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LAB ALERT: NEW TEST

NOTIFICATION DATE: 7/24/2013

EFFECTIVE DATE: 7/30/2013

CYTOMEGALOVIRUS (CMV) VIRAL LOAD BY PCR, PLASMA

TEST CODE: CMVQT

INTERFACE CODE: 1004168

METHODOLOGY: Roche COBAS AmpliPrep/COBAS TagMan CMV Quantitative Real-Time PCR

CLINICAL UTILITY: Cytomegalovirus (CMV) is the most common opportunistic viral pathogen in the transplant setting

causing pneumonitis, colitis, hepatitis, CNS disease, neutropenia, hematological abnormalities, retinitis, gastroenteritis, esophagitis, pancreatitis, and disseminated disease. In transplant populations, the

infection is transmitted via latent CMV present in the transplanted organ donor and the virus

subsequently reactivates, causing a primary CMV infection in the recipient. CMV disease may also occur from reactivation of the virus already present within the recipients. Studies in transplant recipients have shown the association between CMV viral load in blood and the risk of developing CMV disease. Increases in viral load over time have been associated with worse clinical outcomes. Nucleic acid amplification tests are the most sensitive and specific detection methods in the laboratory. Quantification of CMV DNA level in peripheral blood is used to determine when to initiate preemptive antiviral therapy, diagnose active CMV disease, and monitor response to antiviral therapy. Typically, CMV viral load changes of >0.5 log

IU/mL are considered biologically significant changes in viral replication.

PERFORMED: Monday-Saturday

COLLECTION: 5 ml of Peripheral Blood in Lavender top EDTA tube(s)

Specimen Preparation: Centrifuge the EDTA tube(s) at 800-1600xg for 20 min at room temperature

within 6 hours of collection. Aliquot plasma (Min. 2 mL) into a sterile standard transport tube.

STABILITY (FROM

COLLECTION TO INITIATION

OF TESTING)

Ambient: 6 hours. The plasma should be separated from the cells within 6 hours.

After separation of plasma from the cells: Refrigerated plasma: 7 days, Frozen: 6 weeks

TRANSPORT: Refrigerated

REFERENCE RANGE: Target Not Detected (TND)

REPORTABLE RANGE: 137 to 9,100,000 IU/mL (2.14 to 6.96 log IU/mL)

RESULTS REPORTED: 1-3 days

CPT CODE: 87497

PERFORMING LAB: med fusion

ORDER/CONTACT INFORMATION: ClearPoint Client Services: 972-966-7700 | Fax: 972-966-7799