



## Evaluation of the effect of trastuzumab in the treatment of breast cancer

**Fatemeh jalali\***

student of Cellular and Molecular Biology, Islamic Azad University, Najafabad Branch  
jalalifatemeh855@gmail.com

### Background

Breast cancer is caused by Irregular growth of abnormal cells in the breast. Trastuzumab is one of the drugs used to treat breast cancer. It is a potent anti-inflammatory of breast cancer and a new monoclonal antibody Which promotes the growth-promoting protein HER2 suppresses. Trastuzumab and pertuzumab, which are human monoclonal antibodies in combination with chemotherapy, are known as the primary line of treatment for metastatic cancers, including breast cancer. In contrast, trastuzumab and lepatinib, which suppress human epidermal growth factor, have been identified as the next line of treatment. Resistance to trastuzumab is a major barrier to the treatment of HER2 positive breast cancer. Decreased expression mir141 in cancer cells is one of the mechanisms resistance to trastuzumab.

### Materials and Methods

The material is collected in the form of a library.

### Results

The results show that trastuzumab has positive prospects in the treatment of breast cancer. However, a large percentage of patients still do not respond to treatment despite persistent antigen expression against monoclonal antibodies. Due to overexpression of extracellular matrix components that block HER2 as a barrier and do not allow drug access to the receptor.

### Conclusion

What is clear is that this complication gets worse over time But targeted treatment can prevent metastasis and the risk of recurrence. For this reason, it is recommended that prevention and treatment be taken in case of any symptoms.

### References

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2. Maria Vittoria Dieci et al. Biomarkers for HER2-positive metastatic breast cancer: Beyond hormone receptors. Elsevier. 2020; 1-5