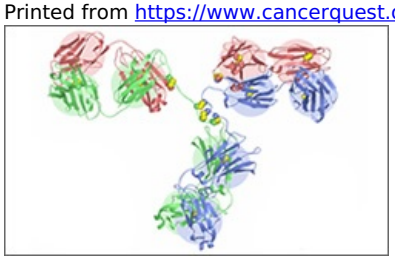
Trastuzumab

Printed from https://www.cancerquest.org/patients/drug-reference/trastuzumab on 11/14/2026



Brand name: Herceptin®
IUPAC: Humanized anti-HER2 antibody
FDA approval: Yes
Manufacturer Link
Usage:

Herceptin® is used to treat metastatic and early-stage breast cancer and is also FDA-approved to treat metastatic gastric cancer in combination with other drugs. Trastuzumab (Herceptin®) is given both alone and in combination with other treatments. In many cases, combination treatment with chemotherapy has been found to yield better results. Herceptin® is given via intravenous infusion in the arm or hand.1

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.

Mechanism:

Trastuzumab binds to the extracellular segment of the epidermal growth factor receptor (also called HER2, HER-2, HER2/neu). The binding blocks signals that would otherwise result in cell division. The result is a reduction in reproduction of cells treated with the drug. Note that the image shown is a general structure of an antibody. There are four proteins bound together in a 'Y' shape. The two top tips of the Y are where the antibody binds with its target. This means that each antibody molecule can bind to two identical target regions.1

Stick | Ribbon | Sphere | Rotate

The diagram above shows the 3D molecular structure of meditope-enabled Trastuzumab.

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.

Side effects:

Common side effects associated with treatment with Trastuzumab are heavily infusion dependent, as they include: fever, chills, fatigue, nausea and vomiting. Less common side effects include: myelosuppression, cardiotoxicity and pulmonary toxicity.1

1 Chu, E., & DeVita, V. T. (2015). Physicians' cancer chemotherapy drug manual 2015. Burlington, MA: Jones & Bartlett Learning.