UnitedHealthcare Community Plan

Clinical Pharmacy Program Guidelines for Topical Androgens

Program	Prior Authorization
Medication	Preferred product: Testosterone (T gel and pump) Non-preferred products: Androderm (testosterone [T] patch), Androgel (T gel and pump), Axiron (T topical solution), Fortesta (T gel), Natesto (T nasal gel), Striant (T buccal system), Testim (T gel), and Vogelxo (T gel and pump)
Issue Date	9/2009
Pharmacy and Therapeutics Approval Date	6/2017
Effective Date	7/1/2017

1. Background:

The topical testosterone products are approved by the Food and Drug Administration (FDA) for testosterone replacement therapy in males with primary hypogonadism (congenital or acquired) or hypogonadrotropic hypogonadism (congenital or acquired). Primary hypogonadism originates from a deficiency or disorder in the testicles. Secondary hypogonadism indicates a problem in the hypothalamus or the pituitary gland. When hypogonadism develops before the age of puberty some of the signs and symptoms of hypogonadism include: small testes, phallus, or prostate, impaired body hair growth, gynecomastia, persistent high pitched voice, and disproportionate growth of arms and legs in comparison to trunk of body. Signs and symptoms associated with later onset hypogonadism are loss of libido, erectile dysfunction**,** sarcopenia, low bone mass, decreases in muscle mass, depressive thoughts**,** fatigue**,** loss of body hair**,** hot flushes**,** loss of vigour. Testosterone use has been strongly linked to improvements in muscle mass, bone density, and libido. Topical products include Axiron, Androderm, Androgel, Fortesta, Natesto, Striant, Testim, and Vogelxo.

The purpose of this program is to provide coverage for androgens and anabolic steroid therapy for the treatment of conditions for which they have shown to be effective and are within the scope of the plan's drug benefit. Coverage for the enhancement of athletic performance or body building will not be provided.

2. Coverage Criteria:

A. Initial Authorization for Hypogonadism

1. **One** of the following:

   a. **Two** pre-treatment serum total testosterone levels less than 280 ng/dL (< 9.7 nmol/L) or less than the reference range for the lab, taken at separate times (This may require treatment to be temporarily held. Document lab value and date for both levels)

   -OR-

   b. **Both** of the following:

      (1) Patient has a condition that may cause altered sex-hormone binding globulin (SHBG) (eg, thyroid disorder, HIV disease, liver disorder, diabetes, obesity)
      (2) **One** pre-treatment calculated free or bioavailable testosterone level less than 50 pg/mL (<5 ng/dL or < 0.17 nmol/L) or less than the reference range for the lab (This may require treatment to be temporarily held. Document lab value and date)

   -OR-

   c. Patient has a history of **one** of the following:

      (1) Bilateral orchiectomy
      (2) Panhypopituitarism
      (3) A genetic disorder known to cause hypogonadism (eg, congenital anorchia, Klinefelter's syndrome)

   -AND-

2. Patient is **not** taking any of the following:

   a. One of the following growth hormones, unless diagnosed with panyhypopituitarism: Genotropin, Humatrope, Norditropin FlexPro, Norditropin NordiFlex, Nutropin, Nutropin AQ, Omnitrope, Saizen, Tev-Tropin

   b. Aromatase inhibitor (eg, Arimidex [anastrozole], Femara [letrozole], Aromasin [exemestane])

   -AND-

3. Patient was male at birth

-AND-

4. Diagnosis of hypogonadism

-AND-

5. **One** of the following:

   a. Significant reduction in weight (less than 90% ideal body weight) (e.g., AIDS wasting syndrome)
   b. Osteopenia
   c. Osteoporosis
   d. Decreased bone density
   e. Decreased libido
   f. Organic cause of testosterone deficiency (eg, injury, tumor, infection, or genetic defects)

-AND-

6. If the request is for a non-preferred product, the patient has a history of failure, contraindication, or intolerance to generic testosterone 1% topical gel

Authorization will be issued for 12 months.

