6 April 2020

BRIEF19

A daily review of covid-19 research and policy.

RESEARCH BRIEFING

Can a drug used to kill parasites fight SARS-Cov-2? A new paper in the journal *Antiviral Research* has observers hopeful about a possible new treatment for SARS-CoV-2. Researchers in Australia performed a laboratory experiment in which they infected kidney cells from the African green monkey with the SARS-CoV-2 virus. The cells were then injected with ivermectin, a drug commonly used to treat parasitic infections. Some previous studies suggest that this drug might also attack viruses, though clinical outcomes in humans are not apparent. The new study found that cells treated with ivermectin had markedly reduced viral levels of SARS-CoV-2--a 5000-fold decrease--within 48 hours. What do we do with this information? Nothing yet. A vast majority of promising studies, both in "petri dishes" and in animals, don't hold up in human trials. But if this one succeeds in humans, it could have a far-reaching impact. Ivermectin is already widely available throughout the world as it is currently on the *World Health Organization's* list of essential medicines. Clinical trials testing ivermectin's effectiveness treating in patients with covid-19 are now needed. If ivermectin were to be successful in treating SARS-CoV-2, it would have the advantage of being in ready supply-unlike hydroxychloroquine, which is already said to be hard to find in many places.

Can antihypertensives help to fight covid-19? In a paper published in the preprint journal medRxiv, researchers in Wuhan, China analyzed medical records of patients hospitalized with confirmed SARS-CoV-2 infection. They separated patients with both covid-19 and high blood pressure (hypertension) into two groups: patients who had been prescribed the antihypertensives "ACE inhibitors" and "ARBs," and patients who had not been prescribed either of these medications. Th question: do ACE inhibitors or ARBs have any effect, good or bad, on covid-19 infection? As previously covered in *Brief19*, experts have debated the use of these medications. In this new study, researchers found that patients taking ACE inhibitors and ARBs were much less likely to develop "very severe" covid-19, and also had lower death rates. Does this mean that patients who have their elevated blood pressure under control have a better chance at good outcomes? It's possible. High blood pressure appears to be a risk factor for poorer outcomes. Alternatively, might these medications even actively interrupt the virus' attempt to enter cells, as we have covered? Too soon to say. However, these data do provide some preliminary evidence that patients already taking either an ACE inhibitor or an ARB for high blood pressure may not need to stop taking these medications if they become infected with SARS-CoV-2, as some experts have suggested might be necessary.

--Joshua Niforatos, MD, Research Section Editor

POLICY BRIEFING

Worsening supply shortages.

Stores of personal protective equipment (PPE) in the Strategic National Stockpile (SNS) are nearly gone, Homeland Security Officials told the Washington Post. The SNS was conceived as a stopgap to support several cities for a limited period, allowing the federal government time to coordinate increased manufacturing and new supply lines. It was not designed to support the bulk of the country during a sustained national pandemic. State leaders have expressed concern

over <u>piecemeal responses</u> to supply requests from the stockpile. The market for N95 masks has become a <u>Wild West feeding frenzy</u>, in which masks that normally cost \$0.50 each were recently selling for as much as \$6 or \$7. Hospitals and state procurement departments are frequently outbid by foreign buyers. Meanwhile, the Trump administration <u>has invoked</u> the Defense Production Act to try to block 3M from exporting masks and to claim to masks produced at 3M's factories abroad. *Various*.

--Joshua Lesko, MD

US paying hospitals Medicare rates for covid-19 care for the uninsured.

On Friday, the Trump administration <u>announced</u> that part of the stimulus package would be used to pay hospitals for covid-19 related care, including for the uninsured. The care would be reimbursed at Medicare rates, which are substantially higher than Medicaid rates. As part of the agreement, hospitals cannot engage in a practice known as "balance billing." This means that hospitals cannot bill uninsured patients for any remaining balance on the cost of their care not covered under Medicare reimbursement schemes. The move came in response to Democrats' calling for the administration to launch a special "open enrollment" period for health insurance under the Affordable Care Act. Such an enrollment period would allow uninsured patients to sign up for health insurance even though they missed the 2019 regular enrollment period. The administration appears unwilling to entertain that possibility thus far. WSJ.

Share the immunity.

The Food and Drug Administration is continuing to help <u>advance</u> the investigation of "convalescent plasma" (which contains antibodies from patients who have recovered from covid-19) for SARS-CoV-2 infections. The FDA has partnered with The American Red Cross to collect the blood needed for the treatments, in a research collaboration to be led by investigators at The Mayo Clinic. The FDA is asking those who have recovered from covid-19 to consider donating by visiting this <u>website</u>: https://www.redcrossblood.org/donate-blood/dlp/plasma-donations-from-recovered-covid-19-patients.html. FDA.

-- Kimi Chernoby MD, JD, Policy Section Editor.

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Brief19 is a daily executive summary of covid-19-related medical research, news, and public policy. It was founded and created by frontline emergency medicine physicians with expertise in medical research critique, health policy, and public policy.