# **Guide to Antidepressant Medications**

### **Antidepressant Medications Guide**

This guide is intended to provide valuable helpful information presented in an easy-to-understand language for people facing health problems. The guide is not a substitute for professional medical advice, diagnosis or treatment.

### Selective serotonin reuptake inhibitors (SSRIs)

- Celexa (Citalopram)
- Lexapro (Escitalopram)
- Prozac (Fluoxetine)
- Paxil (Paroxetine)
- Zoloft (Sertraline)

Selective serotonin reuptake inhibitors are often used as a first line treatment for depression. The SSRIs are all FDA approved for the treatment of depressive disorder but differ in their licensed indications for other conditions.

### Citalopram (Celexa)

Citaloptam causes relatively mild withdawal symptoms. The low potential for drug interactions makes citalopram suitable for people taking other medications.

#### Indications and uses:

- Depression
- Panic disorder (off-label)
- Posttraumatic stress disorder (off-label)
- Obsessive-compulsive disorder (off-label)
- Social anxiety disorder (off-label)
- Binge-eating disorder (off-label)
- Anorexia (off-label)
- Irritable bowel syndrome (IBS) (off-label)

### **Escitalopram (Lexapro)**

Escitalopram is chemically very similar to citalopram. It is a highly selective SSRI. Escitalopram is more effective and has faster onset of antidepressant effect at than citalopram and other SSRIs in the treatment of depression.

### Indications and uses:

- Major depression
- · Generalized anxiety disorder
- Obsessive-compulsive disorder (off-label)
- Panic disorder (off-label)

- Posttraumatic stress disorder (off-label)
- Social anxiety disorder (off-label)

### Fluoxetine (Prozac)

Fluoxetine differs by having a much longer elimination half-life (7–15 days) than that of other SSRIs and slower onset of antidepressant effect. Fluoxetine is more likely to cause agitation, nervousness, and anxiety than other SSRIs.

Fluoxetine's lower potential for discontinuation reactions is beneficial for people who are prone to stop treatment suddenly or miss medication doses and for those who have had severe discontinuation symptoms in the past.

#### Indications and uses:

- Major depressive disorder
- Bulimia nervosa
- Obsessive-compulsive disorder
- · Premenstrual dysphoric disorder
- Panic disorder
- Musculo-skeletal pain (off-label)
- Irritable bowel syndrome (IBS) (off-label)
- Migraine headache prophylaxis (off-label)
- Fibromyalgia (off-label)
- Discontinuation of other antidepressants (off-label)

# Paroxetine (Paxil, Paxil CR)

Paroxetine has the highest rate and severity of discontinuation symptoms (withdrawal)2. Paroxetine treatment causes more sexual dysfunction and weight gain than other SSRIs. Paroxetine is particularly effective in treating the anxiety associated with depression.

#### Indications and uses:

- Major depressive disorder
- Obsessive-compulsive disorder
- Panic disorder
- · Generalized anxiety disorder
- Social anxiety disorder
- Posttraumatic stress disorder
- Chronic headache (off-label)
- Eating disorders (off-label)
- Hot flashes (off-label)
- Fibromyalgia (off-label)

### Sertraline (Zoloft)

Sertraline is more likely to cause diarrhea than other antidepressants. This medication has relatively low incidence of weight gain and low potential for drug interactions. Sertraline may have advantages over the other SSRIs in seniors because this drug lacks the marked anticholinergic side effects.

#### Indications and uses:

- Depression
- Obsessive-compulsive disorder
- Panic disorder
- · Posttraumatic stress disorder
- · Premenstrual dysphoric disorder
- · Social anxiety disorder
- Generalized anxiety disorder (off-label)
- Eating disorders (off-label)
- Autism (off-label)
- Irritable bowel syndrome (IBS) (off-label)

### Serotonin and Norepinephrine reuptake inhibitors (SNRIs)

- Effexor XR (Venlafaxine)
- Cymbalta (Duloxetine)
- Desvenlafaxine (Pristiq)
- Milnacipran (Savella)

Serotonin and norepinephrine reuptake inhibitors (SNRIs) are newer class of antidepressants. They work by slowing down the reuptake of both serotonin and noradrenaline, but more selectively than other drugs.

# Venlafaxine (Effexor XR)

Venlafaxine alleviates depressive symptoms better than other antidepressants. In contrast to duloxetine, there is proof for venlafaxine that the drug is more effective than placebo in prevention of depression recurrence.

In terms of side effects, however, venlafaxine is inferior to SSRIs. Venlafaxine is associated with a higher rate of nausea and vomiting than SSRIs. The drug also has the highest rate of discontinuation symptoms.

#### Indications and uses:

- Depression
- · Generalized anxiety disorder
- Social anxiety disorder
- Panic disorder
- Migraine headaches (off-label)
- Fibromyalgia (off-label)
- Chronic pain (off-label)
- Attention-deficit hyperactivity disorder (off-label)
- Post-traumatic stress disorder (off-label)
- Diabetic neuropathy (off-label)

### **Duloxetine (Cymbalta)**

Duloxetine is a potent dual reuptake inhibitor of noradrenaline and serotonin. This medication may be preferred for people who have pain syndromes in conjunction with their depression.

Duloxetine presents a high discontinuation rates due to side effects, significantly higher than with SSRI antidepressants. Duloxetine can cause severe withdrawal symptoms. Also, generic SSRIs are much less expensive than duloxetine, which is available only as a brand name drug Cymbalta.

#### Indications and uses:

- Depression
- Diabetic peripheral neuropathic pain
- · Generalized anxiety disorder
- Fibromyalgia
- Stress urinary incontinence (off-label)
- Chronic fatigue syndrome (off-label)

### **Desvenlafaxine (Pristig)**

Desvenlafaxine is the active metabolite of venlafaxine. It was introduced by Wyeth in May 2008. Interestingly, drug doses higher than 50 mg are no more effective and cause more side effects, compared to Pristiq dose of 50 mg per day 4.

### Milnacipran (Savella)

Milnacipran is effective in the treatment of depression and fibromyalgia. U.S. FDA approved milnacipran for treatment of fibromyalgia in January 2009, however it is currently not approved for depression in the United States.

### Norepinephrine and Dopamine Reuptake Inhibitors (NDRIs)

• Bupropion (Wellbutrin SR, Wellbutrin XL)

NDRIs increase the levels of norepinephrine and dopamine. Bupropion is the only NDRI antidepressant medication that has been approved by the US FDA.

### **Bupropion**

Bupropion is a unique drug with a chemical structure unrelated to any other antidepressant. It is a chemical derivative of diethylpropion, an amphetamine-like agent used as an appetite suppressant. Bupropion's major effect is on dopamine.

This antidepressant is less likely to cause sexual dysfunction than SSRIs and SNRIs. Another significant advantage of bupropion is that the long-term treatment can result in a small weight loss.

#### Indications and uses:

- Major depressive disorder
- · Seasonal affective disorder
- Smoking cessation
- Weight loss (off-label)

- Bipolar depression (off-label)
- ADD/ADHD (off-label)
- SSRI-induced sexual dysfunction (off-label)
- Chronic fatigue syndrom (off-label)
- Headaches (off-label)

### Combined reuptake inhibitors and receptor blockers

Trazodone

Trazodone is a medication with sedative, anti-anxiety and antidepressant properties. This antidepressant is often used as a sleeping aid, and unlike most sleeping pills is not addictive or habit-forming.

#### Indications and uses:

- Depression
- Insomnia (off-label)
- Panic disorder (off-label)
- Anxiety disorders (off-label)
- Migraine (off-label)
- Bulimia nervosa (off-label)
- Alcohol withdrawal (off-label)
- Erectile dysfunction (off-label)

## Tricyclic antidepressants

- Amitriptyline HCI
- Amoxapine
- Desipramine (Norpramin)
- Doxepin (Sinequan)
- Imipramine (Tofranil)
- Nortriptyline (Pamelor)
- Protriptyline (Vivactil)
- Trimipramine (Surmontil)

The tricyclics (TCAs) are the oldest antidepressants and have been used to treat depression since the 1950s. They work by increasing the levels of both neurotransmitters serotonin and norepinephrine. As they also affect other chemicals in the body, these drugs produce a wide range of unwanted side effects. TCAs are dangerous in overdose.

### **Amitriptyline (Elavil)**

Amitriptyline is a potent and well studied antidepressant. It is also a sedative that is useful for depressed people with insomnia and nervousness. Amitriptyline can cause severe anticholingergic side effects.

#### Indications and uses:

- Depression
- Insomnia (off-label)
- Migraine headaches (off-label)
- Tension headaches (off-label)
- Eating disorders (off-label)
- Anxiety disorders (off-label)
- Bed-wetting in children (enuresis) (off-label)
- Interstitial cystitis (off-label)
- Neuropathic pain (off-label)
- Fibromyalgia (off-label)

### **Nortriptyline (Pamelor)**

Nortriptyline is the active metabolite of amitriptyline.

#### Indications and uses:

- Depression
- Migraine headaches (off-label)
- Anxiety disorders (off-label)
- Attention deficit hyperactivity disorder (ADHD) (off-label)
- Chronic pain (off-label)
- Bed-wetting in children (enuresis) (off-label)

# Noradrenergic and Specific Serotonergic Antidepressants (NaSSA)

• Mirtazapine (Remeron)

Mirtazapine is the worst antidepressants in terms of weight gain. However, unlike SSRIs mirtazapine lacks sexual side effects. This medication works faster than citalogram, fluoxetine, paroxetine, or sertraline.

#### References

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