

Clinical Policy: Sodium Oxybate (Xyrem) and Calcium, Magnesium, Potassium, and Sodium Oxybate (Xywav)

Reference Number: IL.PMN.42

Effective Date: 10.1.23

Last Review Date: 8.2.23

Line of Business: Youthcare HealthChoice IL

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Sodium oxybate (Xyrem[®]) and calcium, magnesium, potassium, and sodium oxybate (Xywav[™]) are central nervous system (CNS) depressants.

FDA Approved Indication(s)

Xyrem and Xywav are indicated for the treatment of patients 7 years of age and older with:

- Cataplexy in narcolepsy
- Excessive daytime sleepiness (EDS) in narcolepsy

Xywav is also indicated for the treatment of idiopathic hypersomnia (IH) 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 Xyrem and Xywav are **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Narcolepsy with Cataplexy (must meet all):

1. Prescribed for the treatment of cataplexy in narcolepsy;
2. Age ≥ 7 years;
3. Prescribed by or in consultation with a neurologist or sleep medicine specialist;
4. Documentation of one of the following (a or b):
 - a. EDS associated with narcolepsy as confirmed by documented multiple sleep latency test (MSLT) and one of the following (i or ii):
 - i. Mean sleep latency ≤ 8 minutes with evidence of two or more sleep-onset rapid eye movement periods (SOREMPs);
 - ii. At least one SOREMP on MSLT and a SOREMP (less than 15 minutes) on the preceding overnight polysomnography (PSG);
 - b. Lumbar puncture shows cerebrospinal fluid (CSF) hypocretin-1 level ≤ 110 pg/mL;
5. Failure of 2 of the following antidepressants, each used for ≥ 1 month, unless clinically significant adverse effects are experienced or all are contraindicated: venlafaxine, fluoxetine, atomoxetine, clomipramine*, protriptyline*;
**If member's age is ≥ 65 years, tricyclic antidepressants are not required for trial.*

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6. Dose does not exceed 9 grams (18 mL) per day.

Approval duration: 6 months

B. Narcolepsy with Excessive Daytime Sleepiness (must meet all):

1. Diagnosis of narcolepsy with EDS;
2. Age ≥ 7 years;
3. Prescribed by or in consultation with a neurologist or sleep medicine specialist;
4. Documentation of both of the following (a and b):
 - a. EDS associated with narcolepsy as confirmed by documented MSLT and one of the following (i or ii):
 - i. Mean sleep latency ≤ 8 minutes with evidence of two or more SOREMPs;
 - ii. At least one SOREMP on MSLT and a SOREMP (less than 15 minutes) on the preceding overnight PSG;
 - b. Member has daily periods of irrepressible need to sleep or daytime lapses into sleep occurring for at least 3 months;
5. Failure of a 1-month trial of one of the following generic central nervous system stimulant-containing agent at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced: amphetamine, dextroamphetamine, methylphenidate;
**Prior authorization may be required for CNS stimulants*
6. If member is ≥ 17 years of age, failure of a 1-month trial of armodafinil or modafinil at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
**Prior authorization may be required for armodafinil and modafinil*
7. Dose does not exceed 9 grams (18 mL) per day.

Approval duration: 6 months

C. Idiopathic Hypersomnia (must meet all):

1. Diagnosis of IH;
2. Request is for Xywav;
3. Prescribed by or in consultation with a neurologist or sleep medicine specialist;
4. Age ≥ 18 years;
5. Exclusion of all of the following (a,b, and c):
 - a. Narcolepsy of cataplexy;
 - b. Narcolepsy of EDS;
 - c. Insufficient sleep syndrome;
6. Documentation of all of the following (a, b, and c):
 - a. MSLT documents either (i or ii):
 - i. Fewer than two SOREMPs;
 - ii. No SOREMPs if the REM sleep latency on the preceding PSG was ≤ 15 minutes;
 - b. Presence of at least one of the following (i or ii):
 - i. MSLT shows a mean sleep latency of ≤ 8 minutes;
 - ii. Total 24-hour sleep time is ≥ 660 minutes on 24-hour PSG or by wrist actigraphy in association with a sleep log;
 - c. Minimal scoring on at least one of the following (i or ii):
 - i. Score ≥ 10 on Epworth Sleepiness Scale (ESS);

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- ii. Score ≥ 22 on Idiopathic Hypersomnia Severity Scale (IHSS);
- 7. Failure of a 1-month trial of armodafinil or modafinil at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced; **Prior authorization may be required for armodafinil and modafinil*
- 8. Failure of a 1-month trial of one of the following generic central nervous system stimulant-containing agent at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced: amphetamine, dextroamphetamine, methylphenidate; **Prior authorization may be required for CNS stimulants*
- 9. Dose does not exceed 6 grams (12 mL) per day for once nightly dosing and 9 grams (18 mL) per day for twice nightly dosing.

