Testosterone for Depression, PTSD, or Fibromyalgia: Clinical Effectiveness and Guidelines
**Research Questions**

1. What is the clinical effectiveness of testosterone for patients with depression?
2. What is the clinical effectiveness of testosterone for patients with post-traumatic stress disorder?
3. What is the clinical effectiveness of testosterone for patients with fibromyalgia?
4. What are the evidence-based guidelines for the use of testosterone for patients with depression, PTSD, or fibromyalgia?

**Key Findings**

Two systematic reviews, two randomized controlled trials, six non-randomized studies, and two evidence-based guidelines were identified regarding the clinical effectiveness of testosterone for patients with depression.

**Methods**

A limited literature search was conducted on key resources including PubMed, PsycINFO, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to a broad search to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, and guidelines. No filters were applied to a second narrow search. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1 2012 and February 6, 2017. Internet links were provided, where available.

**Selection Criteria**

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

**Table 1: Selection Criteria**

<table>
<thead>
<tr>
<th>Population</th>
<th>Adults (aged 18 to 55 years) with depression, PTSD, or fibromyalgia</th>
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</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Testosterone</td>
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<tr>
<td>Comparators</td>
<td>Q1-3: Placebo; No treatment; Other active treatments; Q4: No comparator</td>
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<tr>
<td>Outcomes</td>
<td>Q1-3: Clinical effectiveness (symptom reduction), safety and harms; Q4: Evidence-based guidelines</td>
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<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines</td>
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</table>
Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Two systematic reviews, two randomized controlled trials, six non-randomized studies, and two evidence-based guidelines were identified regarding the clinical effectiveness of testosterone for patients with depression. No relevant literature was identified regarding the clinical effectiveness of testosterone for patients with post-traumatic stress disorder or fibromyalgia. No relevant health technology assessments were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments

No literature was identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials


Non-Randomized Studies

PubMed: PM26756004

PubMed: PM23816768

PubMed: PM23551886

PubMed: PM22092151

Guidelines and Recommendations
See: 6.16. Are Hormonal Agents Effective as Monotherapy or Adjunctive Treatment with Antidepressants? p.595

PubMed: PM25384570
Appendix — Further Information

Review Articles
   PubMed: PM26765046
   PubMed: PM25398416
   PubMed: PM24047633
   PubMed: PM22719760