

COVID-19 Digest Issue 12

July 14, 2020

CLINICAL PEARL

- COVID-19 and waning immunity: Immunity to the circulating seasonal coronaviruses that are associated with common colds is short-lived. While antibody (Ab) responses to SARS-CoV-2 can be detected in most infected individuals 10-15 days following the onset of COVID-19 symptoms, it is not known how long these Ab responses are maintained or whether they provide protection from reinfection.
 - <u>A recent pre-print study</u> has shown seroconversion in more than 95% of cases and neutralizing antibody (nAb) responses when sampled beyond 8 days after the onset of symptoms.
 - The magnitude of the nAb response appears to be dependent upon the disease severity. Declining nAb titers were observed during the follow-up period. Whether individuals with apparent waning immunity will have an anamnestic response when challenged with the antigen is unknown at this point.

ACADEMIC/RESEARCH PAPERS

- CDC Emerging Infectious Diseases
 - o <u>Antibody Responses to SARS-CoV-2 at 8 Weeks Postinfection in Asymptomatic Patients</u>
- medRxiv
 - o Longitudinal evaluation and decline of antibody responses in SARS-CoV-2 infection
 - o <u>Children are unlikely to have been the primary source of household SARS-CoV-2 infections</u>
- Journal of the Pediatric Infectious Diseases Society
 - <u>Characteristics of Hospitalized Pediatric Coronavirus Disease 2019 Cases in Chicago, Illinois, March</u> April 2020
- Pediatrics
 - o <u>COVID-19 in Children and the Dynamics of Infection in Families</u>
- Nature Medicine
 - Age-dependent effects in the transmission and control of COVID-19 epidemics
- Clinical Infectious Diseases
 - o <u>Social distancing alters the clinical course of COVID-19 in young adults: A comparative cohort study</u>
 - o <u>Use of Baricitinib in Patients with Moderate and Severe COVID-19</u>
- New England Journal of Medicine
 - o <u>Children with Covid-19 in Pediatric Emergency Departments in Italy</u>
 - o Swabs Collected by Patients or Health Care Workers for SARS-CoV-2 Testing
 - Accelerating Development of SARS-CoV-2 Vaccines The Role for Controlled Human Infection Models
- Cleveland Clinic Journal of Medicine
 - o <u>Clinical presentation and course of COVID-19</u>
 - o Cytokine storm and the prospects for immunotherapy with COVID-19
- AHA Journal
 - o Lopinavir-ritonavir Treatment for COVID-19 Infection in Intensive Care Unit: Risk of Bradycardia
- JAMA
 - <u>Pathophysiology, Transmission, Diagnosis, and Treatment of Coronavirus Disease 2019 (COVID-19) -</u> <u>A Review</u>
 - Incidence of Stress Cardiomyopathy During the Coronavirus Disease 2019 Pandemic



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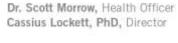
- Persistent Symptoms in Patients After Acute COVID-19
- Evolution of Altered Sense of Smell or Taste in Patients With Mildly Symptomatic COVID-19
- Treatment Recommendations for Persistent Smell and Taste Dysfunction Following COVID-19—The Coming Deluge
- JAMA Health Forum
 - Mask Exemptions During the COVID-19 Pandemic—A New Frontier for Clinicians
- The Lancet
 - Frequency of Symptoms and Asymptomatic SARS-CoV-2 Infection in New Orleans, Louisiana after 7 Weeks of a Stay-at-Home Order
 - Prevalence of SARS-CoV-2 in Spain (ENE-COVID): a nationwide, population-based seroepidemiological study
 - <u>COVID-19 mortality in patients with cancer on chemotherapy or other anticancer treatments: a</u> <u>prospective cohort study</u>
- Nature
 - o OpenSAFELY: factors associated with COVID-19 death in 17 million patients
- Cell
 - Tracking changes in SARS-CoV-2 Spike: evidence that D614G increases infectivity of the COVID-19 virus
- *WHO*
 - o <u>Transmission of SARS-CoV-2: implications for infection prevention precautions</u>
- BMJ Journal
 - <u>Injection Molded Autoclavable, Scalable, Conformable (iMASC) system for aerosol-based protection:</u> <u>a prospective single-arm feasibility study</u>
- Environmental Science and Technology Letters
 - <u>Presence of SARS-Coronavirus-2 RNA in Sewage and Correlation with Reported COVID-19 Prevalence</u> in the Early Stage of the Epidemic in The Netherlands

MMWR

<u>Characteristics of Persons Who Died with Coronavirus Disease 2019 (COVID-19)</u> — United States, February <u>12–May 18, 2020</u>

