## **FACT SHEET FOR HEALTHCARE PROVIDERS**

CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay

Updated: March 25, 2020

Coronavirus Disease 2019 (COVID-19)

This Fact Sheet informs you of the significant known and potential risks and benefits of the emergency use of the CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay

Testing is to be conducted on specimens from people who meet Coronavirus Disease 2019 (COVID-19) clinical and/or epidemiological criteria for testing.

## What are the symptoms of COVID-19?

Many patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing). However, limited information is currently available to characterize the full spectrum of clinical illness associated with COVID-19. Based on what is known about the virus that causes COVID-19, signs and symptoms may appear any time from 2 to 14 days after exposure to the virus. Based on preliminary data, the median incubation period is approximately 5 days but may range 2-14 days.

All patients whose specimens are tested with this assay will receive the Fact Sheet for Patients: CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay

Public health officials have identified cases of COVID-19 throughout the world, including in the United States. Please check the CDC webpage for the most up to date information.

What do I need to know about COVID-19 testing? Current information on COVID-19 for healthcare providers is available at CDC's webpage, *Information for Healthcare Professionals* (see links provided in "Where can I go for updates and more information" section).

 The CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay can be used to test nasopharyngeal/oropharyngeal swabs and sputum. This test is to be performed only using respiratory specimens collected from individuals who meet COVID-19 clinical and/or epidemiological criteria for testing.

- The CRSP SARS-CoV-2 Real-time Reverse
   Transcriptase (RT)-PCR Diagnostic Assay should be
   ordered for the detection of the virus that causes
   COVID-19 in individuals who meet the COVID-19
   clinical and/or epidemiological criteria for testing.
- The CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay is authorized for use in laboratories in the United States, certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform high complexity tests

Specimens should be collected with appropriate infection control precautions. Current guidance for COVID-19 infection control precautions are available at the CDC's website (see links provided in "Where can I go for updates and more information" section).

Use appropriate personal protective equipment when collecting and handling specimens from individuals suspected of being infected with COVID-19 as outlined in the CDC Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19). For additional information, refer to CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons Under Investigation (PUIs) for Coronavirus Disease 2019 (COVID-19) (see links provided in "Where can I go for updates and more information" section).

# What does it mean if the specimen tests positive for the virus that causes COVID-19?

A positive test result for COVID-19 indicates that RNA from SARS-CoV-2 was detected, and the patient is presumptively infected with the virus and presumed to be contagious. Laboratory test results should always be considered in the context of clinical observations and epidemiological data in making a final diagnosis and patient management decisions. Patient management

## **FACT SHEET FOR HEALTHCARE PROVIDERS**

CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay

Updated: March 25, 2020

Coronavirus Disease 2019 (COVID-19)

decisions should be made with a healthcare provider and follow current CDC guidelines.

The CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay has been designed to minimize the likelihood of false positive test results. However, in the event of a false positive result, risks to patients could include the following: a recommendation for isolation of the patient, monitoring of household or other close contacts for symptoms, patient isolation that might limit contact with family or friends and may increase contact with other potentially COVID-19 patients, limits in the ability to work, the delayed diagnosis and treatment for the true infection causing the symptoms, unnecessary prescription of a treatment or therapy, or other unintended adverse effects.

All laboratories using this test must follow the standard confirmatory testing and reporting guidelines according to their appropriate public health authorities.

# What does it mean if the specimen tests negative for the virus that causes COVID-19?

A negative test result for this test means that SARS-CoV-2 RNA was not present in the specimen above the limit of detection. However, a negative result does not rule out COVID-19 and should not be used as the sole basis for treatment or patient management decisions. A negative result does not exclude the possibility of COVID-19.

When diagnostic testing is negative, the possibility of a false negative result should be considered in the context of a patient's recent exposures and the presence of clinical signs and symptoms consistent with COVID-19. The possibility of a false negative result should especially be considered if the patient's recent exposures or clinical presentation indicate that COVID-19 is likely, and diagnostic tests for other causes of illness (e.g., other respiratory illness) are negative. If COVID-19 is still suspected based on exposure history together with other clinical findings, re-testing should be considered by healthcare providers in consultation with public health authorities.

Risks to a patient of a false negative include: delayed or lack of supportive treatment, lack of monitoring of

infected individuals and their household or other close contacts for symptoms resulting in increased risk of spread of COVID-19 within the community, or other unintended adverse events.

#### What is an EUA?

The United States FDA has made this test available under an emergency access mechanism called an Emergency Use Authorization (EUA). The EUA is supported by the Secretary of Health and Human Service's (HHS's) declaration that circumstances exist to justify the emergency use of in vitro diagnostics (IVDs) for the detection and/or diagnosis of COVID-19.

An IVD made available under an EUA has not undergone the same type of review as an FDA-approved or cleared IVD. FDA may issue an EUA when certain criteria are met, which includes that there are no adequate, approved, available alternatives, and based on the totality of scientific evidence available, it is reasonable to believe that this IVD may be effective in the detection of the virus that causes COVID-19.

The EUA for this test is in effect for the duration of the COVID-19 declaration justifying emergency use of IVDs, unless terminated or revoked (after which the test may no longer be used).

## **FACT SHEET FOR HEALTHCARE PROVIDERS**

CRSP SARS-CoV-2 Real-time Reverse Transcriptase (RT)-PCR Diagnostic Assay

Updated: March 25, 2020

Coronavirus Disease 2019 (COVID-19)

## Where can I go for updates and more information?

### **CDC** webpages:

General: https://www.cdc.gov/COVID19

**Healthcare Professionals:** 

https://www.cdc.gov/coronavirus/2019-nCoV/guidance-hcp.html Information for Laboratories: https://www.cdc.gov/coronavirus/2019-nCoV/guidance-hcp.html

nCoV/quidance-laboratories.html

Laboratory Biosafety: https://www.cdc.gov/coronavirus/2019-

nCoV/lab-biosafety-guidelines.html

**Isolation Precautions in Healthcare Settings:** 

https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-

recommendations.html

Specimen Collection: https://www.cdc.gov/coronavirus/2019-

nCoV/guidelines-clinical-specimens.html

Infection Control: https://www.cdc.gov/coronavirus/2019-

ncov/infection-control/index.html

### FDA webpages:

General: www.fda.gov/novelcoronavirus

**EUAs:**(includes links to patient fact sheet and manufacturer's instructions) <a href="https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations">https://www.fda.gov/medical-devices/emergency-use-authorizations</a>

#### Manufacturer: CRSP

Clinical Research Sequencing Platform Broad Institute of MIT and Harvard 320 Charles Street Cambridge, MA 02141

e-mail: crsp@broadinstitute.org