COVID-19: KEEPING UP WITH A MOVING TARGET MAY 13, 2020 UPDATE

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COVID-19 Keeping Up With A Moving Target

Now, Twice Every Week @ COVID19.DKBmed.com

Every Wednesday Evening



Every Friday Morning







CME Information

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

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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

- Discuss the effects of contact tracing.
- Describe testing modalities for COVID-19 illness.
- Review data from randomized controlled trials.

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

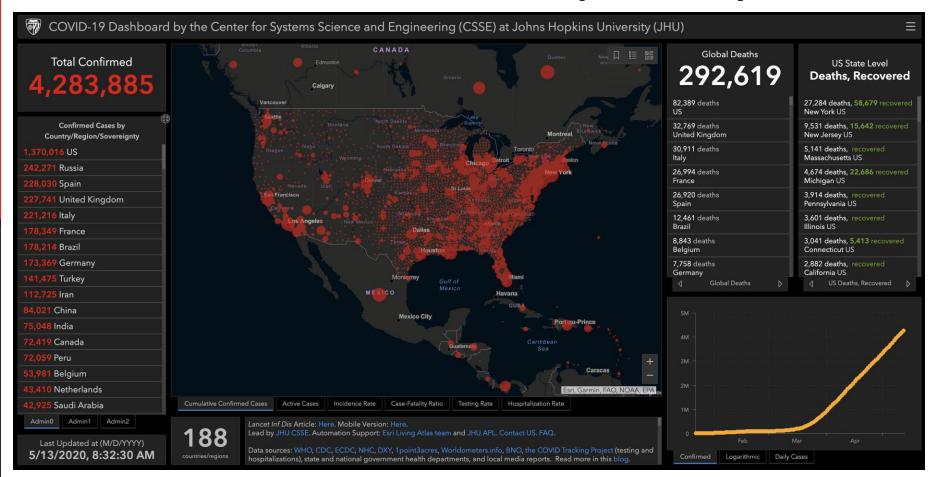
Please see **COVID19.DKBmed.com** for additional resources and educational activities







Total Cases: N. America (5/13/20)









Communication Importance

PRovoke Covid-19 PR Industry Survey, second wave

From what you have seen, which government has impressed you MOST in terms of its Covid-19 communications?

Region



Not providing reliable information. Data given during the week contradicts the following. There is no trust from government sources...

Stickybeak Insight | Surveys

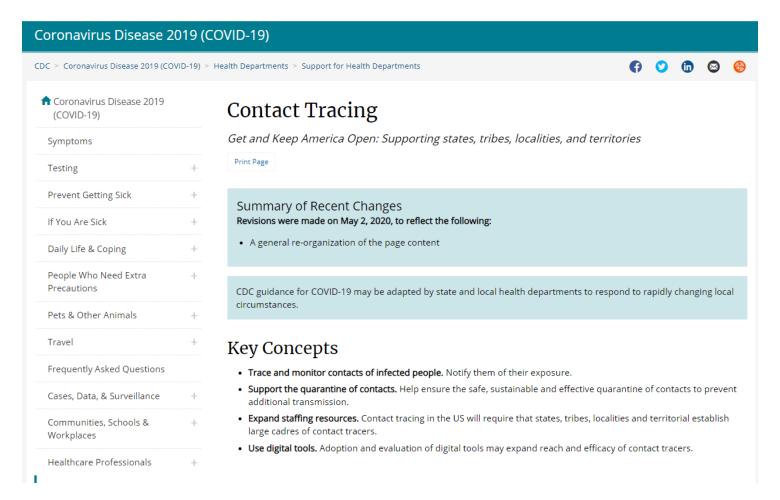








Testing and Contact Tracing







Testing







FDA Approves Oral (Saliva) Test



- Rutgers
 - Increasing production
- Others
 - Commercial
 - Gates Foundation
- Ease compared to NPswab

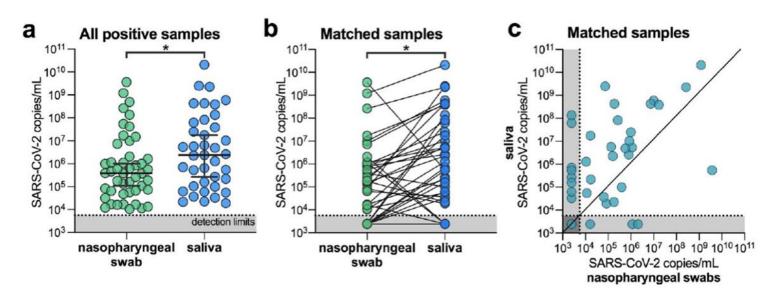






Are Oral Samples Equivalent?

