

## Memorandum

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Date: December 2, 2013

From: Dr. Deborah Griswold  
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Department of Pathology and Laboratory Medicine  
Providence Health Care

Re: **Change In Testing For Heparin-Induced Thrombocytopenia (HIT) Antibodies**

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On December 4, 2013 the hematology laboratory at St. Paul's Hospital will implement a new screening test for HIT antibodies to replace the current gel-based assay. Comparison with the existing assay indicates similar sensitivity with improved specificity (fewer false positive results). An evaluation of the new method was published recently and suggests a sensitivity of at least 95% when compared with a reference method, with moderate specificity.\*

### Test Ordering:

A reminder that HIT is primarily a clinical diagnosis; a positive HIT test does *not* necessarily indicate the presence of *pathogenic* antibodies to heparin/platelet factor 4.

Prior to performing the test we require completion of a 4Ts probability score that includes determining the timing and degree of thrombocytopenia, presence of thrombotic complications and assessment of other potential causes. The 4Ts form can be obtained from SCM for inpatients or by calling the hematology laboratory at 604-806-8049. The completed form should be sent to Tube Station 07 or faxed to 604-806-8815.

### Test Availability and Reporting:

- The test will be available on a 24/7 basis.
- Negative tests will not include a quantitative result. Positive tests will provide a numerical reading in U/mL. The strength of the positive result did correlate with results of the reference method in the study by Althaus et al. Most of the strongly positive results of >4.0 U/mL were positive by the reference method.
- On a non-urgent basis, we will continue to provide an IgG-specific ELISA for further clarification of problem cases.

### Sample Requirement:

Note that the sample requirement for the new test is platelet-poor citrated plasma rather than serum. For laboratories referring tests, please send the sample frozen.

For further information, please feel free to contact any of the hematopathologists at Providence Health Care.

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\* K. Althaus et al. Evaluation of automated immunoassays in the diagnosis of heparin induced thrombocytopenia. Thrombosis Research 131 (2013) e85-e90.