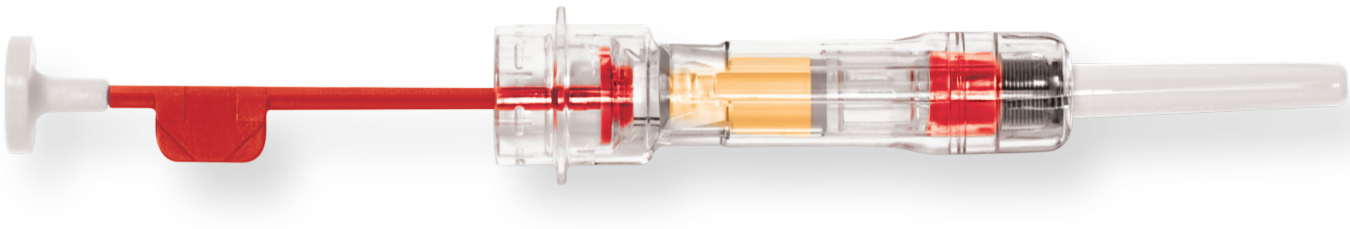
Zoladex®
(goserelin implant)

A Simple Guide to Administration

Convenient ready-to-use, biodegradable GnRH agonist implant[1,2]

GnRH=gonadotropin-releasing hormone.



ZOLADEX 3.6 mg syringe –
For illustration only.

Indications

ZOLADEX 3.6 mg and ZOLADEX 10.8 mg

Management of locally confined Stage T2b-T4 (Stage B2-C) carcinoma of the prostate in combination with flutamide. Treatment with ZOLADEX and flutamide should start 8 weeks prior to initiating radiation therapy and continue during radiation therapy.

Palliative treatment of advanced carcinoma of the prostate.

ZOLADEX 3.6 mg

Management of endometriosis, including pain relief and reduction of endometriotic lesions for the duration of therapy. Experience with ZOLADEX for the management of endometriosis has been limited to women 18 years of age and older treated for 6 months.

Use as an endometrial-thinning agent prior to endometrial ablation for dysfunctional uterine bleeding.

Palliative treatment of advanced breast cancer in pre- and perimenopausal women.

Select Important Safety Information

Anaphylactic reactions to ZOLADEX have been reported in the medical literature. ZOLADEX is contraindicated in patients with a known hypersensitivity to GnRH, GnRH agonist analogues, or any of the components in ZOLADEX.

Please see Important Safety Information on pages 6-7.
Please see accompanying or click for Full Prescribing Information for ZOLADEX 3.6 mg and ZOLADEX 10.8 mg.

ZOLADEX SafeSystem® Syringe: Convenient ready-to-use GnRH agonist[1,2]

Designed for safe and efficient administration[1,2]

ZOLADEX features:

- A sterile, siliconized, triple-beveled hypodermic needle with easy-glide SafeSystem® Syringe
- No assembly, mixing, or refrigeration required
- Implant provides consistent, reliable delivery of medication
- Each syringe is provided with a convenience pack (contains gauze, alcohol wipe, and bandage)
- Designed with a protective needle sleeve to reduce needlestick injuries[3]
  - SafeSystem® Syringe is designed to automatically cover the needle upon withdrawal

Convenience pack

ZOLADEX 10.8 mg syringe and convenience pack – For illustration only.

1.70 min

In a study with nurses,
it took an average of 1.70 minutes
to prepare and deliver ZOLADEX 3.6 mg[4]

91% agreed that it was **easy to prepare** ZOLADEX prior to administration[4]

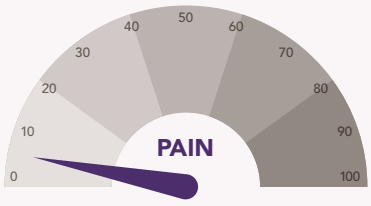
85% agreed that there were **good safety precautions** with ZOLADEX[4]

76% agreed that the ZOLADEX syringe was **easy to manipulate**[4]

Randomized crossover study with 82 nurses timed in the administration (preparation and delivery) of the system used to administer ZOLADEX and the system used to administer another GnRH agonist.* Preferences and perceptions of the ease of use and relative safety of the two injection systems were also assessed.[4]

*GnRH agonist used for comparison was a product marketed only in the UK.

