General Information and Opinion: Moderna COVID-19 Vaccine

(Updated as of December 18, 2020)

General Information:¹

Usage: Authorized under Emergency Use Authorization (EUA) that circumstances exist to justify the emergency use of drugs and biological products during the COVID-19 pandemic.

Indication (reason for usage): To prevent Coronavirus Disease 2019 (COVID-19) caused by SARS-CoV-2.

Contraindication (reason to withhold usage):

- Severe allergic reaction after first dose of the vaccine, and/or
- Prior severe allergic reaction to any ingredient of the vaccine [nucleoside-modified messenger RNA (mRNA) encoding the pre-fusion stabilized Spike glycoprotein (S) of SARS-CoV-2 virus; lipid content {SM-102, polyethylene glycol [PEG] dimyristoyl glycerol [DMG], cholesterol, 1,2-distearoyl-sn-glycero-3-phosphocholine [DSPC]}, tromethamine, tromethamine hydrochloride, acetic acid, sodium acetate, and sucrose]

Age: Individuals 18 years of age or older.

Route of Administration: Via injection into the muscle.

Vaccination Series: 2 doses, 4 weeks apart.

Duration of Immunity: Currently unknown.

Alternative Vaccines: Pfizer-Biontech COVID-19 vaccine (booster second dose should be made by same manufacturer). FDA may allow emergency use of other COVID-19 vaccines in near future

Safety Considerations:

- Pregnancy: Currently no information about the safety of the vaccine when administered in a patient who is pregnant. Pregnancy however is not an absolute contraindication. According to the American College of Obstetricians and Gynecologists, COVID-19 vaccines should not be withhled from pregnant individuals who meet the criteria for vaccination.²
- Age of Infancy to 17 years old: No information yet.
- The vaccine will <u>not</u> cause COVID-19 viral infection.

Adverse reactions: Pain at the injection site, fatigue, headache, myalgia, arthralgia, chills, nausea/vomiting, axillary swelling/tenderness, fever, swelling at the injection site, and erythema at the injection site. In my opinion as an immunologist, these reactions, except vomiting, are expected immunological reactions and are not allergic or anaphylactic reactions.

Where to get the vaccine: The vaccine will be administered to health-care workers and patients in nursing homes first. It is not yet known where the general public will receive the vaccine.

¹ <u>https://www.fda.gov/media/144414/download;</u> <u>https://www.modernatx.com/covid19vaccine-eua</u>

² Vaccinating Pregnant and Lactating Patients Against COVID-19 | ACOG (<u>https://www.acog.org/en/clinical/clinical-guidance/practice-advisory/articles/2020/12/vaccinating-pregnant-and-lactating-patients-against-covid-19</u>)

Opinion (Dr. Schuman Tam): 1

In my opinion, everybody should get the new COVID-19 vaccines, not only to reduce the risk of severe illness if they are infected with the virus, but also to reduce the spread of this deadly virus to friends, family members, and the general public. The vaccination is not only for each individual's own protection, but also to protect the people around them. This is the way to end the COVID-19 pandemic. If you have the rare chance of anaphylaxis to the vaccine or its components, you should consult with your primary physicians to refer you to an allergy and immunology specialist to see if the vaccine can be administered safely, if so indicated.

¹ **DISCLAIMER:** This document is intended to provide educational information only and IS ONLY PROVIDED AS A CONVENIENCE; it is not to be considered as a valid resource for information or contact or communication with a Asthma & Allergy Clinic of Marin and San Francisco, Inc. ("AASTHMA") physician, our practice or its staff. The information on this document is not intended or implied to be a substitute for professional medical advice, diagnosis or treatment. All content, including text and information, contained on or available through this document is for general information purposes only. AASTHMA makes no representation and assumes no responsibility for the accuracy of information contained on or available through this document, and such information is subject to change without notice. You are encouraged to confirm any information obtained from or through this document with other sources, and review all information regarding any medical condition or treatment with your physician. NEVER DISREGARD PROFESSIONAL MEDICAL ADVICE OR DELAY SEEKING MEDICAL TREATMENT BECAUSE OF SOMETHING YOU HAVE READ ON OR ACCESSED THROUGH THIS DOCUMENT. AASTHMA does not recommend, endorse or make any representation about the efficacy, appropriateness or suitability of any specific tests, products, procedures, treatments, services, opinions, health care providers or other information that may be contained on or available through this document. AASTHMA IS NOT RESPONSIBLE NOR LIABLE FOR ANY ADVICE, COURSE OF TREATMENT, DIAGNOSIS OR ANY OTHER INFORMATION OR SERVICES THAT YOU OBTAIN THROUGH THIS DOCUMENT.