

Prioritization of Patients with Cancer

As patient advocates, we have been actively involved in discussions to urge prioritization of patients with lung cancer for vaccination against COVID-19. During our hiatus from these updates, the COVID Lung Cancer Consortium, convened by Drs. Fred Hirsch, Paul Bunn and John Minna and representing a global assembly of leaders in thoracic oncology, virology, immunology, vaccines, advocacy, as well as the NCI and FDA, wrote a [statement](#) urging officials to prioritize ALL patients with cancer, but especially those with lung cancer for vaccination. All of the leading oncology professional societies have also issued similar statements, including [ASCO](#), [AACR](#), [ESMO](#), and [SITC](#).

Vaccine comparison

As vaccines become more widely available, , people are asking if one vaccine is better than another. Here we offer a [quick comparison](#) of the Pfizer-BioNTech and Moderna vaccines (note, we will not discuss the Oxford/AstraZeneca vaccine as it is not yet approved here in the US). As you can see from the table below, both vaccines are equally effective, and the choice of vaccine may be dependent on the state you live in or what your hospital offers.

Parameter of comparison	Pfizer-BioNTech vaccine	Moderna vaccine	What does this mean?
Temperature of distribution	Vaccine must be shipped in special containers with dry ice, which maintains a temperature of -94 degrees Fahrenheit.	Vaccine may be shipped in freezers that can maintain temperatures of -4 degrees Fahrenheit.	The Moderna vaccine doesn't need to be transported and stored in as cold a temperature as the Pfizer-BioNTech product. It may be easier to distribute, especially in small communities and rural areas that may not have access to the required refrigeration
Temperature of storage of vials	Vials of vaccine must be stored in special freezers at -94 degrees Fahrenheit	Vials of vaccine may be stored in regular freezers at -4 degrees Fahrenheit.	
Temperature of storage of vaccine	The vaccine must be used between 30 minutes and two hours once it's thawed to room temperature.	Vaccine can stay in a standard refrigerator for up to 30 days. The vaccine must be used within 12 hours once it's at room temperature.	
Preparation	Once the vial is thawed, the vaccine must be diluted with saline, which is basically salt water, before it can be injected.	This vaccine comes ready to be administered. No dilution required.	This difference has no significance per se. It is quite common to dilute vaccines before using.
Who can take the vaccines, based on who was included in clinical trials?	People 16 years old and older	People 18 years old and older. The company has recently begun testing its vaccine in 12- to 17-year-olds	At this time, the difference is age groups doesn't appear to have much significance
How many shots?	Two shots of the vaccine — 21 days apart	Two shots of the vaccine — 28 days apart	No apparent significance except when you need to go back for the second shot. Please keep in mind that both shots need to be taken to ensure protection.
How effective is the vaccine?	The vaccine showed efficacy of 95% at preventing symptomatic COVID-19, measured starting from seven days after the second dose was administered.	The vaccine was 94.1% effective at preventing symptomatic COVID-19, measured starting from 14 days after the second dose.	Both vaccines are equally effective in reducing the risk of severe COVID-19. As of now, it is not yet known if either prevents asymptomatic infection with the SARS-CoV-2 virus.
Side effects	The most common side effects were pain at the injection site, followed by tiredness, headache, muscle pain, chills, joint pain and fever, according to the FDA. In the U.S. trial, four people who received the vaccine developed Bell's palsy, which causes usually temporary paralysis in facial muscles In the United Kingdom, two health care workers reported severe allergic reactions after being vaccinated; two health care workers in Alaska reported a serious allergic reaction after receiving the vaccine.	The most common side effects were pain at the injection site, followed by tiredness, headache, muscle pain, joint pain and chills, an FDA analysis found. Three trial participants who received the vaccine developed Bell's palsy.	The side effects are basically the same for each vaccine. The chances of developing Bell's palsy or anaphylactic reaction is exceedingly rare given the small numbers we have seen thus far.

New COVID-19 variants

There has been a lot of media attention on new variants of the virus that have been detected in the UK, South Africa and even [here in the US](#). Multiple states are now reporting the presence of the variant first detected in the UK. [What does all this mean?](#)

The short answer is we don't fully know. Different viruses with different "constellations" of mutations are arising independently in different locations around the globe. In the case of the UK variant, it appears to be more transmissible i.e. it can pass more easily from an infected person to a non-infected person. There are concerns that the South African variant may not be as susceptible to current vaccines. BUT, we are awaiting more information.

More studies are needed to confirm the impact of these variants on transmissibility (how easily virus spreads between people), infectivity (how easily it enters the body's cells), disease severity, immune response and vaccine efficacy. It is still expected that current vaccines will offer some degree of protection against the new variants.

What are the immediate implications for our community?

- 1) We should remain vigilant in practicing public health measures, including wearing masks, washing hands and watching our distance.**
- 2) If the variants are more easily transmitted, this could overburden our fragile healthcare system, which is under enormous strain from the holiday surge.
- 3) We must increase our efforts around contact tracing and identifying pockets of these new variants.
- 4) We must rapidly increase vaccination efforts nationwide.

Upcoming events:

January 15: IASLC [webinar](#) moderated by LCRF grantee Dr. Christian Rolfo on "Managing Clinical and Translational Research During COVID"

January 19: GO2 Foundation for Lung Cancer "[Lung Cancer Living Room](#)" with Dr. Amy Moore and Dr. Fred Hirsch "New Year, New Era: Ushering in a New Generation of Vaccines"

Resources and websites

1. [IASLC's Guide to COVID-19 and Lung Cancer](#)
2. The National Cancer Institute website for COVID-19 and emergency preparedness [COVID-19: What People with Cancer Should Know](#)
3. Updates from the US [Centers for Disease Control and Prevention \(CDC\)](#)

January 11, 2021

4. Johns Hopkins [COVID-19 Resource Center](#)
5. Interactive map of [US COVID-19 cases by state](#)
6. [COVID-19 in patients with cancer: managing a pandemic within a pandemic](#)
7. You can find information specific to your state or city or town on your health department's website.
 - Directory of state department of health [websites](#)
 - Directory of local health department [websites](#)
8. American Medical Association [resources](#) for healthcare providers.



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