

### **Clinical Policy: Deutetrabenazine (Austedo, Austedo XR)**

Reference Number: CP.PCH.42

Effective Date: 06.01.21 Last Review Date: 05.25

Line of Business: Commercial, HIM

Revision Log

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

### **Description**

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

### FDA Approved Indication(s)

Austedo and Austedo XR are indicated for the treatment of:

- Chorea associated with Huntington's disease
- Tardive dyskinesia (TD) 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<sup>®</sup> that Austedo or Austedo XR is **medically necessary** when the following criteria are met:

### I. Initial Approval Criteria

### A. Chorea Associated with Huntington Disease (must meet all):

- 1. Diagnosis of chorea associated with Huntington disease;
- 2. Prescribed by or in consultation with a neurologist;
- 3. Age  $\geq$  18 years;
- 4. Targeted mutation analysis demonstrates a cytosine-adenine-guanine (CAG) trinucleotide expansion of ≥ 36 repeats in the huntingtin (HTT) gene;
- 5. Evidence of chorea is supported by a Unified Huntington Disease Rating Scale (UHDRS) score ranging from 1 to 4 on any one of chorea items 1 through 7 (*see Appendix D*);
- 6. Austedo/Austedo XR is not prescribed concurrently with tetrabenazine or Ingrezza<sup>®</sup>;
- 7. Dose does not exceed 48 mg per day.

### **Approval duration:**

HIM - 6 months

**Commercial** – 12 months or duration of request, whichever is less

#### **B.** Tardive Dyskinesia (must meet all):

- 1. Diagnosis of TD secondary to treatment with a centrally acting dopamine receptor blocking agent (DRBA) (*see Appendix G*);
- 2. Prescribed by or in consultation with a psychiatrist or neurologist;
- 3. Age  $\geq$  18 years;



- 4. Austedo/Austedo XR is not prescribed concurrently with tetrabenazine or Ingrezza;
- 5. Dose does not exceed 48 mg per day.

### **Approval duration:**

HIM – 6 months

**Commercial** – 12 months or duration of request, whichever is less

### C. Other diagnoses/indications (must meet 1 or 2):

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial and HIM.PA.33 for health insurance marketplace; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial and HIM.PA.103 for health insurance marketplace; or
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial and HIM.PA.154 for health insurance marketplace.

### **II. Continued Therapy**

### A. All Indications in Section I (must meet all):

- 1. Member meets one of the following (a or b):
  - a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
  - b. Member is currently receiving medication and is enrolled in a state and product with continuity of care regulations (refer to state specific addendums for CC.PHARM.03A and CC.PHARM.03B);
- 2. Member meets one of the following (a or b):
  - a. For Huntington disease: Member is responding positively to therapy as evidenced by a reduction since baseline in any one of UHDRS chorea items 1 through 7 (*see Appendix D*);
  - b. For TD: Member is responding positively to therapy as evidenced by a reduction since baseline in any one of Abnormal Involuntary Movement Scale (AIMS) items 1 through 9 (see Appendix H);
- 3. Austedo/Austedo XR is not prescribed concurrently with tetrabenazine or Ingrezza;
- 4. If request is for a dose increase, new dose does not exceed 48 mg per day.

### **Approval duration:**

HIM - 12 months

**Commercial** – 12 months or duration of request, whichever is less



### **B.** Other diagnoses/indications (must meet 1 or 2):

- 1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
  - a. For drugs on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial and HIM.PA.33 for health insurance marketplace; or
  - b. For drugs NOT on the formulary (commercial, health insurance marketplace) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial and HIM.PA.103 for health insurance marketplace; or
- 2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial and HIM.PA.154 for health insurance marketplace.

### 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 and HIM.PA.154 for health insurance marketplace, or evidence of coverage documents.

### IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key
AAN: American Academy of Neurology
AIMS: Abnormal Involuntary Movement
Scale

APA: American Psychiatry Association DRBA: dopamine receptor blocking agent DSM-5-TR: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision FDA: Food and Drug Administration

HTT: huntingtin

MAOI: monoamine oxidase inhibitor

TD: tardive dyskinesia

**UHDRS:** Unified Huntington Disease Rating

Scale

VMAT: vesicular monoamine transporter

Appendix B: Therapeutic Alternatives Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
  - Suicidal or untreated/inadequately treated depression in patients with Huntington's disease
  - Hepatic impairment
  - o Taking reserpine, MAOIs, tetrabenazine or valbenazine
- Boxed warning(s): depression and suicidality in patients with Huntington's disease



Appendix D: Chorea: The Unified Huntington Disease Rating Scale (UHDRS)

- The UHDRS encompasses motor, behavioral, cognitive, and functional components for use in evaluating patients with Huntington disease and is commonly used in both research and clinical practice.
- The American Academy of Neurology (AAN) guidelines evaluating pharmacologic therapies for chorea associated with Huntington disease describe the chorea subscore of the UHDRS motor component as a rating of 7 body regions (facial, bucco-oral-lingual, trunk, extremities) on a five-point scale from 0 to 4 with 0 representing no chorea.
- See Huntington Study Group 1996 and Mestre et al. 2018 for additional information about the UHDRS.

(AAN Guidelines 2012, Huntington Study Group 1996, Mestre 2018)

### Appendix E: Tardive Dyskinesia: General Information

- Medication-induced movement disorders, including tardive dyskinesia, are organized in the DSM-5-TR as follows: 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.
- Tardive dyskinesia is a type of movement disorder that occurs secondary to therapy with an antipsychotic medication or other DRBA (*see Appendix F*). (DSM-5-TR)
- Typical therapeutic drug classes containing DRBAs include first- and second-generation antipsychotics, antiemetics, and tri-cyclic antidepressants (see Appendix G). (DSM-5-TR)
- Other therapeutic drug classes containing agents that have been variously associated with movement disorders are listed below: (Waln 2013, Meyer 2014, Lerner 2015)
  - Antiarrhythmics
  - o Antibiotics
  - o Anticholinergics
  - Antidepressants
  - Antiepileptics
  - o Antihistamines
  - o Antimanics
  - Bronchodilators
  - Calcium channel blockers

- o Central nervous system stimulants
- o Dopamine agonists
- o Dopamine depleting agents
- o Dopaminergics
- o Glucocorticoids
- Immunosuppressants
- Mood stabilizers
- Muscle relaxants
- o Oral contraceptives

Appendix F: Tardive Dyskinesia: DSM-5-TR Definition

## Tardive Dyskinesia (ICD-10 G24.01)

- The essential features of tardive dyskinesia are abnormal, involuntary movements of the tongue, jaw, trunk, or extremities that develop in association with the use of medications that block postsynaptic dopamine receptors, such as first- and second-generation antipsychotic medications and other medications such as metoclopramide for gastrointestinal disorders. The movements are present over a period of ≥ 4 weeks and may be choreiform (rapid, jerky, nonrepetitive), athetoid (slow, sinuous, continual), or semirhythmic (e.g., stereotypies) in nature.
- Signs or symptoms of tardive dyskinesia develop during exposure to the antipsychotic medication or other dopamine blocking agent, or within 4 weeks of withdrawal from an



### Tardive Dyskinesia (ICD-10 G24.01)

oral agent (or within 8 weeks of withdrawal from a long-acting injectable agent). There must be a history of the use of the offending agent for  $\geq 3$  months (or 1 month in individuals age  $\geq 60$  years). Dyskinesia that emerges during withdrawal from an antipsychotic medication or other DRBA may remit with continued withdrawal from the medication. If the dyskinesia persists for  $\geq 4$  weeks, a diagnosis of tardive dyskinesia may be warranted.

