A Brief Guide to Lab Tests for COVID-19 (as of May 27, 2020)

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Current tests for SARS-CoV-2, the coronavirus that causes Covid-19, fall into 2 general categories:

1. Diagnostic Tests – These test for presence of the virus and are used for diagnosing an acute infection. Almost all these tests are molecular tests that are done in reference labs, and most use a technology known as PCR (Polymerase Chain Reaction). There are over 60 of these type tests currently approved; three are CLIA-waived (Abbott ID NOW, Cepheid Xpert Xpress, and Mesa Biotech Accula). There is currently one approved antigen test, a CLIA-waived rapid point of care test (Quidel Sofia) that checks for the presence of viral-specific protein. All these diagnostic tests are done on nasal, oral, or sputum specimens (the type of specimen used varies with the test). All the PCR tests done in reference labs have a high degree of accuracy, but false negatives may occur due to problems with specimen collection or transport.
2. Antibody Tests – These test for presence of an antibody to the virus and are used to diagnose a past infection. There are currently 12 approved tests on the market. All of them are blood tests, and most of them are done in a reference lab. There are currently no CLIA-waived antibody tests available. Accuracy of the tests vary; most have good specificity (few false positives), but the sensitivity varies, so it is a good idea to know what test your reference lab uses.

The FDA website has a full listing of all tests that have been given Emergency Use Authorization.

As with any lab test, testing for Covid-19 must be done in conjunction with the patient's symptoms, physical exam findings, other laboratory and/or imaging results, and exposure history. **Good clinical judgment is always important!**