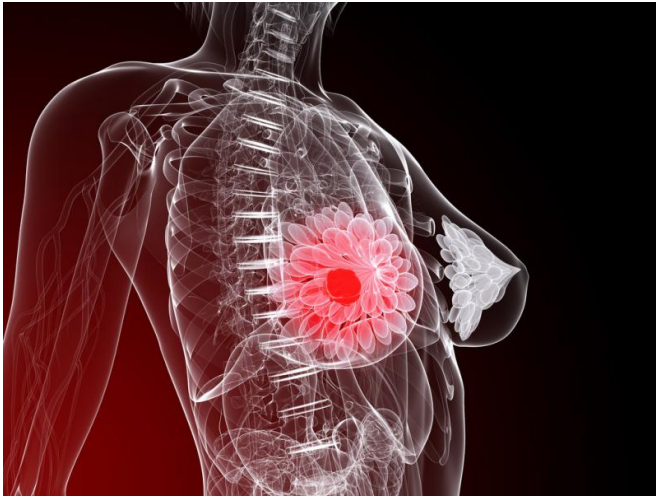


Drugs with directed molecules increase life expectancy by five years in breast cancer patients

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breast cancer are generated because of a positive HER2.

T-DM1 is the first therapy for metastatic or advanced breast cancer that increases [life expectancy](#), this means that it is applicable in patients receiving treatment but who still have a persisting tumor.

This drug, which attaches to the antibody emtansine, enters the interior of the cell and releases chemotherapy molecules, thereby directly attacking the HER2 positive tumor cells, increasing life expectancy and causing fewer side effects.

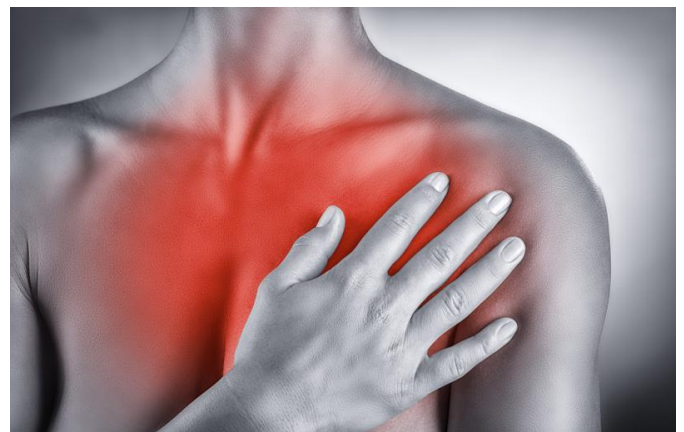
Rodriguez said that [clinical studies](#) have shown that the combination of Herceptin, Pertuzumab and chemotherapy in patients with HER2-positive [advanced breast cancer](#) lengthens life expectancy by 56.5 months, which amounts to almost five years, compared with an expectation of less than two years in 2000, when only chemotherapy was used.

Clinical studies show that new drugs that target malignant cells of HER2-positive breast cancer, such as Pertuzumab and Trastuzumab Emtansine (T-DM1), increase life expectancy in patients with advanced breast cancer.

Scientific advances in the treatment of breast cancer have led to these drug therapies, said Dr. Jerónimo Rodríguez, oncologist at the National Institute of Respiratory Diseases (INER) in Mexico City.

Such is the case of Trastuzumab and Pertuzumab Emtansine (T-DM1) monoclonal antibodies, which are directed to the HER2 gene that promotes the growth of cancer cells.

Stimulation of this gene controls how [breast cells](#) grow and divide. If it does not work properly, an overproduction of proteins results and the cells increase disproportionately; 25 percent of cases of



According to data from the Mexican Institute of Geography and Statistics (INEGI) in 2012, from every hundred women over the age of 20 who died of malignant tumors, 15 died from breast cancer.

Dr. Cynthia Villarreal, oncologist at the Medical Center Zambrano Hellion, said that Herceptin has been shown to improve healing rates in patients with early breast cancer and recommends its administration for one year.

Furthermore, Villarreal said the Pan American Health Organization (PAHO) expects the incidence of breast cancer in Latin America and the Caribbean to increase 46 percent by 2030.

Experts agree that advances in modern oncology are based on personalized treatment that extends the hope and expectation of life.

When [breast cancer](#) is confirmed, is essential that an oncologist performs the appropriate analysis to determine what kind and at what stage it is in order to define the best treatment, said Dr. Villarreal.

Provided by Investigación y Desarrollo

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