

ARIC MANUSCRIPT PROPOSAL #649

PC Reviewed: 02/19/99 **Status: Approved** **Priority: 1**
SC Reviewed: **Status: _____** **Priority: _____**

- 1.a. Full Title:** Fibrinogen G455A genotype and CHD
- b. Abbreviated title (Length 26):** Fibrinogen, genotype & CHD
- 2. Writing Group (list individual with lead responsibility first):**

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3. Timeline:

Immediate analysis by Dr. Ahn.

4. Rationale:

Fibrinogen is a strong cardiovascular risk marker. Several genes influence plasma fibrinogen level and might therefore be associated with CHD incidence. However, evidence to date does not consistently link CHD with fibrinogen gene polymorphisms. G455A variants were measured in ARIC on CHD cases and a cohort random sample.

5. Main Hypothesis:

- (1) There is no association of the G455A polymorphism and CHD incidence.
- (2) If there is an association, it is explained by differences in fibrinogen level.

6. Data:

CHD case - cohort sample
Outcome variable: CHD case status
Independent variable: G455A status
Covariates: age, race, sex, smoking status and cigarette years, LDL, HDL, SBP and hypertensive meds, waist/hip, diabetes, education, and WBC. Plasma fibrinogen level will also be examined in relation to G455A and its relation to CHD.