UNC HEALTH CARE

MEMORANDUM #94

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

FROM: Catherine Hammett-Stabler, Ph.D., Director, Core Laboratory
Robert Mills, MT (ASCP), Supervisor Special Chemistry Laboratory
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DATE: July 15, 2010

Subject: Buprenorphine Testing

Effective July 12th, 2010, the Core Laboratory introduced in-house testing for **buprenorphine** in urine using liquid chromatography tandem mass spectrometry. This method permits the identification and quantification of both buprenorphine as well as its metabolite, norbuprenorphine. Samples for this test have been sent previously to Mayo Medical Laboratories.

Clinical Significance: Buprenorphine is used as an analgesic and as a substitution therapy for opioid dependence. Urine concentrations are useful for monitoring compliance of patients receiving the drug.

Ordering Information: Test ID - BUPU, Test number – 221, CPT code – 83925

Specimen requirements: random urine with no acids or preservatives. Minimum volume is 1 mL of urine.

Availability: testing will be performed twice per week. STAT testing is not available.

Interpretation: Buprenorphine or norbuprenorphine will be reported to a concentration of 5 ng/mL; concentrations of either the parent compound or the metabolite exceeding this level suggest buprenorphine use. Results less than 5 ng/mL will be reported as 'negative'. Urine concentrations are dependent upon physiology and do not correlate with dose or serum concentrations. These results should therefore not be used for therapeutic drug monitoring purposes.

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