

COVID-19: KEEPING UP WITH A MOVING TARGET APRIL 29, 2020 UPDATE

Paul Auwaerter, MD, MBA, FIDSA

Clinical Director, Division of Infectious Diseases
Sherrilyn and Ken Fisher Professor of Medicine
Fisher Center for Environmental Infectious Diseases
Johns Hopkins University School of Medicine
Baltimore, Maryland







COVID-19 Keeping Up With A Moving Target

Now, Twice Every Week @ COVID19.DKBmed.com

Every Wednesday Evening

C**VID-19**
KEEPING UP WITH A MOVING TARGET


Dr. Paul Auwaerter
Clinical Director
Division of Infectious Disease
Johns Hopkins University

Jointly provided by The Postgraduate Institute for Medicine and DKBmed, LLC.

Every Friday Morning

C**VID-19**
KEEPING UP WITH A MOVING TARGET


Sue Hansen, MSN, RN
Trauma/Surgery Critical Care,
Clinical Nurse Specialist
UW Medicine at Harborview Medical Center

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



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
Paul G. Auwaerter, MD, MBA, FIDSA	Scientific Advisor: DiaSorin, Shionogi Inc. JNJ: Ownership equity

Dr. Auwaerter has indicated that he will be referencing the unlabeled or unapproved use of agents currently being investigated in on-going studies and trials. These include hydroxychloroquine/chloroquine, hydroxychloroquine/chloroquine in combination with azithromycin, lopinavir plus ritonavir, tocilizumab, corticosteroids, and COVID-19 convalescent plasma. 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 credit, please visit

COVID19.DKBmed.com



Learning Objectives

- Describe natural history of COVID-19 illness.
- Discuss risks, management, and precautions associated with COVID-19.
- Discuss status of antibody testing



Paul Auwaerter, MD, MBA, FIDSA

Clinical Director, Division of Infectious Diseases
Sherrilyn and Ken Fisher Professor of Medicine
Fisher Center for Environmental Infectious Diseases
Johns Hopkins University School of Medicine
Baltimore, Maryland





Thank You

This program is brought to you through the generous support of DKBmed, Postgraduate Institute for Medicine, and the Institute for Johns Hopkins Nursing.

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





COVID-19 Symptoms



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Coronavirus Disease 2019 (COVID-19)

CDC > Coronavirus Disease 2019 (COVID-19) > Symptoms & Testing

Watch for symptoms

People with COVID-19 have had a wide range of symptoms reported – ranging from mild symptoms to severe illness.

These symptoms may appear **2-14 days after exposure to the virus:**

Previous

- Fever
- Cough
- Shortness of breath or difficulty breathing

New

- Chills
- Reported shaking with chills
- Muscle Pain
- Headache
- Sore throat
- New Loss of taste or smell



COVID-19 Transmission Survey

ORIGINAL ARTICLE

Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility

Melissa M. Arons, R.N., Kelly M. Hatfield, M.S.P.H., Sujan C. Reddy, M.D., Anne Kimball, M.D., Allison James, Ph.D., Jessica R. Jacobs, Ph.D., Joanne Taylor, Ph.D., Kevin Spicer, M.D., Ana C. Bardossy, M.D., Lisa P. Oakley, Ph.D., Sukarma Tanwar, M.Med., Jonathan W. Dyal, M.D., *et al.*, for the Public Health–Seattle and King County and CDC COVID-19 Investigation Team*

23 days after first resident (+)

- 64% of all residents (+)
 - >50% asymptomatic at time of testing
 - Doubling time 3.4 days (vs. 5.5 in community)
 - High viral load titers
- 26% fatality rate
- 19% staff (+) despite early adoption of infection control

***Conclusion:* asymptomatic shedding contributed to rapid spread**



COVID-19 Antibody status

Los Angeles 4.1%



New York City ~ 20%

- Long Island 17%
- Upstate NY 4%





What does serology mean?



