

Zoladex® (goserelin acetate) (Subcutaneous)

Document Number: IC-0151

Last Review Date: 04/04/2024

Date of Origin: 11/28/2011

Dates Reviewed: 03/2012, 06/2012, 09/2012, 12/2012, 03/2013, 06/2013, 09/2013, 12/2013, 03/2014, 06/2014, 09/2014, 12/2014, 03/2015, 05/2015, 08/2015, 11/2015, 02/2016, 05/2016, 08/2016, 11/2016, 02/2017, 05/2017, 08/2017, 11/2017, 02/2018, 05/2018, 04/2019, 04/2020, 04/2021, 04/2022, 10/2022, 04/2023, 04/2024

I. Length of Authorization

- Endometriosis: Coverage will be provided for 6 months and may NOT be renewed.
- Endometrial Thinning: Coverage will be provided for 2 doses only (given 4 weeks apart) and may NOT be renewed.
- All other indications: Coverage will be provided for 12 months and may be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- 3.6mg injection – 1 injection every 28 days
- 10.8mg injection – 1 injection every 12 weeks (Prostate and Breast Cancer only)

B. Max Units (per dose and over time) [HCPCS Unit]:

- Prostate & Breast Cancer – 3 billable units every 84 days
- All Other Indications – 1 billable unit every 28 days

III. Initial Approval Criteria ¹

Coverage is provided in the following conditions:

- Patient is at least 18 years of age; **AND**

Universal Criteria ^{1,2}

- Females of reproductive potential must have a negative pregnancy test prior to start of therapy and will use an effective method of nonhormonal contraception during treatment and for 12 weeks after treatment (*Note: This excludes use in patients receiving palliative treatment of advanced breast cancer*); **AND**

Breast Cancer † ‡ ^{2,3}

- Patient is a pre- or peri-menopausal woman; **AND**

- Patient has hormone receptor-positive disease; **AND**
 - Used in combination with adjuvant endocrine therapy; **OR**
 - Used in combination with endocrine therapy for recurrent unresectable or stage IV (M1) disease; **OR**
 - Used as palliative treatment for advanced disease; **OR**
- Patient is a male (sex assigned at birth); **AND**
 - Used in combination with aromatase inhibitor therapy

Prostate Cancer †¹⁻³

Dysfunctional Uterine Bleeding (Endometrial Thinning) †²

- Used prior to endometrial ablation

Endometriosis †²

- Patient has not received prior-treatment with a gonadotropin releasing hormone (GnRH) agonist for this indication within a 6-month prior period

Ovarian Cancer ‡³

- Used as a single agent; **AND**
 - Patient has a diagnosis of Epithelial Ovarian Cancer OR Fallopian Tube Cancer OR Primary Peritoneal Cancer (*includes Mucinous Carcinoma, Clear Cell Carcinoma, Carcinosarcoma-Mixed Malignant Müllerian Tumors, and Grade 1 Endometrioid Carcinoma*); **AND**
 - Patient has persistent or recurrent disease (excluding immediate treatment of biochemical relapse); **OR**
 - Patient has a diagnosis of Low-grade Serous Carcinoma; **AND**
 - Patient has recurrent disease; **AND**
 - Patient has received prior therapy with an aromatase inhibitor; **OR**
 - Patient has a diagnosis of stage II-IV granulosa cell tumors of the ovary; **AND**
 - Patient has relapsed disease

† FDA Approved Indication(s), ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria¹

Coverage can be renewed based upon the following criteria:

- Patient continues to meet the universal and other indication-specific relevant criteria identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe QT/QTc interval prolongation, severe hyperglycemia and diabetes, cardiovascular disease (e.g., myocardial infarction, stroke, etc.), hypercalcemia, severe injection site and

vascular injury (e.g., pain, hematoma, hemorrhage and hemorrhagic shock, etc.), tumor flare phenomenon, severe hypersensitivity reactions, cervical resistance, new or worsening depression, etc.; **AND**

Prostate Cancer, Breast Cancer, or Ovarian Cancer

- Disease response with treatment as defined by stabilization of disease or decrease in size of tumor or tumor spread

Endometriosis/ Dysfunctional Uterine Bleeding (Endometrial Thinning)

