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**Improving treatment approaches for women with HER2+ metastatic breast cancer**

**Investigator(s):** Eric Winer, M.D.

**Lead Organization:** Dana-Farber Cancer Institute

**Grant Mechanism:** SAB Grants

**Grant ID:** SAB0800001

**Public Abstract:**

Our research seeks to develop improved treatment strategies, particularly for HER2+ breast cancer patients with disease that is refractory to standard therapy and for patients with brain metastases. New treatment approaches will be tested in prospective clinical trials. Specifically, we will test a novel approach using two antibodies (trastuzumab and pertuzumab) and a PI3kinase inhibitor in patients with refractory metastatic disease. We will also test an entirely novel anti-HER2 specific tyrosine kinase inhibitor in combination with trastuzumab in patients with HER2+ brain metastases. If successful, these studies, as well as others, will lead to new potential treatment approaches for women with HER2+ metastatic disease. Our proposed work is of particular importance because the currently available treatment options, while highly effective, are still incapable of providing long-term disease control in a subset of patients. For this subset of patients, the outcome remains very poor. Ultimately, using our proposed novel treatment approach, we hope our research will also lead to improvements in the treatment of HER2+ early stage disease. Importantly, support from the Komen leadership grant will provide overall programmatic support that will allow the Dana-Farber team to pursue a breadth of studies in the treatment of HER2+ disease.