GENERAL TIPS FOR PROVIDING GENDER-AFFIRMING CARE

Patient-centered Care
- Use preferred name and pronouns
- Discuss individual medical treatment goals

Medical assessment
- Discuss medications and/or conditions that might change with hormone treatment

Mental health assessment
- Discuss conditions that might compromise assessment of gender identity or treatment plan

Discuss fertility
- Assess fertility preservation goals and discuss options
- Discuss pregnancy risk

Don’t forget routine body part-specific screenings
- Provide bone health screenings based on guidelines
- Person with cervix: Offer Pap smear based on guidelines
- Person with breasts: Offer chest exams and mammograms based on guidelines
- Person with prostate: Offer prostate exams based on guidelines

PROTOCOL FOR TRANSGENDER AND NON-BINARY PERSONS USING HORMONE THERAPY

**Masculinizing Hormones**

- **Testosterone**
  - (Start at low end of dose range and titrate to physiologic total testosterone level; Consider dose increase if menses persist for >3 months at steady state)
  - **Total testosterone**
    - (target 300–1000 ng/dL)

**Feminizing Hormones**

- **Estrogen**
  - (Start at low end of dose range and titrate to lowest effective dose, i.e., total testosterone level in cisgender female range)
- **Anti-androgens**
  - (Start at low end of dose range and titrate to lowest effective dose, i.e., total testosterone level in cisgender female range)
  - **Uptitrate every 2-3 months**
    - (target testosterone levels <55 ng/dl and estradiol levels roughly in 100-200 pg/ml range)

Monitor sex steroid levels and perform other lab testing based on regimen and/or related to general primary care (see other side of card for more details)

*Note: Progesterone is not currently recommended for feminizing therapy.
### Recommended Regimens and Monitoring

#### Masculinizing Hormone Therapy

**Testosterone Options**

<table>
<thead>
<tr>
<th>Route</th>
<th>Formulation</th>
<th>Possible Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intramuscular (IM) or subcutaneous (SQ)</td>
<td>Testosterone enanthate or cypionate: 50–100 mg IM or SQ weekly or 100–200 mg IM or SQ every 2 weeks</td>
<td>Erythrocytosis, acne (consider dose decrease for severe acne)</td>
</tr>
<tr>
<td>Transdermal or transbuccal</td>
<td>Testosterone gel: 50–100 mg daily</td>
<td></td>
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<tr>
<td></td>
<td>Testosterone patch: 2–8 mg daily</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transbuccal patch: 30 mg to gums every 12 hours</td>
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</tr>
</tbody>
</table>

**Monitoring Recommendations for Persons Using Testosterone**

1. Monitor every 3 months initially (i.e., when dose is changed), then every 6–12 months when stable.
2. Check serum testosterone levels. Target testosterone: 300–1000 ng/dL.
   - Note: Peak levels measured 24–48 hours after injection. Trough levels measured before injection.
3. Check hematocrit/hemoglobin.
4. Other labs may be included by provider as confirmatory tests (e.g., estrogen and LH/FSH) or relating to general primary care (e.g., HgbA1c, lipids).

#### Feminizing Hormone Therapy

**Estrogen Options**

<table>
<thead>
<tr>
<th>Route</th>
<th>Formulation</th>
<th>Possible Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>First-line: Estradiol: initial 1–2 mg daily; maintenance: 2–6 mg daily</td>
<td>Increased rates of venous thromboembolism</td>
</tr>
<tr>
<td></td>
<td>Alternative: Conjugated estrogens: initial 1.25–2.5 mg daily; maintenance 5–7.5 mg daily</td>
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</tr>
<tr>
<td>Transdermal</td>
<td>Estradiol patch: 0.025–0.2 mg daily (new patch placed every 3–5 days)</td>
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</tr>
<tr>
<td>Intramuscular</td>
<td>Estradiol valerate: 2–10 mg IM weekly or 5–30 mg IM every 2 weeks</td>
<td></td>
</tr>
</tbody>
</table>

**Anti-androgen Options**

<table>
<thead>
<tr>
<th>Route</th>
<th>Formulation</th>
<th>Possible Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (first-line)</td>
<td>Spironolactone: initial: 50 mg/daily; maintenance: 100–300 mg daily</td>
<td>Hyperkalemia risk</td>
</tr>
<tr>
<td>Intramuscular (second line for adults)</td>
<td>Leuprolide: 3.75–7.5 mg IM or SQ monthly or 11.25–22.5 mg IM or SQ depot every 3 months</td>
<td></td>
</tr>
</tbody>
</table>

**Monitoring Recommendations for Persons Using Estrogen and Anti-androgens**

1. Measure total testosterone and estradiol levels approximately every 3 months (i.e., with dose changes) initially and approximately annually when stable.
   - (a) Target serum testosterone: <55 ng/dL
   - (b) Target estrogen: 100–200 pg/ml
2. Spironolactone only: Verify safety of potassium level after each dose increase.
3. Other labs may be included by provider as confirmatory tests (like estrogen and LH/FSH) or relating to general primary care (e.g., HgbA1c, lipids).

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For more information regarding transgender care, go to: https://www.mountsinai.org/locations/center-transgender-medicine-surgery

Mount Sinai Center for Transgender Medicine and Surgery

CEI Clinical Education Initiative
New York State Department of Health

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