Policy Number	**RX501.007**
Policy Effective Date	**01/01/2026**
Policy End Date	**07/31/2026**

Hormone Replacement Therapies (HRT) Using Implanted Pellets for Women and Delayed Puberty

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Related Policies (if applicable)
SUR717.001: Gender Assignment Surgery and Gender Reassignment Surgery with Related Services
RX501.076: Testosterone Replacement Therapies

Disclaimer

Medical policies are a set of written guidelines that support current standards of practice. They are based on current generally accepted standards of and developed by nonprofit professional association(s) for the relevant clinical specialty, third-party entities that develop treatment criteria, or other federal or state governmental agencies. A requested therapy must be proven effective for the relevant diagnosis or procedure. For drug therapy, the proposed dose, frequency and duration of therapy must be consistent with recommendations in at least one authoritative source. This medical policy is supported by FDA-approved labeling and/or nationally recognized authoritative references to major drug compendia, peer reviewed scientific literature and generally accepted standards of medical care. These references include, but are not limited to: MCG care guidelines, DrugDex (IIa level of evidence or higher), NCCN Guidelines (IIb level of evidence or higher), NCCN Compendia (IIb level of evidence or higher), professional society guidelines, and CMS coverage policy.

Carefully check state regulations and/or the member contract.

Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Legislative Mandates

EXCEPTION: For HCSC members residing in the state of Ohio, § 3923.60 requires any group or individual policy (Small, Mid-Market, Large Groups, Municipalities/Counties/Schools, State Employees, Fully-Insured, PPO, HMO, POS, EPO) that covers prescription drugs to provide for the coverage of any drug approved by the U. S. Food and Drug Administration (FDA) when it is prescribed for a use recognized as safe and effective for the treatment of a given indication in one or more of the standard medical reference compendia adopted by the United States Department of Health and Human Services or in medical literature even if the FDA has not approved the drug for that indication. Medical literature

support is only satisfied when safety and efficacy has been confirmed in two articles from major peer-reviewed professional medical journals that present data supporting the proposed off-label use or uses as generally safe and effective. Examples of accepted journals include, but are not limited to, Journal of American Medical Association (JAMA), New England Journal of Medicine (NEJM), and Lancet. Accepted study designs may include, but are not limited to, randomized, double blind, placebo controlled clinical trials. Evidence limited to case studies or case series is not sufficient to meet the standard of this criterion. Coverage is never required where the FDA has recognized a use to be contraindicated, and coverage is not required for non-formulary drugs.

Coverage

This medical policy does NOT address Gender Reassignment Services (Transgender Services). This medical policy IS NOT TO BE USED for Gender Reassignment Services. Refer to SUR717.001, Gender Assignment Surgery and Gender Reassignment Surgery with Related Services.

This policy does not address the use of a non-biodegradable drug delivery implant when utilized for purposes of contraception.

Special comment regarding compounded products: Check member contract for benefit coverage. Determination of benefit coverage for non-U.S. Food and Drug Administration (FDA) approved or regulated formulations are based on member's benefit contract and their eligibility for benefit coverage.

Hormone replacement therapy (HRT) using implanted testosterone pellets (such as Testopel® [testosterone pellets]) **may be considered medically necessary** for the treatment of delayed puberty resulting from hypogonadism. treatment of delayed puberty resulting from hypogonadism

HRT using implanted testosterone pellets **is considered experimental, investigational and/or unproven** for all non-FDA approved indications including, but not limited to, the treatment of female menopause.

HRT using implanted estrogen/estradiol pellets **is considered experimental, investigational and/or unproven** including, but not limited to the treatment of female menopause, as there are no FDA approved pelleted versions of these hormones.

Policy Guidelines

Androgens may be used to stimulate puberty in carefully selected males with clearly delayed puberty. These patients usually have a familial pattern of delayed puberty that is not secondary to a pathological disorder; puberty is expected to occur spontaneously at a relatively late date. Brief treatment with conservative doses may occasionally be justified in these patients if they do not respond to psychological support. The potential adverse effect on bone maturation

should be discussed with the patient and parents prior to androgen administration. An x-ray of the hand and wrist to determine bone age should be taken every 6 months to assess the effect of treatment on epiphyseal centers. (1)

Description

Testosterone and estrogen are among the class of sexual hormones that regulate the growth and function of reproductive organs or stimulate the development of secondary sexual characteristics. Sexual hormone disorders occur when there is either an overproduction or underproduction responsible for sexual characteristics and development. In females, the primary female hormone is estrogen, which is produced by the ovaries. In males, the main male hormone is testosterone, which is produced in the testicles.

