



Laboratory Medicine Bulletin

NEW Testing Platform for Polyomavirus (BK Virus) Quantitative Viral Load

May 15, 2018

Effective June 4, 2018, the St. Paul's Hospital Diagnostic Virology and Reference Laboratory (DVRL) will be transitioning from our current laboratory developed test (LDT) **BK virus quantitative viral load assay** to a new testing platform. The transition will enable the DVRL to accommodate rising testing volumes while reducing turn-around times for British Columbia transplant patients.

The new BK virus assay has been validated for post-transplant surveillance and treatment monitoring of patients with polyomavirus-associated nephropathy (PVAN). We will also continue testing of urine specimens for patients with hemorrhagic cystitis. The specimen of choice for quantitative PCR will continue to be EDTA plasma.

Quantitative BK virus PCR can vary between assays. A validation study was performed by DVRL comparing our existing LDT with the new LDT and similar viral load values were observed. There were, however, slightly lower values reported with the new assay (which is consistent with consensus means from standardized inter-laboratory testing). This finding was discussed with British Columbia Transplant (BCT), the Leukemia/Bone marrow Transplant Program (BMT) and Transplant Infectious Diseases. It was agreed that the change was not clinically significant and that the current recommended numerical viral load thresholds for diagnosis will remain unchanged.

It is always important to monitor the BK virus quantitative viral load over time and to correlate results with patient symptoms and clinical presentation.

Please refer to the BCT and BMT clinical care guidelines for further details.

Summary:

- **Transition of BK virus quantitative PCR to new assay on June 4, 2018**
- **BCT and BMT BK virus PCR treatment thresholds remain unchanged**

If you have any questions regarding this transition, please contact the DVRL at (604) 806-8420. For urgent questions on evenings and weekends, please page the Medical Microbiologist on call through the PHC Call Centre.