






MEMORANDUM #161

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

FROM:  John Schmitz, Ph.D., Director, Flow Cytometry Laboratory
 Eric Weimer, Ph.D., Associate Director, Flow Cytometry Laboratory
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DATE: July 16, 2015

SUBJECT: HLA-B57 Screening

Effective July 13, 2015 the flow cytometry laboratory will institute an HLA-B57 screening assay by flow cytometry. This assay will be the first line screen for the presence of HLA-B57 in patients for whom Abacavir therapy is being considered. This assay will be used in place of the HLA-B locus typing assay performed by the Histocompatibility Laboratory.

This B57 flow screening assay uses a monoclonal antibody to HLA-B57 and closely related molecules to detect expression of the HLA-B57 antigen on the surface of T lymphocytes. In house validation studies indicated a 100% negative predictive value for this screening assay. Thus, a negative result excludes the presence of the HLA-B*57:01 allele. A positive B57 flow screen does not however confirm the presence of HLA-B*57:01. Because of this, samples that test B57 flow screen positive will receive HLA-B locus molecular typing to confirm or exclude the presence of HLA-B*57:01.

This change was instituted to provide a rapid and less expensive method to exclude HLA-B57 negative individuals in place of the more expensive and time consuming molecular HLA typing currently used. A recent publication (De Spiegelaere, et al. PLOS One. 2015) determined similar findings to our in house validation studies.

The HLA-B57 flow screen is orderable as B57 BY FLOW [LAB6032A].

For questions, please contact Dr. John Schmitz (984-974-1452) or Dr. Eric Weimer (984-974-1451) for any questions.