Cetimab

Cetuximab

Composition

Cetimab: Each vial contains Cetuximab INN 100mg/20 ml solution for IV infusion.

Description

Cetuximab is a recombinant human/mouse chimeric monoclonal antibody. It binds specifically to the epidermal growth factor receptor (EGFR), thus competitively inhibiting the binding of epidermal growth factor (EGF) and other ligands. This blocks phosphorylation and activation of receptor associated kinases, thus inhibiting cell growth, inducing apoptosis and decreases matrix metalloproteinase and vascular EGF production.

Indications

Squamous Cell Carcinoma of The Head and Neck (SCCHN): Cetimab is indicated in combination with radiation therapy for the initial treatment of locally or regionally advanced squamous cell carcinoma of the head and neck.

Cetimab is indicated in combination with platinum-based therapy with 5-FU for the first-line treatment of patients with recurrent loco regional disease or metastatic squamous cell carcinoma of the head and neck.

Cetimab, as a single agent, is indicated for the treatment of patients with recurrent or metastatic squamous cell carcinoma of the head and neck for which prior platinum-based therapy has failed.

K-Ras Wild-Type, EGFR-Expressing Colorectal Cancer: Cetimab is indicated for the treatment of K-Ras wild-type, epidermal growth factor receptor (EGFR) - expressing, metastatic colorectal cancer (mCRC) as determined by FDA-approved tests for this use

• In combination with FOLFIRI (irinotecan, 5-fluorouracil, leucovorin) for first-line treatment

• In combination with irinotecan in patients who are refractory to irinotecan-based chemotherapy

• As a single agent in patients who have failed oxaliplatin- and irinotecan-based chemotherapy or who are intolerant to irinotecan

Dosage

Squamous Cell Carcinoma of the Head and Neck:

Cetuximab in combination with radiation therapy or in combination with platinum-based therapy with 5-FU:

• The recommended initial dose is 400 mg/m^2 administered one week prior to initiation of a course of radiation therapy or on the day of initiation of platinum-based therapy with 5-FU as a 120-minute intravenous infusion (maximum infusion rate 10 mg/min). Complete Cetuximab administration 1 hour prior to platinum-based therapy with 5-FU.

• The recommended subsequent weekly dose (all other infusions) is 250 mg/m^2 infused over 60 minutes (maximum infusion rate 10 mg/min) for the duration of radiation therapy (6–7 weeks) or until disease progression or unacceptable toxicity when administered in combination with platinum-based therapy with 5-FU. Complete Cetuximab administration 1 hour prior to radiation therapy or platinumbased therapy with 5-FU.

Cetuximab monotherapy:

• The recommended initial dose is 400 mg/m^2 administered as a 120-minute intravenous infusion (maximum infusion rate 10 mg/min).

• The recommended subsequent weekly dose (all other infusions) is 250 mg/m^2 infused over 60 minutes (maximum infusion rate 10 mg/min) until disease progression or unacceptable toxicity.

Colorectal Cancer:

• Determine EGFR-expression status using FDA-approved tests prior to initiating treatment. Only patients whose tumors are K-Ras mutation-negative (wild-type) should receive Cetimab injection.

• The recommended initial dose, either as monotherapy or in combination with irinotecan or FOLFIRI (irinotecan, 5-fluorouracil, leucovorin), is 400 mg/m^2 administered as a 120-minute intravenous infusion (maximum infusion rate 10 mg/min). Complete Cetuximab administration 1 hour prior to FOLFIRI.

• The recommended subsequent weekly dose, either as monotherapy or in combination with irinotecan or FOLFIRI, is 250 mg/m^2 infused over 60 minutes (maximum infusion rate 10 mg/min) until disease progression or unacceptable toxicity. Complete Cetuximab administration 1 hour prior to FOLFIRI.

Recommended Premedication: Premedicate with an H_1 antagonist (eg, 50 mg of diphenhydramine) intravenously 30–60 minutes prior to the first dose; premedication should be administered for subsequent Cetuximab doses based upon clinical judgment and presence/severity of prior infusion reactions. Or, as directed by the registered physician.

Preparation for Administration

Do not administer Cetimab injection as an intravenous push or bolus. Administer via infusion pump or syringe pump. Do not exceed an infusion rate of 10 mg/min. Administer through a low protein binding 0.22-micrometer in-line filter. Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. The solution should be clear and colorless and may contain a small amount of easily visible, white, amorphous, Cetuximab particulates.