Approval duration: 6 months

D. 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 PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.PMN.255 for Medicaid; 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.PMN.16 for Medicaid; 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.PMN.53 for Medicaid.

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 is responding positively to therapy as evidenced by, but not limited to, improvement in any of the following parameters: reduction in frequency of cataplexy attacks, reported daytime improvements in wakefulness;
- 3. If request is for a dose increase, new dose does not exceed 9 grams (18 mL) per day.

Approval duration: 12 months

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 PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.PMN.255 for Medicaid; 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.PMN.16 for Medicaid; or

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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.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.PMN.53 for Medicaid or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

CNS: central nervous system

EDS: excessive daytime sleepiness

ESS: Epworth Sleepiness Scale

FDA: Food and Drug Administration

IHSS: Idiopathic Hypersomnia Severity Scale

MSLT: multiple sleep latency test

PSG: polysomnography

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SOREMP: sleep-onset rapid eye movement period

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 |
|---|---|--|
| Cataplexy | | |
| venlafaxine (Effexor [®]) [†] | 75–150 mg PO BID, or 75–150 mg (extended release) PO QAM | 375 mg/day* (IR tablets); 225* mg/day (extended release) |
| fluoxetine (Prozac [®]) [†] | 20 to 80 mg PO QAM | 80 mg/day |
| clomipramine (Anafranil [®]) [†] | 10 to 150 mg PO as a single dose every morning or in divided doses | 250 mg/day* |
| protriptyline (Vivactil [®]) [†] | 5 to 60 mg PO as a single dose every morning or in divided doses | 60 mg/day |
| atomoxetine (Strattera [®]) [†] | 40–60 mg PO QD | 100 mg/day* |
| Excessive daytime sleepiness | | |
| amphetamine (Evekeo [®]) | 5 to 60 mg/day PO in divided doses | 60 mg/day |
| amphetamine/ dextroamphetamine (Adderall [®]) | | |
| dextroamphetamine ER (Dexedrine [®] Spansule [®]) | | |
| dextroamphetamine IR (Zenedi [®] , Procentra [®]) | | |
| methylphenidate (Ritalin [®] LA or SR, Concerta [®] , Metadate [®] CD or ER, Methylin [®] ER, Daytrana [®]) | Dosing varies; 10-60 mg PO divided 2 to 3 times daily 30-45 min before meals | 60 mg/day |
| armodafinil (Nuvigil [®]) | 150 mg to 250 mg PO once a day | 250 mg/day |
| modafinil (Provigil [®]) | 200 mg PO QD as a single dose in the morning | 400 mg/day |
| Sunosi [™] (solriamfetol) | Initiate at 75 mg PO once a day; dose may be doubled at intervals of at least 3 days | 150 mg/day |
| Wakix [®] (pitolisant) | Dose range is 17.8 to 35.6 mg PO once daily in the morning upon waking. Titrate dosage as follows: <ul style="list-style-type: none"> • Week 1: Initiate with a dosage of 8.9 mg once daily • Week 2: Increase dosage to 17.8 mg once daily • Week 3: May increase to the maximum recommended dosage of 35.6 mg once daily | 35.6 mg/day |
| Idiopathic hypersomnia | | |
| modafinil (Provigil [®]) [†] | 200 mg PO Q AM | 400 mg/day |

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| Drug Name | Dosing Regimen | Dose Limit/ Maximum Dose |
|--|--|-----------------------------|
| armodafinil (Nuvigil [®]) [†] | 150 mg to 250 mg PO once a day | 250 mg/day |
| methylphenidate (Ritalin [®] LA or SR, Concerta [®] , Metadate [®] CD or ER, Methylin [®] ER, Daytrana [®]) [†] | Dosing varies; 10-60 mg PO divided 2 to 3 times daily 30-45 min before meals | 60 mg/day |
| amphetamine (Evekeo [®]) [†] | 5 to 60 mg/day PO in divided doses | 60 mg/day |
| amphetamine/ dextroamphetamine (Adderall [®]) [†] | | |
| dextroamphetamine ER (Dexedrine [®] Spansule [®]) [†] | | |
| dextroamphetamine IR (Zenedi [®] , Procentra [®]) [†] | | |

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.