- May not be renewed

V. Dosage/Administration ^{1,2,4-6}

Indication	Dose
Breast Cancer	Administer 3.6 mg depot every 4 weeks OR Administer 10.8 mg depot every 12 weeks
Dysfunctional Uterine Bleeding (Endometrial Thinning)	(3.6 mg only) Administer 3.6 mg for 1 or 2 doses with each depot given 28 days apart. <ul style="list-style-type: none"> • When 1 depot is given, endometrial ablation surgery should be performed at 4 weeks. If 2 depots are given, surgery should be performed within 2-4 weeks following the second depot dosage.
Endometriosis	(3.6 mg only) Administer 3.6 mg depot every 28 days for 6 months
Ovarian Cancer	(3.6 mg only) Administer 3.6 mg depot every 4 weeks
Prostate Cancer	<u>Stage B2-C Prostatic Carcinoma</u> <ul style="list-style-type: none"> • Administer 3.6 mg depot 8 weeks before radiotherapy, followed in 28 days by 10.8 mg depot. Alternatively, four injections of 3.6 mg depot can be administered at 28-day intervals, two depots prior to and two during radiotherapy. <u>Palliative Treatment of Advanced Prostate Cancer</u> <ul style="list-style-type: none"> • Administer 3.6 mg depot every 4 weeks OR • Administer 10.8 mg depot every 12 weeks

VI. Billing Code/Availability Information

HCPCS Code:

- J9202 – Goserelin acetate implant, per 3.6 mg; 1 billable unit = 3.6 mg

NDC:

- Zoladex 10.8mg 3-Month Implant: 70720-0951-XX
- Zoladex 3.6mg Implant: 70720-0950-XX

VII. References

1. Zoladex 10.8mg [package insert]. Deerfield, IL; TerSera Therapeutics LLC; December 2020. Accessed March 2024.
2. Zoladex 3.6mg [package insert]. Deerfield, IL; TerSera Therapeutics LLC; March 2023. Accessed March 2024.
3. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) for goserelin acetate National Comprehensive Cancer Network, 2024. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed March 2024.
4. Noguchi S, Kim HJ, Jesena A, et al. Phase 3, open-label, randomized study comparing 3-monthly with monthly goserelin in pre-menopausal women with estrogen receptor-positive advanced breast cancer. *Breast Cancer*. 2016; 23(5): 771–779. Published online 2015 Sep 9. doi: 10.1007/s12282-015-0637-4.
5. Zidan J., Zohar S., Mijiritzky I. et al. (2002). Treating relapsed epithelial ovarian cancer with luteinizing hormone-releasing agonist (goserelin) after failure of chemotherapy. *Isr Med Assoc J*, 4(8), 597-9.
6. Hasan, J., Ton, N., Mullahitha, S. et al. Phase II trial of tamoxifen and goserelin in recurrent epithelial ovarian cancer. *British journal of cancer* 93.6 (2005): 647-651.
7. National Government Services, Inc. Local Coverage Article: Billing and Coding: Luteinizing Hormone-Releasing Hormone (LHRH) Analogs (A52453). Centers for Medicare & Medicaid Services, Inc. Updated on 11/20/2023 with effective date 01/01/2023. Accessed March 2024.
8. Palmetto GBA. Local Coverage Article: Billing and Coding: Luteinizing Hormone-Releasing Hormone (LHRH) Analogs (A59160). Centers for Medicare & Medicaid Services, Inc. Updated on 02/07/2024 with effective date 03/15/2024. Accessed March 2024.

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C48.1	Malignant neoplasm of specified parts of peritoneum
C48.2	Malignant neoplasm of peritoneum, unspecified
C48.8	Malignant neoplasm of overlapping sites of retroperitoneum and peritoneum
C50.011	Malignant neoplasm of nipple and areola, right female breast
C50.012	Malignant neoplasm of nipple and areola, left female breast
C50.019	Malignant neoplasm of nipple and areola, unspecified female breast
C50.021	Malignant neoplasm of nipple and areola, right female breast
C50.022	Malignant neoplasm of nipple and areola, left female breast
C50.029	Malignant neoplasm of nipple and areola, unspecified female breast