The majority of patients reported minimal pain (VAS <10 mm) from the ZOLADEX 3.6 mg injection[5]



Injection 1: Median range 5 (0-38) mm.
Injection 2: Median range 7 (0-51) mm.

VAS=visual analogue scale.

In a study with patients, there was **no significant difference between the pain levels experienced** from injections of ZOLADEX compared to another subcutaneous GnRH agonist.[5]

A total of 50 patients were blindfolded and administered either ZOLADEX or another GnRH agonist* into the anterior abdominal wall. Each group (24 ZOLADEX and 26 other GnRH agonist) received 2 injections 4 weeks apart. Following each injection, patients were asked to record the pain of injection on a visual analogue scale ranging from 0 mm (no discomfort) to 100 mm (maximal discomfort).[5]

Select Important Safety Information

Injection site injury and vascular injury including pain, hematoma, hemorrhage and hemorrhagic shock, requiring blood transfusions and surgical intervention, have been reported with ZOLADEX. Extra care should be taken when administering ZOLADEX to patients with low BMI and/or to patients receiving full dose anticoagulation.

Please see Important Safety Information on pages 6-7.
Please see accompanying or click for Full Prescribing Information for ZOLADEX 3.6 mg and ZOLADEX 10.8 mg.

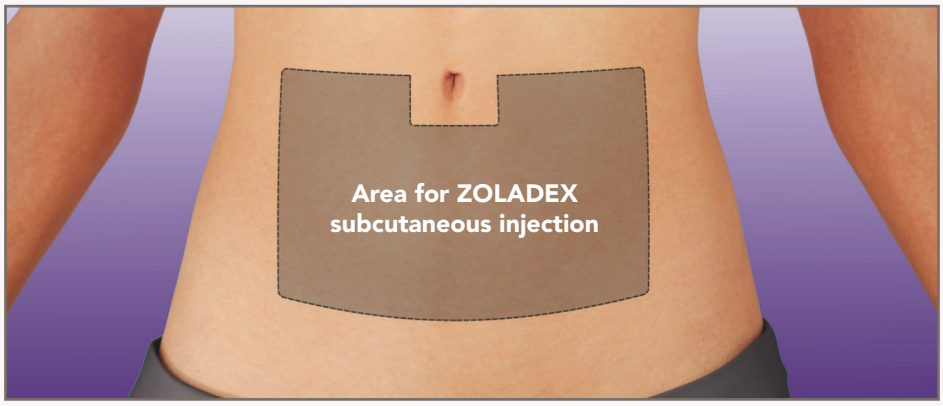
ZOLADEX administration technique

ZOLADEX SafeSystem® Syringe: Convenient ready-to-use GnRH agonist[1,2] No assembly, mixing, or refrigeration required—the siliconized hypodermic needle with easy-glide SafeSystem® Syringe comes ready to administer.

1 Prepare the patient:

Put the patient in a comfortable position with the upper part of the body slightly raised. Prepare an area of the anterior abdominal wall below and two inches out from the navel line with an alcohol swab.

NOTE: Caution should be taken when injecting into the anterior abdominal wall due to the proximity of underlying inferior epigastric artery and its branches.



2 Prepare the injection:

Examine the foil pouch for damage, then open. Empty the pouch onto a counter or into your hand rather than pulling the syringe out of the pouch, as it is possible to inadvertently pull the plunger off of the syringe.

Hold the syringe at a slight angle to the light and confirm at least part of the ZOLADEX implant is visible. There is no need to remove air bubbles, like with liquid injections, and partially depressing the plunger prior to administration may cause the implant to fall from the syringe.

Gently peel the plastic safety tab up and away from the plunger and discard it. Remove the needle cover.

NOTE: If too much force is used when removing the plastic safety tab, the plunger can be pulled off.

