

## Clinical Criteria

**Subject:** Gonadotropin Releasing Hormone Analogs for the Treatment of Non-Oncologic Indications

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### Overview

This document addresses the use of Gonadotropin Releasing Hormone (GnRH) Analogs for the Treatment of Non-Oncologic Indications. Included in this review are

- Zoladex (goserelin acetate)
- Supprelin LA 12 month implant (histrelin acetate)
- Lupron Depot, Lupron Depot-Ped (leuprolide acetate)
- Lupaneta Pack (leuprolide acetate for depot suspension and norethindrone acetate tablets)
- Synarel Nasal Spray (nafarelin acetate)
- Triptodur (triptorelin pamoate extended-release)

#### Summary of FDA-approved Non-Oncology related indications and commercially available GnRH Agents

Agent	Endo	IET	CPP	UL
Lupaneta Pack (leuprolide acetate-norethindrone acetate) 1 month, 3 month	x			
Lupron Depot (leuprolide acetate) 1 month, 3 month	x			x
Zoladex (goserelin acetate) 1 month	x	x		
Synarel (nafarelin acetate) 1 month	x		x	
Lupron Depot-Ped (leuprolide acetate) 1 month, 3 month			x	
Supprelin LA (histrelin acetate) 12 month			x	
Triptodur (triptorelin) 6 month			x	

Endo = Endometriosis, IET = Induce Endometrial Thinning, CPP = Central Precocious Puberty, UL = Uterine Leiomyomata (fibroids)

GnRH analogs are a group of hormonal drugs consisting of GnRH agonists and antagonists, both of which suppress pituitary hormones. GnRH agonists typically act over several days and GnRH antagonists act quickly within several hours. Affecting the pituitary gland in the brain, GnRH analogs suppress function of the ovaries and testes, blocking the production of testosterone in males and estrogen in females. Repeated administration of these drugs will cause gonadal hormone dependent tissues/organs to reduce or cease activity, such as the normal prostate gland that is dependent on testosterone for growth and function. This effect is reversible on discontinuation of the drug therapy.

Gender dysphoria or gender incongruence is a condition wherein an individual's experienced gender is the opposite of his or her natal gender (usually assigned at birth based on anatomic sex). This can result in distress associated with persistent feelings, such as being "Trapped in the wrong body." Gender dysphoria is distinct from cross dressing (transvestitism), inability to accept homosexual orientation, psychotic delusions or personality disorders. Most individuals who express gender dysphoria in adolescence and later are thought to sustain the experienced gender. Guidance from the 2009 and 2017 Endocrine Society Clinical Practice Guidelines for the endocrine treatment of Gender-Dysphoric/Gender Incongruence Persons were utilized in this guideline.

### Clinical Criteria

When a drug is being reviewed for coverage under a member's medical benefit plan or is otherwise subject to clinical review (including prior authorization), the following criteria will be used to determine whether the drug meets any applicable medical necessity requirements for the intended/prescribed purpose.

**Lupron Depot-Ped (leuprolide acetate), Synarel Nasal Spray (nafarelin acetate), Supprelin LA (histrelin acetate subcutaneous implant), and Triptodur (triptorelin pamoate intramuscular extended release) in Central Precocious Puberty**

Requests for Lupron Depot-Ped (leuprolide acetate), Synarel Nasal Spray (nafarelin acetate), Supprelin LA (histrelin acetate subcutaneous implant), or Triptodur (triptorelin pamoate intramuscular extended release) may be approved if the following criteria are met:

~~I. Individual has a diagnosis of central precocious puberty (defined as the beginning of secondary sexual characteristics before age 8 in girls and 9 in boys) (Kaplowitz, et al. 2016);~~

**OR**

- ~~II. Individual has a diagnosis of central precocious puberty (defined as the beginning of secondary sexual characteristics before age 8 in girls and 9 in boys) (Kaplowitz, et al. 2016); **AND**~~
- ~~III. If individual is using Triptodur (triptorelin pamoate) IM injection is given every 6 months for those 2 years of age or older.~~

**Zoladex (goserelin acetate), Lupron Depot or Lupron Depot-Ped (leuprolide acetate), Lupaneta Pack (leuprolide acetate for depot suspension and norethindrone), or Synarel Nasal Spray (nafarelin acetate) in Gynecological uses**

Requests for Zoladex (goserelin acetate), Lupron Depot or Lupron Depot-Ped (leuprolide acetate), or Synarel Nasal Spray (nafarelin acetate) may be approved if the following criteria are met:

- I. Individual has a diagnosis of chronic pelvic pain\* (defined as noncyclical pain lasting 6 or more months that localizes to the anatomic pelvis, anterior abdominal wall at or below the umbilicus, the lumbosacral back, or the buttocks, and is of sufficient severity to cause functional disability or lead to medical care) (ACOG 2004); **OR**
- II. Individual is using to induce amenorrhea (such as but not limited to menstruating women diagnosed with severe thrombocytopenia or aplastic anemia);

**Approval Duration**

\*For Chronic Pelvic Pain: Do not continue use of agent beyond 3 months if there is no symptomatic relief.

Requests for Zoladex (goserelin acetate) may be approved if the following criteria are met:

- I. Individual is using for treatment of endometriosis and duration of treatment is limited to 6 months; **OR**
- II. Individual is using for dysfunctional uterine bleeding; **OR**
- III. Individual is using for endometrial thinning prior to endometrial ablation for dysfunctional uterine bleeding (3.6 mg implant only).

