About triple-negative breast cancer

Despite being the rarest form, it accounted for 15–20% of the over 2 million new breast cancer cases in 2018.

Medical literature shows that the first mention of triple-negative breast cancer was in October 2005.

Who is affected?

Triple-negative breast cancer is more commonly diagnosed in women who:

- Are under the age of 40 or 50
- Are African American or Hispanic
- Have a family history of breast cancer
- Have a mutation in the BRCA1 gene

Compared with other forms of breast cancer, triple-negative breast cancer:

- Is more aggressive,
- Has an increased likelihood of returning to other areas of the body,
- Is more aggressive, and causes more rapid progression and shorter overall survival
- Reduces the likelihood of surviving the first 5 years after diagnosis

A high unmet medical need

Hormone receptor positive
HER2 receptor positive
Triple negative

Called ‘triple-negative’ because the three most common types of receptors known to promote the growth of breast cancer cells are not present in the tumour:

- Oestrogen positive
- Progesterone positive
- HER2 overexpression

Can be more difficult to diagnose, as younger women have denser breast tissue and standardised mammograms are not yet recommended.

Has an increased likelihood of returning to other areas of the body, with the lungs and brain being the most likely sites of distant recurrence.

Is more aggressive, and causes more rapid progression and shorter overall survival

Is more aggressive,

Some triple-negative breast cancer cells express a protein called PD-L1, which enables cancer cells to evade the immune system.

The science of triple-negative breast cancer

The challenge of treating triple-negative breast cancer

New treatment options are needed for people living with this disease.

People with metastatic triple-negative breast cancer exhibit poor clinical outcomes and no consistent standard of care and clinical practice patterns vary worldwide.

Cytotoxic chemotherapy remains the mainstay of treatment.

It does not respond to hormone therapy or HER2-targeted agents.

In people with advanced disease, immune checkpoint inhibitors, which target the PD-L1 and PD-1 proteins, may represent a potential new treatment option for people with triple-negative breast cancer.

References