3 Complete the injection:

Pinch the patient's skin using aseptic technique at the prepared injection site. With the bevel of the needle facing up, grasp the protective sleeve of the syringe with the pointer finger, middle finger, and thumb.

Insert the needle subcutaneously at a 30- to 45-degree angle to the skin in one continuous, deliberate motion until the protective sleeve touches the skin.

NOTE: The ZOLADEX syringe cannot be used for aspiration. If the hypodermic needle penetrates a large vessel, blood will be seen instantly in the syringe chamber. If a vessel is penetrated, withdraw the needle and inject with a new syringe elsewhere. Monitor patients for signs or symptoms of abdominal hemorrhage.

Use extra care when administering ZOLADEX to patients with low BMI and/or patients receiving full dose anticoagulation.

While continuing to pinch the patient's abdomen, move your fingers back to the syringe finger grip and place your thumb on the plunger. Grasping the syringe below the finger grip on the protective sleeve may prevent the protective sleeve from activating.

While grasping the finger grip, depress the plunger until you cannot depress it any further. Use sufficient force to depress the plunger, as a degree of resistance can be experienced.

After fully depressing the plunger, begin withdrawing the needle, and the SafeSystem® Syringe protective sleeve will deploy to cover the syringe. The needle itself does not retract. Dispose of the syringe in an approved sharps collector.

View a step-by-step administration video at **ZOLADEXhcp.com**

Important Safety Information

Anaphylactic reactions to ZOLADEX have been reported in the medical literature. ZOLADEX is contraindicated in patients with a known hypersensitivity to GnRH, GnRH agonist analogues, or any of the components in ZOLADEX.

ZOLADEX is contraindicated during pregnancy unless used for palliative treatment of advanced breast cancer. ZOLADEX can cause fetal harm when administered to a pregnant woman. If used during pregnancy, the patient should be apprised of the potential hazard to the fetus. There is an increased risk for pregnancy loss due to expected hormonal changes that occur with ZOLADEX treatment. ZOLADEX should not be given to women with undiagnosed abnormal vaginal bleeding.

Pregnancy must be excluded for use in benign gynecological conditions. Women should be advised against becoming pregnant while taking ZOLADEX. Effective nonhormonal contraception must be used by all premenopausal women during ZOLADEX therapy and for 12 weeks following discontinuation of therapy.

Transient worsening of tumor symptoms, or the occurrence of additional signs and symptoms of breast cancer, may occasionally develop during the first few weeks of treatment. Some patients may experience a temporary increase in bone pain. Monitor patients at risk for complications of tumor flare.

Hyperglycemia and an increased risk of developing diabetes or worsening of glycemic control in patients with diabetes have been reported in men receiving GnRH agonists like ZOLADEX. Monitor blood glucose levels and glycosylated hemoglobin (HbA1c) periodically and manage according to current clinical practice.

Increased risk of developing myocardial infarction, sudden cardiac death and stroke has been reported in association with use of GnRH agonists like ZOLADEX in men. Patients receiving a GnRH agonist should be monitored for symptoms and signs suggestive of development of cardiovascular disease and be managed according to current clinical practice.

Hypercalcemia has been reported in some breast cancer patients with bone metastases after starting treatment with ZOLADEX. If hypercalcemia does occur, appropriate treatment measures should be initiated.

Hypersensitivity, antibody formation and acute anaphylactic reactions have been reported with GnRH agonist analogues.

ZOLADEX may cause an increase in cervical resistance. Therefore, caution is recommended when dilating the cervix for endometrial ablation.

GnRH agonists may prolong the QT/QTc interval. Providers should consider whether the benefits of androgen deprivation therapy outweigh the potential risks in patients with congenital long QT syndrome, congestive heart failure, frequent electrolyte abnormalities, and in patients taking drugs known to prolong the QT interval. Electrolyte abnormalities should be corrected. Consider periodic monitoring of electrocardiograms and electrolytes.