C50.111	Malignant neoplasm of central portion of right female breast
C50.112	Malignant neoplasm of central portion of left female breast
C50.119	Malignant neoplasm of central portion of unspecified female breast
C50.121	Malignant neoplasm of central portion of right male breast
C50.122	Malignant neoplasm of central portion of left male breast
C50.129	Malignant neoplasm of central portion of unspecified male breast
C50.211	Malignant neoplasm of upper-inner quadrant of right female breast
C50.212	Malignant neoplasm of upper-inner quadrant of left female breast
C50.219	Malignant neoplasm of upper-inner quadrant of unspecified female breast
C50.221	Malignant neoplasm of upper-inner quadrant of right male breast
C50.222	Malignant neoplasm of upper-inner quadrant of left male breast
C50.229	Malignant neoplasm of upper-inner quadrant of unspecified male breast
C50.311	Malignant neoplasm of lower-inner quadrant of right female breast
C50.312	Malignant neoplasm of lower-inner quadrant of left female breast
C50.319	Malignant neoplasm of lower-inner quadrant of unspecified female breast
C50.321	Malignant neoplasm of lower-inner quadrant of right male breast
C50.322	Malignant neoplasm of lower-inner quadrant of left male breast
C50.329	Malignant neoplasm of lower-inner quadrant of unspecified male breast
C50.411	Malignant neoplasm of upper-outer quadrant of right female breast
C50.412	Malignant neoplasm of upper-outer quadrant of left female breast
C50.419	Malignant neoplasm of upper-outer quadrant of unspecified female breast
C50.421	Malignant neoplasm of upper-outer quadrant of right male breast
C50.422	Malignant neoplasm of upper-outer quadrant of left male breast
C50.429	Malignant neoplasm of upper-outer quadrant of unspecified male breast
C50.511	Malignant neoplasm of lower-outer quadrant of right female breast
C50.512	Malignant neoplasm of lower-outer quadrant of left female breast
C50.519	Malignant neoplasm of lower-outer quadrant of unspecified female breast
C50.521	Malignant neoplasm of lower-outer quadrant of right male breast
C50.522	Malignant neoplasm of lower-outer quadrant of left male breast
C50.529	Malignant neoplasm of lower-outer quadrant of unspecified male breast
C50.611	Malignant neoplasm of axillary tail of right female breast
C50.612	Malignant neoplasm of axillary tail of left female breast
C50.619	Malignant neoplasm of axillary tail of unspecified female breast
C50.621	Malignant neoplasm of axillary tail of right male breast
C50.622	Malignant neoplasm of axillary tail of left male breast
C50.629	Malignant neoplasm of axillary tail of unspecified male breast
C50.811	Malignant neoplasm of overlapping sites of right female breast
C50.812	Malignant neoplasm of overlapping sites of left female breast
C50.819	Malignant neoplasm of overlapping sites of unspecified female breast
C50.821	Malignant neoplasm of overlapping sites of right male breast

C50.822	Malignant neoplasm of overlapping sites of left male breast
C50.829	Malignant neoplasm of overlapping sites of unspecified male breast
C50.911	Malignant neoplasm of unspecified site of right female breast
C50.912	Malignant neoplasm of unspecified site of left female breast
C50.919	Malignant neoplasm of unspecified site of unspecified female breast
C50.921	Malignant neoplasm of unspecified site of right male breast
C50.922	Malignant neoplasm of unspecified site of left male breast
C50.929	Malignant neoplasm of unspecified site of unspecified male breast
C56.1	Malignant neoplasm of right ovary
C56.2	Malignant neoplasm of left ovary
C56.3	Malignant neoplasm of bilateral ovaries
C56.9	Malignant neoplasm of unspecified ovary
C57.00	Malignant neoplasm of unspecified fallopian tube
C57.01	Malignant neoplasm of right fallopian tube
C57.02	Malignant neoplasm of left fallopian tube
C57.10	Malignant neoplasm of unspecified broad ligament
C57.11	Malignant neoplasm of right broad ligament
C57.12	Malignant neoplasm of left broad ligament
C57.20	Malignant neoplasm of unspecified round ligament
C57.21	Malignant neoplasm of right round ligament
C57.22	Malignant neoplasm of left round ligament
C57.3	Malignant neoplasm of parametrium
C57.4	Malignant neoplasm of uterine adnexa, unspecified
C57.7	Malignant neoplasm of other specified female genital organs
C57.8	Malignant neoplasm of overlapping sites of female genital organs
C57.9	Malignant neoplasm of female genital organ, unspecified
C61	Malignant neoplasm of prostate
N80.00	Endometriosis of the uterus, unspecified
N80.01	Superficial endometriosis of the uterus
N80.02	Deep endometriosis of the uterus
N80.03	Adenomyosis of the uterus
N80.101	Endometriosis of right ovary, unspecified depth
N80.102	Endometriosis of left ovary, unspecified depth
N80.103	Endometriosis of bilateral ovaries, unspecified depth
N80.109	Endometriosis of ovary, unspecified side, unspecified depth
N80.111	Superficial endometriosis of right ovary
N80.112	Superficial endometriosis of left ovary
N80.113	Superficial endometriosis of bilateral ovaries
N80.119	Superficial endometriosis of ovary, unspecified ovary
N80.121	Deep endometriosis of right ovary

