Susan G. Komen
Research Grants – Fiscal Year 2014

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Improving how we predict toxicity for older women with breast cancer

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Lead Organization: Dana-Farber Cancer Institute
Grant Mechanism: CCR Clinical **Grant ID:** CCR14298143

Public Abstract:
Decisions regarding adjuvant treatments in older women are challenging because of the limited evidence available with regard to treatment selection and side effects. Despite the expected benefits of treatment, many older women do not receive systemic therapy for their cancers, likely because of physician and patient/family preferences related to concerns for competing medical problems and treatment toxicity. In many cases, these concerns may be unwarranted and/or based on inaccurate perceptions. Obtaining a better understanding of how breast cancer treatments may impact patients and disease outcomes is crucial. This topic is of particular importance because older women often experience more recurrences and deaths from breast cancer than their younger counterparts. In this proposal, we will study innovative predictors of toxicity and outcomes within two complementary groups of older patients with breast cancer receiving systemic treatment: (1) Cohort 1—200 women receiving trastuzumab emtansine (T-DM1) for stage I-III, Human Epidermal Growth Factor Receptor 2-positive breast cancer on a multicenter clinical trial at 15 Academic and Community Cancer Research United (ACCRU) centers [to open in early/mid 2014] and (2) Cohort 2— 100 older patients who will begin adjuvant chemotherapy at Dana-Farber/Harvard Cancer Center and its community affiliates for a stage I-III breast cancer. Women on cohort 1 will receive T-DM1 every three weeks for a total of 17 cycles (one year) and women on cohort 2 will receive adjuvant chemotherapy per usual care at their providers' discretion. In addition to clinical endpoints on recurrence and survival for each cohort, we will examine how longitudinal geriatric assessments, patient-reported outcomes, and biomarkers of aging predict for treatment toxicity and short-term survival. Results from this study will lead to an improved understanding of how to optimally report, predict, and limit toxicities while optimizing functional status and outcomes for older patients. In addition, the results of this research will have immediate implications for the care of older women and will direct future interventions in treating breast cancer, including treatment-based protocols and decision aids for selecting adjuvant treatments and for predicting toxicity with treatment.