



**MEMORANDUM #137**

**TO:** UNC Health Care Physicians, Housestaff, Nursing Coordinators,  
Department Heads and Supervisors

**FROM:** *HW* Herbert C. Whinna, MD, PhD,  
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**DATE:** August 11, 2017

**SUBJECT: Discontinuation of Serum Acetest Testing and Replacement by Beta-hydroxybutyrate**

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Effective August 14, 2017, UNCMC McLendon Clinical Laboratories will discontinue performing Acetest testing for serum ketones due to discontinuation of reagent by manufacturer. In its place, serum Beta-hydroxybutyrate will be available and performed in house starting on this date. Testing will be available 24-7 & STAT. The presence and degree of ketosis can be determined by measuring levels of Beta-hydroxybutyrate, which is the ketoacid present in the greatest amount in serum, accounting for approximately 75% of the ketone bodies. During periods of ketosis, the relative percentage of Beta-hydroxybutyrate increases even more over the other two ketoacids, (acetoacetate and acetone) and has been shown to be a better index of ketoacidosis including the detection of subclinical ketosis.

The reference range for the new Beta-hydroxybutyrate assay is 0.02-0.27 mmol/L. UNCMC McLendon Clinical Laboratories Web page & UNCMC Epic facility lists will be updated on go-live day to add the Beta-hydroxybutyrate order and the serum Acetest order will be deleted.

Please contact Christian Cristobal at 984-974-2361 or Dr. Whinna at 984-974-1500/  
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