What is olanzapine/samidorphan and what does it treat?

Olanzapine/samidorphan is a medication that works in the brain to treat schizophrenia. Olanzapine is also known as a second generation antipsychotic (SGA) or atypical antipsychotic. Olanzapine rebalances dopamine and serotonin to improve thinking, mood, and behavior.

The samidorphan part of olanzapine/samidorphan is known as an opioid antagonist or “blocker.” Samidorphan may help reduce weight gain, which is a side effect that may be caused by olanzapine.

Symptoms of schizophrenia include:

- Hallucinations - imagined voices or images that seem real
- Delusions - beliefs that are not true (e.g., other people are reading your thoughts)
- Disorganized thinking or trouble organizing your thoughts and making sense
- Little desire to be around other people
- Trouble speaking clearly
- Lack of motivation

Olanzapine/samidorphan may help some or all of these symptoms.

Olanzapine/samidorphan is also FDA approved for the following indications:

- Acute treatment of manic or mixed episodes of bipolar disorder (when used alone or with lithium or valproate)
- Maintenance (long-term) treatment of bipolar disorder

This medication sheet will focus primarily on schizophrenia. You can find more information about bipolar disorder here.

All FDA warnings are at the end of this fact sheet. Please consult them before taking this medication.
What is the most important information I should know about olanzapine/samidorphan?

Schizophrenia requires long-term treatment. Do not stop taking olanzapine/samidorphan, even when you feel better.

Only your health care provider can determine the length of olanzapine/samidorphan treatment that is right for you.

Missing doses of olanzapine/samidorphan may increase your risk for a relapse in your symptoms.

Do not stop taking olanzapine/samidorphan or change your dose without talking to with your health care provider first.

For olanzapine/samidorphan to work properly, it should be taken every day as ordered by your health care provider.

Are there specific concerns about olanzapine/samidorphan and pregnancy?

If you are planning on becoming pregnant, notify your health care provider to best manage your medications. People living with schizophrenia who wish to become pregnant face important decisions. This is a complex decision since untreated schizophrenia has risks to the fetus, as well as the mother. It is important to discuss the risks and benefits of treatment with your doctor and caregivers.

Antipsychotic use during the third trimester of pregnancy has a risk for abnormal muscle movements (extrapyramidal symptoms [EPS]) and/or withdrawal symptoms in newborns following delivery that may need to be monitored. These may resolve within hours/days without treatment or require hospitalization for monitoring/treatment. Symptoms in the newborn may include agitation, feeding disorder, hypertonia, hypotonia, respiratory distress, somnolence, and tremor; these effects may be self-limiting or require hospitalization.

Caution is advised with breastfeeding since olanzapine does pass into breast milk. It is not yet known whether samidorphan or the combination of olanzapine/samidorphan passes into human breast milk. You should discuss the risks and benefits of breastfeeding while taking olanzapine/samidorphan with your health care provider.

What should I discuss with my health care provider before taking olanzapine/samidorphan?

- Symptoms of your condition that bother you the most
- If you have thoughts of suicide or harming yourself
- Medications you have taken in the past for your condition, whether they were effective or caused any adverse effects
- If you ever had muscle stiffness, shaking, tardive dyskinesia, neuroleptic malignant syndrome, or weight gain caused by a medication
- If you experience side effects from your medications as some side effects may pass with time, but others may require changes in the medication
- Any psychiatric or medical problems you have, such as heart rhythm problems, long QT syndrome, heart attacks, diabetes, high cholesterol, or seizures
- If you have a family history of diabetes or heart disease
- All other medications you are currently taking (including over the counter products, herbal and nutritional supplements) and any medication allergies you have
- Other non-medication treatment you are receiving, such as talk therapy or substance abuse treatment. Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breastfeeding
- If you smoke, drink alcohol, or use illegal drugs
- If you are taking opioids or experiencing opioid withdrawal

How should I take olanzapine/samidorphan?

Olanzapine/samidorphan is usually taken once per day as a single tablet with or without food. Do not combine strengths of tablets. Tablets should not be split, crushed, or chewed.

Typically patients begin at a low dose of medication and the dose is increased slowly over several weeks. Only your health care provider can determine the correct dose for you.

The dose usually ranges from 5 mg/10 mg to 20 mg/10 mg once per day. Only your health care provider can determine the correct dose for you.
Use a calendar, pillbox, alarm clock, or cell phone alert to help you remember to take your medication. You may also ask a family member or a friend to remind you or check in with you to be sure you are taking your medication.

What happens if I miss a dose of olanzapine/samidorphan?
If you miss a dose of olanzapine/samidorphan, take it as soon as you remember, unless it is closer to the time of your next dose. Discuss this with your health care provider. Do not double your next dose or take more than what is prescribed.

What should I avoid while taking olanzapine/samidorphan?
Avoid drinking alcohol, using opioid pain medications (such as codeine, hydrocodone, oxycodone, or morphine), or using illegal drugs while you are taking olanzapine/samidorphan. They may decrease the benefits (e.g., worsen your symptoms) and increase adverse effects (e.g., sedation) of the medication.

Keep in mind that opioid pain medications, including some cough syrups, may not work as well when taking olanzapine/samidorphan since the samidorphan component blocks the opioid receptor. Discuss all medications with your doctor and pharmacist prior to taking olanzapine/samidorphan.

What happens if I overdose with olanzapine/samidorphan?
If an overdose occurs, call your doctor or 911. You may need urgent medical care. You may also contact the poison control center at 1-800-222-1222.

A specific treatment to reverse the effects of olanzapine/samidorphan does not exist.

What are the possible side effects of olanzapine/samidorphan?

