Trastuzumab: Drug information

(For additional information see "Trastuzumab: Patient drug information")

For abbreviations and symbols that may be used in Lexicomp (show table)

ALERT: US Boxed Warning

Cardiomyopathy:

Trastuzumab can result in subclinical and clinical cardiac failure. The incidence and severity was highest in patients who received trastuzumab concurrently with anthracycline-containing chemotherapy regimens.

Evaluate left ventricular function in all patients prior to and during treatment with trastuzumab. Discontinue trastuzumab treatment in patients receiving adjuvant therapy, and withhold trastuzumab in patients with metastatic disease for clinically significant decrease in left ventricular function.

Infusion reactions and pulmonary toxicity:

Trastuzumab administration can result in serious and fatal infusion reactions and pulmonary toxicity. Symptoms usually occur during or within 24 hours of administration of trastuzumab. Interrupt trastuzumab infusion for patients experiencing dyspnea or clinically significant hypotension. Monitor patients until signs and symptoms resolve completely. Discontinue trastuzumab for anaphylaxis, angioedema, interstitial pneumonitis, or acute respiratory distress syndrome.

Pregnancy:

Exposure to trastuzumab during pregnancy can result in oligohydramnios and oligohydramnios sequence manifesting as pulmonary hypoplasia, skeletal abnormalities, and neonatal death. Advise patients of these risks and the need for effective contraception.

Brand Names: US

Herceptin

Brand Names: Canada

Herceptin

Pharmacologic Category

Antineoplastic Agent, Anti-HER2; Antineoplastic Agent, Monoclonal Antibody

Dosing: Adult

Note: Do **NOT** substitute conventional trastuzumab for or with ado-trastuzumab emtansine; products are different and are **NOT** interchangeable.

Breast cancer, adjuvant treatment, HER2+: IV: **Note:** Extending adjuvant treatment beyond 1 year is not recommended

With concurrent paclitaxel or docetaxel:

Initial loading dose: 4 mg/kg infused over 90 minutes, followed by

Maintenance dose: 2 mg/kg infused over 30 minutes weekly for total of 12 weeks, followed 1 week later (when concurrent chemotherapy completed) by 6 mg/kg infused over 30 to 90 minutes every 3 weeks for total therapy duration of 52 weeks

With concurrent docetaxel/carboplatin:

Initial loading dose: 4 mg/kg infused over 90 minutes, followed by

Maintenance dose: 2 mg/kg infused over 30 minutes weekly for total of 18 weeks, followed 1 week later (when concurrent chemotherapy completed) by 6 mg/kg infused over 30 to 90 minutes every 3 weeks for total therapy duration of 52 weeks

Following completion of multi-modality anthracycline-based chemotherapy:

Initial loading dose: 8 mg/kg infused over 90 minutes, followed by

Maintenance dose: 6 mg/kg infused over 30 to 90 minutes every 3 weeks for total therapy duration of 52 weeks

Breast cancer, metastatic, HER2+ (either as a single agent or in combination with paclitaxel): IV:

Initial loading dose: 4 mg/kg infused over 90 minutes, followed by

Maintenance dose: 2 mg/kg infused over 30 minutes weekly until disease progression

Gastric cancer, metastatic, HER2+ (in combination with cisplatin and either capecitabine or fluorouracil for 6 cycles followed by trastuzumab monotherapy; Bang 2010): IV:

Initial loading dose: 8 mg/kg infused over 90 minutes, followed by

Maintenance dose: 6 mg/kg infused over 30 to 90 minutes every 3 weeks until disease progression

Missed doses: If a dose is missed by ≤1 week, the usual maintenance dose should be administered as soon as possible (do not wait until the next planned cycle) and subsequent maintenance doses should be administered 7 or 21 days later (based on patient's maintenance dose/schedule); if a dose is missed by >1 week, then a re-loading dose (4 mg/kg if patient receives trastuzumab weekly; 8 mg/kg if on an every-3-week schedule) should be administered, followed by the usual maintenance dose administered 7 or 21 days later (based on patient's maintenance dose/schedule).

