Clinical Policy: Netupitant and Palonosetron (Akynzeo), Fosnetupitant and Palonosetron (Akynzeo IV)
Reference Number: CP.PMN.158
Effective Date: 09.01.06
Last Review Date: 02.20
Line of Business: HIM, Medicaid

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Netupitant/palonosetron (Akynzeo®) and fosnetupitant/palonosetron are fixed combination products of netupitant, a substance P/neurokinin 1 (NK1) receptor antagonist, and palonosetron hydrochloride, a serotonin (5-HT3) receptor antagonist.

FDA Approved Indication(s)
Akynzeo capsules are indicated in combination with dexamethasone in adults for the prevention of 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 indicated in combination with dexamethasone in adults for the prevention of acute and delayed nausea and vomiting associated with initial and repeat courses of highly emetogenic cancer chemotherapy.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Akynzeo is medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Prevention of Nausea and Vomiting Associated with Cancer Chemotherapy (must meet all):
      1. Prescribed for the prevention of chemotherapy-induced nausea/vomiting;
      2. Age ≥ 18 years;
      3. If request is for Akynzeo capsules, member is scheduled to receive moderately to highly emetogenic cancer chemotherapy (see Appendix D);
      4. If request is for Akynzeo for injection, member is scheduled to receive highly emetogenic cancer chemotherapy (see Appendix D);
      5. Failure of a 5-HT3 receptor antagonist (ondansetron is preferred) at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
      6. Failure of an NK1 antagonist (aprepitant is preferred) at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;

*Prior authorization is required for aprepitant
7. Prescribed in combination with dexamethasone;
8. If request is for Akynzeo capsules, dose does not exceed netupitant 300 mg/palonosetron 0.5 mg (1 capsule) per chemotherapy cycle;
9. If request is for Akynzeo for injection, dose does not exceed fosnetupitant 235 mg/palonosetron 0.25 mg (1 vial) per chemotherapy cycle.

Approval duration: Projected course of chemotherapy

B. Other diagnoses/indications
1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): HIM.PHAR.21 for health insurance marketplace and CP.PMN.53 for Medicaid.

II. Continued Therapy
A. Prevention of Nausea and Vomiting Associated with Cancer Chemotherapy (must meet all):
1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for Akynzeo capsules, member continues to receive moderately to highly emetogenic cancer chemotherapy; (see Appendix D);
4. If request is for Akynzeo for injection, member continues to receive highly emetogenic cancer chemotherapy (see Appendix D);
5. Prescribed in combination with dexamethasone;
6. If request is for a dose increase of Akynzeo capsules, new dose does not exceed netupitant 300 mg/palonosetron 0.5 mg (1 capsule) per chemotherapy cycle;
7. If request is for a dose increase of Akynzeo for injection, new dose does not exceed fosnetupitant 235 mg/palonosetron 0.25 mg (1 vial) per chemotherapy cycle.

Approval duration: Projected course of chemotherapy

B. Other diagnoses/indications (must meet 1 or 2):
1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.
   Approval duration: Duration of request or 12 months (whichever is less); or
2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): HIM.PHAR.21 for health insurance marketplace and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:
A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – HIM.PHAR.21 for health insurance marketplace and CP.PMN.53 for Medicaid or evidence of coverage documents.
IV. Appendices/General Information

**Appendix A: Abbreviation/Acronym Key**

- 5HT3: serotonin 5-hydroxytryptamine, type 3
- ASCO: American Society of Clinical Oncology
- FDA: Food and Drug Administration
- NCCN: National Comprehensive Cancer Network
- NK1: neurokinin 1

