

## **Objectives**

### **Mounting Our Defense**

- ✓ Review of the effectiveness of COVID-19 booster dosing of mRNA vaccinations against the Omicron variant, including symptomatic infections and hospitalization.
- ✓ Summary of the monoclonal antibody treatments, oral and IV anti-viral treatments available for use in longterm care facilities.
- ✓ Discussion of a clinical approach to utilization of the various possible treatment options unique to the long-term care facilities.



### **Continuing Nursing Education**

#### Mounting Our Defense

**Learner Outcome:** 100% of learners will self-report an increase in knowledge of vaccines and therapeutics for protection of residents residing in long-term care facilities against COVID-19.

**Disclosure Statement:** No one with the ability to control content of this activity has a relevant financial relationship with an ineligible company.

**Provider Statement:** Ohio Department of Health is approved as a provider of continuing nursing professional development by Ohio Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. (OBN-001-91)

**Successful Completion:** The learner must attend 100% of the session and complete an evaluation to be awarded 1.0 nursing contact hour.

To be awarded the nursing contact hour, please complete the evaluation by March 4, 2022: https://www.surveymonkey.com/r/Evaluation\_MountingOurDefense





### **Continuing Education**

Mounting Our Defense

#### **Credit Provider:**

AMDA – The Society for Post-Acute and Long-Term Care Medicine

#### **Credit Available:**

- ✓ AMA PRA Category 1 Credit<sup>TM</sup> (Physician CME) or
- ✓ ABIM MOC Point (American Board of Internal Medicine MOC Points)

