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BRIEF19

A daily review of covid-19 research and policy

RESEARCH BRIEFING

Can the prick of a finger produce enough blood for a reliable coronavirus antibody test?

Remember Elizabeth Holmes? She's the disgraced founder of Theranos, a house-of-cards biotech company that built on lies, and felled by [great investigative reporting](#). Most people were disappointed that Holmes' vision of expanding blood testing so that consumers (and not doctors) could order blood tests and do them at home never materialized. Not me. As I [wrote in Slate](#), more testing is not always a good idea, especially when it comes to blood testing, which require a great deal of knowledge to interpret (this is why medical schools exist). But one aspect of Holmes' vision I can still appreciate: getting enough information from a tiny pinprick of blood from a fingertip instead of the need to fill up a bunch of tubes using a larger vein in the arm.

Now, microsampling is being tried to detect SARS-CoV-2 antibodies. What makes this approach possibly more successful is its narrow application. Rather than trying to deliver umpteen tests from a drop of blood, the system tested in a [new preprint](#) on medrxiv just looks for antibodies that would indicate a prior infection and recovery from the virus that causes covid-19.

The results were promising. Blood from patients known to have had covid-19 were tested for antibodies using the new technology (made by Roche) and compared to the usual method of antibody detection. The agreement was 98 percent.

A major issue will be cost. It is not immediately clear how much these devices cost, nor how scalable the reagents are during the timeframe of the pandemic. But if it ultimately lowers the bar to antibody testing, it will make efforts to track seroprevalence (i.e. how many people have already contracted the novel coronavirus) substantially easier. —*Jeremy Samuel Faust MD MS*

POLICY BRIEFING

Doctors respond to baseless accusations on covid-19 billing.

President Trump has once again made headlines with a controversial statement at a rally. After initially [suggesting](#) at an October 25th rally that physicians get paid more by reporting a patient's death as covid-19 related, the president [doubled](#) down just five days later, stating that, "doctors are very smart people, so what they do is they say everybody dies of covid... it's like \$2000 more, so you get more money." Susan Bailey, the president of the American Medical Association [called](#) these remarks, "malicious, outrageous, and completely misguided." The American College of Emergency Physicians [released](#) a statement saying, "to imply that emergency physicians would inflate the number of deaths from this pandemic to gain financially is offensive, especially as many are actually under unprecedented financial strain as they continue to bear the brunt of Covid-19."

The fundamental discrepancy comes down to this: in many cases it is the exacerbation of an underlying comorbidity that actually leads to a patient's death (e.g. congestive heart failure, emphysema, *etc*), but when the presence of covid-19 leads to a patient's inability to compensate for a condition that they would have otherwise been able to recover from, then covid-19 is indeed the primary factor contributing to death. *Various* —*Joshua Lesko, MD*

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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 and public policy.