N80.122	Deep endometriosis of left ovary
N80.123	Deep endometriosis of bilateral ovaries
N80.129	Deep endometriosis of ovary, unspecified ovary
N80.201	Endometriosis of right fallopian tube, unspecified depth
N80.202	Endometriosis of left fallopian tube, unspecified depth
N80.203	Endometriosis of bilateral fallopian tubes, unspecified depth
N80.209	Endometriosis of unspecified fallopian tube, unspecified depth
N80.211	Superficial endometriosis of right fallopian tube
N80.212	Superficial endometriosis of left fallopian tube
N80.213	Superficial endometriosis of bilateral fallopian tubes
N80.219	Superficial endometriosis of unspecified fallopian tube
N80.221	Deep endometriosis of right fallopian tube
N80.222	Deep endometriosis of left fallopian tube
N80.223	Deep endometriosis of bilateral fallopian tubes
N80.229	Deep endometriosis of unspecified fallopian tube
N80.30	Endometriosis of pelvic peritoneum, unspecified
N80.311	Superficial endometriosis of the anterior cul-de-sac
N80.312	Deep endometriosis of the anterior cul-de-sac
N80.319	Endometriosis of the anterior cul-de-sac, unspecified depth
N80.321	Superficial endometriosis of the posterior cul-de-sac
N80.322	Deep endometriosis of the posterior cul-de-sac
N80.329	Endometriosis of the posterior cul-de-sac, unspecified depth
N80.331	Superficial endometriosis of the right pelvic sidewall
N80.332	Superficial endometriosis of the left pelvic sidewall
N80.333	Superficial endometriosis of bilateral pelvic sidewall
N80.339	Superficial endometriosis of pelvic sidewall, unspecified side
N80.341	Deep endometriosis of the right pelvic sidewall
N80.342	Deep endometriosis of the left pelvic sidewall
N80.343	Deep endometriosis of the bilateral pelvic sidewall
N80.349	Deep endometriosis of the pelvic sidewall, unspecified side
N80.351	Endometriosis of the right pelvic sidewall, unspecified depth
N80.352	Endometriosis of the left pelvic sidewall, unspecified depth
N80.353	Endometriosis of bilateral pelvic sidewall, unspecified depth
N80.359	Endometriosis of pelvic sidewall, unspecified side, unspecified depth
N80.361	Superficial endometriosis of the right pelvic brim
N80.362	Superficial endometriosis of the left pelvic brim
N80.363	Superficial endometriosis of bilateral pelvic brim
N80.369	Superficial endometriosis of the pelvic brim, unspecified side
N80.371	Deep endometriosis of the right pelvic brim
N80.372	Deep endometriosis of the left pelvic brim

N80.373	Deep endometriosis of bilateral pelvic brim
N80.379	Deep endometriosis of the pelvic brim, unspecified side
N80.381	Endometriosis of the right pelvic brim, unspecified depth
N80.382	Endometriosis of the left pelvic brim, unspecified depth
N80.383	Endometriosis of bilateral pelvic brim, unspecified depth
N80.389	Endometriosis of the pelvic brim, unspecified side, unspecified depth
N80.3A1	Superficial endometriosis of the right uterosacral ligament
N80.3A2	Superficial endometriosis of the left uterosacral ligament
N80.3A3	Superficial endometriosis of the bilateral uterosacral ligament(s)
N80.3A9	Superficial endometriosis of the uterosacral ligament(s), unspecified side
N80.3B1	Deep endometriosis of the right uterosacral ligament
N80.3B2	Deep endometriosis of the left uterosacral ligament
N80.3B3	Deep endometriosis of bilateral uterosacral ligament(s)
N80.3B9	Deep endometriosis of the uterosacral ligament(s), unspecified side
N80.3C1	Endometriosis of the right uterosacral ligament, unspecified depth
N80.3C2	Endometriosis of the left uterosacral ligament, unspecified depth
N80.3C3	Endometriosis of bilateral uterosacral ligament(s), unspecified depth
N80.3C9	Endometriosis of the uterosacral ligament(s), unspecified side, unspecified depth
N80.391	Superficial endometriosis of the pelvic peritoneum, other specified sites
N80.392	Deep endometriosis of the pelvic peritoneum, other specified sites
N80.399	Endometriosis of the pelvic peritoneum, other specified sites, unspecified depth
N80.40	Endometriosis of rectovaginal septum, unspecified involvement of vagina
N80.41	Endometriosis of rectovaginal septum without involvement of vagina
N80.42	Endometriosis of rectovaginal septum with involvement of vagina
N80.50	Endometriosis of intestine, unspecified
N80.511	Superficial endometriosis of the rectum
N80.512	Deep endometriosis of the rectum
N80.519	Endometriosis of the rectum, unspecified depth
N80.521	Superficial endometriosis of the sigmoid colon
N80.522	Deep endometriosis of the sigmoid colon
N80.529	Endometriosis of the sigmoid colon, unspecified depth
N80.531	Superficial endometriosis of the cecum
N80.532	Deep endometriosis of the cecum
N80.539	Endometriosis of the cecum, unspecified depth
N80.541	Superficial endometriosis of the appendix
N80.542	Deep endometriosis of the appendix
N80.549	Endometriosis of the appendix, unspecified depth
N80.551	Superficial endometriosis of other parts of the colon
N80.552	Deep endometriosis of other parts of the colon
N80.559	Endometriosis of other parts of the colon, unspecified depth

