

### Research Saves Lives

**H**ER2-positive breast cancer (HER2+) is a subtype of breast cancer that makes too much of a protein called HER2. HER2 normally helps a healthy breast cell grow and divide. But in about 25 percent of breast cancers, the HER2 gene doesn't work properly and makes too many copies of itself. As a result, HER2+ breast cancers tend to grow faster and are more likely to spread than other types of breast cancer.

Fortunately, therapies that specifically target HER2, such as trastuzumab (Herceptin®), are very effective and have had a significant impact on breast cancer survival for women with HER2+ breast cancer.



Learn more about HER2-positive breast cancer <http://sgk.mn/1ASICOQ>

In spite of these advances, some HER2+ breast cancers do not respond to these therapies or become resistant to therapy. Komen is dedicated to finding new strategies for treating HER2+ breast cancer and identifying which women are most likely to respond to them.

Read about breast cancer survivor Bonnie Olsen's journey with HER2-positive breast cancer in our Chronicles of Hope series.

<http://sgk.mn/1ASlqPh>



### Our Research Investment

More than **\$83 million** in over **160 research grants** and **20 clinical trials** focused on HER2+ breast cancer

### What We're Investigating



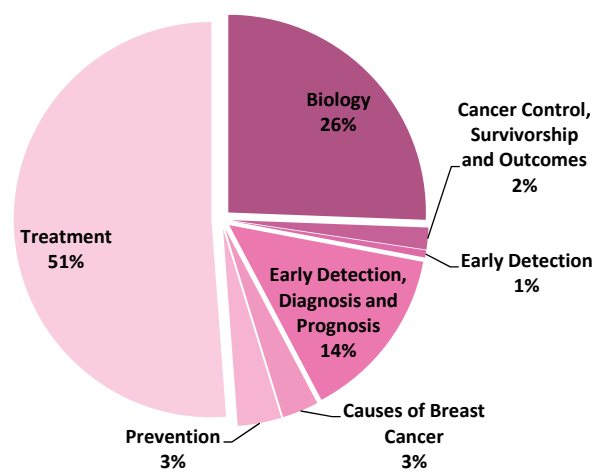
Developing and testing new drugs that target HER2, including new drug combinations, gene therapy and vaccines



Identifying the genes and other factors that cause resistance to HER2 therapies



Identifying biological markers that can be used to predict which women will respond to or become resistant to HER2 therapies



Topic Area of Investment



Read more about targeting sEcad to treat HER2 resistance from Komen grantee Dr. Sabine Brouxhon in our Science Buzz series. <http://sgk.mn/1s3Km4j>

### What We've Learned from Komen-funded research



A drug that targets a protein called sEcad may be used to treat HER2+ cancer cells that are resistant to Herceptin®.



Combinations of vaccines and other immunotherapies that use the body's own immune system may be able to improve survival for women with advanced HER2+ breast cancer.



A simple blood test that measures specific biological markers may be used to predict who will respond or become resistant to Herceptin treatment.



Learn more about breast cancer



More Komen-funded Research Stories



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