



## Therapy Using Medication for Breast Cancer

Y Aadi\*

Department of Pathology, Mohammed V University Souisi, Rabat, Morocco

Systemic therapy is the use of medication to destroy cancer cells. Medications circulate through the body and therefore can reach cancer cells throughout the body. Systemic therapies are generally prescribed by a medical oncologist, a doctor who specializes in treating cancer with medication.

Common ways to give systemic therapies include an intravenous (IV) tube placed into a vein using a needle, an injection into a muscle or under the skin, or in a pill or capsule that is swallowed (orally).

The types of systemic therapies used for breast cancer include:

- Chemotherapy
- Hormonal therapy
- Targeted therapy
- Immunotherapy

Each of these therapies are discussed below in more detail. A person may receive 1 type of systemic therapy at a time or a combination of systemic therapies given at the same time. They can also be given as part of a treatment plan that includes surgery and/or radiation therapy. The medications used to treat cancer are continually being evaluated. Your doctor may suggest clinical trials that are studying new ways to treat breast cancer.

Talking with your doctor is often the best way to learn about the medications that can be prescribed for you, their purpose, and their potential side effects. It is also important to let your doctor know if you are taking any other prescription or over-the-counter medications or supplements. Herbs, supplements, and other drugs can interact with cancer medications. Learn more about your prescriptions by using searchable drug databases.

### Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by keeping the cancer cells from growing, dividing, and making more cells. It may be given before surgery to shrink a large tumor, make surgery easier, and/or reduce the risk of recurrence, called neoadjuvant chemotherapy. It may also be given after surgery to reduce the risk of recurrence, called adjuvant chemotherapy.

A chemotherapy regimen, or schedule, usually consists of a combination of drugs given in a specific number of cycles over a set period of time. Chemotherapy may be given on many different schedules depending on what worked best in clinical trials for that specific type of regimen. It may be given once a week, once every 2 weeks, once every 3 weeks, or even once every 4 weeks. There are many types of chemotherapy used to treat breast cancer. Common drugs include:

- Docetaxel (Taxotere)
- Paclitaxel (Taxol)
- Doxorubicin (available as a generic drug)
- Epirubicin (Ellence)
- Pegylated liposomal doxorubicin (Doxil)

- Capecitabine (Xeloda)
- Carboplatin (available as a generic drug)
- Cisplatin (available as a generic drug)
- Cyclophosphamide (available as a generic drug)
- Eribulin (Halaven)
- Fluorouracil (5-FU)
- Gemcitabine (Gemzar)
- Ixabepilone (Ixempra)
- Methotrexate (Rheumatrex, Trexall)
- Protein-bound paclitaxel (Abraxane)
- Vinorelbine (Navelbine)

A patient may receive 1 drug at a time or a combination of different drugs given at the same time. Research has shown that combinations of certain drugs are sometimes more effective than single drugs for adjuvant treatment. ASCO does not recommend routinely adding platinum chemotherapy (cisplatin or carboplatin) to anthracycline (doxorubicin or epirubicin) or taxane (paclitaxel or docetaxel) chemotherapy to treat people with inherited BRCA mutations before or after surgery.

### References

1. Lee CS, Jung CH (2012) Metastatic spinal tumor. *Asian Spine J* 6:71-87.
2. Ciftdemir M, Kaya M, Selcuk V, YalnizE (2016) Tumors of the spine. *World J Orthop* 7:109-116.
3. Tateiwa D, Oshima K, Nakai T, ImuraY, Tanaka T, et al. (2019) Clinical outcomes and significant factors in the survival rate after decompression surgery for patients who were non-ambulatory due to spinal metastases. *Journal of Orthopaedic Science. The Japanese Orthop Ass* 24:347-352.
4. Buchholz HW, Engelbrecht H (1970) Depot effects of various antibiotics mixed with Palacos resins. *Chirurg* 41:511-515.
5. Bickels J, Jelinek JS, Shmookler BM, Neff RS, Malawer MM (1999) Biopsy of musculoskeletal tumors. *Clin Orthop Relat Res* 368:212-219.
6. Pohligh F, Kirchhoff C, Gradinger R, Eisenhart-Rothe RV, Rechl H (2010) Bone and soft tissue sarcoma: Principles of biopsy. *InFo Onkologie* 13:34-37.

\*Corresponding author: Y Aadi, Department of Infectious and Tropical Diseases, Mohammed V Military Instructional Hospital, Rabat, Morocco, E-mail: amed.regad@hotmail.fr

Received: December 02, 2020; Accepted: December 16, 2020; Published: December 23, 2020

Citation: Y Aadi (2020) Therapy Using Medication for Breast Cancer *J Clin Exp Pathol* S4:e001

Copyright: © 2020 Y Aadi. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.