Portrazza

(necitumumab)

New Product Slideshow

MPR

Introduction

- **Brand name:** Portrazza
- **Generic name:** Necitumumab
- **Pharmacological class:** Human epidermal growth factor receptor (EGFR) inhibitor
- **Strength and Formulation:** 800mg/50mL; solution for IV infusion after dilution; preservative-free
- **Manufacturer:** Eli Lilly
- **How supplied:** Single-use vial—1
- **Legal Classification:** Rx

Indications

- In combination with gemcitabine and cisplatin, for first-line treatment of metastatic squamous non-small cell lung cancer (NSCLC)
- **Limitations of use:** not for treatment of non-squamous NSCLC

Dosage & Administration

- Give by IV infusion over 60 mins prior to gemcitabine and cisplatin infusion
- 800mg on Days 1 and 8 of each 3-week cycle; continue until disease progression or unacceptable toxicity
- May premedicate with diphenhydramine HCl (or equivalent) if previously experienced a Grade 1/2 infusion-related reaction
- Dose modifications: see full labeling

Considerations for Special Populations

- **Pregnancy:** Use effective contraception during therapy and for 3 months after last dose
- **Nursing mothers:** Not recommended during therapy and for 3 months after last dose
- **Pediatric:** Not established
- **Geriatric:** Higher VTE incidence in patients >70yrs
- **Hepatic impairment:** Severe impairment: not studied

Warnings/Precautions

- Risk of cardiopulmonary arrest and/or sudden death, hypomagnesemia
- History of coronary artery disease, CHF, or arrhythmias
- Monitor serum electrolytes (eg, Mg, K, Ca) prior to each infusion during therapy and for 8 weeks after last dose; withhold for Grade 3/4 electrolyte abnormalities and may resume once improved to Grade ≤2

Warnings/Precautions

- Discontinue if serious or life-threatening venous/arterial thromboembolic events or infusion-related reactions occur
- Discontinue if Grade 4 skin reactions or Grade 3 skin induration/fibrosis occurs
- Limit sun exposure

Adverse Reactions

- Rash
- Dermatitis acneiform
- Vomiting
- Diarrhea
- Thromboembolic events
- Hypomagnesemia
- Hypocalcemia
- Hypokalemia
- Cardiopulmonary arrest
- Dermatologic toxicities
- Infusion reactions
- Embryo-fetal toxicity

Mechanism of Action

- Necitumumab, a recombinant human IgG1 monoclonal antibody, binds to human EGFR and blocks the binding of EGFR to its ligands
- EGFR expression and activation has been correlated with malignant progression, angiogenesis induction and apoptosis inhibition
- *In vitro,* binding of necitumumab induces EGFR internalization and degradation, and also led to antibody-dependent cellular cytotoxicity in EGFR-expressing cells

Clinical Trials

- Portrazza was evaluated in a randomized, multicenter, open-label, controlled trial of 1,093 patients with metastatic squamous NSCLC receiving gemcitabine and cisplatin as first-line therapy (**Study 1**)
- Patients were randomized 1:1 to receive either Portrazza (800mg IV, Days 1 and 8) plus gemcitabine (1250mg/m^2, Days 1 and 8) and cisplatin (75mg/m^2, Day 1) or gemcitabine and cisplatin alone every 3 weeks (1 cycle) for a maximum of 6 cycles in the absence of disease progression or unacceptable toxicity

Clinical Trials

- Patients demonstrating at least stable disease on the Portrazza combination therapy were to continue Portrazza as a single agent in absence of disease progression after completion of 6 courses or if chemotherapy was discontinued due to toxicity
- The **primary outcome measure** was overall survival (OS)
- Progression-free survival (PFS) and overall response rate (ORR) were also assessed

Clinical Trials

- Portrazza plus gemcitabine and cisplatin demonstrated a statistically significant improvement in OS and PFS compared to gemcitabine and cisplatin alone, with a median OS of **11.5 months** vs. **9.9 months**, respectively (HR 0.84; [95% CI: 0.74, 0.96];*P*=0.01] and a median PFS of **5.7 months** vs. **5.5 months**, respectively (HR 0.85; [95% CI: 0.74, 0.98]; *P*=0.02)

Clinical Trials

- No difference in ORR were seen between the two arms, with an ORR of **31%** (95% CI: 27, 35) for the Portrazza combination arm and an ORR of **29%** (95% CI: 25, 33) for gemcitabine and cisplatin arm (*P*=0.40)

Clinical Trials

- In the non-squamous NSCLC trial, Portrazza plus pemetrexed and cisplatin demonstrated lack of efficacy, with no improvement in OS (HR=1.01; [95% CI: 0.84, 1.21]; *P*=0.96), PFS (HR=0.96; [95% CI: 0.8, 1.16]), or ORR (31% in Portrazza combination vs. 32% in control arm)
- For more clinical trial data, see full labeling

New Product Monograph

- For more information view the complete product monograph available at:

  http://www.empr.com/portrazza/drugproduct/405/