Detection of SARS-CoV-2 RNA in saliva vs. nasopharyngeal swabs



Wyllie A., et al. 2020



Treatment

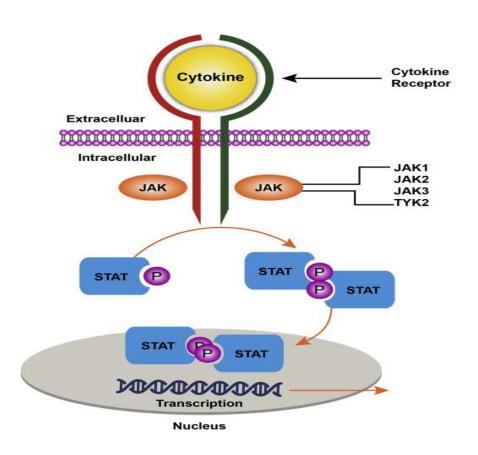






Adaptive COVID-19 Treatment Trial (ACTT): Remdesivir

- Awaiting more analysis
- Trial is adapting starting mid-May
 - RDV v. RDV plus baricitinib
 - JAK1/JAK2 subtype inhibitor, interferes w/ signal transduction STAT proteins, stopping gene expression in immunomodulatory cells







RDV Distribution Issues

The New Hork Times

The Coronavirus Outbreak >

LIVE Latest Updates Maps and Tracker Lingering Symptoms Life at Home Newslette

Haphazard Rollout of Coronavirus Drug **Frustrates Doctors**

Remdesivir was shipped to small hospitals even as besieged medical centers were denied access.



Massachusetts General Hospital in Boston in March. Though other major hospitals did not receive supplies of remdesivir, Mass General did - without asking. "We have no idea how this landed with us," said one doctor. Stan Grossfeld/The Boston Globe, via Getty Images





Triple Antiviral Combination Trial

THE LANCET



- Open-label, randomized, phase 2 trial
- Hong Kong, (2:1) 14-day
 - Combination: lopinavir 400 mg/ritonavir 100 mg every 12 h, ribavirin 400 mg every 12 h, and three doses of 8 million international units of interferon beta-1b on alternate day
 - Lopinavir 400 mg and ritonavir 100 mg every 12 h (control group)
 - o Primary endpoint was the time to providing a nasopharyngeal swab negative





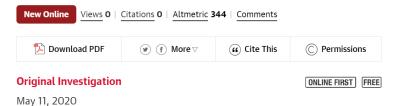
Triple Antiviral Combination Trial Findings

- 127 patients, 86 combination/41 control
- Median days symptom onset 5 days (IQR 3–7)
- Combination group
 - Reduced viral carriage x 5 days
 - Negative nasopharyngeal swab (7 days [IQR 5–11]) v. control group (12 days [8–15]; hazard ratio 4·37 [95% CI 1·86–10·24], p=0·0010)
 - Faster alleviation of symptoms x 4 days
 - NEWS2 of 0 (4 days [IQR 3–8] in the combination group vs 8 days [7–9] in the control group; HR 3-92 [95% CI 1-66–9-23], p<0.0001)</p>
 - Adverse events included self-limited nausea and diarrhea with no difference between the two groups.
- Need for larger study, true placebo arm





HCQ + AZ Mortality



Association of Treatment With Hydroxychloroquine or Azithromycin With In-Hospital Mortality in Patients With COVID-19 in New York State

Eli S. Rosenberg, PhD¹; Elizabeth M. Dufort, MD²; Tomoko Udo, PhD¹; <u>et al</u>

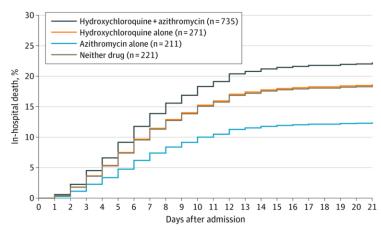
» Author Affiliations | Article Information

JAMA. Published online May 11, 2020. doi:10.1001/jama.2020.8630

25 hospitals, retrospective N = 1438 patients

Adjusted HR in-hospital mortality
HCQ 1.08
Azithromycin 0.56
HCQ + AZ 1.35

None were statistically significant



No. at risk (in hospital)					
	Admission	Day 7	Day 14	Day 21	
Hydroxychloroquine + azithromyc	in 735	653 (384)	568 (106)	557 (47)	
Hydroxychloroquine alone	271	245 (136)	226 (59)	220 (28)	
Azithromycin alone	211	191 (33)	190 (4)	190 (2)	
Neither drug	221	206 (63)	197 (19)	195 (13)	







HCQ or CG Meta-Analysis

- 155 "studies" exhibition of 155 studies with 155 "studies" exhibition (preprint or 115 diff or (preprint or 115 diff or
 - No double blind, placebo-controlled RCT of high quality
 - Data neither to endorse or to refute use of HCQ or CQ

Fajgenbaum et al https://www.medrxiv.org/content/10.1101/2020.05.07.20073981v1.full.pdf (pre-print, release 5/11/20)







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







Are recommendations changing surrounding precautions for pregnant women given the recent articles in *JAMA* and *The Lancet*, which showed increased risks of miscarriage, stillbirth, and preterm delivery in mothers who contracted COVID-19?







It has been discussed recently that there are potentially several different strains of this novel coronavirus. What are the latest research findings related to these different strains?





What do we know about the inflammatory condition being seen in children that has been associated with COVID-19?





Could you please comment on Sweden and New Zealand's disparate approaches to COVID-19?





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