Clinical Policy: Deutetrabenazine (Austedo)
Reference Number: CP.PHAR.341
Effective Date: 06.13.17
Last Review Date: 05.20
Line of Business: Commercial, HIM, Medicaid

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

Description
Deutetrabenazine (Austedo®) is a vesicular monoamine transporter 2 (VMAT2) inhibitor.

FDA Approved Indication(s)
Austedo is indicated for the treatment of:
- Chorea associated with Huntington’s disease
- Tardive dyskinesia in adults

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 Austedo is medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Huntington’s Disease (must meet all):
      1. Diagnosis of chorea associated with Huntington’s disease;
      2. Prescribed by or in consultation with a neurologist;
      3. Age ≥ 18 years;
      4. Failure of tetrabenazine at up to 100 mg/day, unless contraindicated or clinically significant adverse effects are experienced;
      5. At the time of request, tetrabenazine or valbenazine is not prescribed concomitantly;
      6. Dose does not exceed 48 mg/day.
   Approval duration:
   Medicaid/HIM – 6 months
   Commercial – Length of Benefit

   B. Tardive Dyskinesia (must meet all):
      1. Diagnosis of tardive dyskinesia secondary to a centrally acting dopamine receptor blocking agent (DRBA);
         *See Appendix F; if the offending agent is not included in Appendix F, the status of the agent as a centrally acting DRBA as well as its association with tardive dyskinesia should be confirmed.
      2. Prescribed by or in consultation with a psychiatrist or neurologist;
      3. Age ≥ 18 years;
      4. At the time of request, tetrabenazine or valbenazine is not prescribed concurrently;
      5. Dose does not exceed 48 mg/day.
   Approval duration:
C. 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): CP.CPA.09 for commercial, HIM.PHAR.21 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy
   A. All Indications in Section I (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. Tetrabenazine or valbenazine is not prescribed concomitantly;
      4. If request is for a dose increase, new dose does not exceed 48 mg/day.
         Approval duration:
         Medicaid/HIM – 12 months
         Commercial – Length of Benefit
   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 6 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): CP.CPA.09 for commercial, 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 – CP.CPA.09 for commercial, 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
    DRBA: dopamine receptor blocking agent    MAOI: monoamine oxidase inhibitor
    FDA: Food and Drug Administration    VMAT: vesicular monoamine transporter

    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.
Deutetrabenazine

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/ Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrabenazine (Xenazine®)</td>
<td><strong>Huntington’s Chorea</strong>&lt;br&gt;12.5 mg PO QD for 1 week, then 12.5 mg BID, then titrated by 12.5 mg weekly to a tolerated dose up to maximum of 50 mg/day (100 mg/day for CYP2D6 intermediate or extensive metabolizers)</td>
<td>25 mg/dose and 50 mg/day (37.5 mg/dose and 100 mg/day for CYP2D6 intermediate or extensive metabolizers)</td>
</tr>
</tbody>
</table>

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/Boxed Warnings**
- Contraindication(s):
  - QT prolongation
  - Neuroleptic Malignant Syndrome (NMS)
  - Akathisia, agitation, restlessness, and parkinsonism
  - Sedation/somnolence
- Boxed warning(s):
  - Depression and suicidality

**Appendix D: General Information**
- Medication-induced movement disorders, including tardive dyskinesia, are organized in the DSM V as follows: neuroleptic-induced parkinsonism/other medication-induced parkinsonism, neuroleptic malignant syndrome, medication-induced acute dystonia, medication-induced acute akathisia, tardive dyskinesia, tardive dystonia/tardive akathisia, medication-induced postural tremor, other medication-induced movement disorder, antidepressant discontinuation syndrome, and other adverse effects of medication.\(^5\)
- Tardive dyskinesia is a type of movement disorder that occurs secondary to therapy with centrally acting DRBAs (see Appendix E).\(^5\)
- Typical therapeutic drug classes containing DRBAs include first- and second-generation antipsychotics, antiemetics, and tri-cyclic antidepressants (see Appendix F).\(^5\)
- Other therapeutic drug classes containing agents that have been variously associated with movement disorders are listed below:\(^6-8\)
  - Antiarrhythmics
  - Antibiotics
  - Anticholinergics
  - Antidepressants
  - Antiepileptics
  - Antihistamines
  - Antimetics
  - Bronchodilators
  - Calcium channel blockers
  - Central nervous system stimulants
  - Dopamine agonists
  - Dopamine depleting agents
  - Dopaminergics
  - Glucocorticoids
  - Immunosuppressants
  - Mood stabilizers
  - Muscle relaxants
  - Oral contraceptives
Tardive Dyskinesia (ICD-9 333.85/ICD-10 G24.01)

- Involuntary athetoid or choreiform movements (lasting at least a few weeks) generally of the tongue, lower face and jaw, and extremities (but sometimes involving the pharyngeal, diaphragmatic, or trunk muscles) developing in association with the use of a neuroleptic medication for at least a few months.
- Symptoms may develop after a shorter period of medication use in older persons. In some patients, movements of this type may appear after discontinuation, or after change or reduction in dosage, of neuroleptic medications, in which case the condition is called neuroleptic withdrawal emergent dyskinesia. Because withdrawal emergent dyskinesia is usually time limited, lasting less than 4-8 weeks, dyskinesia that persists beyond this window is considered to be tardive dyskinesia.