B. Initial Authorization for Gender Dysphoria[+]

1. Using hormones to change physical characteristics

-AND-

2. The covered person must be diagnosed with gender dysphoria, as defined by the current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM)

-AND-

3. Patient is **not** taking any of the following:

   a. One of the following growth hormones, unless diagnosed with panyhypopituitarism: Genotropin, Humatrope, Norditropin FlexPro, Norditropin NordiFlex, Nutropin, Nutropin AQ, Omnitrope, Saizen, Tev-Tropin [5]

b. Aromatase inhibitor (eg, Arimidex [anastrozole], Femara [letrozole], Aromasin [exemestane])

-AND-

4. If the request is for a non-preferred product, the patient has a history of failure, contraindication, or intolerance to generic testosterone 1% topical gel

Authorization will be issued for 12 months.

C. <u>Reauthorization for both Non-Gender Dysphoria and Gender Dysphoria</u>

1. Reauthorization will be approved based on **<u>both</u>** of the following:

a. **<u>One</u>** of the following:

(1) Follow-up total serum testosterone level drawn within the past 12 months is within or below the normal male limits of the reporting lab (document value and date)

-OR-

(2) Follow-up total serum testosterone level drawn within the past 12 months is outside of upper male limits of normal for the reporting lab and the dose is adjusted (document value and date)

-OR-

(3) **<u>Both</u>** of the following:

(a) Patient has a condition that may cause altered sex-hormone binding globulin (SHBG) (e.g., thyroid disorder, HIV disease, liver disorder, diabetes, obesity)

-AND-

(b) **<u>One</u>** of the following:

i. Follow-up calculated free or bioavailable testosterone level drawn within the past 12 months is within or below the normal male limits of the reporting lab (document lab value and date)

-OR-

ii. Follow-up calculated free or bioavailable testosterone level drawn within the past 12 months is outside of upper male limits of normal for the reporting lab and the dose is adjusted (document value and date)

-AND-

b. Patient is **not** taking any of the following:

(1) One of the following growth hormones, unless diagnosed with panyhypopituitarism: Genotropin, Humatrope, Norditropin FlexPro, Norditropin NordiFlex, Nutropin, Nutropin AQ, Omnitrope, Saizen, Tev-Tropin [5]

(2) Aromatase inhibitor (eg, Arimidex [anastrozole], Femara [letrozole], Aromasin [exemestane])

Authorization will be issued for 12 months.

3. Additional Clinical Rules:

[+]Coverage for patient population may be dependent upon benefit design

4. References:

1. AACE Hypogonadism Task Force. American Association of Clinical Endocrinologists Medical Guidelines for Clinical Practice for the Evaluation and Treatment of Hypogonadism in Adult Male Patients – 2002 Update. *Endocr Pract*. 2002; 8(No. 6): 439-456.
2. The World Professional Association for Transgender Health (WPATH), Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, 7th Version.
3. Cook, David M, et al. "American Association of Clinical Endocrinologists medical guidelines for clinical practice for growth hormone use in growth hormone-deficient adults and transition patients - 2009 update: executive summary of recommendations." Endocrine practice 15.6 (2009):580-586.
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5. Bhasin, S, et al. "Testosterone replacement and resistance exercise in HIV-infected men with weight loss and low testosterone levels." *JAMA*. 2000. 283.(6) 763-770.
6. Isidori, Andrea M, et al. Effects of testosterone on sexual function in men: results of a meta-analysis. *Clinical endocrinology*. 2005 63(4):381-394.

