Susan G. Komen
Research Grants – Fiscal Year 2014

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Identification of phosphatases for the treatment of ER-negative breast cancer

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Lead Organization: UT M.D. Anderson Cancer Center
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Public Abstract:
Breast cancer is the leading cause of cancer-related death in women. For this reason, there is an urgent need to identify effective therapeutic treatments for breast cancer. Approximately 60-70% of breast cancers express ER and respond to current therapies, however the remaining 30-40% of breast cancers do not express this receptor and do not respond effectively to these therapies. There is a critical need to develop new, more effective therapies for the treatment and prevention of these ER-negative breast cancers. The results from the research outlined in this study have the potential to significantly impact the diagnosis and therapeutic treatment of ER-negative breast cancer patients. We have identified a set of phosphatases significantly over-expressed in ER-negative breast cancer which may play a critical role in the progression of these tumors. In this study, we aim to identify those phosphatases that play a critical role in the development and progression of ER-negative breast cancer. This would provide the basis necessary for the development of targeted, effective treatments for patients with ER-negative breast cancer, thereby improving the therapeutic prognoses of these women in the future.