

GMVEMS Council  
Research Committee Meeting  
January 18, 2022

**PRESENT:**

Dr. Nancy Pook, Chair of Clinical Research Committee and attending ER Physician for Kettering Health

Dr. Randy Marriott, ER, Physician, Medical Director for Premier Health

President Marker, President of GMVEMS Council, Retired Lieutenant from Monroe Fire

David Gerstner, DFD/Regional MMRS Coordinator

Chief Nicholas Judge, EMS Chief for Dayton Fire

Chief Brandon Barnett, Trotwood Fire

Lieutenant Shawn Lehrter, Trotwood Fire

EMS Captain David Downey, Trotwood Fire

Chief Michael Guadagno, Washington Township Fire

Aaron Vance, Monroe Fire/FF/Community Paramedicine Program

EMS Captain Joshua Johnson, Sugarcreek Fire

Cheryl Wears, Mercy Health Champaign County, Community Paramedicine Program

Heidi Jones, Paramedic/EMS Instructor, Tippy City Fire

Laura Clark, EMS Coordinator for Premier Health and Community Paramedicine Program Co-Manager

Joseph Burdick, EMS Coordinator for Premier Health

Amy Dunkin, Dayton Fire/GROW Team

Melissa Church, Centers for Medicare and Medicaid Representative

Nathan Pulliam, Dayton Fire, Community Paramedicine Program

Kendra Harris, Dayton Fire, Community Paramedicine Program, Co-chair of Research Committee

**Call to Order**

The January 18, 2021 research meeting of the Greater Miami Valley EMS Council was called to order at 10:00am by Co-chair Kendra Harris followed by introductions.

## Guest Speakers

1. Heidi Jones, Tipp City Fire  
Community Paramedicine Program in 2017 began due to feeling EMS was lacking prevention
  - a. Program currently in infancy stage
  - b. Collaborating with Medical Director
  - c. Currently has outreach program called “Silver Screening” where the “Vial of Life” is given to residents
  
2. Reimbursement for Monoclonal Antibody and Covid19 Vaccination  
Representative, Melissa Church, Center for Medicare and Medicaid Services
  - a. Instructions to register for payment:
    - Go to CMS.gov
    - Medicare
    - Medicare Provider Supplier enrollment
  
    - NPI #, what is this? This is a number you should already have if you’re billing Medicare.
    - Complete the Medicare Enrollment Application 855B paper or PECOS online.
    - Speak with a Medicare Administrative Contractor (MAC) in your jurisdiction.
    - Apply as a mass immunizer roster biller?
    - You should receive a Medicare number#
    - How soon after can we bill once application is complete. Back bill 90 days and forward out as far as 60 days.
    - Once the pandemic is over is it possible to go from Temporary to Permanent biller? **Yes, a completed 855B form is needed no later than 30 days after covid19 pandemic is over.**
    - Fun part pricing for infusions and vaccinations.
    - Pricing for infusions and vaccinations. Vaccine Shot payment 40\$ and additional 35\$ if done in home
    - Get the most current list of billing codes, payment allowances and effective dates
    - Call this number to waive the application fee 1-855-769-992.
    - I also have additional numbers just in case the above (line 14) is incorrect 1-855-247-8428, 1-866-276-9558 press #3
  
3. Dr. Nancy Pook, Chair of Clinical Research Committee and attending KHN Emergency Room Physician on Omicron/Covid19 Treatment Protocols
  - a. Oral antivirals can take Days 1-5
    - Paxlovid
    - Molnupiravir

- b. Infusion treatment can take Days 1-7
    - Sotrovimab
    - Regeneron (discontinued proven to be not effective)
    - Remdesivir is a 3 day infusion
  - c. See Dr. Pook's Handout
  
- 4. Medic rideshare video  
Lyft launches a healthcare transportation program see video below
  - a. <https://www.youtube.com/watch?v=JWbAfWRIHY8>
  
- 5. President Marker, President of GMVEMS Council, Retired Lieutenant from Monroe Fire on finding sustainable funding sources for Community Paramedicine Program
  - a. Healthcare Networks
  - b. Grants
  - c. Insurance

#### Adjournment

There was no further business or discussion meeting adjourned at 1132pm

# Covid-19 Omicron

Treatment options

Nancy Pook MD FACEP

## Day 1-5

- Oral antivirals
  - Paxlovid
  - Molnupiravir

## Day 1-7

- Monoclonal antibody infusion
  - Sotrovimab
  - Regeneron (casirivimab/imdevimab) and Eli Lilly products (bamlanivimab/etesevimab) are not effective vs. Omicron
- Remdesivir 3 day infusion

