Herceptin® (Active ingredient: Trastuzumab):

Indications: Herceptin is a HER2/neu receptor antagonist indicated for: **t**he treatment of HER2 overexpressing **b**reast **c**ancer, and treatment of HER2 overexpressing metastatic gastric or gastroesophageal junction adenocarcinoma, the stomach and gastrointestinal junction who have not received chemotherapy for their metastatic disease

Dosage and administration: ***E****arly breast cancer:* Herceptin is given until recurrence or for a total of 52 weeks. Administer at either:Weekly dosing: the initial dose is 4 mg/kg body weight, followed by 2 mg/kg body weight every week. Three-weekly dosing: initial dose is 8 mg/kg body weight then maintenance dose of at 3-weekly intervals is 6 mg/kg body weight, beginning 3 weeks after the initial dose. *Metastatic breast cancer:* weekly schedule: the initial dose is 4 mg/kg body weight administered as a 90-minute intravenous infusion. The maintenance dose is 2 mg/kg body weight. 3-weekly schedule:the loading dose of herceptin is 8 mg/kg body weight, followed by 6 mg/kg body weight 3 weeks later. The subsequent herceptin doses of 6 mg/kg body weight are repeated at 3-weekly intervals. *Advanced gastric cancer or cancer of the gastroesophageal junction – 3-weekly schedule:* Initial dose is 8 mg/kg body weight, followed 3 weeks later by 6 mg/kg body weight. The subsequent 6 mg/kg Herceptin doses are repeated at 3-weekly intervals. Treatment is administered by infusion over approximately 90 minutes. If the initial dose was well tolerated, the maintenance dose can be administered as a 30-minute infusion. For intravenous (IV) infusion only. Do not administer as an IV bolus injection.
Contraindications: Known hypersensitivity to trastuzumab, hamster (CHO) cell protein or any other product or solvent excipient. Herceptin and anthracycline should not be given concurrently in the metastatic breast cancer or adjuvant treatment setting. Dyspnea at rest due to advanced malignancy or comorbidities.

Warnings and precautions: In order to improve the traceability of biologicals, the trade name Herceptin must be clearly entered in the patient's record. Replacement by another biological requires the consent of the prescribing physician. Data in this prescribing information relate only to Herceptin**.** *Herceptin for multiple injections (benzyl alcohol):* benzyl alcohol, the preservative used in the supplied bacteriostatic water for injections, has caused toxic reactions in neonates and children up to 3 years of age. *Infusion-related reactions:* sometimes serious infusion-related reactions (typical symptoms e.g. dyspnea, hypotension, nausea, fever, bronchospasm, tachycardia, reduced oxygen saturation, urticaria and rash) have been observed in patients during treatment with Herceptin. These adverse effects can occur as part of an infusion-related reaction or as a delayed reaction. Premedication may be given to reduce the risk of occurrence of infusion-related reactions. *Cardiotoxicity:* Patients treated with Herceptin are at increased risk of developing NYHA class II–IV congestive heart failure or asymptomatic cardiac dysfunction. Adjuvant and neoadjuvant treatment: The risk factors for cardiac events were advanced age (>50 years), low level of baseline and declining LVEF (<55%), low LVEF prior to or following the initiation of paclitaxel treatment, Herceptin treatment, and prior or concurrent use of antihypertensive medications. In patients receiving Herceptin after completion of adjuvant chemotherapy the risk of cardiac dysfunction was associated with a higher cumulative dose of anthracycline given prior to initiation of Herceptin and a high body mass index (BMI >25 kg/m2). *Pulmonary reactions:* Severe pulmonary adverse effects have been reported on Herceptin therapy in the post-marketing phase (see Undesirable effects). These events have occasionally been fatal and may occur as part of an infusion-related reaction or with a delayed onset.
Pregnancy and lactation: herceptin should not be administered during pregnancy unless the potential benefit to the mother outweighs the risk incurred by the fetus.If a pregnancy occurs while using Herceptin or within 7 months following the last dose of Herceptin, close monitoring by a multidisciplinary team is indicated. Breastfeeding should be avoided during Herceptin therapy.

Undesirable effects: the most serious and/or frequently reported undesirable effects during treatment with Herceptin are cardiotoxicity, infusion reactions, hematotoxicity (especially neutropenia) infections and pulmonary adverse events. *List of undesirable effects: Very common (>10%):* nasopharyngitis, infection, anemia, thrombocytopenia, febrile neutropenia, leukopenia, weight gain, weight loss, decreased appetite, insomnia, tremor, dizziness, headache, paraesthesia, hypoesthesia, dysgeusia, increased lacrimination, conjunctivitis, atrial flutter, irregular heartbeat, ejection fraction decreased, lymphedema, hot flushes, wheezing, dyspnea, epistaxis, cough, rhinorrhea, oropharyngeal pain, abdominal pain, nausea, vomiting, diarrhea, labial edema, dyspepsia, stomatitis, constipation, erythema, rash, facial edema, alopecia, palmoplantar dysesthesia, nail toxicity, nail disorder, muscle stiffness, asthenia, chest pain, chills, fatigue, influenza symptoms, infusion-related reactions, myalgia, pain, fever, peripheral edema, mucosal inflammation, arthralgia. *Common(1%<-10%>):* cystitis, herpes zoster, infection, influenza, sinusitis, skin infection, rhinitis, upper respiratory tract infection, urinary tract infection, pharyngitis, neutropenia, hypersensitivity, anorexia, anxiety, depression, thought disorders, taste disturbance, hypertonia, peripheral neuropathy, light-headedness, somnolence, dry eye, congestive heart failure, supraventricular tachyarrhythmia, cardiomyopathy, palpitations, hypotension, hypertension, vasodilatation, asthma, lung disorder, pleural effusion, pneumonia, dry mouth, haemorrhoids, hepatitis, liver tenderness, hepatocellular injury, acne, dry skin, subcutaneous bleeding, hyperhidrosis, maculopapular rash, pruritus, onychoclasis, dermatitis, arthritis, back pain, bone pain, muscle cramps, neck pain, pain in the extremities, musculoskeletal pain, renal disorder, mastitis, mastodynia, malaise, edema. Physicians should refer to the Herceptin Product Information in relation to other adverse reactions.

Packs:150 mg single-dose vials: 1 vial , 440 mg multiple-dose vials: Pack containing 1 vial of Herceptin (trastuzumab) and 1 vial of solvent.

Prescription only medicine
Marketing authorization holder : F. Hoffmann-La Roche Ltd, Basel, Switzerland.

Current at July 2016. 150 mg vials: Made in Switzerland by F. Hoffmann-La Roche Ltd, Basel. Made for F. Hoffmann-La Roche Ltd, Basel by Roche Diagnostics GmbH, Mannheim, Germany. 440 mg vials: Made for F. Hoffmann-La Roche Ltd, Basel, Switzerland by Genentech Inc., South San Francisco, California, USA. Genentech Inc., Hillsboro, Oregon, USA

For any queries on the product or report an adverse event please contact : Roche Pars (F. Hoffmann-La Roche Ltd in Iran)**:** North unit, 9th Floor, No. 3, Aftab St., Vanak St., Tehran, Iran, Postal code: 1994834592 . Email: iran.medicalinformation@roche.com, iran.drugsafety@roche.com.