## **Choosing and Switching Antidepressants**

- Up to 2/3 of patients don't achieve remission with the first antidepressant that's tried.<sup>1</sup>
- Switching is a common strategy if there is no response 4 to 8 weeks after dose optimization, or the patient cannot tolerate an adequate dose.<sup>2</sup>
- A patient may respond better to a drug in a different class but is equally as likely to respond to another drug in the same class.<sup>3</sup>
- Once a patient has failed two drugs in the same class, consider a drug from a different class.<sup>2</sup>
- Chart below provides practical considerations for choosing and switching antidepressants. Consult product labeling regarding switching to/from MAOIs.
- Frail elderly and those with comorbid anxiety require lower initial doses and slower titration. Initial dose may be reduced by 50%. If starting with bupropion or venlafaxine, start with immediate-release formulation then titrate to optimal dose before switching to extended-release formulation.

## Choice of Agent (Agents not typically used as initial therapy [e.g., MAOIs, trazodone, TCAs] not included below)

Choose an agent based on side effects, personal or family response history, drug interactions, comorbidities, and cost.<sup>2</sup> Some clinicians target specific depression symptoms; others believe an effective antidepressant will eventually resolve all symptoms.<sup>17</sup> Non-MAOI agents with the highest risk of drug interactions include fluoxetine, fluvoxamine, paroxetine, and sertraline.<sup>1</sup> Those with the lowest include citalopram, escitalopram, mirtazapine, venlafaxine, and desvenlafaxine.<sup>1</sup> Dose all agents cautiously in elderly.<sup>2</sup>

Antidepressant or Antidepressant Class	Consider for	Avoid or use particular caution in
SSRI  Citalopram (Celexa) Escitalopram (Lexapro) Fluoxetine (Prozac) Fluvoxamine (Luvox) Paroxetine (Paxil) Sertraline (Zoloft) Vilazodone (Viibryd)	Anxiety disorders (start with low dose; indications vary) <sup>2,4,16</sup> CV disease (sertraline) <sup>8,9</sup> Young adults <sup>1,4</sup> (Fluoxetine: Depression /OCD) Underweight (paroxetine) <sup>17</sup> Psychomotor slowing (fluoxetine, sertraline) <sup>17</sup> Insomnia (paroxetine) <sup>17</sup> Overweight or obese patients (fluoxetine) <sup>2</sup> Elderly (sertraline – fewer drug interactions/cognitive effects)	Overweight or obese patients (paroxetine) <sup>17</sup> QT prolongation or torsades risk (citalopram) <sup>15</sup> Agitation or insomnia (fluoxetine, sertraline) <sup>17</sup> Pregnancy (paroxetine, fluoxetine) <sup>2</sup> Elderly (paroxetine, citalopram – requires dose adjustment)
SNRI      Desvenlafaxine     Duloxetine     Levomilnacipran     Venlafaxine	Adults <65 <sup>4</sup> Psychomotor slowing <sup>4</sup> Chronic pain <sup>4</sup> Anxiety disorders (start with low dose; indications vary) <sup>2,16</sup>	Hypertension <sup>2</sup> Agitation or insomnia <sup>2</sup>
Mirtazapine (Remeron)	Agitation <sup>4</sup> Insomnia <sup>2</sup> Sexual dysfunction concern <sup>2,5</sup> Underweight patients <sup>2</sup>	Overweight or obese patients <sup>2</sup> Hyperlipidemia <sup>2</sup>
Bupropion	Sexual dysfunction concern <sup>2,5</sup> Smokers <sup>2</sup> Psychomotor slowing <sup>4</sup> Fatigue or sleepiness <sup>2</sup> Overweight or obese patients <sup>2</sup> Pediatrics: Depression, refractory to SSRIs: Limited data available	Seizure disorders <sup>2</sup> Hypertension <sup>15</sup> Agitation or insomnia <sup>17</sup>
Vortioxetine (Brintellix)	Overweight or obese patients <sup>24</sup> Sexual dysfunction concern <sup>24</sup> Psychomotor slowing <sup>24</sup>	Patients in whom nausea is a particular conern <sup>23</sup>

Abbreviations: CV –cardiovascular; GAD – generalized anxiety disorder; MAOI – monoamine oxidase inhibitor; OCD – obsessive compulsive disorder; SSRI – selective serotonin reuptake inhibitor; SNRI; serotonin norepinephrine reuptake inhibitor

