February 3: Omicron Subvariant, Oral Treatments Update and Webinar, and FDA Approval of Moderna Vaccine

Today’s issue features more information about the new omicron subvariant BA.2, as well as an update on oral treatments and details about an upcoming Oral Therapeutics webinar. It also includes information from the U.S. Food & Drug Administration (FDA) about approval of the Moderna vaccine.

OMICRON SUBVARIANT BA.2
Late last week, the Centers for Disease Control and Prevention (CDC) reported that a new subvariant of omicron, called BA.2, has been detected in nearly half of all U.S. states, with 127 cases confirmed as of January 28. The first confirmed case of BA.2 at Northwestern Medicine was identified on January 29 by Infectious Disease Specialist Egon A. Ozer, MD, PhD, director of the Center for Pathogen Genomics and Microbial Evolution. It was the first case of BA.2 reported in Illinois.

BA.2 characteristics
According to the World Health Organization (WHO), the BA.2 subvariant differs from BA.1 in several mutations, including those found in the spike protein. The BA.2 subvariant has five unique mutations not found in BA.1 on a key part of the spike protein that the virus uses to attach to human cells and invade them. Mutations on this part of the spike, known as the receptor-binding domain, are often associated with higher transmissibility.

Transmissibility
Preliminary research out of Europe finds that BA.2 is about 1.5 times more transmissible than the original omicron variant. New infections with BA.2 are contributing to more patients with COVID-19 and slower declines in cases.

Severity of disease and vaccine effectiveness
BA.2 does not appear to cause more severe illness or reduce the effectiveness of vaccines. According to researchers in Europe, a vaccine booster dose was found to be 70% effective at preventing symptomatic illness from BA.2, compared with 63% effectiveness for BA.1.

Effectiveness of current tests
The widely used PCR tests continue to be effective at detecting infection with omicron subvariant BA.2. However, using the absence of the S-gene on the PCR test to presumptively distinguish omicron BA.1 from delta is no longer effective at similarly separating BA.2 from delta. This is why
The BA.2 subvariant is being referred to as “stealth omicron.” Specialized laboratory techniques such as genomic sequencing are still necessary to confirm which variant is causing an infection.

For the latest information about omicron and other variants of concern, visit the Variants of the Virus page on the CDC website and the Tracking SARS-CoV-2 Variants page on the WHO website.

**ORAL TREATMENT UPDATE AND WEBINAR**

Outpatient prescription ordering for nirmatrelvir/ritonavir (Paxlovid) and molnupiravir (Lagevrio), which went live in NM Epic last week, is now live in Epic in the South Region. These oral medications have Emergency Use Authorization (EUA) for the treatment of COVID-19 in patients who are not hospitalized and are at high risk for progression to severe illness, including hospitalization or death.

To assist physicians in prescribing these medications, NM will host a webinar on Thursday, February 10. Led by Infectious Disease Specialist Michael G. Ison, MD, and Infectious Disease Clinical Pharmacist W. Justin Moore, PharmD, BCPS, BCIDP, the session will focus on medication effectiveness, indications for treatment, drug interactions and the ordering process.

**COVID-19 Outpatient Oral Therapies Information Session**

*Thursday, February 10, 7 – 8 am*

Click the link above to attend the meeting.

Since the availability for these medications is extremely limited, please discuss alternative options with the patient if the prescription cannot be filled. Current allocations can be viewed at healthdata.gov.

To better understand treatment indications, contraindications and precautions, all physicians are encouraged to review resources on the COVID-19 Treatment Resources page on Physician Forum and NM Interactive (login required).

**FDA APPROVES MODERNA VACCINE**

On Monday, the FDA announced that the Moderna vaccine has been approved for use in individuals 18 and older. The approved vaccine will be marketed as Spikevax. It will continue to be administered as a primary series of two doses, given 28 days apart.

The Moderna vaccine remains available under EUA for individuals 18 and older for the following purposes:

- As a two-dose primary series
- As a third primary series dose for individuals who are immunocompromised
- As a single booster dose at least five months after completing a primary series of the vaccine
- As a heterologous (or “mix and match”) single booster dose following completion of primary vaccination with a different available COVID-19 vaccine

For more information, please view the announcement on the FDA website.

The new omicron subvariant BA.2 is expected to slow the decline in cases and may soon become the dominant variant. Please continue to educate patients on the importance of vaccination and
boosters, and encourage them to follow appropriate masking guidelines and other precautions to keep themselves, our colleagues and our communities safe.

Gary A. Noskin, MD  
Senior Vice President, Quality  
Northwestern Memorial HealthCare  
Chief Medical Officer  
Northwestern Memorial Hospital