

# COVID 19



Keeping Up with a Moving Target



# CME Information

**Jointly provided by Postgraduate Institute for Medicine, DKBmed, and the Institute for Johns Hopkins Nursing.**

## Disclosure of Conflicts of Interest

Postgraduate Institute for Medicine (PIM) requires instructors, planners, managers, and other individuals who are in a position to control the content of this activity to disclose any real or apparent conflict of interest (COI) they may have as related to the content of this activity. All identified COI are thoroughly vetted and resolved according to PIM policy. PIM is committed to providing its learners with high quality activities and related materials that promote improvements or quality in healthcare and not a specific proprietary business interest of a commercial interest.

The faculty reported the following financial relationships or relationships they or their spouse/life partner have with commercial interests related to the content of this continuing education activity:

Name of Faculty or Presenter	Reported Financial Relationship
Arron Berry, RN, BSN, CCRN, PHRN, CFRN	None

All activity, content, and materials have been developed solely by the activity directors, planning committee members, and faculty presenters, and are free of influence from a commercial entity.



## CME Information

**To attest for CME/CE/AAPA credit, please visit**  
**[COVID19.dkbmed.com](https://COVID19.dkbmed.com)**



## Learning Objectives

- Review critical illness in COVID-19 patients that could require ECMO support
- Discuss V-V ECMO in the COVID-19 population
- Discuss V-A ECMO in the COVID-19 population



## Thank You

This activity is supported by educational grants from Gilead Sciences, Inc., Regeneron Pharmaceuticals, and Eli Lilly and Company.

All activity content and materials have been developed solely by the activity directors, planning committee members, and faculty presenters.

Please see **COVID19.DKBmed.com** for additional resources and educational activities



**Arron Berry, RN, BSN, CCRN, PHRN, CFRN**  
Johns Hopkins – Lifeline Critical Care Transport  
Nurse Clinician III  
Baltimore, MD

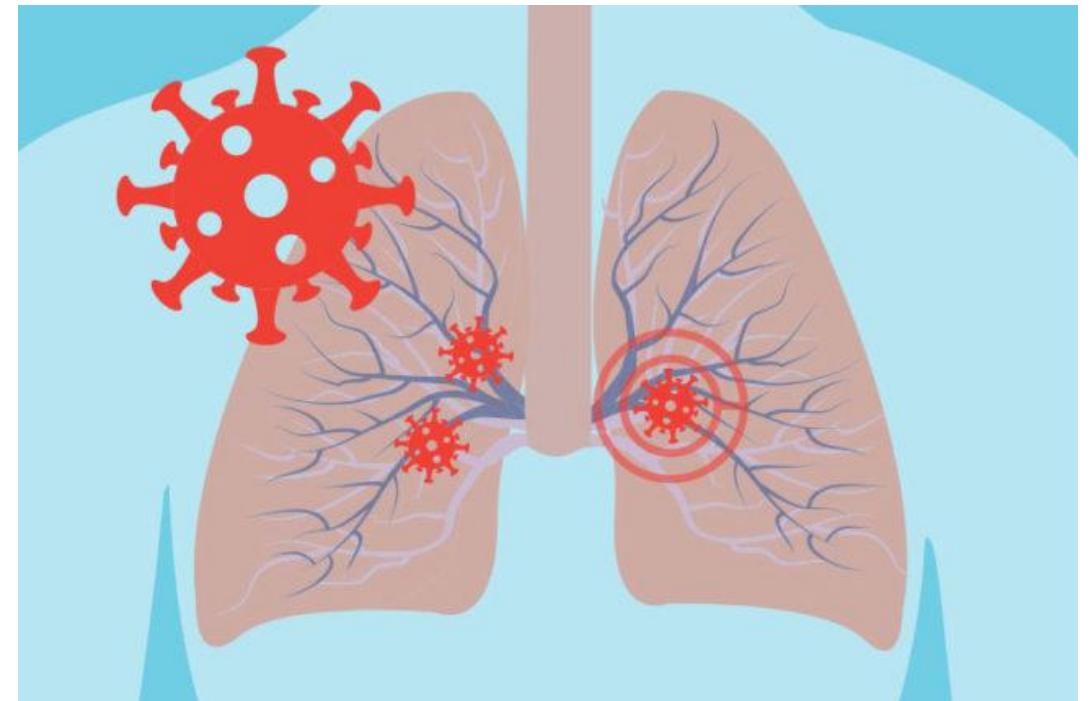
## ARDS in COVID-19

### Acute respiratory distress syndrome

- Oxygenation
- Ventilation

### Optimize ICU therapy:

- Lung protective ventilation
- PEEP
- Proning
- Sedation and paralysis



<https://health.clevelandclinic.org/heres-the-damage-coronavirus-covid-19-can-do-to-your-lungs/>

## Shock in COVID-19

Cardiogenic shock

Distributive shock

Obstructive shock

- Pulmonary embolism

Optimize ICU therapy:

- Fluid
- Vasopressors, inotropes



<https://www.medicinenet.com/shock/article.htm>



# When All Else Fails...



[https://www.azfamily.com/news/continuing\\_coverage/coronavirus\\_coverage/a-ventilator-wasnt-enough-to-treat-him-for-covid-19-this-machine-became-his-last/article\\_38c7dc41-b7b9-5126-936d-3d745cd6eafc.html](https://www.azfamily.com/news/continuing_coverage/coronavirus_coverage/a-ventilator-wasnt-enough-to-treat-him-for-covid-19-this-machine-became-his-last/article_38c7dc41-b7b9-5126-936d-3d745cd6eafc.html)



# V-V ECMO for COVID-19 Patients

Supportive therapy for respiratory function

- Hypoxia
- Hypercarbia

Research

Recommendations







# V-A ECMO for COVID-19 Patients

- Supportive therapy for cardiac and respiratory function
  - Circulation
  - Hypoxia
  - Hypercarbia
- Research
- Recommendations

# Conditions for ECMO During COVID-19

## Conditions for ECMO during COVID-19

<p>1</p>  <p>Apply best conventional intensive care pre-ECMO</p>	<p>2</p>  <p>Use intelligent patient selection</p>
<p>3</p>  <p>Re-organize staffing, cohort ECMOs</p>	<p>4</p> <p>Be part of the solution, <b>CONTRIBUTE TO RESEARCH</b></p>  <p><b>COVID-19 Critical Care Consortium</b> Incorporating <b>ECMOCARD</b></p>

<https://ccforum.biomedcentral.com/articles/10.1186/s13054-020-03386-4>



**To submit your own question, please email [QA@dkbmed.com](mailto:QA@dkbmed.com)**



# Thank You!

## **To receive CME/CE/AAPA credit:**

Complete the evaluation on at [COVID19.DKBmed.com](https://COVID19.DKBmed.com)

Upon registering and successfully completing the activity evaluation, you will have immediate access to your certificate.

## **To access more resources related to COVID-19:**

- Access our resource hub at [COVID19.DKBmed.com](https://COVID19.DKBmed.com)

## **To ask your own question, email:**

- [QA@dkbmed.com](mailto:QA@dkbmed.com)