

Carboplatin drug to treat Breast Cancer

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In news— The results of the study by the Tata Memorial Centre show that a commonly available and inexpensive drug, carboplatin, increased the cure rate and survival of a very aggressive type of breast cancer, called triple-negative breast cancer(TNBC).

Key highlights of the study-

- Dr Sudeep Gupta, Professor of Medical Oncology at Tata Memorial Centre, presented, as a podium presentation, the results of the landmark 'TMC Study – Platinum in TNBC' at the ongoing **San Antonio Breast Cancer Symposium, which is the largest and most important breast cancer conference in the world.**
- The study was a randomized controlled trial which enrolled women with stage II-III triple negative breast cancer from 2010 to 2020 who were divided into two groups, both of whom received chemotherapy to downstage the disease prior to surgery.
- The results were hailed by oncologists worldwide as immediately practice defining.
- A commonly available and inexpensive treatment like **carboplatin will now be routinely offered as part of pre-operative chemotherapy regimen to women with TNBC** which is the most aggressive type of breast cancer.
- Given that **TNBC constitutes about 30% of breast cancer in India** and **about 45% of breast cancer in women younger than 50 years**, the implications of this result are very important.
- Until the results of this study there was no conclusive evidence that this drug should be routinely used as part of the treatment of this disease.

What is triple-negative breast cancer(TNBC)?

- Triple-negative breast cancer is a kind of breast cancer that **does not have any of the receptors that are commonly found in breast cancer.**
- The term triple-negative breast cancer refers to the fact that the cancer cells **don't have estrogen or progesterone receptors** (ER or PR) and also don't make any or too much of the protein called HER2. (The cells test "negative" on all 3 tests.)
- TNBC **differs from other types of invasive breast cancer in that it tends to grow and spread faster**, has fewer treatment options, and tends to have a worse prognosis (outcome).
- Breast cancer is the commonest cancer affecting women not only in India but globally.

Inclusion of Yoga in the treatment of breast cancer patients-

- As per a study by the Tata Memorial Hospital, inclusion of Yoga in the treatment of breast cancer patients is highly beneficial.
- The inclusion of Yoga resulted in a 15% relative improvement in disease free survival (DFS) and 14% in overall survival (OS).
- The yoga protocol included gentle and restorative yoga postures(asana) with regular periods of relaxation and pranayama.
- **The largest clinical trial is an important milestone in use of YOGA in breast cancer since this is the first example of a very Indian traditional remedy** being tested in a rigorous western design of randomized study with robust sample size.