Health Topics ▾

Countries ▾

Newsroom ▾

Emergencies ▾

[Home](#) / [Newsroom](#) / [Commentaries](#) / [Detail](#) / "Immunity passports" in the context of COVID-19

"Immunity passports" in the context of COVID-19

Scientific Brief

24 April 2020

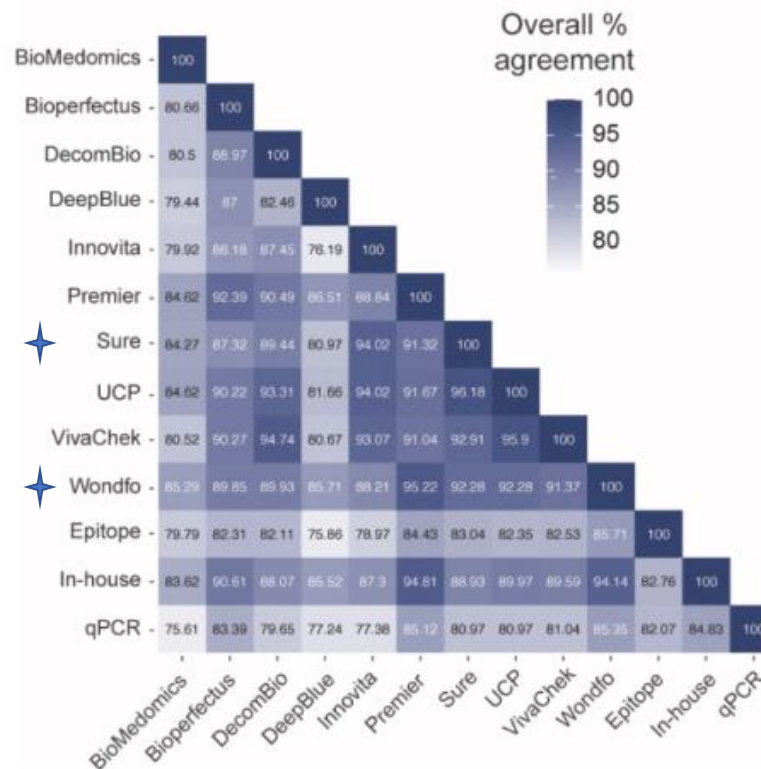
Context of why
"Are you protected from
COVID-19 reinfection?"

At this point in the pandemic, there is not enough evidence about the effectiveness of antibody-mediated immunity to guarantee the accuracy of an "immunity passport" or "risk-free certificate." People who assume that they are immune to a second infection because they have received a positive test result may ignore public health advice. The use of such certificates may therefore increase the risks of continued transmission. As new evidence becomes available, WHO will update this scientific brief.