## **Switching / Tapering**

- Evidence-based options for a second agent, due to evidence of superiority, include <u>sertraline</u>, <u>escitalopram</u>, <u>duloxetine</u>, <u>venlafaxine</u>, <u>mirtazapine</u>, or <u>bupropion</u>. Limited available evidence suggests that abruptly switching (i.e., direct switch) from one **short-acting** SSRI or SNRI to another SSRI or SNRI is generally well-tolerated. Transient serotonergic side effects may occur early in the switch, but this is not usually a safety issue, and a direct switch is usually better tolerated than a washout if the first agent is short-acting.
- <u>TAPERING/CROSS-TAPERING</u> (i.e., gradually increasing the new agent [often starting with a lower dose than usual] while decreasing the first agent):<sup>22</sup> Tapering may be more appropriate in some cases due to two concerns when switching: symptom recurrence and discontinuation syndromes.<sup>2,12</sup> Discontinuation syndromes are of most concern when switching from a serotonergic agent to a nonserotonergic agent, particularly when switching from venlafaxine or paroxetine.<sup>2,7</sup>
  - Taper paroxetine over at least 4 weeks.
  - Taper other SSRIs, venlafaxine, and duloxetine over 1 to 4 weeks (e.g., sertraline or venlafaxine, by 25 to 50 mg/day every one to two weeks; paroxetine or citalopram by 5 to 10 mg/day every one to 2 weeks; escitalopram by 5 mg/day every 1 to 2 weeks). 6,17
- There is no "one size fits all" approach. Monitor patient and adjust switching strategy (e.g., speed of taper) based on symptoms of withdrawal, side effects, or return of depressive symptoms. 2.6.10
- Consider increasing the dose of the serotonergic agent if withdrawal symptoms emerge (e.g., "GI flu"-like symptoms, paresthesias, irritability, insomnia, dizziness, vivid dreams).<sup>10</sup>

vivid dreams)."	
Switching Scenario	Suggested Approach
SSRI (other than fluoxetine) to another SSRI	Stop SSRI. <sup>7,10</sup> Start new SSRI at a low dose (e.g., fluoxetine, citalopram, escitalopram 10 mg/day; sertraline 25 mg to 50 mg/day). <sup>3,6</sup> If patient was taking a high dose of the first agent, consider tapering to lower dose before starting the new agent. <sup>10</sup> Or, stop the first agent and start a dose of the new agent in the same range as the first agent (i.e., low, moderate, high). <sup>7</sup> Keep drug interactions / side effects in mind when choosing dose.
SSRI (other than fluoxetine) to duloxetine	Stop SSRI and start duloxetine 60 mg once daily [Evidence level B; lower quality RCT; nonrandomized clinical trial]. 11,18 Or, start duloxetine 60 mg once daily and taper SSRI over two weeks. 11 Keep in mind some antidepressants (e.g., paroxetine) could inhibit duloxetine metabolism through CYP2D6 inhibition until the SSRI is cleared. 14
SSRI (other than fluoxetine) to venlafaxine	Stop SSRI and start venlafaxine at a low dose (e.g., 37.5 mg to 75 mg total daily dose). <sup>3,7,18,19</sup> Or cross-taper, starting with venlafaxine 37.5 mg once daily. <sup>6</sup> Increase very slowly. <sup>6</sup> If the patient was taking a high dose of an SSRI, consider tapering to a lower dose before stopping it and starting venlafaxine. <sup>10</sup> Keep drug interactions and side effects in mind when choosing method/dose. Some antidepressants (e.g., paroxetine) could inhibit venlafaxine metabolism through CYP2D6 inhibition until the SSRI is cleared. <sup>7</sup>
SSRI (other than fluoxetine) to mirtazapine	Cross-tapering. <sup>6,7</sup> Or, taper SSRI to the minimum therapeutic dose (e.g., paroxetine 20 mg once daily, sertraline 50 mg once daily), then switch to mirtazapine 15 mg once daily [Evidence level B; lower quality RCT]. <sup>20</sup>
Venlafaxine to an SSRI	Stop venlafaxine and start the SSRI at a therapeutic dose. <sup>7,18</sup> Or, cross-taper, starting the new SSRI at a low dose (e.g., fluoxetine, citalopram, escitalopram, or paroxetine 10 mg/day; sertraline 25 mg/day). Increase as tolerated. If the patient was taking a high dose of venlafaxine, consider tapering to a lower dose before stopping it and starting the new agent. Keep drug interactions / side effects in mind when choosing method/dose.
Venlafaxine to duloxetine	Stop venlafaxine and start duloxetine 60 mg once daily [Evidence level B; nonrandomized clinical trial]. If the patient was taking a high dose of venlafaxine (e.g., >150 mg per day), consider tapering to a lower dose before stopping it and starting duloxetine. Keep drug interactions and side effects in mind when choosing method/dose.
Venlafaxine to mirtazapine.	Cross-tapering. <sup>6</sup>
Duloxetine to SSRI	Stop duloxetine and start SSRI at a therapeutic dose. <sup>7,18</sup> Or cross-taper, starting new antidepressant at low dose (e.g., citalopram or escitalopram 10 mg/day sertraline 25 mg/day). Increase as tolerated. If the patient was taking a high dose of duloxetine, consider tapering to a lower dose before stopping it and starting the new agent. Keep drug interactions and side effects in mind when choosing method/dose. If switching to fluoxetine or paroxetine, cross-tapering is not recommended. These agents may increase duloxetine levels through CYP2D6 inhibition. <sup>14</sup>

