

Moderna announces step toward updating COVID shots for fall

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Moderna hopes to offer updated COVID-19 boosters in the fall that combine its original vaccine with protection against the omicron variant. On Tuesday, it reported a preliminary hint that such an approach might

work.

Today's COVID-19 vaccines all are based on the original version of the coronavirus. But the virus continues to mutate, with the super-contagious omicron variant—and its siblings—the latest threat.

Before omicron came along, Moderna was studying a combination shot that added protection against an earlier variant named beta. Tuesday, the company said people given that beta-original vaccine combination produced more antibodies capable of fighting several variants—including omicron—than today's regular booster triggers.

While the antibody increase was modest, Moderna's goal is to produce a combination shot that specifically targets omicron. "These results really give us hope" that next step will work even better, said Dr. Jacqueline Miller, a Moderna vice president.

Tuesday's data was reported online and hasn't been vetted by independent experts.

COVID-19 vaccines still are providing strong protection against severe disease, hospitalization and death, even against omicron. That variant is so different from the original coronavirus that it more easily slips past the immune system's defenses, although studies in the U.S. and elsewhere show an original booster dose strengthens protection. Some countries offer particularly vulnerable people a second booster; in the U.S., that's anyone 50 or older or those with a severely weakened immune system.

Health officials have made clear that giving boosters every few months isn't the answer to the mutating virus. They've [begun deliberating](#) how to decide if and when to change the vaccine recipe.

Just switching to a vaccine that targets the latest variant is risky, because the virus could mutate again. So Moderna and its rival Pfizer both are testing what scientists call "bivalent" shots—a mix of each company's original vaccine and an omicron-targeted version.

Why would Moderna's earlier, beta-targeted combo shot have any effect on omicron? It includes four mutations that both the beta variant and the newer omicron have in common, Miller said.

Now Moderna is testing a bivalent shot that better targets omicron—it includes 32 of that variant's mutations. Studies of two booster doses are underway in the U.S. and Britain; results are expected by late June.

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