

COVID-19 AND CANCER

Covid-19 Vaccination Recommendations for Patients with Cancer

Dr. Aakash Desai [Assistant Professor of Medicine, Mayo Clinic, Rochester, MN, Former Patient Education Ambassador, GRACE, Member, Career Development Community for the International Association of the Study of Lung Cancer (IASLC)]

TRANSCRIPT

And subsequently, as you know, later on in 2021, we were able to get some vaccinations that were approved by the FDA for COVID-19. And here is a list of those vaccines that were approved: the Pfizer vaccine, the Moderna vaccine, and the J&J or Johnson and Johnson vaccine. Pfizer and Moderna have most largely been used in the US also with J&J. Pfizer and Moderna are both messenger RNA vaccines; initially, were given with two shots, 21 days apart for Pfizer, and two shots, 28 days apart for Moderna, and the J&J was a one-shot vaccine, which was a viral type of vaccine.

The effectiveness against COVID-19 after two shots for Pfizer was about 95%, similar for Maderna, J&J was found to be a little less effective with a single shot. But all of these essentially were effective against that from COVID-19. And this was obviously being studied by the general population at the time.

So, as the COVID-19 vaccines came out, we established a COVID-19 and vaccination clinical trials working group. And again, I had the privilege to be part of this. And we established some guidelines for cancer patients for COVID-19 vaccinations. For those patients in Phase One trials and Phase Two and Phase Three trials, obviously, the recommendation was that the vaccines should be given on vaccine availability but the timing based on the mechanism of action for the Phase Two and Phase Three trials.

For the Phase One trial, no investigational agents, the timing of the vaccination, again, should be mechanism based. And then depending on whether it's i mmunotherapy or a dose escalation, including TKIs, there are different vaccine schedules and discussions with the treating providers that we had recommended.



In terms of vaccination with the type of treatment, for surgical clinical trials or for surgery, the administration at discharge after recovery from post-operative complications was generally recommended. In terms of solid tumors or cancers, which are other than blood types of cancer—such as cancers like breast cancer, lung cancer, prostate cancer, or colorectal cancer—we also recommended vaccines on availability for most cases, except for patients who were on cytotoxic chemotherapies where one to two weeks before or one to two weeks after the drug dose would be recommended because of the possible for myelosuppression to increase the potential for the immune system to mount a response.

In terms of patients who had blood cancers or hematological malignancies, again, those receiving intensive cytotoxic chemotherapies, the recommendation is to delay until the recovery of the neutrophil counts. But for most other types of treatment options, patients can get vaccines on availability. A special scenario is hematopoietic stem cell transplant as well as adoptive cell therapy such as CAR T cells, where vaccinations are generally recommended more than three months out from the treatment or the transplant.