

# Virtual Chapter Chat COVID-19 Updates

Tuesday, April 7, 2020  
6:00 – 7:00 PM

Call-In: (646) 749-3122  
Access Code: 143 134 141  
*(Please ensure you are on mute)*



# Welcome

Kate Williamson, MD  
*President, AAP-OC Chapter*



Eric Ball, MD  
*Immediate Past President, AAP-OC Chapter*

*(Please ensure you are on mute)*

# AAP-OC Chapter Chat - Housekeeping

- Callers will be muted upon entering the call and will remain muted during the chat
- Use the chat box to submit comments or questions
- If you are on the phone for audio, please make sure your sound is off on your computer (this causes feedback)
- Do not put your phone on hold if you have to leave the meeting (we will hear the hold music)
- This webinar will be recorded and posted on the AAP-OC Chapter website



# COVID-19 Research Updates

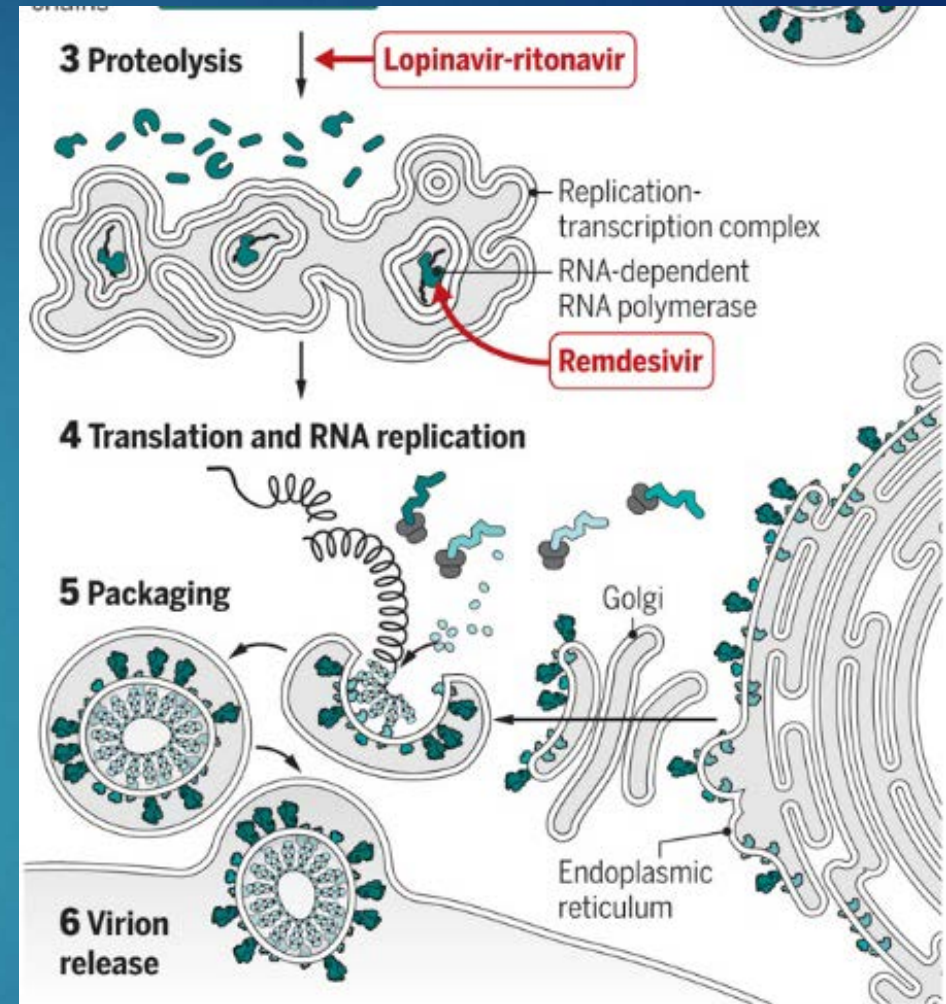
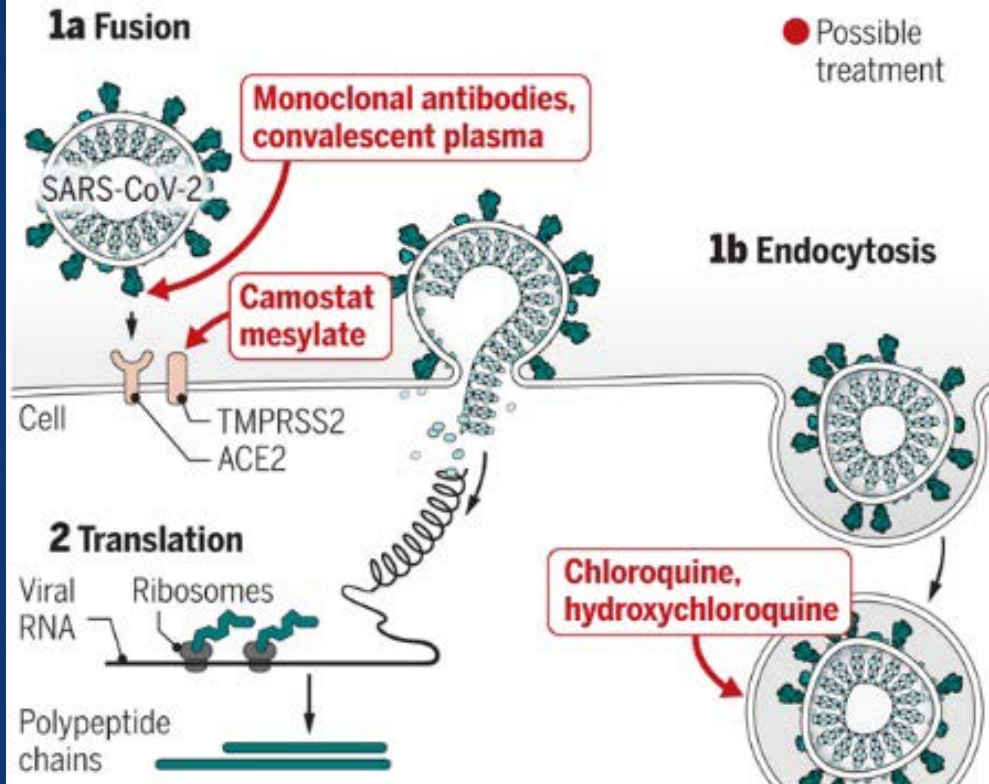
Dan Cooper, MD

