1. Full Title: A Polymorphism of CYP17 and Risk of Breast Cancer
   Abbreviated title (length 26): CYP17 and Breast Cancer

2. Writing Group (list individual with lead responsibility first):
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3. Timeline (anticipated completion dates):
   Case ascertainment and control selection 9/98
   Laboratory assays 1/99
   Data analysis 3/99
   Manuscript preparation 5/99

4. Rationale:
   A previous study (Cancer Res 1997;57:1063-5) of Asian, African-American and Latino
   women found that women carrying at least one copy of the A2 allele of the CYP17 gene
   had a 2.5-fold increased risk of developing advanced breast cancer compared with
   women in no A2 allele. CYP17 is involved in estrogen metabolism, and increased
   exposure to endogenous estrogen is hypothesized to be important in breast
carcinogenesis. To date, this is the only published report of this CYP17 polymorphism
   and breast cancer.

   We have separate funding for this, and will submit an ARIC DNA request.

5. Main Hypothesis:
   Women who carry the A2 allele of the CYP17 gene are at increased risk of breast cancer.

6. Data (variables, time window, source, inclusions/exclusions)
   Genotyping for CYP17 will be done using stored DNA. Incident breast cancer cases are
   identified as part of the ARIC Ancillary Cancer Study. V1 values of age, race, study ctr,
   menopausal status, ages at menarche and menopause, BMI, WHR, weight at age 25,
exogenous hormone use. AMHA form: age at first birth, mammography, lactation history, family history of breast cancer.
Study Design: nested case-control study (matched, 2:1)
Analysis: conditional logistic regression
Inclusions: females, no self-reported history of cancer at V1