ARIC Manuscript Proposal # 1035

| PC Reviewed: _09/03/04 | Status: _A | Priority: | 2 |
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| SC Reviewed: _09/03/04_ | Status: _A | Priority: | 2 |

1.a. Full Title:

Relation of Male Pattern Baldness to Myocardial Infarction, Prevalent CHD, and Stroke

b. Abbreviated Title (Length 26 characters):

Baldness and MI

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

Lead: Eyal Shahar

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Writing group members:

This proposal is based on a component of visit 4 which I initiated 10 years ago. Looking through my thick file, I recall several contributors to the development and implementation of this study: Myra Carpenter, Kay Paton, Aaron Folsom, Gerardo Heiss, Lori Boland, Ken Kaufman, Linn Clegg, and others. In line with ARIC policies, I suggest that the Publication Committee recommends or solicits interested co-authors.

3. Timeline:

I will analyze the data locally and expect to submit a draft manuscript to the Publication Committee within 12 months or so.

4. Rationale:

Male pattern baldness may be the consequence of androgenic activity that may affect the risk of cardiovascular disease in general, and of myocardial infarction in particular. This topic, however, has not been studied thoroughly. A few studies, but not all, have reported a positive association of various magnitudes between vertex type baldness and myocardial infraction.

5. Main Hypothesis/Study Questions:

Under the assumption that male pattern baldness reflects a (poorly defined) pattern of androgenic activity, we will estimate the magnitude of the association between baldness (presence and type) and prevalent cardiovascular disease (MI, CHD, and stroke) after adjustment for age and other covariates.

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Sample: Male participants in visit 4 whose hair pattern was classified (N=5,127). Exclusion: hair loss due to chemotherapy.

Male pattern baldness, classified according to the Hamilton scale and grouped into five mutually exclusive categories: none (N=1,658), frontal (N=670), vertex-mild (N=1,057), vertex-moderate (N=594), vertex-severe (N=1,148).

Dependent variables: prevalent MI, prevalent CHD, and prevalent stroke. (The prevalence of MI among male participants in the fourth exam was about 15%).

Main covariates: age, race, diabetes, smoking history, blood pressure, hypertension, LDL cholesterol, and HDL cholesterol.

Might also consider the age at which heir loss began and fitting race-specific models.

7.a. Will the data be used for non-CVD analysis in this manuscript? _____ Yes __X__ 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 ___X__ 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://www.cscc.unc.edu/ARIC/search.php

| X | Yes | No |
|---|-----|----|
| X | Yes | No |

10. What are the most related manuscript proposals in ARIC (authors are encouraged to

contact lead authors of these proposals for comments on the new proposal or collaboration)?

As far as I can tell, there are no related manuscripts.

11. Manuscript preparation is expected to be completed in one to three years. If a manuscript is not submitted for ARIC review at the end of the 3-years from the date of the approval, the manuscript proposal will expire.