



## MEMORANDUM

**DATE:** January 16, 2017

**TO:** Physicians, Residents, Clinical Managers, and Clinical Educators  
Hamilton Health Sciences and St. Joseph's Healthcare, Hamilton

**FROM:** Dr. Waliul Khan, Biochemist HRLMP  
Dr. Cathy Hayward, Head, Special Coagulation HRLMP

**C.C.:** Ms. Teresa DiFrancesco, Manager HRLMP  
Mr. Dan Brooks, Manager HRLMP

**RE: CHANGE IN TESTING FOR FUNCTIONAL C1-INHIBITOR ASSAY**

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The HRLMP is pleased to announce that effective **Monday, February 6, 2017** we will offer an **automated functional assay for C1-inhibitor testing**. This testing will be performed in the Special Coagulation Laboratory at the McMaster site. With this transition to an automated function assay, the turn-around time will be improved to 10 days.

The sample type remains platelet poor 3.2% sodium citrate plasma (light blue vacutainer).

The Mediatech mnemonic for this new assay is C1EINHFUN (replacing C1EF).

The reference interval is 0.75 – 1.59 U/mL, with the lowest reportable result <0.10 U/mL.

All results will have the following comment attached:

*This test evaluates the functional activity of C1 inhibitor protein utilizing a chromogenic based method. For proper assessment of angioedema please correlate with other clinical features and with the results of quantitative levels of both C1 inhibitor protein and C4.*

Samples with results between 0.69 – 0.74 U/mL, will also have the following comment added:

*This assay is sensitive to sample handling and storage conditions. A repeat test with a fresh sample is recommended for results with borderline low/abnormal functional activity of C1 inhibitor protein.*

If you have any questions regarding results and/or additional laboratory testing for angioedema, please contact Dr. W. Khan at [khanwal@hhsc.ca](mailto:khanwal@hhsc.ca).