SPECIALTY GUIDELINE MANAGEMENT

leuprolide acetate injection

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. FDA-Approved Indications

- 1. Prostate cancer: Leuprolide acetate is indicated in the palliative treatment of advanced prostate cancer.
- 2. Central precocious puberty (CPP): Leuprolide acetate is indicated for the treatment of pediatric patients with central precocious puberty.

B. Compendial Uses

- 1. Use as a stimulation test to confirm the diagnosis of CPP
- 2. Use in combination with growth hormone for children with growth failure and advancing puberty
- 3. Prostate cancer
- 4. Inhibition of premature luteinizing hormone (LH) surges in members undergoing ovulation induction or assisted reproductive technology
- 5. Androgen receptor positive salivary gland tumors
- 6. Triggering of oocyte maturation and ovulation in assisted reproductive technology cycle

All other indications are considered experimental/investigational and not medically necessary.

II. DOCUMENTATION

For central precocious puberty, submission of a pubertal response to a gonadotropin releasing hormone (GnRH) agonist test or a pubertal level of a third-generation luteinizing hormone (LH) assay is required to initiate the prior authorization.

III. CRITERIA FOR INITIAL APPROVAL

A. Central precocious puberty (CPP)

- 1. Authorization of 12 months may be granted for treatment of CPP in a female member when all of the following criteria are met:
 - a. Intracranial tumor has been evaluated by appropriate lab tests and diagnostic imaging, such as computed tomography (CT) scan, magnetic resonance imaging (MRI), or ultrasound.
 - b. The diagnosis of CPP has been confirmed by a pubertal response to a gonadotropin releasing hormone (GnRH) agonist test or a pubertal level of a third-generation luteinizing hormone (LH) assay.
 - c. The assessment of bone age versus chronological age supports the diagnosis of CPP.
 - d. The member was less than 8 years of age at the onset of secondary sexual characteristics.

Leuprolide 1989-A, 1990-A, 2117-A SGM P2021b

© 2021 CVS Caremark. All rights reserved.

This document contains confidential and proprietary information of CVS Caremark and cannot be reproduced, distributed or printed without written permission from CVS Caremark. This document contains prescription brand name drugs that are trademarks or registered trademarks of pharmaceutical manufacturers that are not affiliated with CVS Caremark.



- 2. Authorization of 12 months may be granted for treatment of CPP in a male member when all of the following criteria are met:
 - a. Intracranial tumor has been evaluated by appropriate lab tests and diagnostic imaging, such as CT scan, MRI, or ultrasound.
 - b. The diagnosis of CPP has been confirmed by a pubertal response to a GnRH agonist test or a pubertal level of a third-generation LH assay.
 - c. The assessment of bone age versus chronological age supports the diagnosis of CPP.
 - d. The member was less than 9 years of age at the onset of secondary sexual characteristics.

B. Stimulation test for CPP diagnosis

Authorization of one dose may be granted for use as a stimulation test to confirm the diagnosis of CPP.

C. Advancing puberty and growth failure

Authorization of 12 months may be granted for treatment of advancing puberty and growth failure in a pediatric member when leuprolide acetate is used in combination with growth hormone.

D. Prostate cancer

Authorization of 12 months may be granted for treatment of prostate cancer.

E. Salivary gland tumors

Authorization of 12 months may be granted for treatment of recurrent, unresectable, or metastatic salivary gland tumors as a single agent when the tumor is androgen receptor positive.

F. Inhibition of premature luteinizing hormone (LH) surge[‡]

Authorization of 12 months may be granted for the inhibition of premature LH surge in a member undergoing ovulation induction or assisted reproductive technology (ART).

G. Oocyte maturation and ovulation trigger[‡]

Authorization of 12 months may be granted for the triggering of oocyte maturation and ovulation in members undergoing ovulation induction or assisted reproductive technology (ART).

*Specialty Guideline Management coverage review will be bypassed for leuprolide if it is being requested for a procedure that has been approved under a member's medical benefit plan. Such members will be exempt from the requirements in Section III. A medical authorization number and confirmation of the approved procedure(s) will be required. NOTE: Some plans may opt-out of medical benefit alignment. Members receiving coverage under such plans must meet the requirements in Section III.

IV. CONTINUATION OF THERAPY

A. Central precocious puberty

- Authorization of up to 12 months may be granted for continuation of therapy for CPP in a female member if the member is currently less than 12 years of age and the member meets both of the following:
 - a. The member is currently receiving the requested medication through a paid pharmacy or medical benefit.
 - b. The member is not experiencing treatment failure such as clinical pubertal progression, lack of growth deceleration, and/or continued excessive bone age advancement.
- 2. Authorization of up to 12 months may be granted for continuation of therapy for CPP in a male member if the member is currently less than 13 years of age and the member meets both of the following:

Leuprolide 1989-A, 1990-A, 2117-A SGM P2021b

© 2021 CVS Caremark. All rights reserved.

