GnRH Gender Dysphoria

Description

Zoladex (goserelin), Trelstar (triptorelin), Supprelin LA (histrelin), Vantas (histrelin)

Background
Gonadotropin-releasing hormone (GnRH) analogs are used to suppress the pubertal hormones (1). Initial administration of GnRH analogs leads to an increase in circulating levels of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), leading to a transient increase in concentration of gonadal steroids (testosterone and dihydrotestosterone in males, and estrone and estradiol in premenopausal females) (2-5). After continuous chronic administration, GnRH analogs down-regulate the GnRH receptors in the pituitary gland and cause desensitization of the pituitary gonadotropes. This desensitization leads to a sustained decreased in LH and FSH secretion. In males, this results in testosterone levels equivalent to castration levels, and in females, this results in estradiol levels equivalent to a postmenopausal state (2-5). Slight development of sex characteristics will regress and, in a later phase of pubertal development, will be halted (1).

For use in Gender Dysphoria (GD), GnRH analogues work with cross-sex steroid therapy to maintain full suppression of pituitary gonadotropin levels and gonadal steroids. The actions of GnRH analogues are reversible upon cessation of treatment. Spontaneous pubertal development should resume shortly after GnRH treatment is discontinued (1).
The drugs addressed by this policy are FDA-approved for use in one or more of a variety of different conditions.

1. Supprelin LA (histrelin) – indicated for central precocious puberty in children and for the palliative treatment of advanced prostate cancer (2)
2. Trelstar (triptorelin) – indicated for the palliative treatment of advanced prostate cancer (4)
3. Vantas (histrelin) – indicated for central precocious puberty in children and for the palliative treatment of advanced prostate cancer (5)
4. Zoladex (goserelin) – indicated for use in combination with flutamide for the management of locally confined carcinoma of the prostate, palliative treatment of advanced carcinoma of the prostate, the management of endometriosis, use as an endometrial-thinning agent prior to endometrial ablation for dysfunction uterine bleeding, and use in the palliative treatment of advanced breast cancer in pre-and perimenopausal women (3)

Off Label Use:
GnRH analogues can be used in the treatment of Gender Dysphoria (GD) and should only be started once a diagnosis of GD or transsexualism has been made per the DSM V or ICD-10 criteria (1).

Related policies
ART Infertility, Synarel

Policy
This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

The drugs listed may be considered medically necessary for all indications other than those that are considered to be Gender Dysphoria. Patients using these medications for Gender Dysphoria (GD).

Prior-Approval Requirements

Diagnoses
ALL diagnoses are covered EXCEPT:
For **Gender Dysphoria (GD):**

**MUST HAVE ALL** of the following:

1. Prescribed by an endocrinologist or transgender specialist
2. Patient has met the DSM V criteria for GD

**Policy Guidelines**

**Pre - PA Allowance**

None

**Prior - Approval Limits**

**Duration**  Lifetime

**Rationale**

**Summary**

Gonadotropin-releasing hormone (GnRH) analogs are used to suppress the pubertal hormones (1). Initial administration of GnRH analogs leads to an increase in circulating levels of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), leading to a transient increase in concentration of gonadal steroids (testosterone and dihydrotestosterone in males, and estrone and estradiol in premenopausal females). After continuous chronic administration, GnRH analogs down-regulate the GnRH receptors in the pituitary gland and cause desensitization of the pituitary gonadotropes (2-5). Gonadotropin-releasing hormone (GnRH) analogs are approved for a variety of conditions. GnRH analogs alter the regulation of the GnRH receptors in the pituitary gland. For a diagnosis of Gender Dysphoria (1).

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of drugs used for GD while maintaining optimal therapeutic outcomes.

**References**

Section: Prescription Drugs  
Effective Date: April 1, 2017

Subsection: Endocrine and Metabolic Drugs  
Original Policy Date: January 1, 2016

Subject: GnRH Gender Dysphoria  
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<td>Addition to PA</td>
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<td>December 2015</td>
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<td>Policy number change from 5.08.39 to 5.30.39</td>
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<td>January 2017</td>
<td>Removal of GD age requirement and addition of transgender specialist</td>
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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 17, 2017 and is effective on April 1, 2017.

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