

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.