

2024 RESEARCH FAST FACTS

Vaccines & Immunotherapy



RESEARCH INVESTMENT AT A GLANCE: (1982-2024)

More than **\$60 million** in nearly **160** research grants and close to **20** clinical trials focused on vaccines & immunotherapy

93% focus on treatment



ABOUT VACCINES & IMMUNOTHERAPY

[Immunotherapy](#) is a relatively new and promising area of breast cancer treatment that boosts the body's own immune system to recognize and fight cancer cells. It can be used alone for breast cancer treatment or given along with other treatments like chemotherapy, radiation or surgery. Many types of immunotherapy drugs are used to treat breast cancer, including monoclonal antibodies, and vaccines are currently being tested in clinical trials.

Learn more about emerging areas in breast cancer therapy [here](#). Learn more about participating in a breast cancer immunotherapy trial [here](#).

WHAT WE'RE INVESTIGATING



Determining how activating one type of immune cell may help the body's own immune system kill breast cancer cells.



Testing a new immunotherapy strategy that helps the body's immune system find and attack cancer cells to prevent brain metastases.



Testing new drug combinations that precisely target breast cancer cells and the body's immune cells to make immunotherapies more effective at treating aggressive breast cancers.

“*The reason immunotherapy may actually help us to achieve a cure is because immunotherapy is a treatment that teaches your immune system to recognize a tumor as something that's foreign and needs to be eliminated. This is called an adaptive immune response and it can be lifelong.*”

Komen Scholar, Dr. Elizabeth Mittendorf, speaking on harnessing the immune system to kill breast cancer forever. Read more in the blog post [here](#).

SPOTLIGHT



Dr. Isaac Chan and ASPIRE trainee Isabella Terrazas are studying how activating certain immune cells may help the body's own immune system seek out and destroy breast cancer cells. Learn more [here](#).

WHAT WE'VE LEARNED FROM KOMEN-FUNDED RESEARCH

- [Nanoparticles](#) that target the blood vessels that feed breast tumors may improve the effectiveness of immunotherapy.
- A protein found in certain immune cells in the body may be a new drug target to overcome immunotherapy resistance in triple-negative breast cancer (TNBC).
- Implantable microdevices can deliver new combinations of immunotherapies and other drugs for testing clinical promise for breast cancer treatment.



[Learn More About Breast Cancer](#)

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