1. Title:
Platelet Counts: Descriptive Epidemiology and Association with Carotid Artery Wall Thickness

2. Writing Group:
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3. Background:
Although gender differences in platelet counts (lower in males) have been described by Green, et al (J Clin Epidemiol 45(1):77-84, 1992) relatively little descriptive epidemiology of this hematologic parameter is available. Gender differences in the association between cigarette smoking and platelet counts were found, which are perplexing and deserve replication. Finally, although the association between platelet activation products and platelet counts can be expected to be low, this type of association also deserves replication, as well as a putative association between platelet counts and arterial wall thickness.

4. Hypotheses/Goals:
1) Descriptive epidemiology of platelet counts in the ARIC Study population, by gender, race, and lifestyle factors.
2) If gender differences are detected - replicating the findings by Green, et al - potential associations between platelet counts, female reproductive history, menopausal status, and gonadal hormone use will be examined.
3) Cigarette smoking will be associated with lower levels of circulating platelets (in both gender groups).
4) Platelet counts will be associated with carotid artery wall thickness, controlling for smoking habits.

5. Timeline:
Analytic work can begin as soon as approval is obtained from the ARIC Publications Committee.

6. Data Needed:
Visit 1 data on the full cohort will be used. Analyses will be stratified on field center, to assess (and control for, if required) possible center-specific effects in these measurements done by local laboratories.