Clinical Policy: Central Nervous System (CNS) Agents: Movement Disorders

Reference Number: OH.PHAR.PPA.96
Effective Date: 01.01.2021
Last Review Date: 11.20
Line of Business: Medicaid

Revision Log

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

MOVEMENT DISORDERS

CLINICAL PA REQUIRED "PREFERRED"	PA REQUIRED "NON-PREFERRED"
AUSTEDO ® (deutetrabenazine)† INGREZZA® (valbenazine) TETRABENAZINE (generic of Xenazine®)	

† Quantity limit of 4 tablets per day

Description

Deutetrabenazine (Austedo®), tetrabenazine (Xenazine®) and valbenazine (Ingrezza®) are vesicular monoamine transporter 2 (VMAT2) inhibitors.

FDA Approved Indication(s)

Austedo is indicated for the treatment of:

- Chorea associated with Huntington's disease
- Tardive dyskinesia (TD) in adults

Ingrezza is indicated for the treatment of adults with tardive dyskinesia.

Xenazine is indicated for the treatment of chorea associated with Huntington's disease.

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, Xenazine or Ingrezza are **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. Requested medication is either Austedo or Xenazine;
3. Member must meet labeled age requirements for requested medication;
4. If requested medication is Austedo member has had a trial and failure of tetrabenazine at maximally tolerated doses up to 100 mg per day, unless contraindicated or clinically significant adverse effects are experienced;
5. Requested medication is not prescribed concurrently with another VMAT2 inhibitor;
6. Dose does not exceed the FDA-approved maximum recommended dose for the relevant indication

Approval duration: 12 months

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. Requested medication is either Austedo or Ingrezza;
3. Prescribed by or in consultation with a neurologist or psychiatrist;
4. Member must meet labeled age requirements for requested medication;
5. Requested medication is not prescribed concurrently with another VMAT2 inhibitor;
6. Dose does not exceed the FDA-approved maximum recommended dose for the relevant indication

Approval duration: 12 months

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 and CP.PMN.53 for Medicaid.

II. 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 V: Diagnostic and Statistical Manual, Version 5
FDA: Food and Drug Administration
HTT: huntingtin
MAOI: monoamine oxidase inhibitor
UHDRS: Unified Huntington Disease Rating Scale
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.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
tetrabenazine (Xenazine®)	**Huntington's Chorea** 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)	25 mg/dose and 50 mg/day (37.5 mg/dose and 100 mg/day for CYP2D6 intermediate or extensive metabolizers)
Deutetrabenazine (Austedo®)	**Huntington's Chorea** 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 **Tardive Dyskinesia** 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	48 mg/day (18 mg/dose and 36 mg/day in poor CYP2D6 metabolizers) 48 mg/day (18 mg/dose and 36 mg/day in poor CYP2D6 metabolizers)
Valbenazine (Ingrezza®)	**Tardive Dyskinesia** 40 mg PO once daily; after a week, increase to 80 mg if needed	80 mg/day

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
  - Akathisia, agitation, restlessness, and parkinsonism
  - Sedation/somnolence
- Boxed warning(s):
  - Depression and suicidality

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 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 F*). (DSM V)
- Typical therapeutic drug classes containing DRBAs include first- and second-generation antipsychotics, antiemetics, and tri-cyclic antidepressants (*see Appendix G*). (DSM V)
- Other therapeutic drug classes containing agents that have been variously associated with movement disorders are listed below: (Waln 2013, Meyer 2014, Lerner 2015)
  - Antiarrhythmics
  - Antibiotics
  - Anticholinergics
  - Antidepressants
  - Antiepileptics
  - Antihistamines
  - Antimanics
  - Bronchodilators
  - Calcium channel blockers
  - Central nervous system stimulants
  - Dopamine agonists
  - Dopamine depleting agents
  - Dopaminergics
  - Glucocorticoids
  - Immunosuppressants
  - Mood stabilizers
  - Muscle relaxants
  - Oral contraceptives

Appendix F: Tardive Dyskinesia: DSM-V Definition

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.

(DSM V)

Appendix G: Tardive Dyskinesia: Centrally Acting Dopamine Receptor Blocking Agents (Neuroleptics)

Pharmacologic Class	**Therapeutic Class**		
	First-generation (typical) antipsychotics	**Antiemetic agents**	**Tri-cyclic antidepressants**
Phenothiazine	Chlorpromazine	Chlorpromazine	Amoxapine†

Pharmacologic Class	Therapeutic Class		
	First-generation (typical) antipsychotics	Antiemetic agents	Tri-cyclic antidepressants
	Fluphenazine Perphenazine Thioridazine Thiothixene Trifluoperazine	Perphenazine Prochlorperazine Promethazine* Thiethylperazine	
Butryophenone	Haloperidol	Droperidol Haloperidol**	
Substituted benzamide		Metoclopromide 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 V, Meyer 2014, Smith 2010, Clinical Pharmacology, Lexicomp)
**First generation H1 antagonist*
***Off-label use*
†A dibenzoxapine that shares properties with phenothiazines

Appendix H: Tardive Dyskinesia: 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 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.
- The American Psychiatric Association (APA) guidelines recommend that patients who have moderate to severe or disabling TD be treated with a reversible VMAT2 inhibitor; the guidelines note that the AIMS tool can be instrumental in such decision-making.
- See Munetz 1988 for additional information about the AIMS.

(APA Guidelines 2020, Munetz 1988)

III. Dosage and Administration

A. Varies by drug product. See FDA approved dosing and administration

IV. Product Availability

A. Varies by drug product. Refer to Clinical Pharmacology or other appropriate clinical resource for product availability.

V. References

A. Refer to package insert

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	11.20	

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.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

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.