VANDERBILT PATHOLOGY LABORATORY SERVICES

TEST INFORMATION UPDATE

MIDL PCR EBV Qt (EBQ)

Epstein-Barr Viral Load Testing

NEW TEST METHODOLOGY

Effective November 30, 2022

VUMC Molecular Infectious Disease Laboratory (MIDL) transitioned viral load testing for Epstein-Barr Virus (EBV) to an FDA-approved test on November 30, 2022. This test, MIDL PCR EBV Qt (LAB 1373) differs from the previously offered test in the method used, and the specimen tested.

ORDERING:

- **VUMC Providers:** Ordering the new test in Epic/eStar is no different from ordering the prior test. The following terms can be used in Epic/eStar to locate the correct order: LAB1373, EPSTEIN BARR, PCR EBV QT, PCR EBV QUANTITATIVE
- **VPLS Customers:** MIDL PCR EBV Qt can be ordered using your current process via the Atlas portal or manual paper requisitions.

SPECIMEN COLLECTION:

- **VUMC Providers:** The specimen analyzed in the new assay is plasma, whereas the specimen analyzed in the prior test was whole blood. The sample (blood collected into a tube containing EDTA) is collected the same way as before; plasma will be separated for testing in the laboratory. Specimens should be sent to the laboratory on the day of collection.
- **VPLS Customers:** **COLLECTION IS A PURPLE TOP EDTA TUBE.** Centrifuge and separate plasma. Keep Refrigerated. Refrigerated plasma will be accepted up to 6 days after collection.

RESULTS: Results generated on and after December 1, 2022, will not connect on graphing trendlines with prior EBV viral loads, given the differences in the test method and specimen type. Results from the old assay will trend together, and results from the new assay will trend together in the future.

- **VUMC Providers:** Results generated by the new test will appear in the Virology results section of Epic/eStar.
- **VPLS Customers:** Will continue to receive their EBV reports like other lab reports.

PERFORMANCE: VUMC MIDL is transitioning to this assay to provide improved patient care. This assay is performed on an automated platform. Accordingly, the turn-around time from sample acquisition to result generation will shorten. Additionally, the analytic range of the new assay is broader, allowing the detection of both smaller and larger quantities of EBV. Finally, testing plasma provides more actionable results, as the virus detected in plasma is representative of an actively replicating virus (as opposed to a latent virus that can be detected in whole blood).

	Prior assay	New assay
Manufacturer(s) and Process	bioMerieux (extraction); ThermoFisher (primers, probes, molecular reagents, and instrumentation); manual reporting	Roche, fully automated
Regulatory status	Laboratory developed test (LDT)	FDA In Vitro Diagnostic (IVD)
Specimen	Whole blood	Plasma
Procedure	Quantitative PCR (IU/mL)	Quantitative PCR (IU/mL)
Target(s)	EBV nuclear antigen leader protein (EBNA-LP) gene (one target)	EBV nuclear antigen-1 (EBNA-1) gene and BMRF gene (two targets)
Linear range	200 - 5,000,000 IU/mL (LoD 50 IU/mL)	35 – 100,000,000 IU/mL (LoD 18.8 IU/mL)
Turn-Around Time Goal	72 hours	48 hours goal (longer if specimens sent over the weekend)

For detailed test information, visit our online Test Directory at: www.labVU.com

VUMC Lab Client Services: 615-875-5227 (5-LABS)

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