

## Laboratory Memorandum

Date: 2021-06-24

To: Vancouver Coastal Health Physicians

From: Dr. Amir Karin, Clinical Chemist, VCH

Dr. Catherine Cheng, Regional Medical Discipline Lead – Clinical Chemistry, VCH

Re: **SERUM FREE LIGHT CHAINS TESTING METHOD TO CHANGE ON JUNE 29, 2021**

As of June 29, 2021, a new method of measuring serum free light chains will replace the current method at Vancouver General Hospital. The VGH laboratory has been performing serum free light chain (sFLC) measurements using the assay manufactured by *The Binding Site*, on an instrument from a different company. *The Binding Site* recently decided to discontinue supporting sFLC testing on our instrument. The medical decision limits described in the International Multiple Myeloma guidelines have been established using *The Binding Site's* assays. Therefore, the laboratory acquired and validated *The Binding Site's* own instrument, the *Optilite*, to continue offering their sFLC assays.

We have compared the performance of the sFLC assays between the current and the new instruments. When the results are within or close to their reference ranges, the two methods agree well. However, as values get farther away from the reference intervals, the results are not comparable. The ratio of kappa/lambda is similarly affected. It is not possible to apply a correction factor to inter-convert values between the two methods when there is a difference. Note that the reference intervals will remain unchanged.

While the new method meets the required specifications, clinicians must be careful when interpreting the results, especially for patients who have been followed with periodic sFLC measurements. For 6 months after the new method goes live, the results will be appended with a comment to caution against comparison with the previous results obtained using the previous method.

Should you have any questions please do not hesitate to contact the VGH Biochemist on-call or the undersigned.

Sincerely,

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