

ARIC Manuscript Proposal # 818

PC Reviewed: 08/23/01
SC Reviewed: 09/06/01

Status: A
Status: A

Priority: 2
Priority: 2

1.a. Full Title:

Carotid Artery Atherosclerosis, Coronary Heart Disease and Stroke Incidence, and Mortality from Cardiovascular Disease in Type 2 Diabetic and Nondiabetic Men and Women With and Without History of Myocardial Infarction: The ARIC Study

b. Abbreviated Title (Length 26 characters):

Diabetics and CVD

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

Lead:

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Writing group members

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3. Timeline: draft by 12/31/01

4. Rationale:

Some studies report that type 2 diabetic patients without prior MI have similar rates of incident CHD and stroke, and mortality from CVD compared with nondiabetic patients with prior MI (*Haffner et al., NEJM 1998;339:229-34*). However, this finding is limited to the Finnish population, which had one of the highest coronary death rates in the world (*Tunstall-Pedoe et al, Circulation 1994;90:583-612*). Whether a similar association exists in the US population is unknown.

5. Main Hypothesis/Study Questions:

- 1) Type 2 diabetic participants without prior MI will have equivalent risk of incident CHD and stroke, and mortality from CVD compared with nondiabetic participants with prior MI.
- 2) Type 2 diabetic participants without prior MI will have equivalent mean carotid artery intima-media thickness compared with nondiabetic participants with prior MI.

- 3) Type 2 diabetic participants without prior MI will have equivalent mean levels of hemostatic variables and traditional CHD risk factors compared with nondiabetic participants with prior MI.

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

This analysis will use cohort data.

Baseline variables:

Age, sex, race, ARIC field center, total cholesterol, triglycerides, fasting glucose, left ventricular hypertrophy, WBC count (granulocyte, lymphocyte, monocyte), fibrinogen, AT-III, factor VII, factor VIII, von Willebrand Factor, protein C, carotid artery intima-media thickness, education, family income, cigarette smoking, physical activity, high density lipoprotein cholesterol, low density lipoprotein cholesterol, hypertension, and diabetes mellitus.

Outcome measures:

Incidence of CHD and stroke; CVD mortality

Statistical analysis:

Cox proportional hazards regression; ANOVA

7.a. Will the data be used for non-CVD analysis in this manuscript? Yes No

b. If Yes, is the author aware that the file ICTDER02 must be used to exclude persons with a value RES_OTH = "CVD Research" for non-DNA analysis, and for DNA analysis RES_DNA = "CVD Research" would be used? Yes No

(This file ICTDER02 has been distributed to ARIC PIs, and contains the responses to consent updates related to stored sample use for research.)

8.a. Will the DNA data be used in this manuscript? Yes No

8.b. If yes, is the author aware that either DNA data distributed by the Coordinating Center must be used, or the file ICTDER02 must be used to exclude those with value RES_DNA = "No use/storage DNA"? Yes No

9. The lead author of this manuscript proposal has reviewed the list of existing ARIC Study manuscript proposals and has found no overlap between this proposal and previously approved manuscript proposals either published or still in active status.

ARIC Investigators have access to the publications lists under the Study Members Area of the web site at: <http://bios.unc.edu/units/csc/ARIC/stdy/studymem.html>

Yes No