Common side effects
Low blood pressure, drowsiness, extrapyramidal symptoms, restlessness, dizziness, headache, fatigue, insomnia, increased prolactin, increased serum glucose, increased serum triglycerides, weight gain, increased appetite, dry mouth, indigestion, constipation, liver function test abnormalities, weakness, accidental injury

Rare/serious side effects
Decreased neutrophils

Serious side effects
Olanzapine/samidorphan may cause sudden withdrawal symptoms in people who are physiologically dependent on opioids (such as codeine, hydrocodone, oxycodone, morphine, fentanyl, or heroin) if they still have opioids in their system when starting olanzapine/samidorphan. Prior to starting olanzapine/samidorphan, there should be at least a 7-14 day opioid-free period. It is important you inform your health care provider of all medications or substances you are taking before starting olanzapine/samidorphan.

Some people may develop muscle related side effects while taking olanzapine/samidorphan. The technical terms for these are “extrapyramidal effects” (EPS) and “tardive dyskinesia” (TD). Symptoms of EPS include restlessness, tremor, and stiffness. TD symptoms include slow or jerky movements that one cannot control, often starting in the mouth with tongue rolling or chewing movements.

Second generation antipsychotics (SGAs) increase the risk of weight gain, high blood sugar, and high cholesterol. This is also known as metabolic syndrome. Your health care provider may ask you for a blood sample to check your cholesterol, blood sugar, and hemoglobin A1c (a measure of blood sugar over time) while you take this medication.

• Information on healthy eating and adding exercise to decrease your chances of developing metabolic syndrome may be found at the following sites:
  ○ [http://www.helpguide.org/articles/healthy-eating/healthy-eating.htm](http://www.helpguide.org/articles/healthy-eating/healthy-eating.htm)
All antipsychotics have been associated with the risk of sudden cardiac death due to an arrhythmia (irregular heartbeat). To minimize this risk, antipsychotic medications should be used in the smallest effective dose when the benefits outweigh the risks. Your doctor may order an EKG to monitor for irregular heartbeat.

Neuroleptic malignant syndrome is a rare, life threatening adverse effect of antipsychotics which occurs in <1% of patients. Symptoms include confusion, fever, extreme muscle stiffness, and sweating. If any of these symptoms occur, contact your health care provider immediately.

All antipsychotics can cause sedation, dizziness, or orthostatic hypotension (a drop in blood pressure when standing up from sitting or lying down). These side effects may lead to falls which could cause bone fractures or other injuries. This risk is higher for people with conditions or other medications that could worsen these effects. If falls or any of these symptoms occur, contact your health care provider.

Are there any risks for taking olanzapine/samidorphan for long periods of time?

Tardive dyskinesia (TD) is a side effect that develops with prolonged use of antipsychotics. Medications such as olanzapine/samidorphan have been shown to have a lower risk of TD compared to older antipsychotics, such as Haldol® (haloperidol). If you develop symptoms of TD, such as grimacing, sucking, and smacking of lips, or other movements that you cannot control, contact your health care provider immediately. All patients taking either first or second generation antipsychotics should have an Abnormal Involuntary Movement Scale (AIMS) completed regularly by their health care provider to monitor for TD.

Second generation antipsychotics (SGAs) increase the risk of diabetes, weight gain, high cholesterol, and high triglycerides. (See “Serious Side Effects” section for monitoring recommendations).

What other medications may interact with olanzapine/samidorphan?

Olanzapine/samidorphan may reduce the clinical effect of opioid-containing pain medications or cough syrups because the samidorphan component blocks the opioid receptor.

Olanzapine/samidorphan may block the effects of agents used to treat Parkinson’s disease such as levodopa/carbidopa (Sinemet®), bromocriptine, pramipexole (Mirapex®), ropinirole (Requip®), and others.

Olanzapine/samidorphan may lower your blood pressure. Medications used to lower blood pressure may increase this effect. Propranolol (Inderal®) is an example of this type of medication.

Sedative medications, such as lorazepam (Ativan®) and diazepam (Valium®) may increase the risk of dizziness or sleepiness when used in combination with olanzapine/samidorphan.

The following medications may increase the levels and effects of olanzapine/samidorphan: ciprofloxacin (Cipro®) and fluvoxamine (Luvox®).

Carbamazepine (Tegretol®) and divalproex (Depakote®) may decrease the levels and effects of olanzapine.

Cigarette (and other types of) smoke can decrease levels of olanzapine. Let your health care provider know if you start or stop smoking cigarettes. Nicotine patches do not affect olanzapine levels.

How long does it take for olanzapine/samidorphan to work?

It is very important to tell your doctor how you feel things are going during the first few weeks after you start taking olanzapine/samidorphan. It will probably take several weeks to see big enough changes in your symptoms to decide if olanzapine/samidorphan is the right medication for you.

Antipsychotic treatment is generally needed lifelong for persons with schizophrenia. Your doctor can best discuss the duration of treatment you need based on your symptoms and illness.

- Hallucinations, disorganized thinking, and delusions may improve in the first 1-2 weeks
- Sometimes these symptoms do not completely go away
• Motivation and desire to be around other people can take at least 1-2 weeks to improve
• Symptoms continue to get better the longer you take olanzapine/samidorphan
• It may take 2-3 months before you get the full benefit of olanzapine/samidorphan

Summary of Black Box Warnings

Increased Mortality in Elderly Patients with Dementia Related Psychosis

• When used for dementia related psychosis in elderly patients, both first generation (typical) and second generation (atypical) antipsychotics are associated with an increased risk of mortality
• Although there were multiple causes of death in studies, most deaths appeared to be due to cardiovascular causes (e.g., sudden cardiac death) or infection (e.g., pneumonia)