**Appendix B: Therapeutic Alternatives**

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5-HT3 Serotonin Antagonists</strong></td>
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</table>
| Aloxi® (palonosetron)  | Prevention of nausea and vomiting associated with chemotherapy  
0.25 mg IV given 30 min prior to chemotherapy                                      | 0.25 mg/day                           |
| Anzemet® (dolasetron)  | Prevention of nausea and vomiting associated with chemotherapy  
100 mg PO within 1 hr prior to chemotherapy                                        | 100 mg/day                            |
| granisetron (Kytril®) | Prevention of nausea and vomiting associated with chemotherapy  
Tablet: 2 mg PO QD given 1 hr prior to chemotherapy, or 1 mg PO BID (one dose given 1 hr prior to chemotherapy and then 12 hours later)  
Injection: 10 mcg/kg IV given within 30 min prior to chemotherapy (on days chemotherapy is given) | PO: 2 mg/day  
IV: 10 mcg/kg/day |
| ondansetron (Zofran®, Zofran® ODT, Zuplenz®) | Prevention of nausea and vomiting associated with moderately emetogenic chemotherapy  
Age 12 years or older: 8 mg PO given 30 min prior to chemotherapy, then repeat dose 8 hrs after initial dose, then 8 mg PO BID for 1 to 2 days after chemotherapy completion  
Age 4 to 11 years: 4 mg PO given 30 min prior to chemotherapy, then repeat dose 4 and 8 hrs after initial dose, then 8 mg PO TID for 1 to 2 days after chemotherapy completion  
Prevention of nausea and vomiting associated with highly emetogenic chemotherapy | PO: 24 mg/day  
IV: 16 mg/dose (up to 3 doses/day) |
### CLINICAL POLICY

#### Netupitant and Palonosetron

<table>
<thead>
<tr>
<th>Drug Name</th>
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<th>Dose Limit/Maximum Dose</th>
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<tbody>
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<td><strong>Drug Name</strong></td>
<td><strong>Dosing Regimen</strong></td>
<td><strong>Dose Limit/Maximum Dose</strong></td>
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<tr>
<td></td>
<td>24 mg PO given 30 min prior to start of single-day chemotherapy</td>
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<td></td>
<td><strong>Prevention of nausea and vomiting associated with emetogenic chemotherapy</strong></td>
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<tr>
<td></td>
<td>0.15 mg/kg/dose IV given 30 min prior to chemotherapy, then repeat dose 4 and 8 hrs after initial dose</td>
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<tr>
<td></td>
<td><strong>Prevention of nausea and vomiting associated with chemotherapy</strong></td>
<td></td>
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<tr>
<td></td>
<td>1 patch/7 days</td>
<td></td>
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<tr>
<td><strong>Sancuso® (granisetron)</strong></td>
<td><strong>Prevention of moderately emetogenic chemotherapy</strong></td>
<td>10 mg/7 days</td>
</tr>
<tr>
<td></td>
<td>10 mg SC given 30 min prior to chemotherapy on day 1 (in combination with other agents). Do not administer more frequently than once every 7 days.</td>
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</tr>
<tr>
<td></td>
<td><strong>NK₁ Antagonists</strong></td>
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<td></td>
<td>** Prevention of nausea and vomiting associated with moderately to highly emetogenic chemotherapy**</td>
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<tr>
<td></td>
<td><strong>Capsules:</strong> 125 mg PO on day 1 and 80 mg PO on days 2 and 3</td>
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<td></td>
<td><strong>Oral suspension:</strong> 3 mg/kg PO on Day 1, then 2 mg/kg PO on Days 2 and 3</td>
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<tr>
<td></td>
<td><strong>Prevention of nausea and vomiting associated with moderately to highly emetogenic chemotherapy</strong></td>
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<tr>
<td></td>
<td>150 mg IV on day 1 (for single dose chemo regimens)</td>
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<tr>
<td></td>
<td><strong>Prevention of nausea and vomiting associated with moderately to highly emetogenic chemotherapy</strong></td>
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<tr>
<td></td>
<td>180 mg PO on day 1</td>
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Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.
Appendix C: Contraindications/BoxedWarnings
None reported

Appendix D: American Society of Clinical Oncology (ASCO) and National Comprehensive Cancer Network (NCCN) Recommendations in Oncology