Switching Scenario	Suggested Approach	
Duloxetine to venlafaxine	Stop duloxetine and start venlafaxine at a therapeutic dose (e.g., 75 mg total daily dose) <sup>7,18,19</sup> If the patient was taking a high dose of duloxetine, consider tapering to a lower dose before stopping it and starting venlafaxine. <sup>10</sup> Keep drug interactions and side effects in mind when choosing method/dose.	
Fluoxetine (e.g., <i>Prozac</i> ) to another SSRI	Stop fluoxetine (taper over two weeks if dose >20 mg/day). Start new antidepressant after a four- to seven-day washout. Start new agent at a low dose (e.g., citalopram, escitalopram, paroxetine 10 mg/day; sertraline 25 mg/day) and increase slowly. <sup>6</sup>	
Fluoxetine (e.g., <i>Prozac</i> ) to mirtazapine	Taper fluoxetine while starting mirtazapine 15 mg once daily. Increase as tolerated. Or, taper fluoxetine to 20 mg once daily, then switch to mirtazapine 15 mg once daily [Evidence level B; lower quality RCT]. Or, taper fluoxetine to 20 mg once daily, then switch to	
Fluoxetine to venlafaxine	Stop fluoxetine (taper over two weeks if dose >20 mg/day). Consider a four- to seven-day washout. Start venlafaxine 37.5 mg once daily and increase very slowly.	
Fluoxetine to duloxetine	Stop fluoxetine (taper over two weeks if dose >20 mg/day). Consider a four- to seven-day washout. Start duloxetine 60 mg once daily. 6,11	
Bupropion to/from another agent	Cross-tapering. <sup>7</sup>	
Mirtazapine to SSRI or SNRI	Cross-tapering (e.g., start with duloxetine 30 mg once daily). <sup>6,7</sup>	
Switching to/from vilazodone (Viibryd) or vortioxetine (Brintellix [U.S.]; Trintellix [Canada])	Information lacking. Consider managing as for SSRIs due to serotonergic mechanism. Note strong CYP2D6 inhibitors (e.g., bupropion, fluoxetine, paroxetine) can increase vortioxetine levels. Consider starting with vortioxetine 5 mg once daily (i.e., half of the usual starting dose) when cross-tapering or switching abruptly from one of these agents or patient is taking a strong CYP2D6 inhibitor. Follow manufacturer's recommended titration schedule when starting vilazodone ( <i>Viibryd</i> ).	
Switching to/from desvenlafaxine (e.g., <i>Pristiq</i> ) or levomilnacipran ( <i>Fetzima</i> )		

Levels of Evidence

In accordance with the trend towards Evidence-Based Medicine, we are citing the LEVEL OF EVIDENCE for the statements we publish.

Level	Definition
А	High-quality randomized controlled trial (RCT)
	High-quality meta-analysis (quantitative systematic review)
В	Nonrandomized clinical trial
	Nonquantitative systematic review
	Lower quality RCT
	Clinical cohort study
	Case-control study / Historical control
	Epidemiologic study
С	Consensus / Expert opinion
D	Anecdotal evidence / In vitro or animal study

Adapted from Siwek J, et al. How to write an evidence-based clinical review article. Am Fam Physician 2002;65:251-8.

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