ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #089

1. Title:

Repeatability of Lipid Data from Visit I and Visit II in the ARIC Study

2. WRITING GROUP:

(lead) S. Brown W. Patsch A.M. Gotto, Jr.

K. Dunn

3. Timeline:

The major steps required will be compiling all lipid data from subjects sampled in both Visits I and II. This will include at least the first 6000 Visit 2 participants.

4. Rationale:

To define the repeatability of plasma lipids, lipoproteins, and apolipoproteins associated with the time interval between Visit I and Visit II measurements in the ARIC cohort. Differences in variability between field center, race and sex can be examined.

5. Main Hypothesis/Issues to be Addressed:

The ARIC study cohort data offers an opportunity to examine the retest reliability for measured lipid, lipoprotein, and apolipoprotein levels in a free-living setting controlled to minimize procedural and laboratory variations. The coefficients of variation will be determined for all lipid analytes for each Visit. Other parameters, such as obesity, education, and income and other factors will be tested to determine if these have any possible effect on retest reliability. Also the issue of change of ranking according to the National Cholesterol Education Program will be addressed.

6. DATA REQUIREMENTS:

The data analysis will be performed by our statistician, Dr. K. Dunn.

This manuscript will require all lipid data from those subjects sampled from Visit I and II. Exclusion criteria will include change of medication or hormone use, heart or arterial surgery, TIA or stroke, or non-fasting and other variables which appear appropriate. The data request will include all lipid, lipoprotein, and apolipoprotein levels. These data will be analyzed by matching each analyte by individual for Visit I versus Visit II. Also, confounding variables such as degree of gender, age, field center, race, obesity, level of income and education level will be examined.