Select Testosterone Products

EOCCO POLICY

Policy Type: PA/SP Pharmacy Coverage Policy: EOCCO067

Description

Testosterone is the primary endogenous androgen responsible for promoting growth and development of male sex organs and the maintenance of secondary sex characteristics.

Length of Authorization

- Initial: 12 months
- Renewal: 12 months

Quantity limits

Product Name	Dosage Form	Indication	Quantity Limit
testosterone undecanoate (Jatenzo)	158 mg tablets	Primary hypogonadism; hypogonadotropic hypogonadism	120 capsules/30 days
	198 mg tablets		120 capsules/30 days
	237 mg capsules		60 capsules/30 days
testosterone undecanoate (Aveed)	750 mg/ 3 mL intramuscular solution		3 mL/28 days
testosterone (Striant)	30 mg buccal system		60 buccal systems/ 30 days
testosterone (Androderm)	2 mg/24 hour patch		60 patches/30 days
	4 mg/24 hour patch		30 patches/30 days
testosterone 1% (AndroGel, Testim, Vogelxo)	25mg/2.5gm gel		300 g/30 days
	50 mg/5gm gel		300 g/30days
	1.25 g/actuation gel pump		300 g/30 days
testosterone 1.62% (AndroGel, Vogelxo)	20.25 mg/ 1.25 gm gel packet		150 g/30 days

	40.5 mg/2.5gm gel packet		150 g/30 days
	20.25 mg/ actuation gel pump		150 g/30 days
testosterone cypionate (testosterone cypionate)	100mg/mL intramuscular injection		8 mL/28 days
	200mg/mL intramuscular injection		4 mL/28 days
testosterone cypionate (Depo-testosterone)	100mg/ mL intramuscular injection		8 mL/28 days
	200mg/ mL intramuscular injection		4 mL/28 days
testosterone (Axiron)	30 mg actuation roll-on solution		110 mL /30 days
testosterone (Xyosted)	50 mg/ 0.5 mL subcutaneous solution autoinjector		5 mL/28 days
	75 mg/0.5 mL subcutaneous solution autoinjector		5 mL/28 days
	100 mg/ 0.5 mL subcutaneous		4 mL/28 days

	solution autoinjector		
testosterone enanthate (testosterone enanthate)	200mg/ mL intramuscular injection		4 mL/28 days
testosterone Cypionate 2% (Fortesta)	10mg/ actuation gel		120 g /30 days
methyltestosterone (Methitest)	10 mg tablet or capsule		Men: 150 tablets or capsules/ 30 days Women:600 tablets or capsules / 30 days

Initial Evaluation

I. Select testosterone products may be considered medically necessary when the following criteria are met:

A. A diagnosis of one of the following:

1. **Gender dysphoria**; **OR**
2. **Primary or Secondary Hypogonadism defined as one of the following**;

i. Primary hypogonadism (testicular failure) due to Klinefelter syndrome (KS), cryptorchidism, orchiectomy, vanishing testes syndrome, chemotherapy affecting or radiation to the testes, testicular trauma, torsion, infectious orchitis, HIV infection, anorchia syndrome, myotonic dystrophy; **OR**

ii. Secondary hypogonadism (pituitary-hypothalamic hypogonadism) as caused by hypothalamic or pituitary tumor, iron overload syndromes, idiopathic hypogonadotropic hypogonadism, hyperprolactinemia, head trauma, and pituitary surgery or radiation; **AND**

iii. Two sub-normal testosterone concentration levels taken on two separate mornings while fasting; **AND**

iv. Treatment with all of the following has been ineffective, contraindicated, or not tolerated**:**

a. Generic testosterone cypionate; **AND**

b. Generic testosterone enanthate

AND

v. Member is male; **AND**

vi. Age is 18 years old or greater; **AND**

vii. Member does not:
   a. Plan to conceive; **OR**
   b. Have breast or prostate cancer; **OR**
   c. Have palpable prostate nodule or induration; **OR**
   d. Have a prostate-specific antigen level greater than 4 ng/mL, a prostate-specific antigen greater than 3 ng/mL combined with a high risk of prostate cancer; **OR**
   e. Have testosterone levels within the normal range

II. Testosterone is considered not medically necessary when used for all other conditions, including
   A. Men with low testosterone concentration and without clinical symptoms and signs consistent with testosterone deficiency. The routine assessment of testosterone level in the absence of hypogonadal symptoms is not advised.
   B. Men with a single, sub-normal testosterone concentration that is not repeatable per the U.S. Endocrine Society.
   C. Men with symptoms of hypogonadism, however, present with testosterone level within normal range.

III. Testosterone is considered investigational when used for all other conditions, including but not limited to:
   A. Age-related hypogonadism
      1. The role of testosterone replacement to treat the natural decline in serum testosterone common in men over the age of 60, without identified pituitary or hypothalamic disease, is uncertain.
   B. Men with type 2 diabetes mellitus with low testosterone for the purpose of improving glycemic control
   C. For the healing of fracture
   D. Functional uterine bleed
   E. Treatment of weight loss unrelated to HIV-wasting

Renewal Evaluation

I. A previously approved prior-authorization for a testosterone product from this plan.

Supporting Evidence

I. Per the 2018 AUA guidelines, diagnosis of hypogonadism should be confirmed prior to initiating testosterone replacement therapy. Testosterone levels should be drawn ideally between 8 and

10 AM while fasting due to the diurnal fluctuation of testosterone and its sensitivity to glucose ingestion. A separate, confirmatory measurement is recommended.

II. Thirty percent of men with an initial testosterone concentration in the hypogonadal range can have a measurement within the normal range on repeat measurement.

III. The Endocrine Society strongly advises against "trial periods" of testosterone in men with a single sub-normal testosterone concentration and vague symptoms of deficiency.

IV. The benefit of increasing testosterone concentration has only been shown in patients with organic hypogonadism due to disorders of the hypothalamus, pituitary or testes.

V. In patients within normal range, or, have low testosterone concentration due to age, obesity or otherwise, the benefit of increased testosterone has not been shown. Rather, in this patient population with low an intact gonadal system, increasing testosterone is associated with an increase of certain health risks, including cardiovascular disease. Because of this, the FDA has required manufacturers to label testosterone products warning of the increased risk for heart attack and stroke.

VI. To discriminate between primary and secondary hypogonadism, a measurement of serum luteinizing hormone (LH) and follicle- testosterone and stimulation hormone (FSH) concentrations is required.

- Primary: testicular failure; usually associated with high LH and FSH
- Secondary: pituitary and/or hypothalamic dysfunction; usually associated with low LH and FSH

VII. Lower limit of the normal total testosterone (TT) to the CDC standard in healthy, non-obese young men is 264 ng/dL (9.2 nmol/L).

VIII. There is a lack of strong scientific evidence from randomized controlled trials supporting safety and efficacy for the use of oral testosterone undecanoate (Jatenzo) or topical testosterone products in women.

IX. A randomized trial showed that use of testosterone undecanoate (Jatenzo) resulted in an increase in systolic and diastolic blood pressure by an average of 4.9 mmHg and 2.5 mmHg, respectively.

- Increases in hematocrit and heart rate were also noted, leading to an increased risk of major adverse cardiac events (MACE), limiting dose frequency to twice daily.

X. Testosterone replacement therapy is subject to abuse at doses higher than recommended for approved indications and in combination with other anabolic androgenic steroids. Abuse-related adverse events include cardiac arrest, myocardial infarction, hypertrophic cardiomyopathy, congestive heart failure, hepatotoxicity, and serious psychiatric complaints.

XI. Payment consideration for oral methyltestosterone is reserved for members who have tried and failed injectable testosterone. Testosterone enanthate injectable is approved for use in females, 1-5 years postmenopausal advanced inoperable metastatic breast cancer, in premenopausal women who have benefited from oophorectomy with hormone responsive tumors, OR in

delayed puberty in males. Topical formulations of testosterone are not indicated for use in women and pediatrics.

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Policy Implementation/Update:

Action and Summary of Changes	Date
Added generic testosterone cypionate to table, updated policy title	08/2019
Updated title to encompass nonspecific testosterone products; included Methitest and testosterone enanthate products;	12/2019
Change to policy format; added supplementary evidence section; updated references	07/2019
Policy created	06/2019