



**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.

**Prospective studies correlating pharmacogenetic biomarkers and survival outcomes in hormone-sensitive breast cancer**

**Investigator(s):** Vered Stearns, M.D.

**Lead Organization:** Sidney Kimmel Cancer Center at Johns Hopkins University School of Medicine

**Grant Mechanism:** Komen Scholars

**Grant ID:** SAC110042

---

**Public Abstract:**

How the body interacts with drugs depends on how the body expresses many different genes. One gene, CYP2D6, makes an enzyme that changes how the body uses common drugs. It is possible that breast cancer patients who are poor drug metabolizers (low CYP2D6) will not have the same benefit from tamoxifen compared to patients with a moderate or high score. We will examine that relationship, and test several other genes that could also affect tamoxifen's benefit. We have also initiated a clinical registry to study other endocrine agents and to encourage patients of differing genetic backgrounds, such as African-American patients, to enroll in order to survey a more diverse section of the population to provide a more complete picture of the many ways the human body can work.

