

## **MEDICAL BREAKTHROUGHS** **RESEARCH SUMMARY**

TOPIC: TRODELVY: MAGIC BULLET FOR TRIPLE NEGATIVE BREAST CANCER  
REPORT: MB #4867

**BACKGROUND:** Triple negative breast cancer is cancer that tests negative for estrogen and progesterone receptors, and excess HER2 protein. This means the growth of the cancer is not fed by the hormones estrogen and progesterone, or by the HER2 protein. Therefore, triple-negative breast cancer does not respond to hormonal therapy medicines or medicines that target HER2 protein receptors. About 10-20% of breast cancers are triple negative. For doctors and researchers, there is interest in finding new medications that can treat this kind of breast cancer. Studies are trying to find out whether certain medications can interfere with the processes that cause triple-negative breast cancer to grow.

(Source: [https://www.breastcancer.org/symptoms/diagnosis/trip\\_neg](https://www.breastcancer.org/symptoms/diagnosis/trip_neg))

**DIAGNOSIS AND CURRENT TREATMENTS:** Triple negative breast cancer is more likely to be diagnosed in people younger than age 50. Black women and Hispanic women are more likely to be diagnosed, whereas Asian and white women are less likely to be diagnosed. About 70% of breast cancers diagnosed in people with an inherited BRCA mutation, particularly BRCA1, are triple negative. Treatment can consist of a combination of surgery, radiation therapy, and chemotherapy. When triple negative breast cancer is treated with chemotherapy before surgery, called neoadjuvant chemotherapy, and there is a pathologic complete response, disease-free survival and overall survival are better. PARP inhibitors, such as Lynparza and Talzenna, have been approved to treat advanced-stage HER2-negative breast cancer in people with a BRCA1 or BRCA2 mutation. Finally, immunotherapy medicines work by helping your immune system work harder or smarter to attack cancer cells.

(Source: [https://www.breastcancer.org/symptoms/diagnosis/trip\\_neg](https://www.breastcancer.org/symptoms/diagnosis/trip_neg))

**DRUG SHOWS IMPROVED OUTCOME:** An immune targeted therapy medicine, known as Trodelvy, has shown to offer better progression-free survival and overall survival for people diagnosed with metastatic triple negative breast cancer that had previously been treated with chemotherapy. The study included 529 people diagnosed with metastatic triple negative breast cancer that had grown after being treated with two or more chemotherapy regimens. The people were randomly assigned to one of two treatments, either Trodelvy (235 people), or their doctor's choice of one of four chemotherapy medicines, and received treatment until the cancer grew or unacceptable side effects developed. The results showed that more of the cancers responded to Trodelvy compared to chemotherapy. Aditya Bardia, Director of Precision Medicine at the Center for Breast Cancer at Massachusetts General Hospital Cancer Center, said, "The phase III ASCENT trial is the first phase III study to demonstrate a significant improvement in efficacy with a first-in-class Trop-2-directed antibody-drug conjugate compared with standard chemotherapy."

(Source: <https://www.breastcancer.org/research-news/trodelvy-better-for-previously-treated-tnmbc>)

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**If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at [mthomas@ivanhoe.com](mailto:mthomas@ivanhoe.com)**