Regarding: Safety and efficacy of the Pfizer-BioNTech COVID-19 Vaccine (BNT162b2) and the Moderna COVID-19 Vaccine for patients with aspirin-exacerbated respiratory disease (AERD)

In December 2020, the U.S. Centers for Disease Control (CDC) voted to recommend the Pfizer-BioNTech COVID-19 Vaccine in people 16 years and older and the Moderna COVID-19 Vaccine in people 18 years and older under the Emergency Use Authorization (EUA) issued by the U.S. Food and Drug Administration (FDA).

Overall, the data show that these vaccines are both very safe and very efficacious in preventing COVID-19. There is no evidence that patients with asthma, sinus disease, nasal polyps, or aspirin/NSAID allergy would be at increased risk of adverse reactions to these vaccines.

Consistent with the CDC guidelines, and with the evidence overall, we generally would recommend:

- Adult patients with AERD should be able to receive either the Pfizer or the Moderna COVID-19 vaccination once it is available – there is no evidence that there is a preference for either of these vaccines in terms of safety or efficacy.

- The CDC currently recommends that any person who has a history of anaphylaxis for any reason (patients with AERD who have had very severe/systemic reactions to aspirin or an NSAID may meet this criteria for a “history of anaphylaxis”) should be observed for 30 minutes following their vaccination instead of the usual 15-minute observation.

- Patients with AERD who are being treated with an FDA-approved biologic medication for their disease (i.e., Dupixent®, Nucala®, Xolair®, Fasenra®, Cinqair®, Cinqair®) should be able to receive these COVID-19 vaccines without additional special precautions.

- Patients who have a history of severe allergy or anaphylaxis to polyethylene glycol (PEG), which is a component of both the Pfizer and the Moderna COVID-19 vaccines, should not be vaccinated at this time. This is an extremely rare allergy. Please contact your allergist as there may be further testing available to better determine whether this vaccine would be safe for you.

- Patients who have a history of anaphylaxis to a previous vaccine or who have a history of anaphylaxis to an injected medication should contact their allergist. These are unlikely to be strong risk factors for reaction to these COVID-19 vaccines (no vaccine has previously contained PEG), but your allergist may recommend that you get the vaccine with a 30-minute observation period instead of the usual 15-minute observation.

Please note that although we expect the recommendations to be similar for the upcoming COVID-19 vaccines from other companies (AstraZeneca, etc), we cannot fully comment on those until the trials and reviews are complete.

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