



**MEMORANDUM # 126**

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

FROM: *MBM* Melissa B. Miller, PhD, Director, Molecular Microbiology Laboratory  
*J* Peter H. Gilligan, PhD, Director, Microbiology-Immunology Laboratory  
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DATE: February 5, 2008

**SUBJECT: Changes to HIV Viral Loads and Workflow for HIV Genotyping**

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Effective February 11, 2008, the Clinical Molecular Microbiology Laboratory will change the method used to perform HIV viral loads. The two different HIV viral load tests (ultrasensitive and standard) will be discontinued in lieu of a single orderable test. It can be ordered in SMS as **HIV RNA QUANT** (this is the same ordering information as the current standard test). There will be no change in the billing of this test.

Previously, the collection tube was a pearl-top plasma preparation tube (PPT), which is being replaced by a **6 mL pink-top EDTA tube**. Numerous reports indicate that the use of PPTs may falsely elevate HIV viral load results near the lower limit of detection, thus we will discontinue their use. The EDTA tubes will need to be delivered to the Core Laboratory immediately. **Specimens received > 6 hours of collection will be rejected.**

The new platform for HIV RNA determination is the FDA-approved Roche COBAS AmpliPrep/COBAS Taqman HIV-1 Test, which is a real-time PCR system. The advantages of this platform include total automation allowing for a decreased turn-around-time (3 days) and an extended linear range of 48 – 10,000,000 copies/mL (1.68 -7.00 log<sub>10</sub> copies/mL).

Due to these advantages, we will now be able to hold requests for HIV genotyping (sent to LabCorp) until the viral load has been determined. Patient specimens that have genotyping ordered with a viral load of >1000 copies/mL will be sent out through referral testing. Patient specimens <1000 copies/mL will have the genotyping order cancelled. Note that HIV genotyping still requires a physician's order and is not automatically reflexed. Current ordering and collection practices for HIV genotyping will not change.

For more information, consult the McLendon Clinical Laboratories website (<http://www.unchealthcare.org/site/labs/>) or contact the Molecular Microbiology Laboratory at 966-6101 or Dr. Melissa Miller at 966-3723.