

ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #530

1. a. Full Title: Pulse pressure and menopause
b. Abbreviated Title: Pulse pressure and menopause

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

Riitta Luoto, MD PhD
Address: NHLBI, NIH
6701 Rockledge Drive, Rm 8155,
Bethesda, MD 20892-7934
phone: (301)435 0711 Fax301-480 1667
e-mail: LuotoR@gwgate.nhlbi.nih.gov

Donna Arnett, Richey Sharrett, Marsha Eigenbrodt, Greg Evans

3. Timeline: First draft in 6 months.

4. Rationale:

Increased arterial stiffness has been proposed to be a trigger for initiation or progression of atherosclerosis and hypertension. Pulse pressure, a surrogate marker of arterial stiffness, is known to be associated with aging, but it has not been studied in relation to menopause.

5. Main Hypothesis:

We hypothesize that early age at menopause is associated with increased arterial stiffness using the difference between systolic and diastolic blood pressure, i.e., pulse pressure, as a simple index of stiffness.

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

The differences between systolic blood pressure (SBP) and diastolic blood pressure (DBP) i.e. pulse pressure (PP) and the 6-year change in PP between visits 1 (baseline, 1988-89) and visit 3 (1995-1996) will be evaluated in three groups: 1) women at baseline, classified by their chronological age (N=2617), 2) women postmenopausal at baseline classified by their recalled age at menopause (N=1927) and 3) pre- or peri-menopausal women at baseline undergoing menopause between V1 and 3 (N=567) by their estimated age at menopause. Only non-hysterectomized, non-HRT using women will be included.