Breast cancer (early stage, locally advanced, or inflammatory), neoadjuvant treatment, HER2+ (off-label use): IV: Trastuzumab, pertuzumab, and docetaxel (in patients with operable disease who had received no prior chemotherapy): Initial: 8 mg/kg (cycle 1) followed by 6 mg/kg every 3 weeks for a total of 4 neoadjuvant cycles; postoperatively, administer 3 cycles of adjuvant FEC [fluorouracil, epirubicin, and cyclophosphamide] chemotherapy and continue trastuzumab to complete 1 year of treatment (Gianni 2012)

Breast cancer, metastatic, HER2+ (off-label combinations): IV: **Note:** There are multiple trastuzumab-containing regimens for the treatment of HER2+ metastatic breast cancer; commonly used regimens are listed below:

Trastuzumab, pertuzumab, and docetaxel (in patients with no prior anti-HER2 therapy or chemotherapy to treat metastatic disease): Initial: 8 mg/kg followed by a maintenance dose of 6 mg/kg every 3 weeks until disease progression or unacceptable toxicity (Baselga 2012)

Trastuzumab, pertuzumab, and weekly paclitaxel: Initial: 8 mg/kg followed by a maintenance dose of 6 mg/kg every 3 weeks until disease progression (Dang 2015)

Trastuzumab and lapatinib (in patients with progression on prior trastuzumab containing therapy): Initial: 4 mg/kg followed by a maintenance dose of 2 mg/kg every week (Blackwell 2010; Blackwell 2012)

Other trastuzumab combinations: Initial: 8 mg/kg followed by a maintenance dose of 6 mg/kg every 3 weeks until disease progression or unacceptable toxicity (in combination with docetaxel **or** vinorelbine) (Andersson 2011) **or** 4 mg/kg loading dose followed by a maintenance dose of 2 mg/kg weekly until disease progression (in combination with docetaxel) (Marty 2005)

Dosing: Geriatric

Refer to adult dosing.

Dosing: Renal Impairment

CrCl 30 to 90 mL/minute: There are no dosage adjustments provided in the manufacturer's labeling, although no clinically significant pharmacokinetic differences have been observed.

CrCl <30 mL/minute: There are no dosage adjustments provided in the manufacturer's labeling (has not been studied).

End-stage renal disease (ESRD) (with or without hemodialysis): There are no dosage adjustments provided in the manufacturer's labeling (has not been studied).

Dosing: Hepatic Impairment

There are no dosage adjustments provided in the manufacturer's labeling (has not been studied).

Dosing: Adjustment for Toxicity

Cardiotoxicity: LVEF ≥16% decrease from baseline or LVEF below normal limits and ≥10% decrease from baseline: Withhold treatment for at least 4 weeks and repeat LVEF every 4 weeks. May resume trastuzumab treatment if LVEF returns to normal limits within 4 to 8 weeks and remains at ≤15% decrease from baseline value. Discontinue permanently for persistent (>8 weeks) LVEF decline or for >3 incidents of treatment interruptions for cardiomyopathy.

Infusion-related events:

Mild-moderate infusion reactions: Decrease infusion rate.

Dyspnea, clinically significant hypotension: Interrupt infusion.

Severe or life-threatening infusion reactions: Discontinue.

Dosage Forms Excipient information presented when available (limited, particularly for generics); consult specific product labeling.

Solution Reconstituted, Intravenous:

Herceptin: 440 mg (1 ea) [contains benzyl alcohol, mouse (murine) and/or hamster protein]

Solution Reconstituted, Intravenous [preservative free]:

Herceptin: 150 mg (1 ea)

Generic Equivalent Available (US) No

Administration Check label to ensure appropriate product is being administered (conventional trastuzumab and ado-trastuzumab emtansine are different products and are **NOT** interchangeable).

Administered by IV infusion; loading doses are infused over 90 minutes; maintenance doses may be infused over 30 minutes if tolerated. Do not administer with D_5W. **Do not administer IV push or by rapid bolus. Do not mix with any other medications.**

Observe patients closely during the infusion for fever, chills, or other infusion-related symptoms. Treatment with acetaminophen, diphenhydramine, and/or meperidine is usually effective for managing infusion-related events.

Hazardous Drugs Handling Considerations

Hazardous agent (meets NIOSH 2016 criteria). This medication is not on the NIOSH (2016) list; however, it meets the criteria for a hazardous drug. Drugs are classified as hazardous based on their properties; the properties of a hazardous drug include one or more of the following characteristics: carcinogenic, teratogenic (or other developmental toxicity), reproductive toxicity, organotoxic at low doses, genotoxic, and/or new agents with structural or toxicity profiles similar to existing hazardous agents.

Use appropriate precautions for receiving, handling, administration, and disposal. Gloves (single) should be worn during receiving, unpacking, and placing in storage.