  and
- ✓ ABPLM CMD Management Credit

#### **Credit Award:**

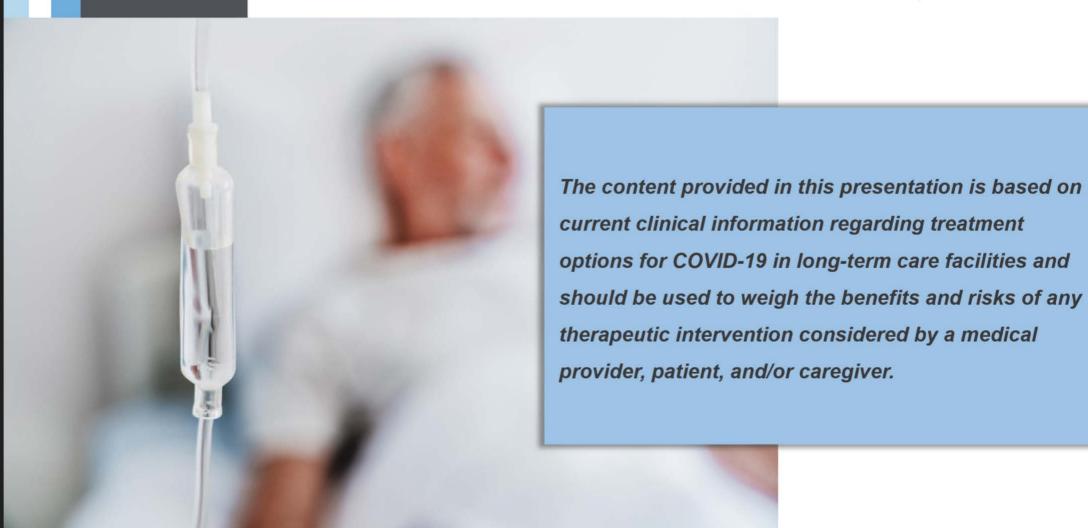
1 Credit each per webinar

#### **Credit Registration:**

https://apex.paltc.org/course/view.php?id=1316&pageid=3239



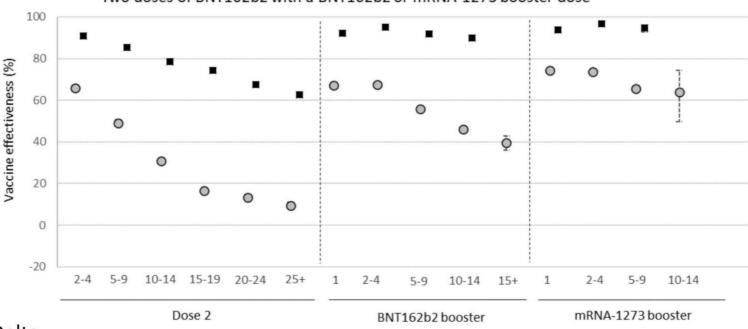






# mRNA vaccine effectiveness (VE) is lower for <u>symptomatic infection</u> due to COVID-19 Omicron compared to Delta





Delta

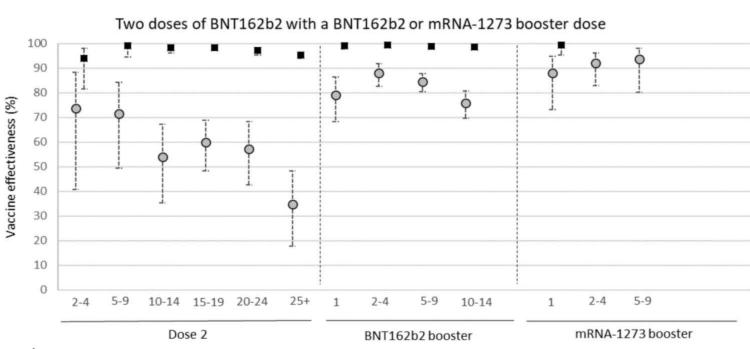
Omicron

Time since Vaccine (weeks)

SARS-CoV-2 variants of concern and variants under investigation (publishing.service.gov.uk)



# mRNA vaccine effectiveness (VE) is lower against <u>hospitalization</u> for COVID-19 Omicron compared to Delta



Delta

Omicron

Time since Vaccine (weeks)

UK Health Security Agency: Vaccine Surveillance Report, Week 5







- ✓ NIH released the publication: Coronavirus Disease 2019 (COVID-19) Treatment Guidelines – available at the following link: https://www.covid19treatmentguidelines.nih.gov/.
- ✓ The therapeutic options for the management of COVID-19 will
  continue to evolve over the coming months to include new, innovative
  tools for healthcare providers to use against SARS-COVID-19.
- ✓ The Clinical Advisory Group for the Regional Rapid Response
  Assistance Program (R³AP) has adapted the NIH publication to address
  considerations unique to long-term care facilities.





### **Special Considerations**

**Mounting Our Defense** 

#### Consider several variables, including but not limited to:

- ✓ Clinical presentation of the individual diagnosed with COVID-19.
- ✓ Basic considerations of risk vs. benefit of any medical treatment with the clinical presentation of the individual, including drugdrug interactions.
- ✓ Availability of therapeutic options to the LTCF through the Ohio network of inpatient pharmacies.
- ✓ Ease of administration of the specific therapeutic options.
- ✓ Staffing challenges of the LTCF experiencing the outbreak of COVID-19.



### Therapeutic Options as of February 18, 2022

**Mounting Our Defense** 



#### **Monoclonal Antibody Treatments (mAb)**

- Sotrovimab
- Bebtelovimab



#### **Oral Antiviral Medications**

- Molnupiravir (Lagevrio<sup>®</sup>)
- Nirmatrelvir / Ritonavir (Paxlovid<sup>™</sup>)



#### **IV Antiviral Medications**

Remdesivir (Veklury®)



### **COVID-19 Treatment**

#### Guidance for Long-Term Care Facilities

When logistical or supply constraints exist, treatment should be prioritized to patients at highest risk of clinical progression based on age, vaccination status, immune status, and clinical risk factors.

#### TIER 1

Immunocompromised patients unlikely to mount response to vaccine regardless of vaccination status **OR** unvaccinated patients aged ≥ 75 years **OR** anyone aged ≥ 65 years with risk factors.

#### TIER 2

Unvaccinated patients at risk of severe disease not included in Tier 1, (anyone aged ≥ 65 years **OR** anyone ≤ 65 years with clinical risk factors.

#### TIER 3

Vaccinated patients at high risk of severe disease, anyone aged ≥ 75 years

OR aged ≥ 65 years with clinical risk factors.

#### TIER 4

Vaccinated patients at risk of severe disease, anyone aged ≥ 65 years **OR** anyone ≤ 65 years with clinical risk factors.

#### **National Institutes of Health**

https://files.covid19treatmentguidelines.nih.gov/guidelines/covid19treatmentguidelines.pdf (see table, page 24)

A list of risk factors and clinical conditions affecting immune status is available at CDC webpage "Underlying Medical Conditions Associated with High Risk for Severe COVID-19"

https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html





#### INFUSION

#### **Sotrovimab**

- Preferred mAb treatment for Omicron-dominant outbreaks due to efficacy (85% relative reduction) and minimal side effects.
- A single intravenous infusion (500 mg) requires 30 minutes, followed by an observation period.

