

Dear Patients,

The Moderna Covid vaccine is a mRNA vaccine. That means that when the vaccine is given to you, your cells pick up the mRNA and the mRNA from the vaccine tells them to make the molecule that the virus uses to infect cells. Since there is no mRNA for the rest of the virus, the molecule is harmless. But it does attract your immune cells, who then get armed with antibodies to fight the virus. Those cells are then pre-armed and ready when the virus tries to get into you. They multiply rapidly and fight off the virus, 19 times out of 20 before you get sick, and 1 time in 20 as you get mildly sick but before you get seriously ill.

The mRNA molecule cannot get into your genes, and it is inherently unstable, so it degrades and disappears in 1-2 weeks. While the vaccine is no longer in you, the pre-armed immune cells are living and ready to protect you.

The vaccine has an excellent safety record in the trial of 30000 people who tested the vaccine. No serious vaccine illnesses other than the allergic response that a few people had were recorded. That allergic response (anaphylaxis) needs to be treated with epinephrine if it occurs, so you must wait in our parking lot for 15 minutes after receiving the vaccine, 30 minutes if you have ever had a previous anaphylaxis episode, so that we can make sure you are safe before you leave.

We don't know how long you will be protected by the vaccine, but we do know that 19 out of every 20 people were protected and did not get Covid illness beginning 10 days after their first shot.

13 out of 30000 did test positive for the virus when they went for their second shot. 38 of the control group tested positive. You can still spread the virus after vaccination, but spread is over 50 % less likely. We will have to keep wearing masks to protect others until the epidemic is controlled.

I am super excited about the vaccine. I received my first dose, and have had only a very minor sore arm. I can't wait until I get you your vaccine!!!

With love,

Terry Copperman MD