*Non-indication specific (maximum dose for the drug)

[†]Off-label indication

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - In combination with sedative hypnotics or alcohol
 - Succinic semialdehyde dehydrogenase deficiency
- Boxed warning(s):
 - Central nervous system depression: In clinical trials at recommended doses, obtundation and clinically significant respiratory depression occurred in adult patients treated with Xyrem or Xywav.
 - Abuse and misuse: Xyrem and Xywav are a sodium salt of gamma-hydroxybutyrate (GHB). Abuse or misuse of illicit GHB is associated with CNS adverse reactions, including seizure, respiratory depression, decreased consciousness, coma and death.

Appendix D: General Information

- PSG:
 - In IH, PSG may show a short sleep latency, increased total sleep time, increased sleep spindles, and variable changes in sleep efficiency and sleep stage distribution
 - Used in diagnostic criteria of IH
 - If no SOREMPs are present on MSLT, REM sleep latency on preceding PSG can be \leq 15 minutes for diagnosis

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- Presence of total 24-hour sleep time > 660 minutes on 24-hour PSG or by wrist actigraphy in association with a sleep log
- MSLT:
 - This test is a series of five daytime nap opportunities that allow objective characterization of the patient’s level of daytime sleepiness, physiological sleep tendency, as reflected by the mean sleep latency
 - In IH, mean sleep latency is shortened and less than 8 minutes and number of SOREMPs is less than two
- IHSS:
 - Ranges from 0 to 50 and made up of 2 components: 5 questions about night and inertia, 9 questions about day and performances
 - Cutoff value of 22 out of 50 can discriminate patients with IH from patients without EDS
 - A cutoff value of 29 out of 50 can discriminate patients with IH from patients with narcolepsy type 1
- ESS:
 - Score is based on scale of 0 to 24
 - 0-5 Lower normal daytime sleepiness
 - 6-10 Higher normal daytime sleepiness
 - 11-12 Mild excessive daytime sleepiness
 - 13-15 Moderate excessive daytime sleepiness
 - 16-24 Severe excessive daytime sleepiness

V. Dosage and Administration

| Indication | Dosing Regimen | Maximum Dose |
|-------------------------|--|--------------|
| Cataplexy in narcolepsy | Adults: The recommended starting dose is 4.5 grams (g) per night administered orally in two equal, divided doses: 2.25 g at bedtime and 2.25 g taken 2.5 to 4 hours later. Increase the dose by 1.5 g per night at weekly intervals (additional 0.75 g at bedtime and 0.75 g taken 2.5 to 4 hours later) to the effective dose range of 6 g to 9 g per night orally Pediatrics: Dosing is weight-based as follows: <i>20 to < 30 kg</i> : ≤ 1 g at bedtime and ≤ 1 g taken 2.5 to 4 hours later. Increase the dose by 1 g per night at weekly intervals (additional 0.5 g at bedtime and 0.5 g taken 2.5 to 4 hours later) to a maximum dose of 6 g per night orally <i>30 to < 45 kg</i> : ≤ 1.5 g at bedtime and ≤ 1.5 g taken 2.5 to 4 hours later. Increase the dose by 1 g per night at weekly intervals (additional 0.5 g at bedtime and 0.5 g taken 2.5 to 4 hours later) to a maximum dose of 7.5 g per night orally <i>≥ 45 kg</i> : ≤ 2.25 g at bedtime and ≤ 2.25 g taken 2.5 to 4 hours later. Increase the dose by 1.5 g per night at weekly intervals (additional 0.75 g at bedtime and 0.75 g taken 2.5 to 4 hours later) to a maximum dose of 9 g per night orally | 9 g/night |
| EDS in narcolepsy | | |

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| Indication | Dosing Regimen | Maximum Dose |
|------------|---|--------------|
| IH | Adults: Administered twice or once nightly regimen in adults. For twice nightly, initiate dose at 4.5 g or less per night PO, divided into two doses. Titrate to effect in increments of up to 1.5 g per night per week, up to 9 g total nightly dose. For once nightly, initiate dosage at 3 g or less per nightly PO, as one dose. Titrate to effect in increments of up to 1.5 g per night per week, up to 6 g total nightly dose. | 9 g/night |