*Professor of Pediatrics, UC Irvine Chief, Pediatric Pulmonology Division*



## Lines of attack

Experimental treatment strategies attempt to interfere with different steps (numbered) in the coronavirus replication cycle.



Race to find COVID-19 treatments accelerates Kai Kupferschmidt and Jon Cohen DOI: 10.1126/science.367.6485.1412 *Science* 367 (6485), 1412-1413.

Health Information

Grants & Funding

News & Events

Research & Training

 **COVID-19 is an emerging, rapidly evolving situation.**

Get the latest public health information from CDC: <https://www.coronavirus.gov>

Get the latest research information from NIH: <https://www.nih.gov/coronavirus>

[Home](#) » [News & Events](#) » [News Releases](#)

## NEWS RELEASES

Tuesday, February 25, 2020

# NIH clinical trial of remdesivir to treat COVID-19 begins

*Study enrolling hospitalized adults with COVID-19 in Nebraska.*

JCI

The Journal of Clinical Investigation

## The convalescent sera option for containing COVID-19

Arturo Casadevall, Liise-anne Pirofski

*J Clin Invest.* 2020;130(4):1545-1548. <https://doi.org/10.1172/JCI138003>.

Viewpoint

COVID-19

American Academy of Pediatrics

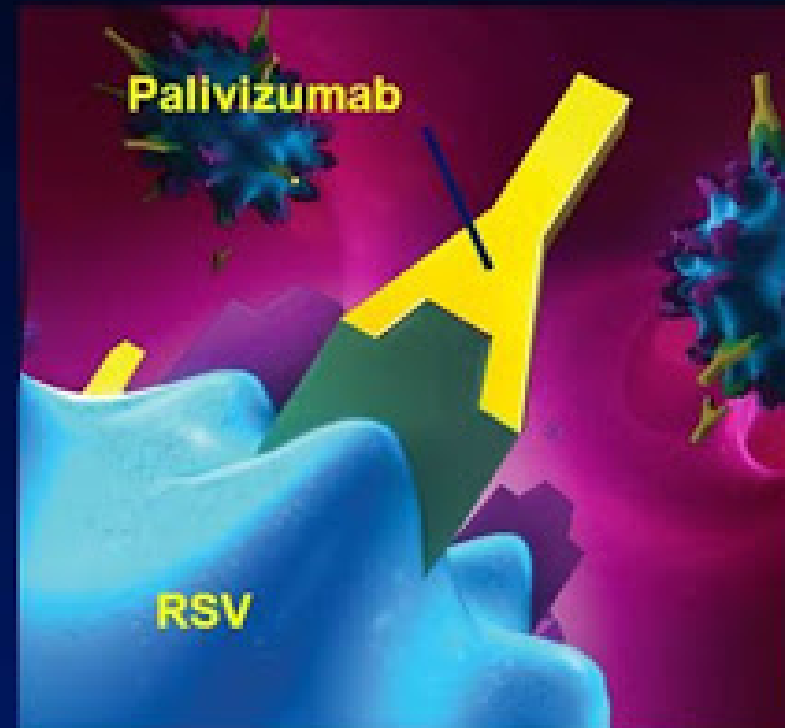
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# Palivizumab (Synagis®): Mechanism of Action

- Palivizumab is a monoclonal antibody that binds the F (fusion) protein of RSV
- Palivizumab prevents infection of the host cell
- Palivizumab reduces viral replication and spread of RSV to other susceptible cells
- **Protective levels need to be achieved prior to exposure to RSV**



MedImmune, Inc.





**Outcomes and Resource Use Among  
Overweight and Obese Children With  
Sepsis in the Pediatric Intensive Care Unit**

Journal of  
Intensive Care  
Medicine **2020**,  
Vol. 35(5) 472-477

Laura S. Peterson, MD<sup>1</sup>, Cecilia Gállego Suárez, MD<sup>2</sup>,  
Hannah E. Segaloff, MPH<sup>3</sup>, Cameron Griffin, BS<sup>2</sup>, Emily T. Martin, PhD, MPH<sup>3</sup>,  
Folafoluwa O. Odetola, MD, MPH<sup>4</sup>, and Kanakadurga Singer, MD<sup>2</sup>

...there was a significantly higher use of specialized technology including CRRT and ECMO among the obese/overweight children, in comparison with the normal weight children.

...it appears that overweight/obese children with sepsis are more susceptible to severe acute kidney injury and cardiorespiratory decompensation requiring CRRT and ECMO, respectively

It is possible that the chronic inflammatory state of obesity primes tissues such as the kidney to be at a higher risk of organ dysfunction during this state of illness.

Pediatr Pulmonol. 2020 Apr 3. doi: 10.1002/ppul.24748. [Epub ahead of print]  
**Lessons unfolding from pediatric cases of COVID-19 disease caused by SARS-CoV-2 infection.**

Yonker LM<sup>1,2</sup>, Shen K<sup>3,4,5</sup>, Kinane TB<sup>1,2</sup>.

Importantly, pediatric patients provide an opportunity to gain critical insight into disease pathogenesis and guide future vaccine or therapeutic development. Two main theories explaining the protective effect of age are currently being perused:

- a) differences in pediatric immune responses as compared to adults, or
- b) differences in airway epithelial cell make-up affecting the availability of viral binding sites.

