Clinical Policy: Desmopressin Acetate (DDAVP)

Reference Number: LA.PHAR.214
Effective Date: 05.10.24
Last Review Date: 11.21.24
Line of Business: Medicaid

Coding Implications
Revision Log

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

Please note: This policy is for medical benefit

Description
Desmopressin acetate (DDAVP®) is a synthetic vasopressin analog.

FDA Approved Indication(s)
DDAVP is indicated for the treatment of patients with:
- Mild to moderate classic von Willebrand's disease (VWD; type I) with factor VIII (FVIII) levels greater than 5%
- Hemophilia A with FVIII coagulant activity levels greater than 5% *without FVIII antibodies (DDAVP only)*

DDAVP is also indicated for the management of central (cranial) diabetes insipidus and for the management of the temporary polyuria and polydipsia following head trauma or surgery in the pituitary region.

Limitation(s) of use:
- DDAVP is not indicated for the treatment of severe classic VWD (type I) and when there is evidence of an abnormal molecular form of FVIII antigen.
- DDAVP is ineffective and not indicated for the treatment of nephrogenic diabetes insipidus.

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 Louisiana Healthcare Connections® that DDAVP injection is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria
A. Polyuria and Central Diabetes Insipidus (must meet all)**:**
1. Diagnosis of one of the following (a or b):
   a. Central (cranial) diabetes insipidus (referred to as arginine vasopressin deficiency);
   b. Temporary polyuria and polydipsia following head trauma or surgery in the pituitary region;
2. Prescribed by or in consultation with an endocrinologist;
3. Age ≥ 12 years;

4. Request is for DDAVP injection;
5. Failure of desmopressin tablets, unless contraindicated, clinically significant adverse effects are experienced, or documentation supports inability to swallow tablets;
6. Dose does not exceed 4 mcg per day.

Approval duration: 6 months

B. Congenital Hemophilia A (must meet all)**:**

1. Diagnosis of congenital hemophilia A (FVIII deficiency);
2. Prescribed by or in consultation with a hematologist;
3. Age ≥ 3 months;
4. Request is for DDAVP injection or Stimate for one of the following uses (a, b, or c):
   a. Control and prevention of bleeding episodes;
   b. Perioperative management;
   c. Routine prophylaxis to prevent or reduce the frequency of bleeding episodes;
5. FVIII coagulant activity levels are > 5%;
6. Member does not have FVIII antibodies;
   a. Dose does not exceed 0.3 mcg/kg per dose

Approval duration: 6 months

C. Von Willebrand Disease (must meet all)**:**

1. Diagnosis of VWD type 1 or type 2;
2. Prescribed by or in consultation with a hematologist;
3. Age ≥ 3 months;
4. Request is for DDAVP injection or Stimate for one of the following uses (a, b, or c):
   a. Control and prevention of bleeding episodes;
   b. Perioperative management;
   c. Routine prophylaxis to prevent or reduce the frequency of bleeding episodes;
5. FVIII coagulant activity levels are > 5%;
   a. Dose does not exceed 0.3 mcg/kg per dose;

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 LA.PMN.255
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: LA.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 Louisiana Healthcare Connections benefit
b. Member has previously met initial approval criteria;

2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed 4 mcg per day for polyuria or diabetes insipidus and 0.3 mcg/kg per dose for hemophilia A or VWD;

Approval duration: 12 months

A. 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 LA.PMN.255
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: LA.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 – LA.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

DDAVP: 1-deamino-8-D-arginine vasopressin
eGFR: estimated glomerular filtration rate
FDA: Food and Drug Administration
FVIII: factor VIII
SIADH: syndrome of inappropriate antidiuretic hormone
VWD: von Willebrand disease

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
desmopressin acetate oral tablets (DDAVP®)	**Polyuria and Central Diabetes Insipidus** 0.05 mg PO BID, titrated to a maintenance dose in the range of 0.1-1.2 mg divided into 2-3 daily doses as needed to obtain adequate antidiuresis	1.2 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):
  - DDAVP injection: hyponatremia or a history of hyponatremia; polydipsia; concomitant use with loop diuretics or systemic/inhaled glucocorticoids; renal impairment with an eGFR below 50 mL/min/1.73 m^2; SIADH secretion; during illnesses that can cause fluid or electrolyte imbalance; heart failure; uncontrolled hypertension
  - DDAVP injection: hypersensitivity to desmopressin acetate or to any of the components of DDAVP Injection
- Boxed warning(s):
  - DDAVP injection: hyponatremia

Appendix D: General Information

- The American Urology Association defines nocturnal polyuria as the production of greater than 20 to 33% of total 24-hour urine output during the period of sleep, which is age-dependent with 20% for younger individuals and 33% for elderly individuals.
- In 2022, the Endocrine Society along with various international endocrine societies proposed to change the name of this disorder from central diabetes insipidus to arginine vasopressin deficiency.

V. Dosage and Administration

Drug Name	Indication	Dosing Regimen	Maximum Dose
Desmopressin injection (DDAVP)	Central diabetes insipidus	2 to 4 mcg IV or SC daily, as one or two divided doses	4 mcg/day
	Hemophilia A, VWD	0.3 mcg/kg IV or SC as needed	0.3 mcg/kg/dose

VI. Product Availability

Drug Name	Availability
Desmopressin injection (DDAVP)	Single-dose ampule: 4 mcg/mL (1 mL) Multi-dose vial: 4 mcg/mL (10 mL)

VII. References

1. DDAVP Injection Prescribing Information. Parsippany, NJ: Ferring Pharmaceuticals; September 2022. Available at: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=651f6fee-a2c7-431b-8d5d-58b156c72244. Accessed October 28, 2023.
2. Nocdurna Prescribing Information. Parsippany, NJ: Ferring Pharmaceuticals; November 2020. Available at: www.nocdurna.com. Accessed October 10, 2023.
3. Stimate Prescribing Information. King of Prussia, PA: CSL Behring LLC; June 2013. Available at: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=30d4c387-b99c-49f8-a8bd-de23fdafb739. Accessed October 10, 2023.

4. Srivastava A, Santagostino E, Dougall A, et al. WFH Guidelines for the Management of Hemophilia, 3rd edition. *Haemophilia*. 2020;26 Suppl 6:1-158.
5. Medical and Scientific Advisory Council (MASAC) of the National Bleeding Disorders Foundation (formerly National Hemophilia Foundation): Database of treatment guidelines. Available at: www.hemophilia.org/healthcare-professionals/guidelines-on-care/masac-documents. Accessed October 25, 2023.
6. Van Kerrebroeck P, Abrams P, Chaikin D et al. The standardization of terminology in nocturia: Report from the standardization sub-committee of the International Continence Society. Neurourol Urodyn 2002; 21: 179.
7. Arima H, Cheetham T, Christ-Crain M, et al. Changing the Name of Diabetes Insipidus: A Position Statement of the Working Group for Renaming Diabetes Insipidus. *J Clin Endocrinol Metab*. 2022;108(1):1-3.

Coding Implications
Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J2597	Injection, desmopressin acetate, per 1 mcg

Reviews, Revisions, and Approvals	Date	LDH Approval Date
Policy created	05.09.23	08.28.23
Added update that central diabetes insipidus is referred to as arginine vasopressin deficiency with further information in Appendix D; references reviewed and updated.	02.21.24	05.10.24
Included DDAVP black box warning for hyponatremia; no significant changes.	11.21.24	

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. LHCC 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.

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 LHCC administrative policies and procedures.

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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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