Background

Menopause

Menopause naturally occurs as a biological process when a woman's ovaries stop producing hormones, resulting in cessation of fertility and a decline in circulating blood estrogen levels. Menopause is defined as beginning 12 months following the last menstrual cycle. However, there may be months or years of symptoms leading up to menopause, known as perimenopause (transitional menopause). The regularity and length of the menstrual cycle varies across a woman's reproductive life span, but the age at which natural menopause occurs is generally between 45 and 55 years for women worldwide. (1)

The hormonal changes associated with menopause can affect physical, emotional, mental and social well-being. The symptoms experienced during and following the menopausal transition vary substantially from person to person. Some have few, if any, symptoms. For others, symptoms can be severe and affect daily activities and quality of life. Some can experience symptoms for several years. Symptoms may include hot flushes and night sweats, irregular menstrual cycle, vaginal thinning and dryness, and difficulty sleeping/insomnia. (1)

Delayed Puberty

The time in one's life when sexual maturity takes place is known as puberty. The physical changes that mark puberty typically begin in girls between ages 8 and 13 and in boys between ages 9 and 14. Precocious puberty is a condition that occurs when sexual maturity begins earlier than normal. Precocious (meaning prematurely developed) puberty begins before age 8 for girls and before age 9 for boys. Delayed puberty is the term for a condition in which the body's timing for sexual maturity is later than the normal range of ages. (2)

Many children with delayed puberty will eventually go through an otherwise normal puberty, just at a late age. Other children have a long-lasting condition known as hypogonadism in which the sex glands (the testes in men and the ovaries in women) produce few or no hormones. For example, hypogonadism can occur in girls with Turner syndrome or in individuals with

hypogonadotropic hypogonadism, which occurs when the hypothalamus produces little to no gonadotropin-releasing hormone (GnRH). (2)

Hormone Replacement Treatments

Estrogen therapy is used primarily to treat the symptoms of menopausal and postmenopausal women and to decrease the risk of osteoporosis and cardiovascular disease. Estrogen replacement therapy has also been investigated for the prevention of menstrual migraine headaches and to prevent or reduce neural degeneration in Alzheimer's disease and Parkinson's disease.

Typical methods of estrogen administration include oral tablets, intramuscular injections, vaginal creams, and transdermal patches. Estrogen pellets are sometimes combined with testosterone implants to enhance the effects of hormone replacement therapy (HRT). Subcutaneous doses of testosterone can be delivered by implantation of the drug in pellet form in the lower abdomen or buttocks. The procedure is done in a physician's office with the use of a local anesthetic and a small incision for insertion. The release of the drug continues over a three to six-month period, eliminating patient compliance with dosing schedules. Since the drug bypasses gastrointestinal and most liver metabolism, bioavailability can be increased.

The treatment for delayed puberty depends on its cause. An adolescent who is naturally late in developing needs no treatment, although if the adolescent is severely stressed by the lack of development or development is extremely delayed, some doctors may give supplemental sex hormones to begin the process sooner. If boys show no sign of puberty or bone maturation by age 13 or 14, they may be given a 4- to 6-month course of testosterone injections. At low doses, testosterone induces puberty, causes the development of some masculine characteristics (virilization), and does not jeopardize adult height potential. When an underlying disorder is the cause of delayed puberty, puberty usually proceeds once the disorder has been treated. Genetic disorders cannot be cured, although replacing hormones may help sex characteristics develop. Surgery may be needed for adolescents with tumors. (3)

Regulatory Status

There are numerous different U.S. Food and Drug Administration (FDA) approved formulations of testosterone and estrogens that are available for replacement therapy. For the majority of delivery preparations, FDA approval was granted on the ability to increase levels to the normal range, and not on demonstration of beneficial clinical outcomes. However, when it comes to subcutaneous implanted testosterone pellets, the FDA has Testopel® (testosterone pellets) listed without an approved label. The recommended dosing range for Testopel® (testosterone pellets) is 150 to 450 mg subcutaneously every 3 to 6 months. For 75-mg pellets, this would correspond to implant of 2 to 6 pellets every 3 to 6 months. Dosages in delayed puberty generally are in the lower range of that listed above and for a limited duration. The dosing interval is individualized, as some patients will require re-dosing as early as every 3 months while others may not require re-dosing for up to 6 months. The Testopel® (testosterone pellets) official website includes full prescribing information and Endo Pharmaceuticals Inc., Malvern, PA is listed as the manufacturer. (1)

Currently no implantable estrogen pellets have received FDA approval. The FDA has published information concerning the hormone therapy for menopause. It addresses questions about treating menopause symptoms, and recommends that women use FDA approved hormone therapies, as they have been evaluated for safety and effectiveness. (5)

Rationale

This policy is based upon U.S. Food and Drug Administration (FDA) label information for hormone replacement therapies using implanted pellets for women and in the treatment of delayed puberty.

Testosterone Pellets

Testopel®

Indications And Usage

Androgens are indicated for replacement therapy in conditions associated with a deficiency or absence of endogenous testosterone.

- Primary hypogonadism (congenital or acquired) - testicular failure due to cryptorchidism, bilateral torsion, orchitis, vanishing testes syndrome; or orchiectomy.
- Hypogonadotropic hypogonadism (congenital or acquired) - gonadotropic luteinizing hormone–releasing hormone (LHRH) deficiency, or pituitary - hypothalamic injury from tumors, trauma or radiation.

