

Laboratory Medicine Bulletin

January 28, 2015

Dear Doctor,

RE: Hepatitis B (HBV) resistance and genotype testing

As of January 2015, the Diagnostic Virology and Reference Laboratory will be changing the test system for hepatitis B resistance testing. The current system, INNO-LiPA HBV DR v2/v3, will be replaced by the Roche Diagnostics GS Junior System, a next-generation sequencer. Transitioning to this platform will enable testing for both HBV resistance and genotype. In addition, the next-generation sequencer is more sensitive in the detection of low-level mutations, and will enable a more detailed description of resistance including the detection of resistant sub-populations and potentially novel resistance loci.

The indications for resistance testing will include the following:

1. Patients on antiviral therapy with a suspicion of antiviral resistance.
2. Baseline resistance testing for treatment naive patients.

Test requisitions will remain unchanged, and all orders for HBV resistance testing will include both resistance and genotype. Resistance testing can only be performed a maximum of 2 times per year per patient. Please also request HBV viral load testing if it has not been performed in the past 4 weeks, as the sensitivity of the resistance testing is viral load dependent.

A detailed printed report will be produced after testing is complete. Please note that if you are new to this program, you will be required to route your requests for testing through one of the expert hepatologists at St Paul's Hospital or Vancouver General Hospital (list available on request; call 604-806-8426).

For any enquiries about this change, please contact Dr. Christopher Lowe at (604) 682-2344 ext. 63279 or the PHC Medical Microbiologist on call through the Providence Health Care switchboard.

Sincerely,

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