Injection site injury and vascular injury including pain, hematoma, hemorrhage and hemorrhagic shock, requiring blood transfusions and surgical intervention, have been reported with ZOLADEX. Extra care should be taken when administering ZOLADEX to patients with low BMI and/or to patients receiving full dose anticoagulation.

Depression may occur or worsen in women receiving GnRH agonists.

Treatment with ZOLADEX may be associated with a reduction in bone mineral density over the course of treatment. Data suggest a possibility of partial reversibility. In women, current available data suggest that recovery of bone loss occurs on cessation of therapy in the majority of patients.

In women, the most frequently reported adverse reactions were related to hypoestrogenism. The adverse reaction profile was similar for women treated for breast cancer, dysfunctional uterine bleeding, and endometriosis.

The most commonly reported adverse reactions with ZOLADEX in clinical trials for endometriosis were: hot flashes (96%), vaginitis (75%), headache (75%), decreased libido (61%), emotional lability (60%), depression (54%), sweating (45%), acne (42%), breast atrophy (33%), seborrhea (26%), and peripheral edema (21%).

The most commonly reported adverse reactions with ZOLADEX in clinical trials for endometrial thinning were: vasodilation/hot flashes (57%), headache (32%), sweating (16%), and abdominal pain (11%).

The most commonly reported adverse reactions with ZOLADEX in breast cancer clinical trials were hot flashes (70%), decreased libido (47.7%), tumor flare (23%), nausea (11%), edema (5%), and malaise/fatigue/lethargy (5%). Injection site reactions were reported in less than 1% of patients.

For ZOLADEX 3.6 mg: Hot flashes (62%), sexual dysfunction (21%), decreased erections (18%), lower urinary tract symptoms (13%), lethargy (8%), pain (worsened in the first 30 days) (8%), edema (7%), upper respiratory infection (7%), rash (6%), and sweating (6%).

For ZOLADEX 10.8 mg: Hot flashes (64%), pain (general) (14%), gynecomastia (8%), pelvic pain (6%), and bone pain (6%).

In the locally advanced carcinoma of the prostate clinical trial, additional adverse event data were collected for the combination therapy with radiation group during both the hormonal treatment and hormonal treatment plus radiation phases of this study. Adverse experiences (incidence >5%) in both phases of this study were hot flashes (46%), diarrhea (40%), nausea (9%), and skin rash (8%). Treatment with ZOLADEX and flutamide did not add substantially to the toxicity of radiation treatment alone.

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To report suspected adverse reactions, contact the FDA at 1-800-FDA-1088 or www.FDA.gov/medwatch. You may also contact TerSera Therapeutics at 1-844-334-4035 or medicalinformation@tersera.com.

Please see accompanying or click for Full Prescribing Information for ZOLADEX 3.6 mg and ZOLADEX 10.8 mg.

References: 1. ZOLADEX® (goserelin implant). Prescribing Information. TerSera Therapeutics LLC. **2.** ZOLADEX® injection education support. https://www.zoladexhcp.com/dosing-administration/. Accessed November 15, 2023. **3.** Moser MA. Engineering out needle stick injuries (safety devices). *The Safe Angle.* Summer 2004;5-7. **4.** Morgan G, Cooley C. Injection systems for two luteinising hormone-releasing hormone agonists: a comparative assessment of administration times and nurses' perceptions. *Eur J Oncol Nurs.* 2005;9(4):334-340. **5.** Montgomery BS, Borwell JP, Higgins DM. Does needle size matter? Patient experience of luteinising hormone-releasing hormone analogue injection. *Prostate Cancer Prostatic Dis.* 2005;8(1):66-68.

ZOLADEX Administration Guide

View a step-by-step administration video at **ZOLADEXhcp.com**

Request in-office injection training by calling **1-844-ZOLADEX (1-844-965-2339)**

TerSera SupportSource

Additional support services, including reimbursement information, patient support, and co-pay card information are available at:

ZOLADEXhcp.com
1-844-ZOLADEX
(1-844-965-2339)

TerSera® therapeutics

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Zoladex® (goserelin implant)