelists discussed the development of a "Dear Doctor" letter that patients could bring to their clinician that provides high-level recommendations on current CDC guidance, as well as links to additional reputable resources. Panelists are interested in this initiative but caution that it could backfire and instead create more confusion. Restating CDC guidelines will not be enough, and the panel will need to include their own interpretation. The recommendations included will not be able to go against CDC guidance, which may be difficult. For example, the CDC recommends against using antibody titers to make clinical decisions, but many panelists routinely use these assays to make decisions about when to administer a 4th vaccine dose versus Evusheld. Many community physicians do not have the teams or resources in place to help them interpret these assays, though, making them impractical to recommend.

Pharmacist Education

Dr. Advani also recommended providing education for pharmacists so that if CDC guidelines are updated to be more inclusive of lymphoma patients, pharmacists won't continue to turn away vulnerable patients who are eligible for revaccination. Panelists were very interested in a pharmacist-directed education initiative but were unsure what channels to use to develop such programming. Other professional societies may already have such lines of communication open and could be engaged to develop some form of educational resource that is broadly available to pharmacists. Alternatively, large pharmacy brands (e.g., CVS, Walgreens, Costco, and Walmart) could be directly engaged, as these brands provide a large proportion of vaccines for the American population.

Recommendations

Moving forward, the panel expects to meet on an every-other-month basis or as needed to address the ongoing initiatives described above.

References

1. Centers for Disease Control and Prevention. Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States. https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html. Updated February 22, 2022. Accessed February 28, 2022.

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