Immunotherapy is a relatively new and promising area of breast cancer treatment that boosts the body’s own immune system to fight cancer. There are many types of immunotherapies, including monoclonal antibodies and vaccines, among others.

Monoclonal antibodies can be used many ways. When used as an immunotherapy, they help the immune system work better at killing cancer cells. They can attach to specific proteins on cancer cells, which flags the cells so the immune system can find and destroy them. They can also work by releasing the brakes on the body’s immune system so it can destroy cancer cells. Some cancer cells disguise themselves as normal cells and hijack immune system pathways called “immune checkpoints” to escape attack. Monoclonal antibodies called checkpoint inhibitors block this “identity theft” by cancer cells and help the immune system find and kill the cancer cells.

A vaccine is another type of immunotherapy. Like a traditional vaccine, such as mumps or measles, a breast cancer vaccine exposes the immune system to a tumor protein called an antigen. This triggers the immune system to make antibodies against that antigen, and attack and destroy the cancer cells. There are two types of cancer vaccines: treatment, which are designed to treat cancers that have already developed or that could recur; and preventive, which are intended to prevent cancer from developing.

No immunotherapies have been FDA approved yet for breast cancer, however research suggests they may be successful for some types of breast cancers. Immunotherapies have been approved for other cancers such as melanoma, lung and blood cancers.

Learn more about emerging areas in breast cancer therapy
http://sgk.mn/ZqBVGB