#### INFUSION

#### **Bebtelovimab**

- Retains full neutralizing activity against Omicron and other known variants including BA.2.
- A single intravenous injection (175 mg or 2 mL) administered over 30 seconds, followed by a normal saline flush.

#### INFUSION

#### Remdesivir

- Shown to be effective in Omicron-dominant outbreaks, including the BA.2 subvariant. Its use was
  expanded on January 21, 2022 to non-hospitalized patients for the treatment of mild to moderate COVID-19
  disease with high risk of hospitalization.
- Remdesivir 200 mg IV is given on Day 1, followed by Remedsivir 100 mg IV on Days 2 and 3, initiated as soon as possible and within 7 days of symptom onset.



#### **ORAL DELIVERY**

#### Nirmatrelvir / Ritonavir (Paxlovid™)

- An oral medication that is the next choice due to efficacy (89% risk reduction) and minimal side effects.
- Renal impairment: significant drug interactions exist and require careful medication review. Dosage reduction in moderate renal impairment (eGFR ≥ 30 to ≤ 60 mL/min) is recommended.
- Pills should not be crushed or cut.
- **Standard Dosing:** two Nirmatrelvir 150 mg tablets (total 300 mg) and one Ritonavir 100 mg tablet (total 100 mg) twice daily x five days.
- **Renal Dosing:** one Nirmatrelvir 150 mg tablet (total 150 mg) and one Ritonavir 100 mg tablet (total 100 mg) twice daily x five days.

#### **ORAL DELIVERY**

#### Molnupiravir (Lagevrio®)

- An oral antiviral medication that is reserved for situations where other agents are not available.
- An oral medication reserved for situations where other agents are not available due to efficacy (30% relative reduction) and minimal side effects.
- Pills should not be crushed or cut.
- **Dosing:** 800 mg orally twice daily x five days.



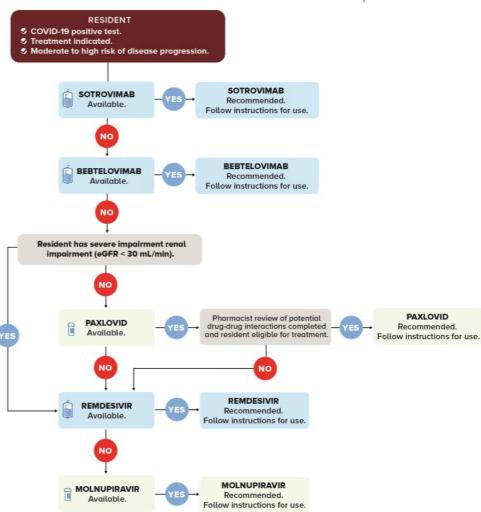
# **COVID-19 Treatment Algorithm for LTCFs**

February 2022

All medications and infusions come with potential side effects.

Residents must be advised to ask their doctor or pharmacist to assist in choosing the right option after providing patient health and profile information.

This algorithm was developed by the Ohio Department of Aging Clinical Advisory Board.







Help us take our shot against COVID-19 Ohio! We have the players. We have the skills. We can score a victory!

and its variants, which are still a very serious health risk for residents - who have up-to-date vaccinations have less chance of contracting COVID-19, generally experience milder symptoms, and are less likely to be hospitalized for their symptoms.

game, we need a boost to keep our defense against the virus strong.

The COVID-19 vaccine is our best defense against the virus A vaccine booster, like a sports drink, ensures that our bodies are providing the strongest defense against COVID-19. The all Ohioans. People - especially long-term care staff and COVID-19 booster is widely available and provides another layer of protection to prevent illness and the spread of the

For more than a year, the Ohio Vaccine Maintenance Program has connected facilities with players in their communities to Just as an athlete sometimes needs a boost to stay in the ensure vaccinations are up-to-date for new and existing staff and residents. Our game plan works. We win when everyone takes their shot.



#### Reporting is important.

When you report your staff and resident vaccination rates, it allows for effective allocation of state and federal resources where they are most needed. Reporting also helps individuals, families, and advocates make informed decisions about the best and safest places to receive the care they need.



#### Every team needs a coach.

We're here to provide the guidance and know-how to help you win. Ohio's Regional Rapid Response Assistance Program is ready to help with services including vaccination clinics, COVID-19 testing, infection prevention and control education, and staffing support. Visit www.aging.ohio.gov/r3ap or call 1-855-732-7632 to learn more.



