ARIC MANUSCRIPT PROPOSAL # 709

PC Reviewed: 01/06/00 Status: Approved Priority: 1 SC Reviewed: _____ Status: Approved Priority: 1

1.a. Full Title:

White blood cell (WBC) count and incidence of coronary heart disease (CHD) and stroke, and mortality from cardiovascular disease in African-American men and women: the ARIC Study

b. Abbreviated Title (Length 26):

WBC count and CVD in Blacks

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

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3. Timeline: 7/1/00

4. Rationale:

Several studies show that WBC count is related to MI and CHD incidence or mortality. There has been little research on the relationship between WBC count and the risk of CHD, stroke, and CVD in Blacks.

5. Main Hypothesis:

There will be a positive relationship between WBC count and incidence of CHD and stroke, and CVD mortality in African-American men and women.

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

<u>Baseline variables</u>: Age, ARIC field center, family income (<25k, 25-<50k, ≥50k), education (<HS, HS, ≥ college), cigarette smoking (never, former, or current), alcohol intake (never, former, or current), physical activity (low, moderate, or high), waist girth (cm), systolic blood pressure (mmHg), HDL (mmol/L), total cholesterol (mmol/L), diabetes (yes/no), antihypertensive or diabetic medication use, a personal history of hypertension or diabetes, ECG-left ventricular hypertrophy, and a parental history of CHD.

Outcome measures: Incidence of CHD and stroke; CVD mortality

<u>Exclusion</u>: Participants who had a personal history of CHD, stroke, or cancer at baseline. <u>Statistical analyses</u>: Cox proportional hazards regression.