



Statement on Variants of the SARS-CoV-2 Virus

December 23, 2020

The Moderna COVID-19 Vaccine expresses the full-length Spike protein of the SARS-COV-2 virus, allowing for the generation of neutralizing antibody responses to multiple domains of the protein. The full-length Spike protein is 1,273 amino acids long, so while recent variants involve multiple mutations, for instance up to 8 amino acid changes in the spike protein of the B1.1.7 strain, these represent less than a 1% difference from the spike protein encoded by Moderna's vaccine.

While we plan to run tests to confirm the activity of the vaccine against any strain, the broad range of potential neutralizing antibodies made possible by the Moderna COVID-19 Vaccine provide confidence that our vaccine will also be effective at inducing neutralizing antibodies against them.

We have already tested sera from animals and humans vaccinated with the Moderna COVID-19 Vaccine against a number of previous variants of the SARS-CoV-2 virus that have emerged since the first outbreak of the pandemic and found our vaccine to remain equally effective.

Based on the data to date, Moderna expects that the vaccine-induced immunity from the Moderna COVID-19 Vaccine would be protective against the variants of the SARS-CoV-2 virus recently described in the UK. We will be performing additional tests of the vaccine in the coming weeks to confirm this expectation.

We continue to test the Moderna COVID-19 Vaccine against new SARS-CoV-2 variants, and our expectation is that the vaccine's effectiveness will hold against them as well.

Forward-Looking Statements

This statement contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including statements regarding: Moderna's expectations regarding the ability of the Moderna COVID-19 Vaccine to protect and provide immunity against variant strains of the SARS-CoV-2 virus, and Moderna's ongoing test of the effectiveness of the Moderna COVID-19 Vaccine against these strains. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "could," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this statement are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties, and other factors include those risks and uncertainties described under the heading "Risk Factors" in Moderna's most recent Quarterly Report on Form 10-Q filed with the U.S. Securities and Exchange Commission (SEC) and in subsequent filings made by Moderna with the SEC, which are available on the SEC's website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements contained in this statement in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna's current expectations and speak only as of the date hereof.