Appendix G: Tardive Dyskinesia: Centrally Acting Dopamine Receptor Blocking Agents

Pharmacologic Class	Therapeutic Class			
	First-generation (typical) antipsychotics	Antiemetic agents	Tri-cyclic antidepressants	
Phenothiazine	Chlorpromazine Fluphenazine Perphenazine Thioridazine Thiothixene Trifluoperazine	Chlorpromazine Perphenazine Prochlorperazine Promethazine* Thiethylperazine	Amoxapine <sup>†</sup>	
Butryophenone	Haloperidol	Droperidol Haloperidol**		
Substituted benzamide		Metoclopramide Trimethobenzamide		
Dibenzazepine	Loxapine			
Diphenylbutylpiperidine	Pimozide			

Pharmacologic Class	Second-generation (atypical) antipsychotics
Quinolone	Aripiprazole, brexpiprazole
Dibenzazepine	Asenapine
Piperazine	Cariprazine
Dibenzodiazephine	Clozapine, quetiapine
Benzisoxazole	Iloperidone
Benzisothiazole	Lurasidone, ziprasidone
Thienobenzodiazepine	Olanzapine
Pyrimidinone	Paliperidone, risperidone

(DSM-5-TR, Meyer 2014, Smith 2010, Clinical Pharmacology, Lexicomp)

#### Appendix H: The Abnormal Involuntary Movement Scale (AIMS)

- The AIMS is a clinician-rated 12-item assessment tool developed by the National Institute of Mental Health to evaluate severity of involuntary movements in multiple movement disorders including TD. The AIMS is commonly used in both research and clinical practice.
- AIMS items 1-10 are rated on a 5-point scale (0 none; 1 minimal; 2 mild; 3 moderate; 4 severe). Items 1-7 assess dyskinesia severity by body region (items 1-4

<sup>\*</sup>First generation H1 antagonist

<sup>\*\*</sup>Off-label use

 $<sup>^{\</sup>dagger}A$  dibenzoxapine that shares properties with phenothiazines



orofacial; items 5-7 extremity and trunk). Items 8-10 assess overall severity, incapacitation, and patient awareness respectively - item 8 uses the highest score of any one of items 1-7. Items 11 (dental) and 12 (dentures) are yes/no questions which help characterize lip, jaw, and tongue movements.

• See Munetz 1988 for additional information about the AIMS.

### V. Dosage and Administration

Indication	Dosing Regimen	<b>Maximum Dose</b>
Huntington's	When not switching from tetrabenazine:	48 mg/day (36
chorea	Recommended starting dose	mg/day in poor
	Austedo XR: 12 mg PO QD	CYP2D6
TD	Austedo: 6 mg PO BID	metabolizers or
	, and the second	with strong
	Titrate at weekly intervals by 6 mg/day based on	CYP2D6
	reduction of chorea or tardive dyskinesia, and	metabolizers)
	tolerability, up to a maximum recommended daily	
	dosage of 48 mg. When switching between Austedo	
	and Austedo XR, switch to the same total daily	
	dosage.	
	When switching from tetrabenazine: see Prescribing	
	Information dosage chart	

### VI. Product Availability

Drug Name	Availability
Austedo	Immediate-release tablets: 6 mg, 9 mg, 12 mg
Austedo XR	Extended-release tablets: 6 mg, 12 mg, 18 mg, 24 mg, 30
	mg, 36 mg, 42 mg, 48 mg

### VII. References

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#### Huntington Disease

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Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created; split from CP.PHAR.341; removed redirection to tetrabenazine for chorea per Trade.		05.21
Revised approval duration for Commercial line of business from length of benefit to 12 months or duration of request, whichever is less	09.27.21	02.22
2Q 2022 annual review: no significant changes; references reviewed and updated.	01.31.22	05.22
Per May SDC and prior clinical guidance, for TD removed requirement for AIMS score for initial authorizations.	05.20.22	08.22
Template changes applied to other diagnoses/indications and continued therapy section.	09.29.22	
2Q 2023 annual review: no significant changes; references reviewed and updated. RT4: added new extended-release dosage formulation, Austedo XR, to policy.	03.13.23	05.23
2Q 2024 annual review: no significant changes; references reviewed and updated.	01.09.24	05.24
RT4: added new strengths of Austedo XR extended-release tablets (18 mg, 30 mg, 36 mg, 42 mg, 48 mg).		
2Q 2025 annual review: no significant changes; updated Appendix definitions per updated DSM-5-TR; references reviewed and updated.	02.23.25	05.25

#### **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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