Cetimab 5 mg/mL must be prepared as follows:

For administration with infusion pump or gravity drip (diluted with sterile sodium chloride 9 mg/mL (0.9%) solution): Take an

infusion bag of adequate size of sterile sodium chloride 9 mg/mL (0.9%) solution. Calculate the required volume of Cetimab. Remove an adequate volume of the sodium chloride solution from the infusion bag, using an appropriate sterile syringe with a suitable needle. Take an appropriate sterile syringe and attach a suitable needle. Draw up the required volume of Cetimab from a vial. Transfer the Cetimab into the prepared infusion bag. Repeat this procedure until the calculated volume has been reached. Connect the infusion line and prime it with the diluted Cetimab before starting the infusion. Use a gravity drip or an infusion pump for administration.

For administration with a syringe pump: Calculate the required volume of Cetimab. Take an appropriate sterile syringe and attach a suitable needle. Draw up the required volume of Cetimab from a vial. Remove the needle and put the syringe into the syringe pump. Connect the infusion line to the syringe, set and control the rate and start the infusion after priming the line with Cetimab or sterile sodium chloride 9 mg/mL (0.9%) solution. If necessary, repeat this procedure until the calculated volume has been infused.

Contraindication – None

Precautions & Warnings

Infusion rate should be reduced if patient exhibits signs of toxicity. Discontinue treatment if there are severe infusion reactions. Caution when used in patients with history of coronary artery disease, heart failure and arrhythmias. Monitor serum electrolytes during and after (for atleast 8 weeks) Cetimab therapy. Exposure to sunlight may worsen skin reactions. Risk of interstitial lung disease in patients with pre-existing lung disease. Dose should be modified if there is occurrence of severe acneiform rash, skin drying and fissuring, paronychial inflammation and hypertrichosis in patients receiving Cetuximab therapy.

Special precautions for disposal

Cetimab injection (5 mg/ml) may be administered via a gravity drip, an infusion pump or a syringe pump method. A separate infusion line must be used for the infusion, and the line must be flushed with sterile sodium chloride 9 mg/ml (0.9%) solution for injection at the end of Infusion. Product is for single use in one patient only. Discard any residue.

Adverse reactions

The following adverse reactions are discussed in greater detail in other sections

- Infusion reactions
- Cardiopulmonary arrest
- Pulmonary toxicity
- Dermatologic

The most common adverse reactions in Cetuximab include cutaneous adverse reactions (including rash, pruritus, and nail changes) headache, diarrhea, and infection. The most serious adverse reactions with Cetuximab are infusion reactions, cardiopulmonary arrest, dermatologic toxicity and radiation dermatitis, sepsis, renal failure, interstitial lung disease, and pulmonary embolus.

Pregnancy & Lactation

Pregnancy: Category C.

Either studies in animals have revealed adverse effects on the fetus (teratogenic or embryocidal or other) and there are no controlled studies in women or studies in women and animals are not available. Drugs should be given only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether Cetuximab is secreted in human milk. IgG antibodies, such as Cetuximab, can be excreted in human milk.

Pediatric Use: The safety and effectiveness of Cetuximab in pediatric patients have not been established.

Drug Interaction

A drug interaction study was performed in which Cetuximab was administered in combination with Irinotecan. There was no evidence of any pharmacokinetic interactions between Cetuximab and Irinotecan.

Use in Special Populations

Dose modification in cases of severe acneiform rash (grade 3 or 4):

- **1st occurrence:** Delay infusion by 1-2 weeks. If improvement, continue at 250 mg/m^2; discontinue if no improvement.
- **2nd occurrence:** Delay infusion by1-2 weeks. If improvement, continue at reduced dose of 200 mg/m^2; discontinue if no improvement.
- **3rd occurrence:** Delay infusion by 1-2 weeks. If improvement, continue at reduced dose of 150 mg/m^2; discontinue if no improvement.
- **4th occurrence:** Discontinue therapy.

Storage Condition

Store the vial in original carton at 2°C - 8°C. Protect from light. Do not freeze. Keep out of the reach of children.

Packaging

Cetimab: Each box contains 1 vial of Cetuximab INN 100mg/20 ml solution for IV infusion.

Manufactured by
DRUG INTERNATIONAL LTD.
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