Clinical Policy: Testosterone (Androderm)
Reference Number: HIM.PA.87
Effective Date: 12.01.14
Last Review Date: 11.20
Line of Business: HIM

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Testosterone transdermal system (Androderm®) is a topical androgen.

FDA Approved Indication(s)
Androderm is indicated for replacement therapy in males for conditions associated with a deficiency or absence of endogenous testosterone:

- Primary hypogonadism (congenital or acquired) - testicular failure due to conditions such as cryptorchidism, bilateral torsion, orchitis, vanishing testes syndrome, orchiectomy, Klinefelter Syndrome, chemotherapy, or toxic damage from alcohol or heavy metals. These men usually have low serum testosterone concentrations and gonadotropins (FSH, LH) above the normal range.

- Hypogonadotropic hypogonadism (congenital or acquired) - gonadotropic lutenizing hormone-releasing hormone deficiency, or pituitary - hypothalamic injury from tumors, trauma, or radiation. These men have low testosterone serum concentrations but have gonadotropins in the normal or low range.

Limitation(s) of use:
- Safety and efficacy of Androderm in men with “age-related hypogonadism” (also referred to as “late-onset hypogonadism”) have not been established.
- Safety and efficacy of Androderm in males less than 18 years old have not been established.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Androderm is medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Hypogonadism (must meet all):
      1. Diagnosis of primary hypogonadism or hypogonadotropic hypogonadism;
      2. Age ≥ 18 years;
      3. Documentation of serum testosterone level < 300 ng/dL on at least 2 separate days within the last 6 months;
      4. Failure* of testosterone cypionate or testosterone enanthate injection at up to maximally indicated dose unless contraindicated or clinically significant adverse effects are experienced;
CLINICAL POLICY
Testosterone

*Failure is demonstrated by lower than normal total testosterone levels as compared to laboratory reference values

5. Dose does not exceed 1 patch per day.

**Approval duration: 12 months**

B. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): HIM.PHAR.21 for health insurance marketplace.

II. Continued Therapy

A. Hypogonadism (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed 1 patch per day.

**Approval duration: 12 months**

B. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

   **Approval duration: Duration of request or 12 months (whichever is less); or**

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): HIM.PHAR.21 for health insurance marketplace.

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – HIM.PHAR.21 for health insurance marketplace or evidence of coverage documents;

B. Age-related hypogonadism or late-onset hypogonadism.

IV. Appendices/General Information

**Appendix A: Abbreviation/Acronym Key**
FDA: Food and Drug Administration

**Appendix B: Therapeutic Alternatives**

*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.*

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>testosterone cypionate</td>
<td>50 to 400 mg IM once every 2 to 4 weeks</td>
<td>400 mg every 2 to 4 weeks</td>
</tr>
<tr>
<td>testosterone enanthate injection</td>
<td>50 to 400 mg IM once every 2 to 4 weeks</td>
<td>400 mg every 2 to 4 weeks</td>
</tr>
</tbody>
</table>

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*
Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
  - Men with carcinoma of the breast or known or suspected carcinoma of the prostate
  - Pregnant or breastfeeding women (testosterone may cause fetal harm)
- Boxed warning(s): none reported

Appendix D: General Information

- Per the Endocrine Society (2018), the diagnosis of hypogonadism requires unequivocally and consistently low testosterone levels on at least 2 separate mornings. Although the lower limit of normal for testosterone can vary depending on the laboratory used, clinical trials for a number of testosterone agents defined it as < 300 ng/dL. Additionally, the American Urological Association suggests < 300 ng/dL as a reasonable cut-off in support of low testosterone diagnosis (2018).
- Patients with primary hypogonadism usually have low serum testosterone concentrations and gonadotropins (follicle stimulating hormone and luteinizing hormone) above the normal range. Patients with hypogonadotropic hypogonadism have low serum testosterone concentrations but have gonadotropins in the normal or low range.

V. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypogonadism</td>
<td>1 patch topically nightly for 24 hours</td>
<td>6 mg/day</td>
</tr>
</tbody>
</table>

VI. Product Availability

Transdermal system: 2 mg/day, 4 mg/day

VII. References

## Reviews, Revisions, and Approvals

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reformatted guideline to new format. Added Workflow reference document. Removed exclusion for use in gender reassignment transitioning</td>
<td>12.15</td>
<td>12.15</td>
</tr>
<tr>
<td>Removed gender restriction to male. Updated references.</td>
<td>11.16</td>
<td>11.16</td>
</tr>
<tr>
<td>Converted to new template. Added testosterone enanthate injection as a trial option.</td>
<td>04.17</td>
<td>08.17</td>
</tr>
<tr>
<td>3Q 2018 annual review: no significant changes; added age; references reviewed and updated.</td>
<td>06.17.18</td>
<td>08.18</td>
</tr>
<tr>
<td>4Q 2018 annual review: added requirement for documentation of testosterone levels per PI and guidelines; references reviewed and updated.</td>
<td>07.16.18</td>
<td>11.18</td>
</tr>
<tr>
<td>4Q 2019 annual review: added age-related hypogonadism or late-onset hypogonadism to Section III for excluded diagnoses; references reviewed and updated.</td>
<td>08.08.19</td>
<td>11.19</td>
</tr>
<tr>
<td>4Q 2020 annual review: no significant changes; references reviewed and updated.</td>
<td>08.11.20</td>
<td>11.20</td>
</tr>
</tbody>
</table>

### Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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