Test Definition: COVNG

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Lineage, Clade, and Spike Gene Mutation Detection, Next-Generation Sequencing, Varies

Reporting Title: SARS-CoV-2 Lineage, Clade, S Mut, V
Performing Location: Rochester

Ordering Guidance:

This test should only be requested on known SARS-CoV-2 RNA-positive upper or lower respiratory tract specimens, with polymerase chain reaction target cycle threshold value of to 30.0 or less or transcription-mediated amplification generated relative light units of 1200 or more.

This test should not be used to detect the presence or absence of SARS-CoV-2 in an individual, with or without symptoms or signs of COVID-19. For these cases, order COVOO / Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) RNA Detection, Varies.

Shipping Instructions:

Ship specimens refrigerated (if <72 hours from collection to arrive at Mayo Clinic Laboratories [MCL]) or frozen (if 72 hours or more from collection to arrive at MCL)

Necessary Information:

The following question must be answered at the time of test ordering:
Does the patient have a positive SARS-CoV-2, COVID19 polymerase chain reaction test result within the last 5 days? Answer "Yes" or "No".
Note: Test orders for submitted specimens with a "No" answer to this question will be canceled.

Specimen Requirements:

Call 800-533-1710 to have this test added to a previously collected specimen that tested positive for SARS-CoV-2, COVID19 with COVOO, COVID, or COFLU. A new specimen would not be needed if there is sufficient specimen volume remaining.

Specimen Type: Nasopharyngeal (NP), oropharyngeal (OP ie, throat), nasal mid-turbinate, or nares/nasal swab
Supplies: Swab, Sterile Polyester(T507)
Collection Container/Tube:
Preferred: Sterile polyester swab
Acceptable: Dacron-tipped swab with plastic shaft
Submission Container/Tube: Universal transport media, viral transport media, or equivalent (eg, Copan UTM-RT, BD VTM, MicroTest M4, M4-RT, M5). Media should not contain guanidine thiocyanate (GTC).
For more information on acceptable transport media, see www.fda.gov/medical-devices/emergency-situations-medical-devices/faqs-diagnostic-testing-sars-cov-2
Specimen Volume: Entire specimen with a minimum of 1.5 mL (maximum 3 mL) of transport media
Collection Instructions:
1. Collect specimen by swabbing back and forth over nasal or pharyngeal mucosa surface to maximize recovery of cells.
2. NP and OP swab specimens may be combined at collection into a single vial of transport media but only 1 swab is required for analysis.
3. Swab must be placed into transport medium. Swab shaft should be broken or cut so that there is no obstruction to the sample or pressure on the media container cap.
4. Do not send in glass tubes, vacutainer tubes, or tubes with push caps.

5. Do not overfill with more than 3 mL total volume of media.

Specimen Type: Nasopharyngeal aspirate or nasal washings
Container/Tube: Sterile container
Specimen Volume: Minimum of 1.5 mL
Additional Information: Do not aliquot into viral transport media, glass tubes, vacutainer tubes, or tubes with push caps.

Specimen Type: Nasopharyngeal aspirate or nasal washings, bronchoalveolar lavage (BAL) fluid, bronchial washings, endotracheal aspirate, sputum
Container/Tube: Sterile container
Specimen Volume: Minimum of 1.5 mL
Additional Information: Do not aliquot into viral transport media, glass tubes, vacutainer tubes, or tubes with push caps.

Specimen Minimum Volume:
See Specimen Required

Specimen Type	Temperature	Time	Special Container
Varies	Frozen (preferred)	14 days	
	Refrigerated	72 hours	

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
COVNG	CVNGS	SARS-CoV-2 Specimen Source: • Oropharynx • Nasopharynx • Nares • Nasal • Nasal mid-turbinate • Nasal Washing • Nasopharyngeal Aspirate • Bronchial Washings • Sputum • Endotracheal Aspirate • Bronchoalveolar Lavage Fluid (BAL)	Answer List	Yes

Test ID	Question ID	Description	Type	Reportable
COVNG	CVNGR	Patient Race: • American Indian or Alaska Native • Asian • Black or African American • Native Hawaiian/Other Pacific Islander • White • Other Race • Refused to Answer • Unknown	Answer List	Yes
COVNG	CVNGE	Patient Ethnicity: • Hispanic or Latino • Not Hispanic or Latino • Not Obtainable • Refused • Asked but Unknown • Unknown	Answer List	Yes
COVNG	CVPOS	Recent Positive PCR Result within 5 days?: • Yes • No	Answer List	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
614373	SARS-CoV-2 PANGO lineage	Alphanumeric		96895-8
614421	SARS-CoV-2 Nextstrain clade	Alphanumeric		96896-6
614374	S codon mutations of interest	Alphanumeric		96751-3
614501	S mutations of unknown significance	Alphanumeric		96751-3
616432	RdRp codon mutations of interest	Alphanumeric		99314-7
616433	RdRp mutations of unknown significance	Alphanumeric		99314-7
CVNGS	SARS-CoV-2 Specimen Source	Alphanumeric		31208-2
CVNGR	Patient Race	Alphanumeric		72826-1
CVNGE	Patient Ethnicity	Alphanumeric		69490-1
CVPOS	Recent Positive PCR Result within 5 days?	Alphanumeric		86955-2

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

87913

Reference Values:

Not applicable