## MAMMOGRAM PRACTICES OF WOMEN AT RISK FOR BREAST CANCER FOLLOWING CHEST RADIATION FOR A PEDIATRIC CANCER: A REPORT FROM THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

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**Background:** Because of their significant risk of breast cancer at a young age, it is recommended that women treated with chest radiation for a childhood cancer have an annual mammogram beginning at 25 years of age.

**Methods:** We aimed to determine the prevalence of screening mammography in women in this risk group, identify factors associated with screening practices for two age groups (25-39 and  $\geq$  40 years), and to compare these practices with two age-matched standard risk populations (survivors not treated with chest radiation and siblings). A 114-item questionnaire was administered to a random sample of 2024 women participating in the CCSS who were 25-52 years of age.

**Results:** Among the 25-39 year old group with chest radiation, 37.0% reported a screening mammogram (within the preceding two years); 46.2% never had a mammogram. In a multivariate model, factors associated with having a screening mammogram included older age at interview (OR 3.7; 95% CI 2.2-6.0), physician recommendation (OR 10.0; 95% CI, 5.0-19.9); higher perception of breast cancer risk (OR 1.7; 95% CI 1.1-2.6); and more positive decisional balance of the pros and cons of mammography (OR 1.4; 95% CI 1.1-1.8). Among the 40-52 year old chest radiation group, 76.1% reported a screening mammogram; 50.2% had a pattern of regular screening ( $\geq$  2 mammograms within previous four years). In a multivariate model, factors associated with having a screening mammogram among this group included older age (OR 2.9; 95% CI 1.5-5.8), having a primary care physician (OR 3.4; 95% CI 1.1-11.4), physician recommendation (OR 4.3; 95% CI 2.1-8.7), awareness of the association between chest radiation and breast cancer (OR 2.2; 95% CI 1.1-4.6), increased general health concerns (OR 2.0; 95% CI 1.3-3.0), and more positive decisional balance (OR 1.4; 95% CI 1.1-1.8). The likelihood of reporting screening mammography was minimally to modestly higher for the target population in comparison with the two standard risk groups.

**Conclusions:** Most young women previously treated with chest radiation are not being regularly screened for breast cancer. Testing of interventions aimed at educating clinicians and empowering survivors are warranted.