



MEMORANDUM #101

TO: UNC Hospitals Attending Physicians, Housestaff, Department Heads, Nursing staff and Supervisors

FROM: Catherine Hammett-Stabler, Ph.D., Director Core Laboratory *CSH*
Robert Mills, MT (ASCP), Supervisor Special Chemistry Laboratory *RM*
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SUBJECT: **Beta-2 Microglobulin Testing Performed in Core Laboratory**

DATE: August 10, 2011

The Core Laboratory announces the introduction of serum **beta-2 microglobulin (B2M)** testing in-house effective August 9, 2011. Currently, this test is sent to Mayo Medical Laboratories where testing is performed using a nephelometry-based method. Testing will be performed in the Special Chemistry Section using an immunoturbidimetric-based method (Binding Site Group, Ltd, UK) so results may differ from those obtained previously. A comparison of patient samples tested using both methods shows the new method to trend lower compared to the method available through our referral laboratory (regression analysis: new B2M = 0.86 Mayo B2M -0.20, $r = 0.99$).

B2M is a low molecular weight protein found on the surface of most nucleated cells where it forms the light chain component of the histocompatibility antigen. Following filtration through the glomeruli, B2M is reabsorbed in the proximal tubules. Increased serum concentrations of B2M are associated with renal disease and are also seen in rheumatoid arthritis, systemic lupus erythematosus, malignant lymphoma and myeloma.

Ordering Information: Test ID –**B2MGS** Test Number - **1355** CPT Code – 82232

Specimen Requirements: 4 mL of blood/Serum Separator Tube/Gold Top, or
1.5 mL blood/ 3 microtainers.

Availability: Testing will be performed twice weekly. STAT testing is NOT available.

Reference Range: 0.80 – 2.34 mg/L

For more information or questions, please contact Dr. Catherine Hammett-Stabler or Robert Mills at 966-2361.