

## **NK1 ANTAGONISTS**

Akynzeo capsules (netupitant and palonosetron)
Akynzeo injection (fosnetupitant and palonosetron)
Cinvanti injection, Emend capsules, Emend oral suspension (aprepitant)
Emend injection, Focinvez\* injection (fosaprepitant)
Varubi tablets (rolapitant)

\*Product covered on the medical benefit only

## RATIONALE FOR INCLUSION IN PA PROGRAM

## Background

Akynzeo, Cinvanti, Emend, Focinvez, and Varubi are antiemetics which work by antagonizing the action of substance P at the neurokinin 1 (NK1) receptor. NK1 antagonists are used to help prevent the nausea and vomiting that happens acutely or which is delayed following the administration of certain anti-cancer medicines (chemotherapy) and can also be used in the prevention of postoperative nausea and vomiting (1-6).

## **Regulatory Status**

FDA-approved indications:

# Akynzeo capsules and injection (1)

Akynzeo capsule is a fixed combination of netupitant, a substance P/neurokinin 1 (NK1) receptor antagonist, and palonosetron, a serotonin-3 (5-HT3) receptor antagonist indicated for the prevention of:

1. acute and delayed nausea and vomiting associated with initial and repeat courses of cancer chemotherapy, including, but not limited to, highly emetogenic chemotherapy.

Akynzeo for injection is a combination of fosnetupitant and palonosetron indicated for the prevention of:

1. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy.

# Cinvanti injection (2)

- 1. Indicated for adults, in combination with other antiemetic agents for the prevention of:
  - a. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin as a single-dose regimen



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- b. delayed nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC) as a single dose regimen
- c. nausea and vomiting associated with initial and repeat courses of MEC as a 3-day regimen

# **Emend oral suspension** (3)

- 1. Indicated in combination with other antiemetic agents, in patients 6 months of age and older for the prevention of:
  - a. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin
  - b. nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC)

## Emend capsules (3)

- 1. Indicated in combination with other antiemetic agents, in patients 12 years of age and older for the prevention of:
  - a. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin
  - b. nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC)
- 2. For the prevention of postoperative nausea and vomiting (PONV)

## Emend injection (4)

- 1. Indicated for adults and pediatric patients 6 months of age and older, in combination with other antiemetic agents, for the prevention of:
  - a. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin



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b. delayed nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC)

# Focinvez injection (5)

- 1. Indicated for adults and pediatric patients 6 months of age and older, in combination with other antiemetic agents for the prevention of:
  - a. acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy (HEC) including high-dose cisplatin
  - b. delayed nausea and vomiting associated with initial and repeat courses of moderately emetogenic cancer chemotherapy (MEC)

# Varubi tablets (6)

- 1. Varubi is indicated in combination with other antiemetic agents in adults for the prevention of:
  - a. delayed nausea and vomiting associated with initial and repeat courses of emetogenic cancer chemotherapy, including, but not limited to, highly emetogenic chemotherapy

## Limitations of Use:

- 1. Akynzeo for injection has not been studied for the prevention of nausea and vomiting associated with anthracycline plus cyclophosphamide chemotherapy (1).
- 2. Emend is not used to treat nausea and vomiting that the patient already has and should not be used continuously for a long time (chronic use) (3-4).
- 3. Cinvanti and Focinvez have not been studied for treatment of established nausea and vomiting (2, 5).

## Summary

NK1 antagonists are indicated for the prevention of nausea and vomiting associated with initial and repeat courses of cancer chemotherapy. Aprepitant is also indicated for the prevention of



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postoperative nausea and vomiting in adults (1-6).

Prior approval is required to ensure the safe, clinically appropriate, and cost-effective use of NK1 antagonists while maintaining optimal therapeutic outcomes.

## References

- 1. Akynzeo capsules and Akynzeo for Injection [package insert]. Iselin, NJ: Helsinn Therapeutics (U.S.), Inc.; February 2023.
- 2. Cinvanti [package insert]. San Diego, CA: Heron Therapeutics, Inc.; March 2022.
- 3. Emend [package insert]. Rahway, NJ: Merck & CO, Inc.; May 2022.
- 4. Emend for Injection [package insert]. Rahway, NJ: Merck & CO, Inc.; May 2022.
- 5. Focinvez [package insert]. North Brunswick, NJ: Spes Pharmaceuticals Inc.; August 2023.
- 6. Varubi [package insert]. Deerfield, IL: TerSera Therapeutics LLC; August 2020.