BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

A surprising turn of events for blood thinners in covid-19.

At *Brief19* we have covered research on the notable relationship between covid-19 and pulmonary emboli (blood clots in the lungs), which is likely a consequence of systemic inflammation that the body mounts in response to SARS-CoV-2. Because of observations made in both retrospective and observational studies, many top medical institutions started recommending and implementing policies to give patients anticoagulation (blood thinners) at high doses to treat and/or prevent the presumed formation of abnormally and potentially dangerous blood clots in covid-19 patients admitted to the hospital.

In an astonishing turn of events on Monday, it was announced that the three largest ongoing randomized clinical trials designed to determine whether anticoagulation helps hospitalized patients with covid-19 have been stopped early due to futility. These international trials included REMAP-CAP, ACTIV-4, and ATTACC. It was revealed that the preliminary interim statistical analyses showed that patients with severe covid-19 pneumonia and/or those admitted to an intensive care unit with covid-19 did not benefit from high dose anticoagulation. Analyses are still underway to determine if any patients were harmed.

Notably, the results were announced by press release and data are not yet publicly available. Importantly, patients with less severe covid-19 pneumonia are still being enrolled in the aforementioned clinical trials as the benefits and harms are not yet known in that patient population. Although we must proceed with caution and withhold judgment until the results are published, this may be another lesson among many in the covid-19 therapeutic drama: medical interventions with biological plausibility—that is, they *seem* like they should help—may turn out not benefit patients in the real world. One great lesson from the covid-19 pandemic is the need for collaborative international clinical trials that can rapidly assess efficacy of various treatments during emerging pandemics.

—Joshua Niforatos, MD MTS

POLICY BRIEFING

One million vaccines down, nineteen million by January?

The US Centers for Disease Control and Prevention announced that one million people in the United States have already received their first dose of the much anticipated covid-19 vaccine, just 10 days after Pfizer and BioNTech's inoculation received Emergency Use Authorization from the US Food and Drug Administration. Many of those one million are healthcare workers, some on the front lines of the pandemic. Meanwhile, this week also marked the beginning of vaccinations in nursing homes.

The head of Operation Warp Speed, the federal government's project directed at accelerating the vaccine effort, acknowledged that it was unlikely 20 million people would receive the first of two vaccine doses before the end of the year, which had been the Trump administration's initial goal. Twenty million shots will actually be allocated to the states before year's end, but five million of them won't arrive until after the new year begins. This distribution will likely be aided by the $9 billion in Congressional funding as part of a stimulus package passed late Tuesday night. The legislation is still awaiting President Trump's signature, however.

—*Jordan M. Warchol, MD MPH*