NIOSH recommends double gloving, a protective gown, ventilated engineering controls (a class II biological safety cabinet or a compounding aseptic containment isolator), and closed system transfer devices (CSTDs) for preparation. Double gloving, a gown, and (if dosage form allows) CSTDs are required during administration (NIOSH 2016).

Use

Breast cancer, adjuvant treatment: Treatment (adjuvant) of human epidermal growth receptor 2 (HER2)-overexpressing node positive or node negative (estrogen receptor/progesterone receptor negative or with 1 high risk feature) breast cancer as part of a treatment regimen consisting of doxorubicin, cyclophosphamide, and either paclitaxel or docetaxel; with docetaxel and carboplatin; or as a single agent following multimodality anthracycline-based therapy.

Breast cancer, metastatic: First-line treatment of HER2-overexpressing metastatic breast cancer (in combination with paclitaxel); single agent treatment of HER2-overexpressing breast cancer in patients who have received 1 or more chemotherapy regimens for metastatic disease.

Gastric cancer, metastatic: Treatment of HER2-overexpressing metastatic gastric or gastroesophageal junction adenocarcinoma (in combination with cisplatin and either capecitabine or 5-fluorouracil) in patients who have not received prior treatment for metastatic disease.

Limitations of use: Patients should be selected for breast and gastric cancer therapy based on an approved companion diagnostic test for tumor specimen for HER2 overexpression or HER2 gene amplification.

Use: Off-Label

HER2-positive metastatic breast cancer (in combination with pertuzumab and docetaxel) in patients who have not received prior anti-HER2 therapy or chemotherapy to treat metastatic disease; HER2-positive metastatic breast cancer (in combination with pertuzumab and weekly paclitaxel); HER2-positive metastatic breast cancer (in combination with either docetaxel or vinorelbine); HER2 overexpressing metastatic breast cancer (in combination with lapatinib) which had progressed on prior trastuzumab containing therapy; Neoadjuvant treatment of HER2-positive locally advanced, inflammatory or early breast cancer

Medication Safety Issues

Sound-alike/look-alike issues:

Trastuzumab may be confused with ado-trastuzumab emtansine, pertuzumab

High alert medication:

This medication is in a class the Institute for Safe Medication Practices (ISMP) includes among its list of drug classes which have a heightened risk of causing significant patient harm when used in error.

Other safety concerns:

Conventional trastuzumab (Herceptin) may be confused with the US product ado-trastuzumab emtansine (Kadcyla); products are **not** interchangeable.

Conventional trastuzumab (Herceptin) may be confused with the Canadian product trastuzumab emtansine (Kadcyla); products are **not** interchangeable.

Adverse Reactions

Percentages reported with single-agent therapy.

>10%:

Cardiovascular: Decreased left ventricular ejection fraction (4% to 22%)

Central nervous system: Pain (47%), chills (5% to 32%), headache (10% to 26%), insomnia (14%), dizziness (4% to 13%)

Dermatologic: Skin rash (4% to 18%)

Gastrointestinal: Nausea (6% to 33%), diarrhea (7% to 25%), vomiting (4% to 23%), abdominal pain (2% to 22%), anorexia (14%)

Infection: Infection (20%)

Neuromuscular & skeletal: Weakness (4% to 42%), back pain (5% to 22%)

Respiratory: Cough (5% to 26%), dyspnea (3% to 22%), rhinitis (2% to 14%), pharyngitis (12%)

Miscellaneous: Infusion related reaction (21% to 40%, chills and fever most common; severe: 1%), fever (6% to 36%)

1% to 10%:

Cardiovascular: Peripheral edema (5% to 10%), edema (8%), cardiac failure (2% to 7%; severe: <1%), tachycardia (5%), hypertension (4%), arrhythmia (3%), palpitations (3%)

Central nervous system: Paresthesia (2% to 9%), depression (6%), peripheral neuritis (2%), neuropathy (1%)

Dermatologic: Acne vulgaris (2%), nail disease (2%), pruritus (2%)

Gastrointestinal: Constipation (2%), dyspepsia (2%)

Genitourinary: Urinary tract infection (3% to 5%)

Hematologic & oncologic: Anemia (4%; grade 3: <1%), leukopenia (3%)

Hypersensitivity: Hypersensitivity reaction (3%)

Infection: Influenza (4%), herpes simplex infection (2%)

Neuromuscular & skeletal: Arthralgia (6% to 8%), ostealgia (3% to 7%), myalgia (4%), muscle spasm (3%)

