Selective serotonin reuptake inhibitors for the treatment of depression in adults

This document prepares the clinician to discuss scientific data with the patient so they can make an informed decision together.

Presenting selective serotonin reuptake inhibitors to patients

What are selective serotonin reuptake inhibitors (SSRIs) for?
- SSRIs are a class of medications that are taken daily to reduce the symptoms of depression. These medications (Citalopram [Celexa®], Escitalopram [Cipralex®], Fluoxetine [Prozac®], Fluvoxamine [Luvox®], Paroxetine [Paxil®], Sertraline [Zoloft®]) act by selectively inhibiting the uptake of serotonin.

Among individuals with depressive symptoms, who might consider taking SSRIs?
- Adults diagnosed with moderate to severe unipolar depression. Diagnosis can be made using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*

Why do patient preferences matter when making this decision?
- There are pros and cons to taking this medication:
  **PROS:** Individuals with moderate to severe depression who take SSRIs for 4-8 weeks experience a small but clinically significant reduction in their symptoms using the HRSD (see below).¹
  **CONS:** 85% of individuals treated with SSRIs experience at least one bothersome side effect,² and 1-5% of individuals discontinue treatment because of reversible side effects such as sexual dysfunction and insomnia.³

In the trials to evaluate the effectiveness of SSRIs, the lengths of treatment were relatively short—there is a lack of evidence on the effects of long term SSRI treatment.

- Moderate and severe depression can also be treated with exercise,⁴ behavioural and psychotherapy approaches, and other medications such as tricyclic antidepressants and St. Johns wort.⁵

Both taking and not taking SSRIs are acceptable options, so we propose that:
- the decision takes into account the patient's preferences and values
- the clinician shares this decision with the patient

Hamilton Rating Scale of Depression (HRSD)**
- 17 to 21 item questionnaire to rate depression severity
- range: 0-50
- score > 18 indicates severe depression
- 3-point change: clinically significant

**http://imaging.ubmmedica.com/all/editorial/psychiatrictimes/pdfs/clinical-scales-ham-d-form.pdf

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See page 2 for the current state of knowledge
### Benefits of medication

1. **Improves symptoms of depression**
   
   Individuals with moderate to very severe depression treated with SSRIs (paroxetine and fluoxetine) for 4-8 weeks **improve on average 3 points more** on the HRSD (range 0-50) than individuals receiving placebo.¹

### Harms of medication

#### 1. Adverse effects

- **85% of individuals treated with SSRIs experience at least one bothersome side effect** during the first three months of treatment, and **55% experience more than one.²**
- The most common adverse effects experienced are:
  - Sexual dysfunction
  - Dizziness
  - Drowsiness
  - Headache
  - Weight gain
  - Insomnia
  - Nausea
  - Anxiety
  - Rash

#### 2. Intolerable side effects

- **For each 100 individuals treated with SSRIs, 1-5 more (1-5%) experience an adverse event causing them to withdraw from treatment** compared to 100 individuals receiving placebo.³

### State of knowledge – February 2013

#### Selection of best available studies

<table>
<thead>
<tr>
<th>Study design</th>
<th>Participants</th>
<th>Length of treatment</th>
<th>Study description and references</th>
</tr>
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<td>3. Arroll et al. Cochrane Database Syst Rev 2009, CD007954 (3) Study design: systematic review of 14 RCTs comparing treatment with trycyclic antidepressants or SSRIs with placebo. Participants: 2283 individuals (1060 in the 3 SSRIs trials in the data presented in intolerable side effects), aged 15-65, from Australia, Canada, Europe, the UK and the US, diagnosed with a range of depressive disorders. Length of Treatment: 4-28 weeks (typically 4-8 weeks)</td>
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<td>4. Rimer et al. Cochrane Database Syst Rev 2012, CD004366 (7). Study design: systematic review of 32 RCTs comparing exercise to standard treatment (e.g. pharmacotherapy), no treatment or a placebo. Participants: 1858 adults (mean age 22-88) from Canada, the US, Europe, Asia, Australia and New Zealand diagnosed with mild, moderate and major depression. Length of treatment: 10 days to 16 weeks.</td>
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<td>5. Anderson et al. Evidence-based guidelines for treating depressive disorders with antidepressants: A revision of the 2000 British Association for Psychopharmacology guidelines. J. Psychopharmacol. 2008; 22(4); 343–396. Study design: Clinical practice guidelines developed through a literature review that judged the strength of the evidence in combination with clinical expertise.</td>
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<td>6. Turner et al. New Engl J Med 2008, 358, 252-60. Study design: systematic review of research literature that matched phase 2 and 3 clinical trials for 12 antidepressants that were FDA approved between 1987 and 2004. Participants: 12,564 adults.</td>
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