pathogenic mechanisms underlying this relationship, we assessed factors affecting mammographic density in postmenopausal women.

METHODS: Percent density (PD) was measured on pre-randomization mammograms from 425 participants in the Women's Health Initiative clinical trial; no women were currently using HRT. Trained observers used a previously validated computer-assisted thresholding technique to measure PD (ratio of dense areas to breast area) on craniocaudal films. Univariate relationships were assessed between PD and age, parity, education, history of HRT use, age at first birth, abortion history, alcohol use, serum cholesterol, physical activity, smoking, dietary fat intake, body-mass index (BMI), and waist-to-hip ratio (WHR). Multivariable regression was used to identify predictors of PD (log transformed), controlling for confounders.

RESULTS: PD ranged from 0–60% with mean 8%. Age, gravidity, BMI, and WHR were negatively associated with PD. Mean PD in the highest tertiles of BMI and WHR was nearly half that in the lowest. Ethnicity (50% white, 28% black, and 19% Hispanic) and hysterectomy status (50% had intact uterus) were unassociated with PD. Controlling for age, BMI, WHR, smoking, hysterectomy status, prior HRT, and nulliparity, mean PD differed significantly by ethnicity, with black women having highest PD. However, the effect of prior HRT use differed by uterine status. In women with uteri intact, ethnicity, but not prior HRT use, was related to PD after controlling for age, BMI, and WHR. In hysterectomized women, ethnicity was unrelated to PD, while previous HRT was associated with lower PD.

CONCLUSIONS: Gravidity, ethnicity and body shape and size are associated with mammographic density in postmenopausal women. Previous hormone use predicts lower PD, but only among hysterectomized women. This may be due to the higher frequency of oophorectomies in this group, which may lower PD and increase likelihood of HRT use. Planned analyses of entire sample of 1050 women will clarify the effect of these and other factors on density, and on density change in followup mammograms.

PII S1047-2797(00)00157-5

THE METROPOLITAN NEW YORK REGISTRY & CFRBCS: UNIQUE RESOURCES FOR BREAST CANCER RESEARCH
RT Senie, RM Santella, H Ahsan, Divisions of Sociomedical Sciences, Environmental Health Sciences, and Epidemiology, Mailman School of Public Health of Columbia University, New York, NY

PURPOSE: The goal of the Metropolitan NY Registry, and five other international collaborating sites of the Cooperative Family Registry for Breast Cancer Studies [CFRBCS], has been the development of a comprehensive resource for interdisciplinary genetic epidemiology studies addressing breast cancer risk and prognostic factors.

METHODS: Family recruitment has been conducted in clinical and community settings by a multidisciplinary team of collaborators affiliated at six major metropolitan NY medical centers. Families meeting one of the following criteria were invited to join: a male with breast cancer; a female with breast or ovarian cancer diagnosed at age ≤45; a female with breast and ovarian cancer; or two or more first and second degree relatives diagnosed at any ages. Participants are asked to complete an epidemiology questionnaire, dietary history form, extensive family history, and donate biospecimens including blood and urine. Pathology reports and tissue samples are obtained for breast and ovarian cancer cases; pathology reports are requested to confirm the history of other cancers.

RESULTS: Of the 1102 families (3,252 participants), 28 males and 1,304 females had been treated for breast cancer. More than 2,400 blood samples are banked and >3,000 epidemiology questionnaires completed. Ethnic/racial data indicates 14% are of African American or Hispanic heritage and 509 families (46%) are of Ashkenazi descent. One or more DNA samples from 400 Ashkenazi families have been tested for the three BRCA1/2 founder mutations. Of 331 Ashkenazi participants with a history of breast and/or ovarian cancer, 19% were found to be mutation carriers. Thirty-six (7 men/29 women) mutation carriers are free of cancer.

CONCLUSIONS: The families participating in the NY Registry reflect a spectrum of breast cancer risk. The extensive NY and CFRBCS databases and banked biospecimens provide a unique resource for multidisciplinary genetic epidemiologic studies that may identify avenues for prevention.

PII S1047-2797(00)00148-4

AN INTERVENTION STUDY ON SCREENING FOR BREAST CANCER AMONG SINGLE AFRICAN-AMERICAN WOMEN AGED 65 AND OLDER
K Zhu, S Hunter, LJ Bernard, K Payne-Wilks, CL Roland, C Everett, Z Feng, RS Levine, Meharry Medical College, Nashville, TN

PURPOSE: Older single African-American women are the population that is least likely to use screening procedures because of cognition-related, income-related, social-support-related and medical care-related barriers. This study aims to evaluate a breast screening intervention program developed according to socioeconomic, cultural, psychological and behavioral characteristics of older single African-American women.

METHODS: Ten public housing complexes were randomly assigned to either intervention or control group. African-American women aged 65 and over were recruited into the study if they were widowed, divorced, separated or never-married in the preceding year, and did not have a history of breast cancer (n = 325). Delivered by lay health educators, the intervention program targeted increasing knowledge on breast health and breast screening, reducing emotional or psychological problems, and increasing support from the significant others of study women. Breast screening-related cognition and behavior were measured at pre-intervention and post-intervention.