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**Date:** February 18, 2016

**To:** Infectious Disease Specialists (Edmonton & Calgary), Transplant Physicians and Surgeons and Transplant Program; Directors, Coordinators and Managers

**From:** Provincial Laboratory for Public Health (ProvLab)

**Re:** Implementation of a New EBV Quantitative PCR Assay at ProvLab

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**Key Message:**

- Starting March 21, 2016, ProvLab will be using a new quantitative EBV PCR assay calibrated in International Units (IU), the RealStar® EBV PCR (Altona Diagnostics). This new assay and the current in-house assay will be run concurrently for a transition period of three months.

**Background:**

- Epstein-Barr virus (EBV) is a ubiquitous virus in the population. Among many diseases linked to this virus, post-transplant lymphoproliferative disease (PTLD) is a common complication of solid organ transplantation and bone marrow transplantation, caused by an unchecked proliferation of EBV-transformed lymphocytes.
- Quantitative PCR for EBV on peripheral blood samples is a valuable test for the diagnosis and monitoring of PTLD. ProvLab has been providing a quantitative EBV PCR using an in-house assay. Replacement of the in-house assay by a commercial assay will have numerous advantages, including reporting results in the new International Units (IU) standard.
- The implementation will involve a three month transition period during which both assays will be performed and reported on submitted samples. After the transition period, only the new assay will be available. During the first half of the transition period, the cumulative report for the patient will be continued with the in-house assay; afterward, a new cumulative report using the new assay will be initiated.
- The two assays show a strong correlation, with a conversion factor of approximately 2-fold, e.g. 50 000 copies/mL (in-house assay) corresponding to 25 000 IU/mL (EBV RealStar® assay). Please note that there may be a greater disparity between the two assays on some samples, especially at low viral loads because of stochastic effects.

**Action Required: Specimen submission**

There is no change in the type of sample to be submitted, i.e. a dedicated blood in EDTA tube. There is no change in the name of the test ordered.

**Inquiries and feedback may be directed to:**

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**This bulletin has been reviewed and approved by:**

Dr. Graham Tipples, Medical / Scientific Director, ProvLab