- Minimal emetic risk chemotherapy: No routine prophylaxis is recommended.
- Low emetic risk chemotherapy: Recommended options include dexamethasone (recommended by both ASCO and NCCN) or metoclopramide, prochlorperazine, or a 5-HT3 receptor antagonist (recommended by NCCN only). NK1 receptor antagonists are not included in low risk antiemetic recommendations.
- Moderate emetic risk chemotherapy: 5-HT3 receptor antagonists and dexamethasone may be used in combination and with or without NK1 receptor antagonists. Olanzapine may also be used in combination with palonosetron and dexamethasone.
  - Examples of moderate emetic risk chemotherapy: azacitidine, alemtuzumab, bendamustine, carboplatin, clofarabine, cyclophosphamide < 1,500 mg/m², cytarabine < 1,000 mg/m², daunorubicin, doxorubicin, epirubicin, idarubicin, ifosfamide, irinotecan, oxaliplatin
- High emetic risk chemotherapy: NK1 receptor antagonists are recommended for use in combination with 5-HT3 receptor antagonists and dexamethasone. Olanzapine may also be used in combination with 5-HT3 receptor antagonists, dexamethasone, and/or NK1 receptor antagonists.
  - Examples of high emetic risk chemotherapy: carmustine, cisplatin, cyclophosphamide ≥ 1,500 mg/m², dacarbazine, dactinomycin, mechlorethamine, streptozocin.
- Breakthrough emesis: Per NCCN, an agent from a different drug class is recommended to be added to the current antiemetic regimen. Drug classes include atypical antipsychotics (olanzapine), benzodiazepines (lorazepam), cannabinoids (dronabinol, nabilone), phenothiazines (prochlorperazine, promethazine), 5-HT3 receptor antagonists (dolasetron, ondansetron, granisetron), steroids (dexamethasone), or (haloperidol, metoclopramide, scopolamine). An NK1 receptor antagonist may be added to the prophylaxis regimen of the next chemotherapy cycle if not previously included.

V. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
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<tbody>
<tr>
<td>Prevention of chemotherapy-induced</td>
<td>1 capsule PO given 1 hr prior to chemotherapy on Day 1, in combination with</td>
<td>1 capsule or 1 vial on Day 1 of chemotherapy</td>
</tr>
<tr>
<td>nausea and vomiting</td>
<td>dexamethasone or 1 vial infused IV over 30 minutes starting 30 minutes</td>
<td>cycle</td>
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<tr>
<td></td>
<td>before chemotherapy on Day 1, in combination with dexamethasone.</td>
<td></td>
</tr>
</tbody>
</table>

VI. Product Availability

- Capsules: 300 mg netupitant/0.5 mg palonosetron
- Single dose vial, powder for reconstitution: 235 mg fosnetupitant/0.25 mg palonosetron

VII. References

<table>
<thead>
<tr>
<th>Reviews, Revisions, and Approvals</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
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</thead>
<tbody>
<tr>
<td>Policy created.</td>
<td>01.17</td>
<td></td>
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<tr>
<td>3Q 2018 annual review: policies combined for HIM and Medicaid lines of business; For Medicaid, policy split from CP.PMN.11 Oral Antiemetics into individual policies; For HIM and Medicaid: added requirement that member is scheduled to receive moderately to highly emetogenic cancer chemo per NCCN recommendations; modified trial and failure of ondansetron and granisetron to require one 5-HT₃ receptor antagonist (ondansetron is preferred for both lines of business); added trial and failure of an NK₁ antagonist (aprepitant is preferred); added requirement that Akynzeo must be prescribed in combination with dexamethasone per FDA labeling for initial and continued approval; specified that member must be receiving moderately to highly emetogenic chemotherapy for initial and continued approval; revised max dose requirement to per chemotherapy cycle; For HIM: added age requirement.; For Medicaid: removed requirement that 5-HT₃ receptor antagonist must be tried in the last 60 days, modified approval duration for chemotherapy-induced N/V to duration of chemotherapy; references reviewed and updated.</td>
<td>05.15.18</td>
<td>08.18</td>
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<tr>
<td>1Q 2019 annual review: no significant changes; references reviewed and updated.</td>
<td>10.30.18</td>
<td>02.19</td>
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<tr>
<td>RT4: Akynzeo IV formulation added.</td>
<td>06.21.19</td>
<td></td>
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<tr>
<td>1Q 2020 annual review: no significant changes; revised HIM-Medical Benefit to HIM; references reviewed and updated.</td>
<td>01.22.20</td>
<td>02.20</td>
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</table>

**Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in
developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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**Note:**

For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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