## Paxlovid EUA

- Age 12 and over weighing at least 88 pounds
- High risk profile
- Dose reduction for moderate renal impairment
- Not recommended if severe renal or hepatic impairment
- Long list of drug interactions requires close collaboration with pharmacy
  - Includes common medications such as amlodipine, blood thinners, antibiotics
  - Combined hormonal contraceptives require additional protection
- No human data regarding pregnancy or lactation
  - Safety data from antiretroviral pregnancy registry shows no increase in birth defect rate

# Paxlovid EUA

- Nirmatrelvir is a SARS-CoV2 protease inhibitor
- Ritonavir is an HIV protease inhibitor which increases the plasma concentrations of nirmatrelvir
- Blocks viral replication
- Nirmatrelvir/ritonavir 300mg/100mg orally every 12 hours for 5 days



# Paxlovid EUA

- Reduces progression to severe illness/hospitalization by 88% in high risk group with at least one of the following risk factors
  - Diabetes
  - Overweight BMI>25
  - Chronic lung disease, including asthma
  - Chronic kidney disease
  - Smoker
  - Immunosuppressive disease or immunosuppressive treatment
  - Cardiovascular disease or hypertension
  - Sickle cell disease
  - Neurodevelopmental disorders
  - Active cancer
  - Medically related technological dependence
  - Age 60 and older

# Paxlovid EUA

- Adverse drug reactions
  - Abnormal taste 6%
  - Diarrhea 3%
  - Hypertension 1%
  - Myalgia 1%

# Molnupiravir EUA

- Age 18 and up
- 800mg twice daily for 5 days
- Started within 5 days of onset of symptoms
- 30% reduction in progression to severe disease/hospitalization in high risk population
- Inhibits viral replication by causing mutagenesis

# Molnupiravir EUA

- Not recommended during pregnancy or while lactating
- Female contraception during therapy + 4 days
- Males to use reliable contraception for 3 months from the last dose of molnupiravir

# Molnupiravir EUA

- Adverse drug reactions
  - Diarrhea, nausea, dizziness
  - Frequency is similar to placebo

# SOTROVIMAB EUA

- Monoclonal antibody infusion
- Retains effectiveness vs. Omicron
- Progression of disease was reduced by 79%

# EVUSHELD EUA

- Pre-exposure prophylaxis
- Not a substitute for vaccination in individuals for whom vaccination is recommended
- Consists of 2 monoclonal antibodies (tixagevimab/cilgavimab) which block spike protein attachment

# EVUSHELD EUA

- Authorized for
  - Age 12 years and up weighing at least 88 pounds
  - Who are not currently infected with SARS-CoV-2
  - Who have moderate to severe immune compromise or receive immunosuppressive medications or treatments and may not mount an adequate immune response to COVID-19 vaccination
  - Or for whom vaccination is not recommended due to history of severe adverse reaction



# EVUSHELD EUA

- 77% reduction in development of symptomatic disease; studied to 6 months
- Not protective in the first 30 days so NOT for post-exposure prophylaxis
- Adverse effects: increased incidence of myocardial infarction and heart failure

# REMDESIVIR

- High risk outpatients
- 3 day course IV infusion
- 200 mg on day 1; 100mg on days 2 and 3
- Initiated in first 7 days of illness
- 87% lower risk of Covid related hospitalization or death
- Quicker return to normal per questionnaire

# REMDESIVIR

- Direct-acting antiviral therapy
- Storage at room temperature
- Safety profile is similar to placebo

# NIH Outpatient Treatment Tier Guidelines- Tier 1

- Immunocompromised individuals not expected to mount an adequate immune response to COVID-19 vaccination or SARS-CoV-2 infection due to their underlying conditions, regardless of vaccine status *or*
- Unvaccinated individuals at the highest risk of severe disease (anyone aged  $\geq 75$  years or anyone aged  $\geq 65$  years with additional risk factors).

# NIH Outpatient Treatment Tier Guidelines- Tier 2

- Unvaccinated individuals at risk of severe disease not included in Tier 1 (anyone aged  $\geq 65$  years or anyone aged  $< 65$  years with clinical risk factors)

# NIH Outpatient Treatment Tier Guidelines- Tier 3

- Vaccinated individuals at high risk of severe disease (anyone aged  $\geq 75$  years or anyone aged  $\geq 65$  years with clinical risk factors)
- **Note:** Vaccinated individuals who have not received a COVID-19 vaccine booster dose are likely at higher risk for severe disease; patients in this situation within this tier should be prioritized for treatment.

# NIH Outpatient Treatment Tier Guidelines- Tier 4

- Vaccinated individuals at risk of severe disease (anyone aged  $\geq 65$  years or anyone aged  $< 65$  with clinical risk factors)
- **Note:** Vaccinated individuals who have not received a COVID-19 vaccine booster dose are likely at higher risk for severe disease; patients in this situation within this tier should be prioritized for treatment.

## FAQ

- Regeneron and bamlamivimab/ete WAIT?
  - Vaccination status?
  - Location of treatment?
  - Other?
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