INTRAMUSCULAR TESTOSTERONE

I.M. testosterone products marketed in Canada* 1

<table>
<thead>
<tr>
<th>DIN</th>
<th>Company</th>
<th>Product</th>
<th>Active Ingredient</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>0029246</td>
<td>VALENT CANADA LP/VALENT CANADA S.E.C.</td>
<td>DELATESTRYL TESTOSTERONE ENANTHATE</td>
<td></td>
<td>200 MG / ML (approx. 140 mg testosterone)</td>
</tr>
<tr>
<td>0030783</td>
<td>PFIZER CANADA INC.</td>
<td>DEPO-TESTOSTERONE INJ 100MG/ML TESTOSTERONE CYPIONATE</td>
<td></td>
<td>100 MG / ML</td>
</tr>
<tr>
<td>0224063</td>
<td>SANOZ CANADA INCORPORATED</td>
<td>TESTOSTERONE CYPIONATE INJECTION USP</td>
<td></td>
<td>100 MG / ML</td>
</tr>
</tbody>
</table>

* Other products are listed in the Drug Product Database but are not currently being marketed

Confirm that ongoing use of testosterone is indicated
- Approved indication for I.M. testosterone therapy 2: androgen replacement therapy in adult males for conditions associated with a deficiency or absence of endogenous testosterone.
- Off-label uses 3: gender disorder (female-to-male change), post-menopausal hormone replacement, certain cancers, others.

Potential alternatives for I.M. testosterone 4

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</tr>
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<tbody>
<tr>
<td>00782327</td>
<td>MERCK CANADA INC</td>
<td>ANDRIOL TESTOSTERONE UNDECANOATE</td>
<td></td>
<td>40 mg</td>
</tr>
<tr>
<td>02322498</td>
<td>PHARMASCIENCE INC.</td>
<td>PMS-TESTOSTERONE oral TESTOSTERONE UNDECANOATE</td>
<td></td>
<td>40 mg</td>
</tr>
<tr>
<td>0239653</td>
<td>PALADIN LABS INC.</td>
<td>ANDRODERM transdermal patch TESTOSTERONE</td>
<td></td>
<td>12.2 mg (2.5 mg testosterone per day 24.3 mg (5 mg testosterone per day)</td>
</tr>
<tr>
<td>02245972</td>
<td>AUXILIUM PHARMACEUTICALSgel</td>
<td>TESTIM 1% TESTOSTERONE</td>
<td></td>
<td>1 % 50 mg testosterone /per prepackaged tube</td>
</tr>
<tr>
<td>02280248</td>
<td>ABBOTT LABORATORIES, LIMITED</td>
<td>ANDROGEL metered dose pump TESTOSTERONE</td>
<td></td>
<td>1 % - 12.5 mg testosterone per actuation</td>
</tr>
<tr>
<td>02249499</td>
<td>ABBOTT LABORATORIES, LIMITED</td>
<td>2.5 g/5 g packets TESTOSTERONE</td>
<td></td>
<td>1 % - 25mg or 50 mg testosterone per packet</td>
</tr>
</tbody>
</table>
Considerations when choosing an alternate form of testosterone:

- **Indication for use**

  **Dosage recommendations for androgen deficiency**
  - 75–100 mg of testosterone enanthate or cypionate IM weekly
  - One or two 5-mg testosterone patches applied nightly
  - 5–10 g of a 1% testosterone gel applied daily over a covered area of skin
  - Oral testosterone undecanoate 40 – 160 mg daily

  **Dosage recommendations for female to male transsexual change**
  - Testosterone enanthate or cypionate 100–200 mg IM every 2 week or 50% weekly
  - Testosterone gel 1% 2.5–10 g daily
  - Testosterone patch 2.5–7.5 mg daily
  - Oral: testosterone undecanoate 160–240 mg daily

- Testosterone enanthate and testosterone cypionate provide approximately the same concentrations of unesterified testosterone (140 mg per 200 mg of enanthate/cypionate).

- Ten percent of testosterone in topically applied gels is absorbed. (For example, 5 g of 1% testosterone gel delivers approximately the same amount of testosterone as one 5 mg testosterone patch).

- The bioavailability of oral testosterone undecanoate is about 7% provided it is taken with a meal.

- Adjust the dose as needed to provide desired effect on symptoms of hypoandrogenism and serum testosterone levels.

- There is a lower incidence of skin irritation with the gel than with the patch.

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Reviewed by Carmen Bell BSP and Gurpreet Nijaar BSP
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References:


