

ARIC Manuscript Proposal # 904

PC Reviewed: 08/14/02

Status: A

Priority: 2

SC Reviewed: 08/15/02

Status: A

Priority: 2

1.a. Full Title: The relationship between ischemic stroke incidence and alcohol consumption

b. Abbreviated Title (Length 26 characters): Alcohol & stroke incidence

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

Lead: Louise Henderson

Address: Epidemiology Department, School of Public Health

The University of North Carolina at Chapel Hill

CB #7435, McGavran-Greenberg Hall

Chapel Hill, NC 27599-7400

Phone: (919) 403-6998

Fax: (919) 966-9800

E-mail: louise_henderson@unc.edu

Writing group members:

Wayne Rosamond (Chapel Hill, NC)

Heejung Bang (Chapel Hill, NC)

Eyal Shahar (MN)

Ana Felix (Chapel Hill, NC)

3. Timeline:

Submit proposal to publications committee

August 2002

Preliminary data analysis

November 2002

Complete data analysis

January 2003

Submit manuscript to publications committee

April 2003

4. Rationale:

Several studies have previously examined the relationship between alcohol consumption and ischemic stroke risk. The evidence for increased stroke risk among heavy drinkers has been fairly consistent; however, the data for stroke risk among those consuming light to moderate amounts of alcohol have been inconclusive. The results of studies examining stroke risk and light to moderate amounts of consumption report either no association or a protective effect (a “J” shaped relationship). Biologically plausible mechanisms support the notion that light to moderate alcohol consumption may reduce stroke risk by increasing HDL cholesterol levels or by decreasing platelet aggregation and fibrinogen levels. The proposed study will improve upon prior analyses via the prospective follow-up study design, the geographic and racial diversity of the study population, and the detailed alcohol consumption data collected at visit 1.

5. Main Hypothesis/Study Questions:

This study will prospectively examine the relationship between alcohol consumption and ischemic stroke incidence among participants in the ARIC cohort. We hypothesize that ischemic stroke incidence will be reduced among those who consume light amounts of alcohol and that

ischemic stroke incidence will be increased among those who consume heavy amounts of alcohol (reference group = those who consume no alcohol).

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

Exposure: alcohol consumption (measured at visit 1)

Outcome: ischemic stroke incidence

Potential covariates: age, race, sex, blood pressure, body mass index, clotting factors, diabetes, lipids, migraine, physical activity, smoking, socioeconomic status (education), study center, left ventricular hypertrophy (LVH) by ECG, use of antihypertensive medications

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/cscf/ARIC/stdy/studymem.html>

☒ 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)?

Manuscript # 449, Title: Alcohol consumption and incident CHD, CVD and total mortality

Manuscript # 404, Title: Correlation of Amount and Type of Alcohol Intake on MRI Changes in the Brain