HOT OFF THE (LAY) PRESS

- The New York Times
 - o <u>New Cases in the U.S. Soar Past 65,000, a 7th Record in 11 Days</u>
 - Florida reported more than 15,000 new coronavirus cases, the highest single-day total for any state — including New York — since the pandemic began.
 - o Did a Mutation Help the Coronavirus Spread? More Evidence, but Lingering Questions
 - o <u>'I Couldn't Do Anything': The Virus and an E.R. Doctor's Suicide</u>
 - o <u>Who Gets a Vaccine First? U.S. Considers Race in Coronavirus Plans</u>
- TED
 - o The case to infect volunteers with COVID-19 to accelerate vaccine testing
- Los Angeles Times
 - <u>A plasma shot could prevent coronavirus. But feds and makers won't act,</u> <u>scientists say</u>



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- The Wall Street Journal
 - o <u>Regeneron Advances Covid-19 Drug Into Later-Stage Testing</u>
- NBC News
 - o <u>'All the hospitals are full': In Houston, overwhelmed ICUs leave COVID-19 patients waiting in ER</u>
- Cal OES News
 - o Cal OES Provides Update on State Alternative Care Sites
- The New Yorker
 - How Two Waves of Coronavirus Cases Swept Through the Texas Panhandle
 - o <u>The Emotional Evolution of Coronavirus Doctors and Patients</u>
- PBS News
 - o This Maryland nursing home has had no coronavirus cases. How did they do it?
 - o <u>3 things the U.S. can do to stop coronavirus</u>
- The Washington Post
 - o How Fauci, 5 other health specialists deal with covid-19 risks in their everyday lives
- Cal Matters
 - o <u>The virus and the vulnerable: Latino children suffer higher rates of COVID-19</u>
- MedPage Today
 - o <u>Report: COVID-19 Transmitted to Babies in Utero Italian researchers confirm two infections at birth</u>
- Science Magazine
 - School openings across globe suggest ways to keep coronavirus at bay, despite outbreaks.
- Medpage Today
 - What Evidence Is Aiding School Reopening Decisions? Weighing risks of COVID-19 in children versus the benefits of having kids in the classroom
- NPR
 - o After Reopening Schools, Israel Orders Them To Shut If COVID-19 Cases Are Discovered
- KGW8 News
 - o <u>28 COVID-19 cases reported at Lake Oswego day care center</u>
- The Oregonian
 - <u>Coronavirus infections rising fastest among kids younger than 10, dimming prospects for Oregon's</u> <u>school reopening plans</u>
- The Texas Tribune
 - o More than 300 children in Texas day cares have caught COVID-19, and the numbers are rising
- CNN
 - o What we know about coronavirus risks to school age children
 - o <u>Medics are down to their last defense with coronavirus swamping their town</u>
 - o Pathologist found blood clots in 'almost every organ' during autopsies on Covid-19 patients
- ABC News
 - o <u>13 states now report coronavirus testing issues, in echo of early troubles</u>
- Seattle Times
 - o <u>How our sewage could warn us of future outbreaks of COVID-19</u>
- University of Illinois
 - o Pandemic Behind Bars: Containing COVID-19 Outbreaks in Illinois Correctional Settings
- San Francisco Chronicle
 - o <u>Newsom to release 8,000 prisoners in California by end of August amid coronavirus outbreaks</u>
 - o Fauci on coronavirus pandemic: 'Worst nightmare'





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- <u>'The country is facing a very serious problem,' Fauci says as coronavirus</u> <u>cases soar in California, elsewhere</u>
- o Homelessness has spread beyond major Bay Area cities. COVID-19 is making it even more visible
- o Coronavirus infections spike among San Francisco General Hospital workers
- o <u>If you have this blood type, studies show you're at higher risk for the coronavirus</u>
- o <u>Do women practice safety better than men? What we learned from first COVID-19 conference</u>

EPIDEMIOLOGY UPDATES

- US Leads the World in Confirmed COVID-19 Cases per Johns Hopkins University Center for Systems Science and Engineering Dashboard Website
- **California COVID-19 by the numbers** are available on the <u>CDPH Website</u> and the <u>NYT Map and</u> <u>Table</u> (includes data by county)
 - California <u>COVID-19 Statewide Update</u> as of July 13, 2020
- San Mateo County COVID-19 Dashboard
- Santa Clara County COVID-19 Dashboard

ADDITIONAL COVID-19 RESOURCES

- <u>COVID-19 California Statewide Case Statistics</u>
- Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties
- <u>California Department of Corrections and Rehabilitations Population COVID-19 Tracking Dashboards</u>
- <u>COVID-19 Nursing Home Data</u>
- <u>CDPH COVID-19 Assessment and Modeling Tool</u>

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