ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #171

1. Title:(full)

Incidence and Hemostasis

Full Title: Hemostasis Variables and Incident Coronary Heart Disease: Early Results of the Atherosclerosis Risk in Communities (ARIC) Study

2. Writing group:

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3. Timeline:

This manuscript proposal is submitted in conjunction with an abstract in which considerable analysis has been completed for the purpose of submission to the 3rd International Conference on Preventive Cardiology in Oslo, Norway. Additional analysis will be incorporated before the presentation and before drafting of the manuscript.

4. Rationale:

The ARIC cohort of 15,800 persons has now been followed for 3 years. This follow-up and the baseline examination allows a definition of incident MI. While the relation of hemostatic factor levels and prevalent cardiovascular disease has been reported, their role in predicting incident incident events is incompletely established. Plasma fibrinogen and factor VII have been shown to be directly associated with cardiovascular disease incidence, however the role of other hemostatic factors such as factor VIII, antithrombin III, protein C and von Willebrand factor with disease incidence in not well understood. The follow-up of the ARIC Cohort provides an excellent opportunity to further examine the association of hemostatic variables with incident events.

5. Main Hypotheses:

a) There is no relationship between incident MI and fatal CHD event and hemostatic factors. The focus would be to estimate and test race and age-adjusted "risk ratios" between hemostatic factors and incident MI and fatal coronary heart disease.

6. Data:

After excluding prevalent CVD, incident events among 14,641 persons over an average of 2.4 years of follow-up will be classified. A temporary definition of event for use in the abstract only will be established using a combination of electrocardiographic evidence, cardiac enzymes, pain, discharge diagnosis and death certificate cause of death. The manuscript will only use complete validated diagnoses in the analysis. For the abstract, cases classified as incident definite or probable MI or fatal coronary heart disease will be used. There are 92 men and 37 women with such incident events in whom hemostatic factor level is available.