7. Kenny, A M, et al. Effects of transdermal testosterone on bone and muscle in older men with low bioavailable testosterone levels. *The journals of gerontology*. 2001. 56(5) M266-M272.
8. Tracz, Michal J, et al. Testosterone use in men and its effects on bone health. A systematic review and meta-analysis of randomized placebo-controlled trials. *The Journal of clinical endocrinology and metabolism.* 2006. 91(6):2011-2016.
9. Bolona, Enrique R, et al. Testosterone use in men with sexual dysfunction: a systematic review and meta-analysis of randomized placebo-controlled trials. *Mayo Clinic proceedings*.2007. 82(1):20-28.
10. The Endocrine Society. Testosterone therapy in Adult Men with Androgen Deficiency Syndromes. *J Clini Endocrinol Metab*. 2010; 95(6): 2546-59.
11. Androderm® (testosterone) transdermal system. Prescribing information. Parsippany, NJ: Watson Laboratories, Inc., July 2015.
12. Androgel® (testosterone) 1.62% gel. Prescribing information. Abbvie Inc. Chicago, IL. May 2015.
13. Androgel® (testosterone) 1% gel. Prescribing information. Abbvie Inc. Chicago, IL. October 2016.
14. Axiron® (testosterone) topical solution. Prescribing Information. Indianapolis, IN: Lilly USA, LLC. October 2016.
15. Fortesta® (testosterone) 2% gel. Prescribing Information. Malvern, PA: Endo Pharmaceuticals. October 2016.
16. Testim® (testosterone) 1% gel. Prescribing information. Malvern, PA: Endo Pharmaceuticals, Inc., October 2016.
17. Striant® (testosterone) buccal system. Prescribing information. Endo Pharmaceuticals. Malvern, PA. October 2016.
18. Natesto® (testosterone) nasal gel. Prescribing information. Endo Pharmaceuticals. Malvern, PA. May 2015.
19. Vogelxo® (testosterone) gel. Prescribing information. Maple Grove, MN: Upsher-Smith Laboratories, September 2016.
20. Hembree, Wylie C, et al. "Endocrine treatment of transsexual persons: an Endocrine Society clinical practice guideline." The Journal of clinical endocrinology and metabolism 94.9 (2009):3132-3154.

Program	Prior Authorization
Change Control	
Date	Change
Sept 2009	Criteria taken from previously approved AmeriChoice policy. Policy was reformatted.
Dec 2010	Annual Review
March 2011	Annual Review. Added Axiron and Fortesta to non-preferred product list

Sept 2011	Annual Review. Added Androgel 1.62% to non-preferred product list
December 2011	Changed Androgel 1.62% from non-preferred product list to preferred product list. Changed Androgel 1% from preferred product list to non-preferred product list.
December 2012	Annual Review
December 2014	Full updated made to clinical criteria. Serum testosterone requirement changed to two levels less than 280 ng/dL, previously required one level less or equal to 300 ng/dL Added an alternative diagnostic option to serum testosterone testing: conditions that may cause altered sex-hormone binding globulin with one of the following (1) calculated free or bioavailable testosterone level less than 5 ng/dL or bilateral orchiectomy, panhypopituitarism, or (2) a genetic disorder known to cause hypogonadism. Added all of the following new requirements: • Not used in combination with growth hormones or aromatase inhibitors • Patient is male • Diagnosis of hypogonadism • One of the following: significant reduction in weight (less than 90% ideal body weight) (eg, AIDS wasting syndrome), osteopenia, osteoporosis, decreased bone density, decreased libido, organic cause of testosterone deficiency
March 2015	Gender Identity disorder initial criteria created for New Jersey and Washington plans due to plan requirement. Gender Identity disorder added to Male hypogonadism reauthorization criteria for New Jersey and Washington plans due to plan requirement.
June 2015	Changed products that the criteria applies to due to a PDL change.
November 2016	Updated clinical criteria to align with E&I's policy, added trial/failure of generic testosterone 1% topical gel to section A and B
February 2017	Updated header to define preferred and non-preferred products. Clarified that reauthorization is for non-gender dysphoria indications.
March 2017	Changed authorization durations to 12 months.
April 2017	In the female to male transition section, removed language requiring documented real life experience living as the other gender or a period of psychotherapy as this is not supported by WPATH guidelines.

May 2017	In the female to male transition section, removed language requiring demonstrable knowledge of what hormones medically can and cannot do and their social benefits and risks, and the requirement that if significant medical or mental health concerns are present, they are reasonably well controlled. Changed “transsexual” to “transgender”. Updated references. Updated reauthorization header to clarify that it applies to all conditions.