ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #027C

1. Title:
   (Full): Variability in multiple metabolic syndrome clustering across categories of obesity
   (Abbrev): VARIABILITY IN MMS CLUSTERING BY OBESITY

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3. Timeline:
   All analyses should be completed and a draft paper circulating within the next few months.

4. Rationale:
   (Two ARIC manuscripts (MS#27 and MS#27A) have investigated the clustering of metabolic abnormalities hypertension, diabetes, hypertriglyceridemia, low HDL-C and hyperuricemia among participants at baseline. As part of the initial analyses, variation in this clustering was investigated. However, due to space limitations, several of these analyses were not presented in the manuscripts mentioned above. The Publications Committee approved presentation of this additional data at the American Diabetes Association meetings, which occurred this month. This request thus basically aims to formalize a separate AWG number for these analyses)

   Associations of fasting insulin/insulin resistance with individual abnormalities linked to the metabolic syndrome have been shown to be generally stronger in the lean than in the obese (1). However, the frequencies of individual abnormalities are higher in the obese. The implications of these findings have not been addressed with regard to the metabolic syndrome composed of such abnormalities

   Thus we propose to investigate (a) the degree to which each abnormality clusters with the others and (b) the frequency of clustering, in lean and obese individuals.


5. Main Hypotheses:
   The association of each abnormality with clustering of the others is stronger in the lean than in the obese. The frequency of clusters is greater in the obese.

6. Data:
Basically the same data as used in the MS #027 analyses: hypertension, diabetes, triglycerides, HDL-C, uric acid, BMI, gender, ethnicity, fasting time, insulin, age at visit one.