



**Susan G. Komen**

**Research Grants – Fiscal Year 2015**

This research grant was approved for FY2015 Research Programs funding. This grant will be funded upon the execution of grant agreements between Komen and the grantee institutions.

**Measuring circulating tumor cells in vivo for breast cancer metastasis detection**

**Investigator(s):** George Sledge, Jr., M.D.

**Lead Organization:** Stanford University

**Grant Mechanism:** SAB Grants

**Grant ID:** SAB1500003

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**Public Abstract:**

Measuring circulating tumor cells (CTCs) in patients with advanced breast cancer is a currently available clinical test, but the potential of this test to affect patient outcome has been limited. While we do a good job of counting CTCs with the existing technology, and while CTC Counts provide some information regarding the treatment response and ultimate prognosis, this information alone does not “move the needle” with regard to breast cancer treatment and outcome. New approaches are needed to fulfill the full potential of CTC evaluation. We are evaluating two novel, locally created technologies to evaluate CTCs. The first technology has the potential to measure CTCs noninvasively with great precision. The second technology has the potential to be used to measure the effects of targeted therapies on breast cancer cells, providing an early read-out on benefit and appropriate dosing of new-targeted agents.

