

MEMORANDUM # 115

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

FROM: Melissa B. Miller, PhD, Director of Molecular Microbiology Laboratory
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DATE: October 10, 2005

**SUBJECT: New Molecular Microbiology Tests: HHV-6 and Parvovirus B19
Qualitative PCR Assays**

Effective October 10, 2005, the Microbiology-Immunology Laboratory will begin offering both HHV-6 and Parvovirus B19 qualitative PCR assays. Previously, requests for these PCR tests were sent out to a reference laboratory.

HHV-6 Qualitative PCR:

Acceptable specimens for HHV-6 PCR include: plasma, CSF, bone marrow aspirate, and tissue. The test can be ordered in SMS as **PCR, HHV-6 - OTHER**, (Test number **9014**) for non-blood specimens and **PCR, HHV-6, BLOOD**, (Test number **9013**) for blood.

HHV-6 qualitative PCR uses real-time PCR to amplify and detect the HHV-6 U67 gene. This assay detects both HHV-6A and HHV-6B, but does not differentiate them. The lower limit of detection for HHV-6 qualitative PCR is 1580 copies/ml. Testing will be performed on Monday, Wednesday, and Friday. Specimens should be transported to the Microbiology laboratory as soon as possible, but no later than 2 hours post-collection. Blood should be collected in a pearl top tube (PPT, plasma preparation tube).

Parvovirus B19 Qualitative PCR:

Acceptable specimens for Parvovirus B19 PCR include: whole blood, amniotic fluid, and bone marrow aspirate. The test can be ordered in SMS as **PCR, PARVO – OTHER**, (Test number **9010**) for non-blood specimens and **PCR, PARVO – BLOOD** (Test number **9009**) for blood.

Parvovirus qualitative PCR uses real-time PCR to amplify and detect a proprietary sequence of Parvovirus B19 (Roche Diagnostics). Please note this assay does not detect non-B19

strains of Parvovirus, such as variants A6 and V9, which have primarily been detected in patients with immune deficiencies in Europe. In addition, Parvovirus B19 DNA can be detected in blood for >4 months and in bone marrow and tissues for >1 year after acute infection. The lower limit of detection for Parvovirus B19 qualitative PCR is 800 IU/ml. Testing will be performed daily, Monday through Friday. Specimens should be transported to the Microbiology laboratory as soon as possible, but no later than 2 hours post-collection. Blood should be collected in a purple top tube (EDTA).

For more information, consult the McLendon Clinical Laboratories Manual of Pathology and Laboratory Medicine Clinical Services (<http://www.pathology.unc.edu/labs>) or contact the Molecular Microbiology Laboratory at 966-6101 or Dr. Melissa Miller at 966-3723.