Respiratory: Flu-like symptoms (2% to 10%), sinusitis (2% to 9%), nasopharyngitis (8%), upper respiratory tract infection (3%), epistaxis (2%), pharyngolaryngeal pain (2%)

Miscellaneous: Accidental injury (6%)

<1%, postmarketing, and/or case reports (as a single-agent or with combination chemotherapy): Abnormality in thinking, adult respiratory distress syndrome, amblyopia, anaphylactic shock, anaphylactoid reaction, anaphylaxis, angioedema, apnea, ascites, asthma, ataxia, blood coagulation disorder, bradycardia, bronchitis, bronchospasm, cardiogenic shock, cardiomyopathy, cellulitis, cerebral edema, cerebrovascular accident, cerebrovascular disease, chest discomfort, colitis, coma, confusion, cystitis, deafness, dermal ulcer, dermatitis, dyspnea on exertion, dysuria, erysipelas, esophageal ulcer, febrile neutropenia, focal segmental glomerulosclerosis, gastritis, gastroenteritis, glomerulonephritis (membraneous, focal and fibrillary), glomerulopathy, hematemesis, hemorrhage, hemorrhagic cystitis, hepatic failure, hepatic injury, hepatitis, herpes zoster, hiccups, hydrocephalus, hydronephrosis, hypercalcemia, hypervolemia, hypoprothrombinemia, hypotension, hypothyroidism, hypoxia, immune thrombocytopenia, intestinal obstruction, interstitial pneumonitis, interstitial pulmonary disease, jaundice, laryngeal edema, laryngitis, lethargy, leukemia (acute), limb pain, lymphangitis, madarosis, mania, mastalgia, meningitis, musculoskeletal pain, myopathy, nephrotic syndrome, neutropenia, neutropenic

sepsis, oligohydramnios, onychoclasis, osteonecrosis, oxygen desaturation, pancreatitis, pancytopenia, paresis, paroxysmal nocturnal dyspnea, pathological fracture, pericardial effusion, pericarditis, pleural effusion, pneumonitis, pneumothorax, pulmonary edema (noncardiogenic), pulmonary fibrosis, pulmonary hypertension, pulmonary infiltrates, pyelonephritis, radiation injury, renal failure, respiratory distress, respiratory failure, seizure, sepsis, shock, syncope, stomatitis, thrombosis (including mural), thyroiditis (autoimmune), urticaria, vertigo, ventricular dysfunction, wheezing

Contraindications

There are no contraindications listed in the manufacturer's US labeling.

Canadian labeling: Hypersensitivity to trastuzumab, Chinese hamster ovary (CHO) cell proteins, or any component of the formulation

Warnings/Precautions

Concerns related to adverse effects:

• Cardiomyopathy: **[US Boxed Warning]: Trastuzumab is associated with symptomatic and asymptomatic reductions in left ventricular ejection fraction (LVEF) and heart failure (HF); the incidence is highest in patients receiving trastuzumab with an anthracycline-containing chemotherapy regimen. Evaluate LVEF in all patients prior to and during treatment; discontinue for cardiomyopathy.** Extreme caution should be used in patients with pre-existing cardiac disease or dysfunction. Prior or concurrent exposure to anthracyclines or radiation therapy significantly increases the risk of cardiomyopathy; other potential risk factors include advanced age, high or low body mass index, smoking, diabetes, hypertension, and hyper-/hypothyroidism. Patients who receive anthracyclines after completion or discontinuation of trastuzumab are at increased risk of cardiac dysfunction (anthracyclines should be avoided for at least 7 months after the last trastuzumab dose, and then monitor cardiac function closely if anthracyclines are used. Discontinuation should be strongly considered in patients who develop a clinically significant reduction in LVEF during therapy; treatment with HF medications (eg, ACE inhibitors, beta-blockers) should be initiated. Withhold treatment for ≥16% decrease from pretreatment levels or LVEF below normal limits and ≥10% decrease from baseline (see Dosage Adjustment for Cardiotoxicity). Cardiomyopathy due to trastuzumab is generally reversible over a period of 1 to 3 months after discontinuation. Long-term (8 years) follow-up in the adjuvant setting (trastuzumab for 1 or 2 years administered sequentially following chemotherapy and radiation therapy) has demonstrated a low incidence of cardiac events, which were generally reversible in most patients (de Azambuja 2014). Trastuzumab is also associated with arrhythmias, hypertension, mural thrombus formation, stroke, and even cardiac death.