COVID-19 Serology: 11 of 14 Unreliable

A

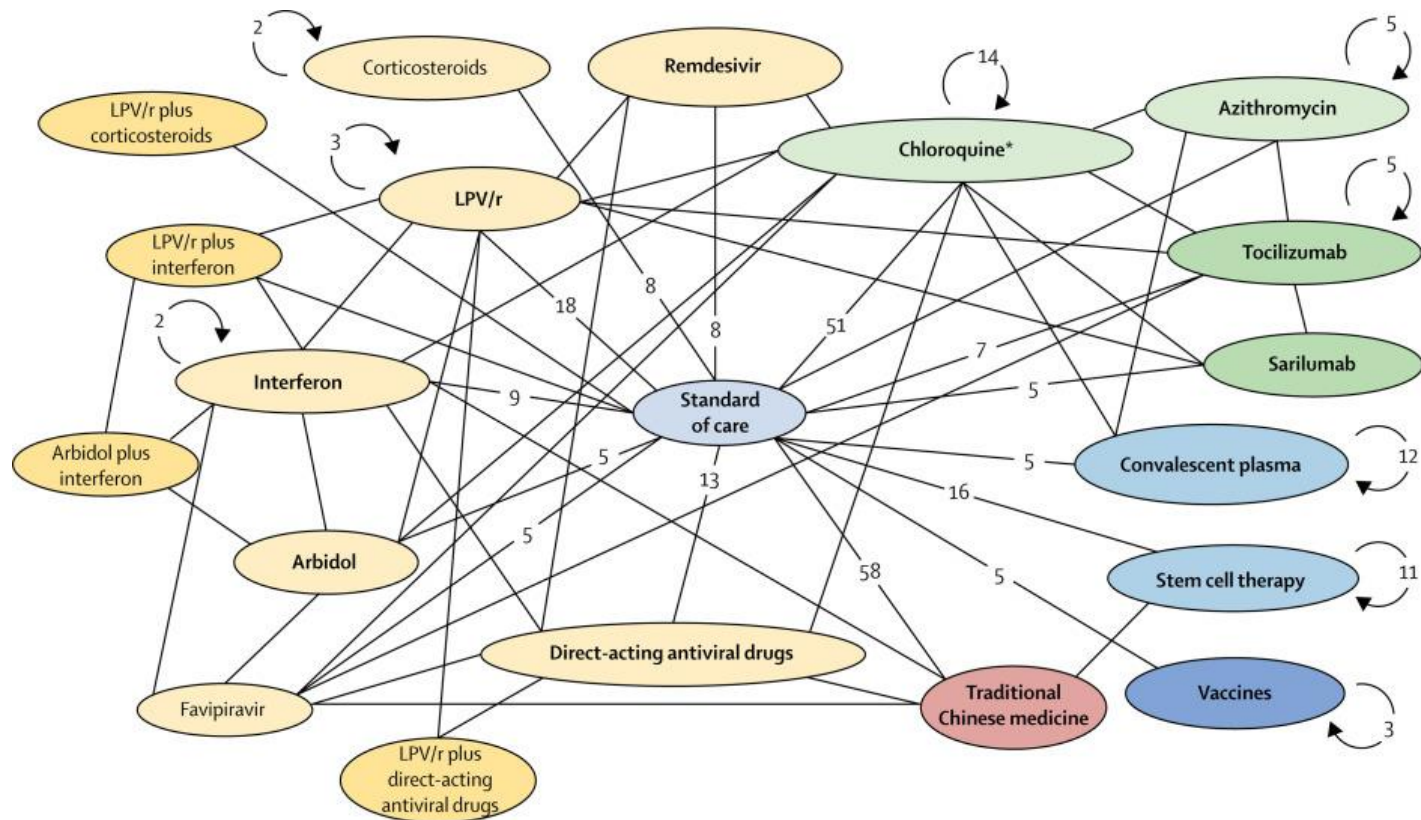


★ = 99-100% sensitivity

- 12 COVID-19 Ab assay
- Panel 130 samples
- 80 PCR-confirmed SARS-CoV-2
- 108 pre-COVID-19 specimens
- False-positives frequent
- 11-16%, average ~ 5%



What we know about COVID-19 Therapies (many not yet published as of 4/21/20)





Remdesivir

“WHO leaked by accident?”

- Randomized controlled trial
 - 237 patients
 - 158 Remdesivir
 - 18 removed
 - 79 Placebo

Coronavirus

+ Add to myFT

Gilead antiviral drug remdesivir flops in first trial

Exclusive: Disappointing results revealed in draft documents published accidentally by WHO



Chinese trial showed remdesivir — developed by California-based Gilead Sciences — did not improve patients' condition © AFP



Sarilumab study

Regeneron, Sanofi shut down part of arthritis drug study after trial shows benefit for only sickest coronavirus patients

PUBLISHED MON, APR 27 2020 7:01 AM EDT | UPDATED AN HOUR AGO

- Phase 2/3 of Kevzara (sarilumab) IL-6 receptor blocker
- Study compared low and high dose in those with “severe” or “critical” illness
- Preliminary phase 2 analysis
 - Negative trends for most outcomes in the severe group
 - Positive trends for all outcomes in critical group
- The phase 3 results in those patients with severe illness showed the drug appeared to have no effect.
- Ongoing portion of phase trial will enroll 600 patients with critical illness



Moving Forward

- Wear masks (N95 > surgical/cloth)
- People at risk: remain home
- COVID-19 cases may increase if social distancing not maintained
- No large groups/no events





To submit your own question for Dr. Auwaerter,
please email QA@dkbmed.com



Is there a standardized questionnaire or noninvasive screening tool that we should be using when screening people? All I see out there are subjective questions about people feeling ill in the past 72 hours and being in contact with someone who's been ill in the past 14 days. Is there anything a little more specific and discriminatory?



What is the thinking behind why children seem to not be as vulnerable to this virus?



**Other than the respiratory tract secretions,
has COVID-19 virus been found in blood or
other bodily fluids?**



Can you please comment on the reports of strokes in COVID-19 patients; whether the clotting is because of direct attack on blood vessels or caused by patient's immune response, and clots being found in veins vs arteries?



To receive CME/CE credit:

- Complete the evaluation on at 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

To ask your own question to Dr. Auwaerter:

- Email QA@dkbmed.com