Clinical Policy: Desmopressin Acetate (DDAVP, Stimate)

Reference Number: PA.CP.PHAR.214
Effective Date: 01/18
Last Review Date: 07/18

Coding Implications
Revision Log

Description
The intent of the criteria is to ensure that patients follow selection elements established by Pennsylvania Health and Wellness® clinical policy for desmopressin acetate (DDAVP Injection®).

FDA Approved Indication(s)
DDAVP injection is indicated for:

- 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
- For the treatment of patients with mild to moderate classic von Willebrand's disease (Type I) with factor VIII levels greater than 5%
- For the treatment of patients with hemophilia A with factor VIII coagulant activity levels greater than 5%

Limitation(s) of use:

- DDAVP is not indicated for the treatment of hemophilia A with factor VIII coagulant activity levels equal to or less than 5%, or for the treatment of hemophilia B, or in patients who have factor VIII antibodies.
- DDAVP is not indicated for the treatment of severe classic von Willebrand's disease (Type I) and when there is evidence of an abnormal molecular form of factor VIII antigen.
- DDAVP is ineffective for the treatment of nephrogenic diabetes insipidus.

Stimate nasal spray is indicated:

- For the treatment of patients with hemophilia A with Factor VIII coagulant activity levels greater than 5%
- For the treatment of patients with mild to moderate classic von Willebrand’s disease (Type I) with Factor VIII levels greater than 5%

Limitation(s) of use:

- Stimate is not indicated for the treatment of hemophilia A with factor VIII coagulant activity levels equal to or less than 5%, or for the treatment of hemophilia B, or in patients who have factor VIII antibodies.
- DDAVP is not indicated for the treatment of severe classic von Willebrand's disease (Type I) and when there is evidence of an abnormal molecular form of factor VIII antigen.

Policy/Criteria
It is the policy of Pennsylvania Health and Wellness that desmopressin acetate - 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 central diabetes insipidus;
2. Prescribed by or in consultation with an endocrinologist;
3. Age ≥ 12 years;
4. Request is for DDAVP injection;
5. Failure of a trial of desmopressin tablets, unless contraindicated or clinically significant adverse effects are experienced, or documentation that the member is unable to swallow tablets;
6. Prescribed as antidiuretic replacement therapy for one of the following conditions:
   a. Central (cranial) diabetes insipidus;
   b. Temporary polyuria and polydipsia following head trauma or surgery in the pituitary region;
7. Dose does not exceed 4 mcg/day injection.

Approval duration: 6 months

B. Congenital Hemophilia A (must meet all)**:**
1. Prescribed by or in consultation with a hematologist;
2. Age ≥ 3 months;
3. Diagnosis of congenital hemophilia A (factor VIII deficiency);
4. Request is for one of the following:
   a. Control and prevention of bleeding episodes;
   b. Perioperative management;
   c. Routine prophylaxis to prevent or reduce the frequency of bleeding episodes;
5. Does not have factor VIII antibodies;
6. Factor VIII coagulant activity levels are >5%;
7. Dose does not exceed the following (a or b):
   1. DDAVP injection: 0.3 mcg/kg per dose;
   2. Stimate: 300 mcg/day.

Approval duration: 6 months

C. Von Willebrand Disease (must meet all)**:**
1. Prescribed by or in consultation with a hematologist;
2. Age ≥ 3 months;
3. Diagnosis of von Willebrand disease (VWD), Type 1 or Type 2 *(off-label)*;
4. Factor VIII coagulant activity levels are >5%;
5. Request is for one of the following:
   a. Control and prevention of bleeding episodes;
   b. Perioperative management;
   c. Routine prophylaxis to prevent or reduce the frequency of bleeding episodes;
6. Dose does not exceed the following (a or b):
   1. DDAVP injection: 0.3 mcg/kg per dose;
   2. Stimate: 300 mcg/day.

Approval duration: 6 months

D. Other diagnoses/indications: Refer to PA.CP.PMN.53

II. Continued Approval

A. All indications listed in section I (must meet all)**:**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy.
3. If request is for a dose increase, new dose does not exceed the following (a or b):
   a. DDAVP injection: 4 mcg/day for diabetes insipidus and 0.3 mcg/kg per dose for hemophilia A or VWD;
   b. Stimate: 300 mcg/day.

Approval duration: 6 months

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

1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies.

   Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to PA.CP.PMN.53

Background

Description/Mechanism of Action:

Desmopressin is a synthetic analogue of the antidiuretic hormone arginine vasopressin. In a dose dependent manner, desmopressin increases cyclic adenosine monophosphate in renal tubular cells which increases water permeability resulting in decreased urine volume and increased urine osmolality. Desmopressin also increases plasma levels of von Willebrand factor (VWF), factor VIII, and t-PA contributing to a shortened activated partial thromboplastin time and bleeding time.

Formulations:

- Solution, Intravenous, as acetate:
  - DDAVP: 4 mcg/mL (1 mL)
  - DDAVP: 4 mcg/mL (10 mL)
  - Generic: 4 mcg/mL (1 mL, 10 mL)
- Solution, Intravenous, as acetate [preservative free]:
  - Generic: 4 mcg/mL (1 mL)

Appendices

Appendix A: Abbreviation Key

DDAVP: 1-deamino-8-D-arginine vasopressin

t-PA: tissue plasminogen activator
VWD: von Willebrand disease

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	Approval Date
Removed the requirement for CrCl at least 50 mL/min and serum sodium at least 35 mEq/L to adhere to the accepted approach re: inclusion of safety precautions in PA policies. References reviewed and updated.	02/18	

References
1. DDAVP Injection Prescribing Information. Parsippany, NJ: Ferring Pharmaceuticals; April 2015. Available at https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=651f6fee-a2c7-431b-8d5d-58b156c72244. Accessed November 29, 2017.
2. Stimate Prescribing Information. King of Prussia, PA: CSL Behring LLC; June 2013. Available at: http://labeling.cslbehring.com/PI/US/Stimate/EN/Stimate-Prescribing-Information.pdf. Accessed November 29, 2017.
3. Desmopressin tablets Prescribing Information. Parsippany, NJ: Actavis Pharmaceuticals, Inc.; September 2014. Available at: https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=43bd65ca-0b1c-42c9-bbcd-7a97d3287581. Accessed November 29, 2017.
4. Srivastava A, Brewer AK, Mauser-Bunschoten EP, et al. Guidelines for the management of hemophilia. *Haemophilia*. Jan 2013; 19(1): e1-47.
5. Medical and Scientific Advisory Council (MASAC) of the National Hemophilia Foundation (NHF): Database of treatment guidelines. Available at https://www.hemophilia.org/Researchers-Healthcare-Providers/Medical-and-Scientific-Advisory-Council-MASAC/MASAC-Recommendations. Accessed November 29, 2017.