PKD Foundation's answers to the PKD community's questions about the Pfizer and Moderna COVID-19 Vaccines

Are the vaccines recommended for PKD patients in general?

Yes. The FDA has authorized the Pfizer vaccine for the prevention of COVID-19 for individuals 16 years of age and older, and the Moderna vaccine for individuals 18 years of age or older, including persons with underlying medical conditions. Further, the FDA noted that clinical trial results for both studies showed that the vaccines are expected to be safe in those individuals at increased risk for severe COVID-19, such as those with chronic kidney disease. **Check with your doctor to see if the COVID-19 vaccine is safe for you.**

The exception to this is anyone who has a "contraindication," or medical reason to not receive the vaccine. So far, the only contraindication identified is having had a prior severe allergic reaction to any component or ingredient of the vaccine. These include:

Pfizer ingredients

- mRNA
- lipids
  - ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate)
  - 2 [(polyethylene glycol)-2000]-N,N-ditetradecylacetamide
  - 1,2-Distearoyl-sn-glycero-3-phosphocholine
  - cholesterol
- potassium chloride
- monobasic potassium phosphate
- sodium chloride
- dibasic sodium phosphate dihydrate
- sucrose

Moderna ingredients

- mRNA
- lipids
  - SM-102
  - 1,2-dimyristoyl-rac-glycero-3-methoxypolyethylene glycol-2000 [PEG2000-DMG]
  - cholesterol
  - 1--,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]
- tromethamine
- tromethamine hydrochloride
- acetic acid
- sodium acetate
- sucrose

Are the vaccines safe for transplant patients who are on immunosuppressive drugs?

There is not enough information from the clinical trials to tell us if the vaccines will prevent COVID-19 in patients who are immunocompromised or on immunosuppressive medications. However, the FDA has recommended that such patients get the COVID-19 vaccines unless there is an additional medical reason that they should not (a contraindication such as mentioned above).

Importantly, this vaccines do not contain SARS-CoV-2 (the live virus) and will not give you COVID-19. The vaccine contains a molecule called an mRNA, which provides the instructions to our cells necessary to make a single key component of the virus (the "spike" protein), in order to help your immune system to recognize the virus in the future and know how to fight it.

Were any transplant patients (immunosuppressed) participants in the Pfizer or Moderna studies?

Individuals receiving immunosuppressive medications were excluded from both vaccine trials, so we have no information on how your body may react differently to the vaccine than the average person. Johns Hopkins is now recruiting post-transplant patients (transplantvaccine.org) to answer this critically important question by measuring antibodies following vaccination in those who have had an organ transplant.

How do I get the vaccine?

Currently there is a limited supply of both COVID-19 vaccines in the US. For now, the vaccines are only available to health care workers and residents of long term care facilities. Once the vaccines are widely available, they will be offered in doctors' offices, retail pharmacies, hospitals, and federally qualified health centers in a manner similar to the seasonal flu vaccine. Importantly, vaccine doses purchased with US taxpayer dollars will be provided to people at no cost.

Can children get the vaccines?

Not at this time. The COVID-19 vaccines have only been approved in people over 16 years of age.

What are the side effects of the vaccines?

The most frequent side effects of both vaccines are reactions at the site of injection, including pain (the most common), rednesss and swelling. Individuals receiving the vaccine also experienced general side effects, including fever, chills, tiredness, and headaches. Find more information from the CDC **here** .

Could the vaccine have any impact on kidney function?

There were no reported kidney-specific safety events in the vaccine safety data provided to the Vaccine Products Advisory Committee by either the study Sponsors or FDA scientists.

When is it safe to be in public after the vaccine?

Maximum protection (~95% effective) from COVID-19 was observed 14 days after individuals received the second dose of either vaccine. It is important to understand that the vaccines are being evaluated based on their ability to prevent COVID-19 disease, not infection by the virus, SARS-CoV-2, that causes the disease. At present, there is no data available as to whether either vaccine prevents infection by the virus. This means that you might still be able to spread the virus after receiving the vaccine. Therefore, the CDC recommends all people continue public health practices to prevent infection, including covering your nose and mouth with a mask when around others, staying at least six feet away from others not in your household, avoiding crowds, and frequent handwashing until we know more.

*More information from the CDC **here**.*

***Read our blog** featuring our conversation with a PKD transplant nephrologist!*