 OG

Oren Gordon <ogordon3@jhmi.edu>

Tue 4/7/2020 4:29 PM



Cooper, Dan; Shmuel Shoham <sshoham1@jhmi.edu>; Sanjay Jain <sjain5@jhmi.edu>; Terry Sanger <terry@sangerlab.net>; ANTONIO ARRIETA <AARRIETA@choc.org>; Nugent, Diane ✓

Thanks Shmuel for the introduction.

Dan, very nice to virtually meet you as well as with your team. We are working on a pediatric protocol for convalescent plasma to evaluate safety and pharmacokinetics. We aim to treat or give prophylactic treatment to particularly high-risk children (immunodeficiency, chronic lung patients, etc.) that have been exposed to COVID or with already positive test for COVID.

We are working with other pediatric groups (Baylor, Cincinnati, Duke) and we are happy that folks from CHOC are also involved. I believe some have been on our previous discussion. I'm not sure yet when the next discussion will take place. The efforts are de-centralized with protocol sharing and it seems that Baylor is developing a protocol for efficacy which may be randomized. We are close to a draft protocol and happy to share that once finalized. We hope to submit an IND application to the FDA very soon.

Many thanks for reaching out to us,

Oren

*Oren Gordon MD PhD*

*Pediatric Infectious Diseases Fellow*

*Johns Hopkins University School of Medicine*

*ogordon3@jhmi.edu*

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## Journal Pre-proof

Physical exercise as therapy to fight against the mental and physical consequences of COVID-19 quarantine: Special focus in older people

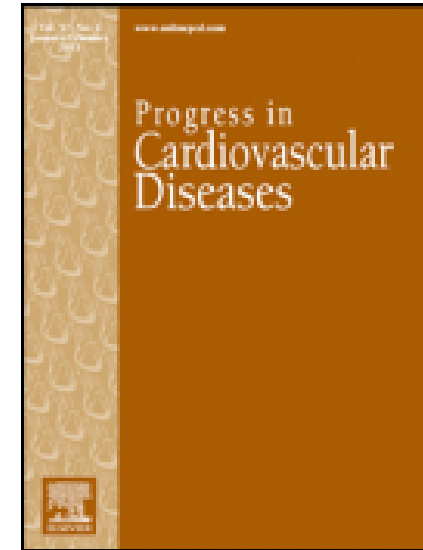
David Jiménez-Pavón, Ana Carbonell-Baeza, Carl J. Lavie

PII: S0033-0620(20)30063-3

DOI: <https://doi.org/10.1016/j.pcad.2020.03.009>

Reference: YPCAD 1064

To appear in: *Progress in Cardiovascular Diseases*



# Newborns Born to Mothers with Confirmed or Suspected COVID-19

Lavonne Sheng, MD

*Infection Prevention Physician Champion, CHOC NICU*

*Neonatologist, CHOC CS*



# AAP Initial Guidance For Management of Infants Born to Mothers with COVID-19

April 2, 2020

- SARS-CoV2 primarily transmitted by respiratory secretions/saliva
- No SARS-CoV2 has been detected in breast milk
- Current data (limited) low rates of peripartum transmission and inconclusive about *in utero* transmission
- Limited data to guide management
- Guidance may not be fully applicable to clinical settings where limitations on testing and PPE continue to exist

# AAP Initial Guidance For Management of Infants Born to Mothers with COVID-19

April 2, 2020

- Infants of PUI/COVID-19 moms are PUI
- Temporary separation is recommended
- Breast milk feeds are allowed and should be supported
- Testing of all newborns is recommended "where testing capacity is available". *"Centers may opt for clinical monitoring only"*
- Infants should receive all indicated care, including circumcision if requested
- Well newborns should be discharged based on center's normal criteria
- Infants who are positive for the virus or were unable to be tested should have frequent outpatient follow-up for 14 days

# COVID-19 Q & A

**Jasjit Singh, MD**

**Pediatric Infectious Disease Specialist, CHOC Children's**

Add your questions to the chat box and they will be addressed in the order received.





*Thank You.*

*Thank you for participating!*

