



THE UNIVERSITY OF
CHICAGO MEDICINE &
BIOLOGICAL SCIENCES

DATE: August 10, 2020

TO: UCM Medical Staff, Housestaff, Nursing Staff, Patient Care Centers, and Outpatient Clinics

FROM:

Xander van Wijk, PhD, DABCC, FAACC
Assistant Professor of Pathology; Assistant Medical Director, Clinical Chemistry Laboratories

KT Jerry Yeo, PhD, DABCC, FAACC
Professor of Pathology; Medical Director, Clinical Chemistry Laboratories

RE: Clinical Chemistry Updates: TSH & Creatinine

1. Effective 7/13/2020, a new “biotin-resistant” TSH assay has been implemented. According to the manufacturer, Roche Diagnostics, with the new TSH assay, there will be no biotin interference with serum concentrations up to 1200 ng/mL. This was made possible by using a specific protein scavenger in the buffer that binds to free biotin, but does not bind to biotin attached to the immunologically active components of the assay. Consequently, assay performance and reference ranges are not impacted by this update.
2. Effective 8/13/2020, an enzymatic creatinine assay replaces the current Jaffe creatinine assay. The enzymatic method is less susceptible to interferences compared to the Jaffe method¹. In-house correlation studies showed no significant systematic biases between the two methods. Reference ranges remain unchanged.

If you have any questions, please contact one of us by email at xvanwijk@bsd.uchicago.edu or jyeo@bsd.uchicago.edu; or contact Sarah Groboske, Laboratory Manager, Clinical Chemistry Laboratories, at 773-702-9356.

Reference

1. Syme NR et al, Clinical and Analytical Impact of Moving from Jaffe to Enzymatic Serum Creatinine Methodology, The Journal of Applied Laboratory Medicine, Volume 5, Issue 4, July 2020, Pages 631–642, <https://doi.org/10.1093/jalm/jfaa053>