

# THE ALCIVAX

**Alcimed** analyzes the global game of peek-a-boo governments are playing with how to best re-emerge from isolation safely.

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## Re-emergence Peek-a-Boo

As isolation drags on another week effecting over 100 countries, easing isolation restriction discussions have intensified, but lack of testing data, fear of 2nd wave infections, and overwhelming economic collapse is forcing governments to announce re-emergence plans and then retract them while staring at everyone else through their fingers.

### All Eyes on the East

As the pandemic first emerged from Asia, many governments are wary to come out of isolation, until Asia proves it is safe to do so. These efforts have been hampered with 140 previously recovered South Koreans re-testing positive for COVID, raising concerns about lack of immunity or re-infection potential. A 2nd wave in Japan, new cases in China, Singapore, and Hong Kong have provided evidence that isolation remove comes with real risk of losing ground gained. Near neighbors, such as India, have already declared lock down extensions, but Iran has begun to open reopen government offices, shops, and factories.

### Western Trepidation

Once confident, Austria underestimated its COVID-19 burden by 50%, raising warnings about reopening too quickly. In Vienna, workers are living inside the power plant just to keep the lights on. Austria still plans to begin reopening smaller shops, with stay at home orders ending May 1st and hotels re-opening mid May. Denmark and Norway will begin reopening schools and kindergartens, while Italy won't go back to school before September. France and the UK have announced official extensions to lock down orders, while Germany remains vague on when easing my really begin. The uneven toll of the virus on European countries, heavy in in Spain and Italy, while light in Portugal and Greece demonstrate that early response is crucial, while critical care bed capacity may also predict the why countries like Germany have less fatalities. The US will reopen on a state by state basis determined by each governor.

### LATAM - Only the Beginning

In Latin America, the pandemic still seems to be in the upswing. Brazil has become the first country in the southern hemisphere to surpass 1,000 deaths related to coronavirus. There is growing concern that the virus could spiral out of control, especially in poorer areas like favelas and that an outbreak could devastate the indigenous community. But Guayaquil, Ecuador is the emerging epicenter of the coronavirus in Latin America. The coronavirus has overwhelmed hospitals and morgues in Ecuador's largest city, a preview of what other vulnerable regions in Latin America may soon encounter. Columbia determines the days citizens are allowed to leave the house by the numbers found on their national ID card.



## Strategic Assets

Immunity certificates have been widely discussed as the best way to safely re-emerge from isolation, but there are some practical and ethical considerations that have impeded progress.

Scientifically, we still do not know if the presence of antibodies actually provides immunity or how long that immunity lasts (9 months, 1 year?). Immunity to coronaviruses varies from a few months to several years in other strains. While some antibody tests have been approved, false positives will undermine the entire strategy.

There are also significant concerns about black market procurement of falsified immunity certificates. But there are also serious discrimination concerns. Will people without immunity be prevented from working, eating in restaurants, taking public transportation?

The best way forward is contact tracing, knowing who is infected and whom they have contacted so the correct people can be quarantined. This requires much wider scale testing that is currently taking place. Contract tracing will mean hiring armies of community health workers to manage the tracing and confinements. This must be combined with significant efforts to solve the testing logistical hurdles, including the use of university testing labs and more at home testing like the new saliva tests.

[Article on COVID-19 tests](#)

Click on the picture here  to read our analysis of **WHAT** types of tests to use, **WHERE** and **WHY**.



COVID-19 Testing: Which Tests, Where, and Why?

# The Search for Therapies

Treatment of severe COVID-19 with remdesivir through compassionate use has yielded positive results, but controlled trials in China have been suspended due to the drop in cases, so effectiveness data will be delayed until ongoing trials in US & EU produce results.

The same can not be said for hydroxychloroquine as trials have been halted in Brazil for serious adverse events, with 43 cardiac complications linked to the drug in France, and a Chinese study showing it doesn't speed recovery.

Meanwhile, Avigan trials have begun in the US and an RA drug Actemra is being used in Washington State to control hyperinflammatory complications based on a small Chinese study.

