

## Cytomegalovirus (CMV) Drug Resistance by Next-Generation Sequencing, Plasma

**Test ID:** CMVNG

**Useful for:**

Detecting mutations associated with antiviral resistance in the genes UL97 and UL54 of cytomegalovirus (CMV). This test is not intended for the initial diagnosis of CMV infection.

**Methods:**

Next-generation sequencing (NGS)

**Genetics Information:**

This test uses next-generation sequencing to assess whether mutations associated with antiviral resistance are present in the genes UL97 and UL54 of CMV.

**Additional Testing Requirements:**

Plasma submitted for next-generation sequencing (NGS) testing must have been collected within 7 days of a viral load assay (CMVQN / Cytomegalovirus [CMV] DNA Detection and Quantification by Real-Time PCR, Plasma, or similar test) with a result of  $\geq 500$  international units (IU)/mL.

**Testing Algorithm:**

This test may be performed following quantitative nucleic acid amplification test results that suggest an increase, or stabilization, of CMV viral load while the patient is on appropriate antiviral therapy.

**Reference Values:**

None Detected/Not Predicted

**Specimen Requirements:**

<b>Collection Container/Tube</b>	Lavender top (EDTA)
<b>Submission Container/Tube</b>	Aliquot Tube, 5 mL (T465)
<b>Specimen Volume:</b>	1.2 mL
<b>Collection Instructions:</b>	Centrifuge and aliquot plasma
<b>Minimum Volume:</b>	1.0 mL
<b>Additional Information:</b>	Plasma submitted for next-generation sequencing testing must have been collected within 7 days of a viral load assay (i.e., CMVQN) with a result of $\geq 500$ IU/mL

**Specimen Stability Information:**

Specimen Type	Temperature	Time
Plasma EDTA	Frozen (preferred)	30 days
	Refrigerated	14 days

**Cautions:**

This assay is designed to detect resistance-associated mutations in the genes UL97 and UL54. Only mutations that have been reported in the literature to confer antiviral resistance and included in the sequence analysis will be reported. Unrecognized resistance mutations may exist, which are not reported in this assay. Furthermore, previously reported resistance-associated mutations may not result in a resistant phenotype in all cases.

**CPT Code:** 87910

**Day(s) Setup:** Monday through Friday; Varies      **Analytic Time:** 7 days

**Note:**

The following referral test code will become obsolete.

Test Name	Test ID	Referral Lab Code	Referral Lab
Cytomegalovirus (CMV) Genotypic Drug Resistance	FCYTO	58006	Quest Diagnostics Infectious Disease

**Questions**

Contact Dunisha Messmer, Laboratory Technologist Resource Coordinator at 800-533-1710.