

## Client Memo

**To:** Wake Forest Baptist Health Outreach Clients  
**Date:** July 20, 2017  
**Re:** BETA-HYDROXYBUTYRATE

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The Clinical Laboratory is now offering and reporting a new test for quantitative determination of the predominant “ketone body” produced during ketoacidosis. The new Beta-Hydroxybutyrate (BHB) test is performed in the core lab. The test is in CareEvolve as **BETA-HYDROXYBUTYRATE** (test code **LAB4727**). This test replaces LAB3299 KETONE and LAB2809 BETA HYDROXYBUTYRATE (SENDOUT). LAB3299 and LAB2809 have been inactivated in CareEvolve.

### Test requirements:

- Container Description: GOLD TOP SST 3.5
- Container Code: Gld
- Specimen Type: Blood
- Minimum Volume: 0.25 ML
- Storage Requirement: REFRIGERATE

### Background

The specific measurement of quantitative BetaHB is used for diagnosis and monitoring of DKA. The nitroprusside reaction test detects acetoacetate and acetone but not BetaHB. Acetoacetate (AcAc) levels may be initially low in untreated ketotic patients but may paradoxically increase in response to therapy. Methods that do not include BetaHB measurement may provide misleading clinical information by underestimating total ketone body concentration. BetaHB levels correlate more closely than serum ketones with anion gap elevation and with resolution of ketosis.

If you have any questions related to this test change, please contact the Core Laboratory at 716-2610.