1. Title:
Arterial Distensibility, LV Mass, and Menopausal Status

2. Writing Group:
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3. Timeline: The data are available from the latest Visit 1 files. The Halifax ECG data from Visit 1 have been successfully uploaded at the Coordinating Center. The writing group has the necessary resources to undertake the analyses. Conditional upon the Publications Committee acceptance, analyses can begin in January.

4. Rationale:
Population based estimates of the prevalence of left ventricular hypertrophy, although lower in women compared to men at young and middle ages, surpass those of men after the age of 50. A potential mechanism for this manifestation is decreased arterial distensibility. Arterial distensibility is inversely related to increasing age in both men and women. Although at younger ages women have higher distensibility compared to men, the magnitude of the decline with age is greater in women after the of 50 years. Animal studies indicate that estrogen receptors are located in the heart and tunica media of the arteries. The relation between these two observational findings to menopausal status needs to be addressed, but has not yet been attempted.

5. Main Hypothesis:
The distribution of arterial distensibility and ECG LV mass, and the association between them, are altered by menopausal status in women, after adjusting for this effects of mean arterial pressure.

6. Data Requested:
The data needed for this manuscript include derived variables for arterial distensibility, Halifax ECG LV mass, anthropomorphic measurements, medication survey data, medical history and home interviews. Covariates will include demographic characteristics, study center, chemistries, mean arterial pressure, and established cardiovascular risk factors.