Appendix F: Centrally Acting Dopamine Receptor Blocking Agents (Neuroleptics)\(^5,6,9,10\)

<table>
<thead>
<tr>
<th>Pharmacologic Class</th>
<th>First-generation (typical) antipsychotics</th>
<th>Therapeutic Class</th>
<th>Tri-cyclic antidepressants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Antiemetic agents</td>
<td></td>
</tr>
<tr>
<td>Phenothiazine</td>
<td>Chlorpromazine</td>
<td>Chlorpromazine</td>
<td>Amoxapine(^\d)</td>
</tr>
<tr>
<td></td>
<td>Fluphenazine</td>
<td>Perphenazine</td>
<td></td>
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<tr>
<td></td>
<td>Perphenazine</td>
<td>Prochlorperazine</td>
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<tr>
<td></td>
<td>Thioridazine</td>
<td>Promethazine*</td>
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<tr>
<td></td>
<td>Thiotoxiplene</td>
<td>Thiethylperazine</td>
<td></td>
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<tr>
<td></td>
<td>Trifluoperazine</td>
<td></td>
<td></td>
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<tr>
<td>Butryphenone</td>
<td>Haloperidol</td>
<td>Droperidol**</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Haloperidol</td>
<td></td>
</tr>
<tr>
<td>Substituted benzamide</td>
<td>Loxapine</td>
<td>Metoclopromide</td>
<td></td>
</tr>
<tr>
<td>Dibenzazepine</td>
<td></td>
<td>Trimethobenzamide</td>
<td></td>
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<tr>
<td>Diphenylbutylpiperidine</td>
<td>Pimozide</td>
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<td></td>
</tr>
</tbody>
</table>

Second-generation (atypical) antipsychotics

- Quinolone
- Aripiprazole, brexpiprazole
- Dibenzazepine
- Asenapine
- Piperazine
- Cariprazine
- Dibenzodiazepine
- Clozapine, quetiapine
- Benzisoxazole
- Iloperidone
- Benzisothiazole
- Lurasidone, ziprasidone
- Thienobenzodiazepine
- Olanzapine
- Pyrimidinone
- Paliperidone, risperidone

*First generation H1 antagonist
**Off-label use
\(^\d\) A dibenzoxapine that shares properties with phenothiazines
V. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huntington’s chorea</td>
<td>6 mg/day (6 mg once daily) PO; may be increased weekly by increments of 6 mg/day to a maximum of 48 mg/day</td>
<td>48 mg/day (18 mg/dose and 36 mg/day in poor CYP2D6 metabolizers)</td>
</tr>
<tr>
<td>Tardive dyskinesia</td>
<td>12 mg/day (6 mg twice daily) PO; may be increased weekly by increments of 6 mg/day to a maximum of 48 mg/day</td>
<td>48 mg/day (18 mg/dose and 36 mg/day in poor CYP2D6 metabolizers)</td>
</tr>
</tbody>
</table>

VI. Product Availability

Tablets: 6 mg, 9 mg, 12 mg

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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<tbody>
<tr>
<td>Policy created</td>
<td>05.17</td>
<td>08.17</td>
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<tr>
<td>Tardive dyskinesia: Added criteria and corresponding appendices. Huntington’s chorea: Added age requirement per prescribing information. Added preferencing for tetrabenazine per SDC.</td>
<td>10.17.17</td>
<td>02.18</td>
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## Reviews, Revisions, and Approvals

<table>
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<tr>
<th>Description</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both indications: Added requirement for no concomitant use of xenazine or valbenazine for both initial and re-auth requests.</td>
<td></td>
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<tr>
<td>Policies combined for Centene Medicaid and Commercial lines of business.</td>
<td>11.27.17</td>
<td>02.18</td>
</tr>
<tr>
<td>2Q 2018 annual review: no significant changes; modified continued approval duration for Medicaid for 6 to 12 months; references reviewed and updated.</td>
<td>02.05.18</td>
<td>05.18</td>
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<tr>
<td>2Q 2019 annual review: no significant changes; added HIM line of business; references reviewed and updated.</td>
<td>02.26.19</td>
<td>05.19</td>
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<tr>
<td>2Q 2020 annual review: no significant changes; references reviewed and updated.</td>
<td>02.11.20</td>
<td>05.20</td>
</tr>
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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.

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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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