If the above conditions occur prior to puberty, androgen replacement therapy will be needed during the adolescent years for development of secondary sex characteristics. Prolonged androgen treatment will be required to maintain sexual characteristics in these and other males who develop testosterone deficiency after puberty.

Androgens may be used to stimulate puberty in carefully selected males with clearly delayed puberty. These patients usually have a familial pattern of delayed puberty that is not secondary to a pathological disorder; puberty is expected to occur spontaneously at a relatively late date. Brief treatment with conservative doses may occasionally be justified in these patients if they do not respond to psychological support. The potential adverse effect on bone maturation should be discussed with the patient and parents prior to androgen administration. An x-ray of the hand and wrist to determine bone age should be taken every 6 months to assess the effect of treatment on epiphyseal centers.

Safety and efficacy of Testopel® (testosterone pellets) in men with “age-related hypogonadism” (also referred to as “late-onset hypogonadism”) have not been established.

Estrogen/Estradiol Pellets

There are no FDA approved pelleted versions of these hormones.

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	11980, 11981, 11982, 11983
HCPCS Codes	G0516, G0517, G0518, J1073, [Deleted 1/2026: S0189]

*Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.

References

U.S. Food and Drug Administration Label:

1. Testopel® (testosterone pellets). Full prescribing information (5/2025). Available at <https://www.testopel.com> (accessed October 27, 2025).

Other:

2. World Health Organization. Menopause. (October 16, 2024). Available at <https://www.who.int> (accessed October 29, 2025).
3. NICHD - Eunice Kennedy Shriver National Institute of Child Health and Human Development. Puberty and Precocious Puberty. Available at <https://www.nichd.nih.gov> (accessed October 29, 2025).
4. Calabria A. Merck Manual (Consumer Version). Delayed Puberty (Reviewed/Revised Apr 2024). Available at <https://www.merckmanuals.com> (accessed October 29, 2025).
5. U.S Food and Drug Administration. Menopause and hormones: Common questions. 2019. Available at <https://www.fda.gov> (accessed October 31, 2025).

Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does not have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been developed since this medical policy document was written. See Medicare's National Coverage at <https://www.cms.hhs.gov>.

Policy History/Revision	
Date	**Description of Change**
01/01/2026	Document updated. The following changes were made to Coverage: 1) Added special comment regarding compounded products and benefit coverage for non-Food and Drug Administration approved products; 2) Revised female hormone replacement therapy coverage statements; 3) Revised coverage statement for the treatment of delayed puberty resulting from hypogonadism, and 4) Removed Note concerning compounded products and statements concerning associated policies related to testosterone therapy for men and bioidentical hormone replacement therapy for any gender. References 2 and 5 added; others updated/removed.
07/15/2024	Document updated with literature review. Coverage unchanged. References 1-3 added and some updated.
05/01/2023	Reviewed. No changes.
09/15/2022	Document updated with literature review. Coverage unchanged. Reference 14 added and some updated.
06/15/2021	Document updated with literature review. Coverage unchanged. Some references updated; no new references added.
03/15/2020	Reviewed. No changes.
07/15/2018	Document updated with literature review. Coverage unchanged. References 13 and 18 added.
04/15/2017	Reviewed. No changes.
04/01/2016	Document updated with literature review. Coverage unchanged.
11/01/2015	Reviewed. No changes.
10/01/2014	Document updated with literature review. The following NOTE was added to the coverage: Some hormone replacement therapy preparations may be compounded into a combined testosterone and estrogen/estradiol formula for use in implanted pellets. Coverage statements and information regarding the treatment of primary hypogonadism and hypogonadotropic hypogonadism for men moved to a new policy document Testosterone Replacement Therapies, RX501.076. Description, Rationale, and References significantly revised and reorganized. Otherwise, coverage unchanged. Title changed from Subcutaneous Hormone Implants.
05/01/2012	Document updated with literature review, No change in coverage. Rationale updated with 2012 North American Menopause Society Position Statement recommendations.
05/15/2010	Document updated with literature review. The title was changed from Estradiol Pellets. The following was added: Subcutaneous testosterone pellets (Testopel™) may be considered medically necessary for the following Food and Drug Administration (FDA) approved indications in males: primary hypogonadism, and hypogonadotrophic hypogonadism . Subcutaneous

	testosterone pellets (Testopel™) are considered not medically necessary for treatment of delayed puberty not resulting from hypogonadism.
01/01/2010	Revised/updated entire document. Testosterone subcutaneous pellets are now considered a convenience item and not medically necessary. Medical policy title changed from Estradiol Pellets.
08/15/2009	Routine review with literature search, no change in coverage. This policy is no longer scheduled for routine literature review and update.
07/15/2007	Revised/updated entire document
10/01/2005	Revised/updated entire document
01/01/2005	Revised/updated entire document
02/01/2002	Revised/updated entire document
05/01/2000	Revised/updated entire document
05/01/1996	Revised/updated entire document
06/01/1991	Revised/updated entire document