• Infusion reactions: **[US Boxed Warning]: Infusion reactions (including fatalities) have been associated with use; discontinue for anaphylaxis or angioedema. Most reactions occur during or within 24 hours of the first infusion; interrupt infusion for dyspnea or significant hypotension; monitor until symptoms resolve.** Infusion reactions may consist of fever and chills, and may also include nausea, vomiting, pain, headache, dizziness, dyspnea, hypotension, rash, and weakness. Re-treatment of patients who experienced severe hypersensitivity reactions has been attempted (with premedication). Some patients tolerated re-treatment, while others experienced a second severe reaction.

• Pulmonary toxicity: **[US Boxed Warning]: May cause serious pulmonary toxicity (dyspnea,**

hypoxia, interstitial pneumonitis, pulmonary infiltrates, pleural effusion, noncardiogenic pulmonary edema, pulmonary insufficiency, acute respiratory distress syndrome [ARDS], and/or pulmonary fibrosis); discontinue for ARDS or interstitial pneumonitis. Use caution in patients with pre-existing pulmonary disease or patients with extensive pulmonary tumor involvement; these patient populations may have more severe toxicity. Pulmonary events may occur during or within 24 hours of administration; delayed reactions have occurred.

• Renal toxicity: Rare cases of nephrotic syndrome with evidence of glomerulopathy have been reported, with an onset of 4 to 18 months from trastuzumab initiation; complications may include volume overload and HF. The incidence of renal impairment was increased in metastatic gastric cancer patients when trastuzumab is added to chemotherapy.

Concurrent drug therapy issues:

• Chemotherapy: When used in combination with myelosuppressive chemotherapy, trastuzumab may increase the incidence of neutropenia (moderate-to-severe) and febrile neutropenia. The incidence of anemia may be higher when trastuzumab is added to chemotherapy.

• Drug-drug interactions: Potentially significant interactions may exist, requiring dose or frequency adjustment, additional monitoring, and/or selection of alternative therapy. Consult drug interactions database for more detailed information.

Special populations:

• Pregnancy: **[US Boxed Warning]: Trastuzumab exposure during pregnancy may result in oligohydramnios and oligohydramnios sequence (pulmonary hypoplasia, skeletal malformations and neonatal death). Advise patients of these risks and the need for effective contraception.** Effective contraception is recommended in women of childbearing potential during treatment and for at least 7 months after the last trastuzumab dose.

Dosage form specific issues:

• Do not interchange: Conventional trastuzumab and ado-trastuzumab emtansine are **not** interchangeable. Verify product label prior to reconstitution and administration to prevent medication errors. Dosing and treatment schedules between conventional trastuzumab (Herceptin) and ado-trastuzumab emtansine (Kadcyla) are different; confusion between the products may potentially cause harm to the patient.

Other warnings/precautions:

• HER2 expression: Establish HER2 status prior to treatment with an approved test, either HER2 protein overexpression by validated immunohistochemistry (IHC) assay or gene amplification by fluorescence in situ hybridization (FISH) assay. Due to differences in disease histopathology (eg, incomplete membrane staining and more frequent heterogeneous HER2 expression in gastric cancer), tests appropriate for the specific tumor type (breast or gastric) should be used to assess HER2 status. Unreliable results may occur from improper assay performance, such as use of suboptimally fixed tissue, failure to utilize specified reagents or to include appropriate controls for assay validation, or incorrectly following specific assay instructions. Information regarding HER2 diagnostic testing may be found at http://www.fda.gov/CompanionDiagnostics.

Metabolism/Transport Effects

None known.

Drug Interactions

(For additional information: Launch drug interactions program) Lexicomp®

Antineoplastic Agents (Anthracycline, Systemic): Trastuzumab may enhance the cardiotoxic effect of Antineoplastic Agents (Anthracycline, Systemic). Management: When possible, patients treated with trastuzumab should avoid anthracycline-based therapy for up to 7 months after stopping trastuzumab. Monitor closely for cardiac dysfunction in patients receiving anthracyclines with trastuzumab. *Risk D: Consider therapy modification*

Belimumab: Monoclonal Antibodies may enhance the adverse/toxic effect of Belimumab. *Risk X: Avoid combination*

Immunosuppressants: Trastuzumab may enhance the neutropenic effect of Immunosuppressants. **Exceptions:** Cytarabine (Liposomal). *Risk C: Monitor therapy*

PACLitaxel (Conventional): Trastuzumab may decrease the serum concentration of PACLitaxel (Conventional). PACLitaxel (Conventional) may increase the serum concentration of Trastuzumab. *Risk C: Monitor therapy*