N80.561	Superficial endometriosis of the small intestine
N80.562	Deep endometriosis of the small intestine
N80.569	Endometriosis of the small intestine, unspecified depth
N80.A0	Endometriosis in cutaneous scar
N80.A1	Endometriosis of bladder, unspecified depth
N80.A2	Superficial endometriosis of bladder
N80.A41	Deep endometriosis of bladder
N80.A42	Superficial endometriosis of right ureter
N80.A43	Superficial endometriosis of left ureter
N80.A49	Superficial endometriosis of bilateral ureters
N80.A51	Superficial endometriosis of unspecified ureter
N80.A52	Deep endometriosis of right ureter
N80.A53	Deep endometriosis of left ureter
N80.A59	Deep endometriosis of bilateral ureters
N80.A61	Deep endometriosis of unspecified ureter
N80.A62	Endometriosis of right ureter, unspecified depth
N80.A63	Endometriosis of left ureter, unspecified depth
N80.A69	Endometriosis of bilateral ureters, unspecified depth
N80.B1	Endometriosis of unspecified ureter, unspecified depth
N80.B2	Endometriosis of pleura
N80.B31	Endometriosis of lung
N80.B32	Superficial endometriosis of diaphragm
N80.B39	Deep endometriosis of diaphragm
N80.B4	Endometriosis of diaphragm, unspecified depth
N80.B5	Endometriosis of the pericardial space
N80.B6	Endometriosis of the mediastinal space
N80.C0	Endometriosis of cardiothoracic space
N80.C10	Endometriosis of the abdomen, unspecified
N80.C11	Endometriosis of the anterior abdominal wall, subcutaneous tissue
N80.C19	Endometriosis of the anterior abdominal wall, fascia and muscular layers
N80.C2	Endometriosis of the anterior abdominal wall, unspecified depth
N80.C3	Endometriosis of the umbilicus
N80.C4	Endometriosis of the inguinal canal
N80.C9	Endometriosis of extra-pelvic abdominal peritoneum
N80.D0	Endometriosis of other site of abdomen
N80.D1	Endometriosis of the pelvic nerves, unspecified
N80.D2	Endometriosis of the sacral splanchnic nerves
N80.D3	Endometriosis of the sacral nerve roots
N80.D4	Endometriosis of the obturator nerve
N80.D5	Endometriosis of the sciatic nerve

N80.D6	Endometriosis of the pudendal nerve
N80.D9	Endometriosis of the femoral nerve
N80.9	Endometriosis, unspecified
N92.4	Excessive bleeding in the premenopausal period
N92.5	Other specified irregular menstruation
N93.8	Other specified abnormal uterine and vaginal bleeding
Z85.3	Personal history of malignant neoplasm of breast
Z85.43	Personal history of malignant neoplasm of ovary
Z85.46	Personal history of malignant neoplasm of prostate

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: <https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes		
Jurisdiction	NCD/LCA/LCD Document (s)	Contractor
G, K	A52453	National Government Services, Inc
J, M	A59160	Palmetto GBA

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA

Medicare Part B Administrative Contractor (MAC) Jurisdictions

Jurisdiction	Applicable State/US Territory	Contractor
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC