

# Selective Serotonin Reuptake Inhibitor (SSRI) Overview

SSRIs, abbreviated for selective serotonin reuptake inhibitors, are a class of drugs indicated for use to treat depression, anxiety disorders, OCD, bulimia nervosa, PTSD. Specific SSRIs, such as escitalopram, can even be used to improve cognitive recognition post-stroke. Other drugs in this class are fluoxetine, paroxetine and sertraline, which all have varied indications for use. These drugs work by selectively inhibiting reuptake of serotonin by presynaptic cells. This leads to an increased availability of serotonin in the synaptic gap, allowing it to repeatedly stimulate the post-synaptic receptors. A common side effect with SSRI use is sexual dysfunction. Male patients often describe erectile dysfunction with this medication, but can also suffer from anorgasmia and decreased libido. Another, more serious, side effect of SSRIs is serotonin syndrome, which can occur when these drugs are combined with other medications promoting serotonin availability. This is a life-threatening, serious affliction, presenting with hyperthermia, hypertension, myoclonus, mydriasis, overactive bowels, and mental agitation. Serotonin syndrome can be managed with cyproheptadine administration.



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#### Indications

#### **Depression**

Depressed-emo

SSRIs are frequently used to treat various forms of depression.

### Anxiety

Anxiety-bag

These drugs are used to treat generalized anxiety disorder, social phobia, panic disorder and PTSD.

#### **Mechanism of Action**

# **Selective Serotonin Reuptake Inhibitors**

Selective Silver-tonic Reuptake tube with Inhibiting-chains

These drugs specifically inhibit the reuptake of the neurotransmitter serotonin by the presynaptic cells. Because of this class of drug's mechanism of action, serotonin stays in the synaptic gap longer than it normally would, and may repeatedly stimulate the receptors of the post-synaptic cell. This class of medications typically requires 4-8 weeks of compliance before they have an effect.

# Drugs

### Paroxetine

Pear-rockets

Paroxetine is an SSRI which is indicated for treating social phobia. It is also indicated for use with panic attacks, depression, OCD and PTSD.

# Sertraline

Search-light

Sertraline is another SSRI which has numerous uses. It is often indicated for PTSD, and can be remembered by the image of a soldier saying "SIR!" This medication can also be used to treat anxiety disorders, depression, OCD and panic disorder.

### Escitalopram

Easter-ram

Escitalopram has a wide variety of uses, and is indicated for cognitive recovery post-stroke. It can also be used for depression and anxiety treatment.

# Fluoxetine

Flute-ox

Fluoxetine is indicated for depression. This medication can also be used for OCD, bulimia and panic disorder.

### **Side Effects**



### **Sexual Dysfunction**

Limp-weiner

SSRIs are known to cause sexual dysfunction, such as erectile dysfunction, anorgasmia and decreased libido.

#### Serotonin Syndrome

Silver-tonic Savage

Serotonin syndrome is a risk with patients taking SSRI medications, while concurrently taking TCAs, SNRIs, MAOIs (any medications increasing serotonin availability). Serotonin syndrome is a rapidly progressive, potentially life-threatening syndrome which can be caused by a drug interaction. It has a wide range of clinical findings, where patients may display hyperthermia, hypertension, myoclonus, mydriasis, overactive bowels and mental agitation.

### **Treat with Cyproheptadine**

Zippo-head

Cyproheptadine is a medication used to treat serotonin syndrome. This drug acts as a serotonergic (5-HT2) receptor antagonist.