

# SmartPA Criteria Proposal

	Luteinizing Hormone Releasing Hormone (LHRH)/Gonadotropin Releasing Hormone (GnRH) Agents, Non-Oral PDL Edit
	TBD
	June 17, 2021
	MO HealthNet
	MO HealthNet/Conduent
	<input type="checkbox"/> Existing Criteria <input type="checkbox"/> Revision of Existing Criteria <input checked="" type="checkbox"/> New Criteria

## Executive Summary

**Purpose:** The MO HealthNet Pharmacy Program will implement a state-specific preferred drug list.

**Why Issue Selected:** Endogenous luteinizing hormone releasing hormone (LHRH), also known as gonadotropin releasing hormone (GnRH), is released in a pulsatile fashion from the hypothalamus, stimulating pituitary gland receptors thereby resulting in the release of gonadotropins luteinizing hormone (LH) and follicle-stimulating hormone (FSH). LH and FSH regulate ovarian function and are influenced by negative feedback from estradiol and progesterone. Synthetic GnRH agonist analogs act within the hypothalamic-pituitary-ovarian axis pathway and are utilized for a variety of conditions including endometriosis, uterine fibroids, breast/prostate cancer, and central precocious puberty (CPP). Upon initial administration, GnRH agonists increase gonadotropin levels, but their continuous administration leads to the downregulation of the GnRH receptor on the pituitary gland and decreased production of LH and FSH.

Firmagon® (degarelix), the only GnRH receptor antagonist in the class, is indicated for the treatment of advanced prostate cancer and functions by reversibly binding to the pituitary GnRH receptor thereby reducing LH and FSH levels. This results in the immediate and sustained decrease in testosterone concentration without the initial stimulation of the hypothalamic-pituitary-gonadal axis. Degarelix has an advantage over GnRH agonists by reducing testosterone levels more rapidly.

Products currently on the market are available in many formulations including long- and short-acting injections, and implants. In 1985 Lupron Depot® (leuprolide acetate) became the first FDA-approved GnRH agonist. It is available as a powder for reconstitution administered via intramuscular injection at frequencies varying from monthly up to every 24 weeks. Synarel® (nafarelin acetate) is a nasal formulation that is administered twice to three times daily for the treatment of endometriosis or CPP. Recommended duration of therapy with Synarel is 6 months and retreatment is not recommended due to lack of safety data.

Total program savings for the PDL classes will be regularly reviewed.

Program-Specific Information:	Preferred Agents	Non-Preferred Agents
	<ul style="list-style-type: none"> <li>Firmagon®</li> <li>Lupron Depot® 3.75, 11.25 mg</li> <li>Lupron Depot-Ped®</li> <li>Supprelin® LA</li> <li>Synarel®</li> <li>Triptodur®</li> <li>Vantas®</li> <li>Zoladex®</li> </ul>	<ul style="list-style-type: none"> <li>Eligard®</li> <li>Fensolvi®</li> <li>Leuprolide</li> <li>Lupron Depot® 7.5, 22.5, 30, 45 mg</li> <li>Trelstar®</li> </ul>

- Type of Criteria:**     Increased risk of ADE                       Preferred Drug List  
                                    Appropriate Indications                       Clinical Edit
- Data Sources:**         Only Administrative Databases                       Databases + Prescriber-Supplied

### Setting & Population

- Drug class for review: LHRH/GnRH Agents, Non-Oral
- Age range: All appropriate MO HealthNet participants

### Approval Criteria

- Documented compliance on current therapy regimen **OR**
- Failure to achieve desired therapeutic outcomes with trial of 3 preferred agents
  - Documented trial period of preferred agents **OR**
  - Documented ADE/ADR to preferred agents

### Denial Criteria

- Lack of adequate trial on required preferred agents
- Therapy will be denied if all approval criteria are not met
- Claim exceeds maximum dosing limitation for the following:

Drug Description	Generic Equivalent	Max Dosing Limitation
ELIGARD 22.5 MG SYRINGE KIT	LEUPROLIDE ACETATE	1 kit per 72 days
ELIGARD 30 MG SYRINGE KIT	LEUPROLIDE ACETATE	1 kit per 96 days
ELIGARD 45 MG SYRINGE KIT	LEUPROLIDE ACETATE	1 kit per 143 days
ELIGARD 7.5 MG SYRINGE KIT	LEUPROLIDE ACETATE	1 kit per 24 days
FENSOLVI 45 MG SYRINGE KIT	LEUPROLIDE ACETATE	1 kit per 143 days
FIRMAGON 2 X 120 MG KIT	DEGARELIX ACETATE	1 kit per 143 days
FIRMAGON 80 MG KIT	DEGARELIX ACETATE	1 kit per 24 days
LEUPROLIDE 2WK 14 MG/2.8 ML KIT	LEUPROLIDE ACETATE	2 kits per 24 days
LEUPROLIDE 2WK 14 MG/2.8 ML VL	LEUPROLIDE ACETATE	2 vials per 24 days
LUPRON DEPOT 11.25 MG 3MO KIT	LEUPROLIDE ACETATE	1 kit per 72 days
LUPRON DEPOT 22.5 MG 3 MO KIT	LEUPROLIDE ACETATE	1 kit per 72 days
LUPRON DEPOT 3.75 MG KIT	LEUPROLIDE ACETATE	1 kit per 24 days
LUPRON DEPOT 45 MG 6MO KIT	LEUPROLIDE ACETATE	1 kit per 143 days
LUPRON DEPOT 7.5 MG KIT	LEUPROLIDE ACETATE	1 kit per 24 days
LUPRON DEPOT-4 MONTH KIT	LEUPROLIDE ACETATE	1 kit per 96 days
LUPRON DEPOT-PED 11.25 MG 3 MO	LEUPROLIDE ACETATE	1 kit per 72 days
LUPRON DEPOT-PED 11.25 MG KIT	LEUPROLIDE ACETATE	1 kit per 24 days
LUPRON DEPOT-PED 15 MG KIT	LEUPROLIDE ACETATE	1 kit per 24 days

LUPRON DEPOT-PED 30 MG 3MO KIT	LEUPROLIDE ACETATE	1 kit per 72 days
LUPRON DEPOT-PED 7.5 MG KIT	LEUPROLIDE ACETATE	1 kit per 24 days
SUPPRELIN LA 50 MG KIT	HISTRELIN ACETATE	1 kit per 286 days
SYNAREL 2 MG/ML NASAL SPRAY	NAFARELIN ACETATE	8 mL per 30 days
TRELSTAR 11.25 MG VIAL	TRIPTORELIN PAMOATE	1 vial per 72 days
TRELSTAR 22.5 MG VIAL	TRIPTORELIN PAMOATE	1 vial per 143 days
TRELSTAR 3.75 MG VIAL	TRIPTORELIN PAMOATE	1 vial per 24 days
TRIPTODUR 22.5 MG KIT	TRIPTORELIN PAMOATE	1 kit per 143 days
VANTAS 50 MG KIT	HISTRELIN ACETATE	1 kit per 286 days
ZOLADEX 10.8 MG IMPLANT SYRN	GOSERELIN ACETATE	1 syringe per 72 days
ZOLADEX 3.6 MG IMPLANT SYRN	GOSERELIN ACETATE	1 syringe per 24 days

## Required Documentation

Laboratory Results:  Progress Notes:   
 MedWatch Form:  Other:

## Disposition of Edit

Denial: Exception Code "0160" (Preferred Drug List)  
 Rule Type: PDL

## Default Approval Period

1 year

## References

1. Kumar, P., Sharma, A. Gonadotropin-releasing hormone analogs: Understanding advantages and limitations. *Journal of Human Reproductive Sciences*. 7(3) 170-174.
2. Evidence-Based Medicine Analysis: "LHRH, GHRH Antagonists, Oral and Injectable", UMKC-DIC; April 2021.
3. Evidence-Based Medicine and Fiscal Analysis: "LHRH GnRH Pituitary Suppressants, Injectable Agents – Therapeutic Class Review", Conduent Business Services, L.L.C., Richmond, VA; June 2021.
4. Facts and Comparisons eAnswers (online); 2021 Clinical Drug Information, LLC.
5. Clinical Pharmacology [online]. Tampa (FL): Elsevier. 2021. Available from: <http://www.clinicalpharmacology.com>.
6. Eligard [package insert]. Fort Collins, CO: Tolmar Pharmaceuticals, Inc., April 2019.
7. Lupron Depot-Ped [package insert]. North Chicago, IL: AbbVie Inc., March 2021.
8. Fensolvi [package insert]. Fort Collins, CO: Tolmar Pharmaceuticals, Inc., May 2020.
9. Zoladex [package insert]. Deerfield, IL: TerSera Therapeutics, LLC., February 2020.
10. Supprelin LA [package insert]. Malvern, PA: Endo Pharmaceuticals, Inc., November 2019.
12. Triptodur [package insert]. Atlanta, GA: Arbor Pharmaceuticals, LLC., October 2018.
13. Trelstar [package insert]. Madison, NJ: Allergan USA, Inc., December 2018.