VI. Product Availability

| Drug Name | Availability |
|---|--|
| Xyrem (sodium oxybate) | Oral solution: 0.5 g per mL in 180 mL bottle |
| Xywav (calcium, magnesium, potassium, and sodium oxybate) | Oral solution: 0.5 g per mL in 180 mL bottle |

VII. References

1. Xyrem Prescribing Information. Palo Alto, CA: Jazz Pharmaceuticals, Inc.; March 2022. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2021/021196s036,212690s001s0061bl.pdf. Accessed February 7, 2023.
2. Xywav Prescribing Information. Palo Alto, CA: Jazz Pharmaceuticals, Inc.; March 2022. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/212690s0001bl.pdf. Accessed February 7, 2023.
3. Morgenthaler TI, Kapur VK, Brown T, et al. Practice Parameters for the Treatment of Narcolepsy and other Hypersomnias of Central Origin An American Academy of Sleep Medicine Report: An American Academy of Sleep Medicine Report. *Sleep*. 2007;30(12):1705-1711.
4. Wise MS, Arand DL, Auger RR, Brooks SN, Watson NF. Treatment of Narcolepsy and other Hypersomnias of Central Origin: An American Academy of Sleep Medicine Review. *Sleep*. 2007;30(12):1712-1727.
5. Scammell TE. The neurobiology, diagnosis and treatment of narcolepsy. *Ann Neurol* 2003;53:154 –166.
6. Swick TJ. Treatment paradigms for cataplexy in narcolepsy: past, present, and future. *Nat Sci Sleep*. 2015; 7:159-169.
7. Billiard M. Narcolepsy: current treatment options and future approaches. *Neuropsychiatric Disease and Treatment*. 2008;4(3):557-566.
8. Trotti LM, Staab BA, Rye DB. Test-retest reliability of the multiple sleep latency test in narcolepsy without cataplexy and idiopathic hypersomnia. *J Clin Sleep Med*. 2013 Aug 15;9(8):789-95. doi: 10.5664/jcsm.2922. PMID: 23946709; PMCID: PMC3 716670.
9. Lopez R, Doukkali A, Barateau L, Evangelista E, Chenini S, Jaussent I, Dauvilliers Y. Test-Retest Reliability of the Multiple Sleep Latency Test in Central Disorders of Hypersomnolence. *Sleep*. 2017 Dec 1;40(12). doi: 10.1093/sleep/zsx164. PMID: 29099966.
10. Anderson KN, Pilsworth S, Sharples LD, Smith IE, Shneerson JM. Idiopathic hypersomnia: a study of 77 cases. *Sleep*. 2007 Oct;30(10):1274-81. doi: 10.1093/sleep/30.10.1274. PMID: 17969461; PMCID: PMC2266276.
11. Lavault S, Dauvilliers Y, Drouot X, Leu-Semenescu S, Golmard JL, Lecendreux M, Franco P, Arnulf I. Benefit and risk of modafinil in idiopathic hypersomnia vs. narcolepsy with

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- cataplexy. *Sleep Med.* 2011 Jun;12(6):550-6. doi: 10.1016/j.sleep.2011.03.010. Epub 2011 May 14. PMID: 21576035.
12. Dauvilliers Y, Evangelista E, Barateau L, Lopez R, Chenini S, Delbos C, Beziat S, Jausseant I. Measurement of symptoms in idiopathic hypersomnia: The Idiopathic Hypersomnia Severity Scale. *Neurology.* 2019 Apr 9;92(15):e1754-e1762. doi: 10.1212/WNL.00000000000007264. Epub 2019 Mar 13. PMID: 30867266.
13. Johns MW. A new method for measuring daytime sleepiness: the Epworth sleepiness scale. *Sleep.* 1991 Dec;14(6):540-5. doi: 10.1093/sleep/14.6.540. PMID: 1798888.
14. *Clinical Pharmacology* [database online]. Tampa, FL: Gold Standard, Inc.; 2023. Available at: <https://www.clinicalkey.com/pharmacology/>. Accessed February 7, 2023.

| Reviews, Revisions, and Approvals | Date | P&T Approval Date |
|---|--------|-------------------|
| Policy created, adapted from MDN.CP.PMN.42 for migration to HFS PDL | 8.2.23 | |

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

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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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