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COVID-19 Update: Positive case growth rate slowing in New York State and NYC though still high, movement on a point of care antibody test in the US, and Imperial College London projections are walked back for the UK, all encouraging signs...

Positive COVID-19 tests are still growing in New York State and NYC, up 34% and 50% today as we work our way through the testing backlog. However, today's result for New York State is a noticeable decline in the growth rate compared to 43% yesterday, and 47% two days ago. The NYC case growth rate dropped marginally from 52% to 50% today. We expect the testing backlog to become less of an issue going forward and hope to reach equilibrium sometime next week.

We wanted to highlight movement on the serological testing front as announced by the distributor, Henry Schein earlier today:

- HSIC will have "hundreds of thousands" of point of care antibody tests for the detection of COVID-19 available by the end of March, ramping up sharply by early April
- The test is made by a South Korean company called SD Biosensor, and is able to detect IgM & IgG antibodies to the SARS-CoV2 virus from a pinprick of blood in about 15 minutes
- The kits will be distributed to physician offices, hospitals, and "other" healthcare institutions
- Importantly, this test is not FDA approved, but according to an FAQ released by HSIC, approval is not necessary in order for the test to be used as an immunity test (but not a diagnostic)

As we stated on our client webinar, a widely available point of care, serological test to detect antibodies to this coronavirus would help identify those who have been exposed, and were either asymptomatic, or with a mild course of illness that never warranted getting testing. This information will assist in the pacing of "opening up society," as well as gain a better understanding of the true transmission rate of this virus and level of background immunity that could contribute to herd immunity materializing sooner. Importantly, the infection rate to date remains ~14% given the 552,000 tests performed in the US as of earlier this afternoon. This low infection rate dovetails nicely with an interesting report out this afternoon from world renowned Epidemiologist, Neil Ferguson who wrote the Imperial College London coronavirus report that projected 500,000 deaths in the UK and 2.2M in the US if certain measures were not taken (i.e. social distancing, tracing contacts, and self-quarantine etc.).

The Epidemiologist behind the Imperial College London coronavirus model that predicted 2.2M American deaths and 500,000 deaths in the UK if no actions were taken has drastically reduced his projections, and now sees ~20,000 deaths in the UK, though US projections were not mentioned. This is due to the revision of estimates that have suggested many more people have already been infected with the virus and had either asymptomatic, or very mild cases.

A few points resulting from the change in projections:

- The UK should now have enough ICU beds to handle COVID-19 cases
- The 20,000 death projection compares to the University of Oxford's projection of 600-13,000 influenza deaths per year (the pandemic in context)
- The reason for less dire estimates beyond the spread is the impact of social distancing, though it hasn't been long enough in our view to see the impact based on other models
- To this end, it is possible that the UK could peak within 2-3 weeks, which would be welcoming news for the world if it proves true
- As of late this afternoon, the UK had 11,772 confirmed COVID-19 cases and 578 deaths
- This article was referenced by the CDC's Dr. Birx at this evening's Coronavirus Task Force, and a re-evaluation of the projected 2.2M deaths in the US by that study is underway

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For more information on COVID-19, please refer to the Center for Disease Control and Prevention at cdc.gov

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