## The Vaccine Bet

Vaccine development got a big manufacturing boost this week as Sanofi and GSK announced a major collaboration. The combined potential capacity would meet the needs of a global pandemic. Of the 70 potential global vaccine candidates, two have made it to Phase 2 trials in Asia. The microneedle skin patch vaccine will also soon enter human trials after positive data from animal models.

A coronavirus mutation may threaten the race to develop a vaccine: a virus strain identified in India showed changes in the spike protein which facilitates the mechanism that the virus uses to bind to human cells.



## International Discord & Threats

According to Unicef, a global coordinated approach is the only way to effectively fight COVID-19. This seems even more apparent as reports of COVID in refugee camps in Germany give a grim picture of what the pandemic can do in tight quarters. So far the COVID pandemic has spread discord and largely blocked large scale international cooperation, raising interesting questions about globalization.

Both far-right political groups and radical Islamist groups are using COVID-19 as a recruitment tool. In the US, armed protesters are labeling stay-at-home orders tyranny. The UN Secretary General says COVID-19 threatens peace and global security, though some cease-fire appeals are holding.

To confound problems, as wealthy countries get into bidding wars for medical equipment, poorer countries are being left out in the cold and may take months to fill. This makes them more reliant on international organizations like the WHO, for which the US has suspended funding, causing increased US directed animosity and calls for formal reviews.

Journalism is also under siege, as journalists working in Iran, China, Egypt, and India have been deported, barred from social media, and in some cases unduly influence what types of stories can be published about the outbreak.

Brazil has fired their Health Minister after disagreeing with the President on the COVID response and the US President has recently threatened to do the same to Dr. Andrew Fauci, while Congress tries to prevent him from being able to do so.



## What We Know

The angiotensin-converting enzyme 2 (ACE2) has been identified as the receptor for used for cellular entry during COVID-19. ACE2 can be found in the nose, and lungs, but also the liver, kidneys, and gut. This may explain why data from the field shows evidence of liver, kidney, and cardiac damage in COVID-19 patients. The high need for dialysis for COVID patients is putting additional strain on hospitals without sufficient dialysis technicians.

ACE2 expression levels differ between ethnic groups and may explain disease severity and fatality rates fluctuates between countries. Various inflammatory disorders may also vary ACE2 expression.

Some of the sickest COVID patients may succumb a cytokine storm raised by a hyperactive immune response.

Additional evidence suggests that COVID-19 may also reduce red blood cells ability to carry oxygen, while this may help to rethink treatment for COVID complications. Containment measures also need rethinking with new transmission data published.



## All Joking Aside

Can't get tested for COVID? Medical detection dogs are joining the fight. Originally trained to sniff out malaria, dogs are now being trained to ferret out the asymptomatic.



In the same vein, COVID can also force mimes to break their silence. A popular mime in Cairo is passing out masks and health information while still in costume to keep children safe.

The reduction of pollution in India during isolation makes the Himalayas visible from the state of Punjab for the first time in 30 years.

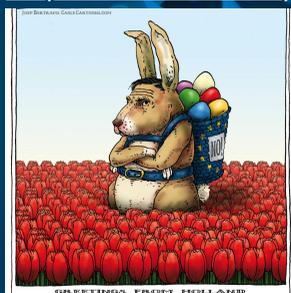
Notre Dame reconstruction had paused for isolation, so thieves attempted to steal stones, but history says cathedral reconstruction will still be prioritized in the end similar to WWII.

## The week in review: Cartoon Edition

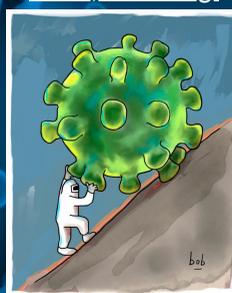
Asterix & Obelix turn out to be prophets



COVID-19 hinders Tulips & the Easter Bunny



The battle grows more frustrating



Everyone places their hopes in vaccines

