

ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #054

1. Title (length 26):

ECG LV Mass & Race

2. Writing Group (list individual with lead responsibility first):

(lead) Tyroler	Koehn	Rautaharju
Folsom	Hoyt	Ekeland
Hutchinson	Crow	Heiss

3. Timeline:

One month after approval of this writing group by the Publications Committee a detailed plan of analysis will be circulated to members for input and approval. Four months after delivery of a data file, a first set of analytic results will be distributed to the writing group. Anticipated time to draft manuscript: one year from approval of this writing group.

4. Rationale:

While extensive epidemiologic investigations of electrocardiographic left ventricular hypertrophy are present for whites, limited data of this nature are available for blacks. In addition, the Halifex measurement of ECG left ventricular mass offers more accurate and potentially more informative estimates of the degree of LVH (i.e., as a continuous variable reflected by the magnitude of left ventricular mass) compared to traditional methods.

5. Main Hypothesis:

- 1) A monotonic increase in ECG LV Mass occurs with sequential increases in (a) systolic blood pressure, (b) body mass in blacks and whites, but is disproportionately greater in blacks.
- 2) At similar levels of standard cardiovascular risk factors, ECG LV mass is significantly higher in blacks.
- 3) Increasing ECG LV mass is inversely related to increasing years of education after controlling for increased systolic blood pressure and body mass.

6. Data (variables, time window, source, inclusions/exclusions):

Time Windows: Most recent visit one data available at Coordinating Center.

Exclusions: Prevalent CVD (MI, Angina, CHF, Valvular Heart Disease, CVA)

Variables: ECG LV Mass; systolic and diastolic blood pressure; total, LDL, and HDL cholesterol; Triglycerides; Education; Smoking; Physical Activity; body mass index; skin fold thickness; body circumference; medical history; antihypertensive medication