Pregnancy Implications Trastuzumab inhibits HER2 protein, which has a role in embryonic development. [US Boxed Warning]: Trastuzumab exposure during pregnancy may result in oligohydramnios and oligohydramnios sequence (pulmonary hypoplasia, skeletal malformations and neonatal death). Advise patients of these risks and the need for effective contraception. Oligohydramnios (reversible in some cases) has been reported with trastuzumab use alone or with combination chemotherapy. Monitor for oligohydramnios if trastuzumab exposure occurs during pregnancy or within 7 months prior to conception; conduct appropriate fetal testing if oligohydramnios occurs. Verify pregnancy status in women of reproductive potential prior to initiation of therapy. Women of reproductive potential should use effective contraception during treatment and for at least 7 months after the last trastuzumab dose. If trastuzumab is administered during pregnancy, or if a patient becomes pregnant during or within 7 months after treatment, report exposure to Genentech Adverse Events at 1-888-835-2555. Women exposed to trastuzumab during pregnancy (or within 7 months prior to conception) are encouraged to enroll in MotHER (the Herceptin Pregnancy Registry; 1-800-690-6720 or http://www.motherpregnancyregistry.com).

European Society for Medical Oncology (ESMO) guidelines for cancer during pregnancy recommend delaying treatment with trastuzumab (and other HER-2 targeted agents) until after delivery in pregnant patients with HER-2 positive disease (Peccatori 2013).

Breast-Feeding Considerations It is not known whether trastuzumab is present in human milk. Because many immunoglobulins are secreted in milk, and the potential for serious adverse reactions in the breastfed infant exists, the decision to discontinue trastuzumab or discontinue breastfeeding during treatment should take in account the benefits of treatment to the mother. The 7-month wash out period for trastuzumab should be considered for decisions regarding breastfeeding after treatment is completed.

Monitoring Parameters Assessment for HER2 overexpression and HER2 gene amplification by validated immunohistochemistry (IHC) or fluorescence *in situ* hybridization (FISH) methodology (pretherapy); test should be specific for cancer type (breast vs gastric cancer). Pregnancy test (prior to treatment in women of reproductive potential). Monitor vital signs during infusion; signs and symptoms of cardiac dysfunction;

LVEF (baseline, every 3 months during treatment, upon therapy completion and if component of adjuvant therapy, every 6 months for at least 2 years; if treatment is withheld for significant LVEF dysfunction, monitor LVEF at 4-week intervals); signs and symptoms of infusion reaction or pulmonary toxicity; if pregnancy inadvertently occurs during treatment, monitor amniotic fluid volume

Mechanism of Action

Trastuzumab is a monoclonal antibody which binds to the extracellular domain of the human epidermal growth factor receptor 2 protein (HER-2); it mediates antibody-dependent cellular cytotoxicity by inhibiting proliferation of cells which overexpress HER-2 protein.

Pharmacodynamics/Kinetics

Note: In most patients, trastuzumab concentrations will decrease to ~3% (~97% washout) by 7 months following discontinuation.

Pricing: US

Solution (reconstituted) (Herceptin Intravenous)

150 mg (1): $1711.40

440 mg (1): $5020.10

Disclaimer: The pricing data provide a representative AWP and/or AAWP price from a single manufacturer of the brand and/or generic product, respectively. The pricing data should be used for benchmarking purposes only, and as such should not be used to set or adjudicate any prices for reimbursement or purchasing functions. Pricing data is updated monthly.

International Brand Names

Herceptin (AE, AR, AT, AU, BB, BE, BF, BG, BH, BJ, BM, BR, BS, BZ, CH, CI, CL, CN, CO, CR, CU, CY, CZ, DE, DK, DO, EC, EE, ES, ET, FI, FR, GB, GH, GM, GN, GR, GT, GY, HK, HN, HR, HU, IE, IL, IS, IT, JM, JO, KE, KR, KW, LB, LK, LR, LT, LU, LV, MA, ML, MR, MT, MU, MW, MX, MY, NE, NG, NI, NL, NO, NZ, PA, PE, PH, PL, PT, PY, QA, RO, RU, SA, SC, SD, SE, SG, SI, SK, SL, SN, SR, SV, TH, TN, TR, TT, TW, TZ, UG, UY, VE, VN, ZA, ZM, ZW); Hertseptyn (UA); Kadsila (UA); Trastunix (BD); Vivitra (IN)

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