This document contains confidential and proprietary information of CVS Caremark and cannot be reproduced, distributed or printed without written permission from CVS Caremark. This document contains prescription brand name drugs that are trademarks or registered trademarks of pharmaceutical manufacturers that are not affiliated with CVS Caremark.



- a. The member is currently receiving the requested medication through a paid pharmacy or medical benefit.
- b. The member is not experiencing treatment failure such as clinical pubertal progression, lack of growth deceleration, and/or continued excessive bone age advancement.
- B. All members (including new members) requesting authorization for continuation of therapy for the specified indications below must meet all initial authorization criteria:
 - 1. Stimulation test for CPP diagnosis
 - 2. Advancing puberty and growth failure
 - 3. Inhibition of premature LH surge
 - 4. Oocyte maturation and ovulation trigger
- C. Authorization of 12 months may be granted for continued treatment of salivary gland tumors in members requesting authorization who are experiencing clinical benefit to therapy and who have not experienced an unacceptable toxicity.
- D. Authorization of 12 months may be granted for continued treatment of prostate cancer in members requesting authorization who are experiencing clinical benefit to therapy (e.g., serum testosterone less than 50 ng/dL) and who have not experienced an unacceptable toxicity.

V. REFERENCES

- 1. Leuprolide acetate injection [package insert]. Princeton, NJ: Sandoz Inc.; January 2019.
- 2. Lupron injection for pediatric use [package insert]. North Chicago, IL: Abbvie Inc.; March 2021.
- 3. IBM Micromedex® DRUGDEX® (electronic version). IBM Watson Health, Greenwood Village, Colorado, USA. Available at: https://www.micromedexsolutions.com/ Accessed: April 28, 2021.
- 4. Carel J, Eugster EA, Rogol A, et al. Consensus statement on the use of gonadotropin-releasing hormone analogs in children. *Pediatrics*. 2009;123:e752-e762.
- 5. Bangalor Krishna K, Fuqua JS, Rogol AD, et al. Use of gonadotropin-releasing hormone analogs in children: Update by an international consortium. *Horm Res Paediatr.* 2019;91(6):357-372.
- 6. Kletter GB, Klein KO, Wong YY. A pediatrician's guide to central precocious puberty. *Clin Pediatr.* 2015;54:414-424.
- 7. Houk CP, Kunselman AR, Lee PA. Adequacy of a single unstimulated luteinizing hormone level to diagnose central precocious puberty in girls. *Pediatrics*. 2009;123:e1059-e1063.
- 8. Kaplowitz P, Bloch C, the Section on Endocrinology. Evaluation and referral of children with signs of early puberty. *Pediatrics*. 2016;137:e20153732.
- 9. Kamp GA, Mul D, Waelkens JJ, et al. A randomized controlled trial of three years growth hormone and gonadotropin-releasing hormone agonist treatment in children with idiopathic short stature and intrauterine growth retardation. *J Clin Endocrinol Metab*. 2001;86:2969-2975.
- 10. Mericq V, Cajardo H, Effers M, et al. Effects of treatment with GH alone or in combination with LHRH analog on bone mineral density in pubertal GH-deficient patients. *J Clin Endocrinol Metab.* 2002;87:84-89.
- 11. Mul D, Wit JM, Oostdijk W, et al. The effect of pubertal delay by GnRH agonist in GH-deficient children on final height. *J Clin Endocrinol Metab.* 2001;86:4655-4656.
- 12. Quintos JB, Vogiatzi MG, Harbison MD, et al. Growth hormone therapy alone or in combination with gonadotropin-releasing hormone analog therapy to improve the height deficit in children with congenital adrenal hyperplasia. *J Clin Endocrinol Metab.* 2001;86:1511-1517.
- 13. Tanaka T, Satoh M, Yasunaga T, et al. GH and GnRH analog treatment in children who enter puberty at short stature. *J Pediatr Endocrinol Metab.* 1997;10:623-628.
- 14. The NCCN Drugs & Biologics Compendium[®] © 2021 National Comprehensive Cancer Network, Inc. http://www.nccn.org. Accessed April 28, 2021.

Leuprolide 1989-A, 1990-A, 2117-A SGM P2021b

© 2021 CVS Caremark. All rights reserved.

This document contains confidential and proprietary information of CVS Caremark and cannot be reproduced, distributed or printed without written permission from CVS Caremark. This document contains prescription brand name drugs that are trademarks or registered trademarks of pharmaceutical manufacturers that are not affiliated with CVS Caremark.



1989-A, 1990-A, 2117-A

- 15. Urman B, Yakin K. Ovulatory disorders and infertility. *J Reprod Med.* 2006;51(4):267-282.
- 16. National Collaborating Centre for Women's and Children's Health. Fertility: assessment and treatment for people with fertility problems (Clinical guideline no. 156). National Institute for Health and Clinical Excellence (NICE); 2013.
- 17. Casper RF. Reducing the Risk of OHSS by GnRH Agonist Triggering. J Clin Endocrinol Metab. 2015;100(12):4396-8

Leuprolide 1989-A, 1990-A, 2117-A SGM P2021b

© 2021 CVS Caremark. All rights reserved.