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Requests for Lupron Depot or Lupron Depot-Ped (leuprolide acetate) may be approved if the following criteria are met:

- I. Individual is using for initial treatment or retreatment of endometriosis\*; **OR**
- II. Individual is using for preoperative treatment as adjunct to surgical treatment of uterine fibroids (leiomyoma uteri), such as but not limited to reducing the size of fibroids to allow for a vaginal procedure (AHFS); **OR**
- III. Individual is using prior to surgical treatment (myomectomy or hysterectomy) in those with a diagnosis of confirmed anemia (Letheby et al. 2001).

**Approval Duration**

\*For Endometriosis:

Initial treatment: 6 months.

Retreatment: A single course may be approved for 6 months. Total duration of therapy should not exceed 12 months.

Requests for Lupaneta Pack (leuprolide acetate for depot suspension and norethindrone acetate) may be approved if the following criteria are met:

- I. Individual is using for initial treatment or retreatment of endometriosis.

**Approval Duration**

Initial treatment: 6 months.

Retreatment: A single course may be approved for 6 months. Total duration of therapy should not exceed 12 months.

Requests for Synarel (nafarelin acetate) may be approved if the following criteria are met:

- I. Individual is using for endometriosis; **AND**
- II. Duration of treatment with agent is limited to 6 months.

**Zoladex (goserelin acetate), Supprelin LA (histrelin acetate), Lupron Depot or Lupron Depot-Ped, (leuprolide acetate), Lupaneta Pack (leuprolide acetate for depot suspension and norethindrone acetate tablets), Synarel Nasal Spray (nafarelin acetate), and Triptodur (triptorelin pamoate intramuscular extended release) in Gender Dysphoria/Incongruence in Adolescents**

Requests for all GnRH Analogs—Zoladex (goserelin acetate), Supprelin LA (histrelin acetate), Lupron Depot or Lupron Depot-Ped, (leuprolide acetate), Lupaneta Pack (leuprolide acetate for depot suspension and norethindrone acetate tablets), Synarel Nasal Spray (nafarelin acetate), or Triptodur (triptorelin pamoate intramuscular extended release) may be approved if the following criteria are met:

- I. Individual has a diagnosis of gender dysphoria in adolescents (Hembree 2009, 2017); **AND**
- II. Individual fulfills the DSM V criteria for gender dysphoria (American Psychiatric Association 2013); **AND**
- III. Individual has experienced puberty to at least Tanner stage 2 (Hembree 2009, 2017); **AND**
- IV. Individual has (early) pubertal changes that have resulted in an increase of their gender dysphoria (Hembree 2009, 2017); **AND**
- V. Individual does not suffer from a psychiatric comorbidity that interferes with the diagnostic work-up or treatment (Hembree 2009, 2017); **AND**
- VI. Individual has psychological and social support during treatment confirmed (Hembree 2009, 2017); **AND**
- VII. Individual has confirmed to demonstrate knowledge and understanding of the expected outcomes of GnRH analog treatment (Hembree 2009, 2017).

## Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

### HCPCS

<b>J1675</b>	Injection, histrelin acetate, 10 micrograms	<b>Formatted: Font: Bold</b>
<b>J1950</b>	Injection, leuprolide acetate (for depot suspension), per 3.75 mg [Lupron Depot, Lupron Depot-Ped, Lupaneta Pack]	<b>Formatted: Font: Bold</b>
<b>J3315</b>	Injection, triptorelin pamoate, 3.75 mg [Trelstar, Trelstar Depot, Trelstar LA]	<b>Formatted: Font: Bold</b>
<b>J3316</b>	Injection, triptorelin, extended-release, 3.75 mg [Triptodur]	<b>Formatted: Font: Bold</b>
<b>J9202</b>	Goserelin acetate implant, per 3.6 mg [Zoladex]	<b>Formatted: Font: Bold</b>
<b>J9217</b>	Leuprolide acetate (for depot suspension), 7.5 mg [Eligard, Lupron Depot, Lupron Depot-Ped, Lupaneta Pack]	<b>Formatted: Font: Bold</b>
<b>J9218</b>	Leuprolide acetate, per 1 mg [Lupron]	<b>Formatted: Font: Bold</b>
<b>J9225</b>	Histrelin implant (Vantas), 50 mg	<b>Formatted: Font: Bold</b>
<b>J9226</b>	Histrelin implant (Supprelin LA), 50 mg	<b>Formatted: Font: Bold</b>
<b>S9560</b>	Home injectable therapy; hormonal therapy (e.g.; Leuprolide, Goserelin), including administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem	<b>Formatted: Font: Bold</b>

### ICD-10 Diagnosis

All diagnoses *excluding* oncologic diagnoses

## Document History

Revised: 06/10/2019  
Document History:

- 06/10/2019– Annual Review: Added Zoladex Quantity limit to document. Wording and formatting updates. Coding Reviewed: Deleted C9399, J3490. Added Lucenta Pack to J1950 and J1917
- 11-16-2018 – Annual Review: Annual review. Updated criteria with references. Minor wording and formatting updates to clarify existing override criteria. HCPCS and ICD-10 coding review: Deleted HCPCS C9016, J9155, J3490 for Triptodur. Added J3316 for Triptodur. Added C9399 for Lupaneta Pak and J3490 for Lupaneta Pack.

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