What is aripiprazole and what does it treat?
Aripiprazole is a medication that works in the brain to treat schizophrenia. It is also known as a second-generation antipsychotic (SGA) or atypical antipsychotic. Aripiprazole rebalances dopamine and serotonin to improve thinking, mood, and behavior.

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

Aripiprazole may help some or all of these symptoms.

Aripiprazole 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
- Adjunctive treatment of major depressive disorder. This means aripiprazole is used in addition to an antidepressant to help treat depression.
- Irritability associated with autistic disorders
- Tourette’s syndrome
- Acute treatment of agitation in schizophrenia and bipolar disorder

This medication sheet will focus primarily on schizophrenia. You can find more information about bipolar disorder, depression, and autism spectrum disorders here.

Aripiprazole may also be helpful when prescribed “off-label” for borderline personality disorder or drug-induced hyperprolactinemia (elevated prolactin levels caused by other antipsychotics). “Off-label” means that it hasn’t been approved by the Food and Drug Administration for this condition. Your mental health provider should justify his or her thinking in recommending an “off-label” treatment. They should be clear about the limits of the research around that medication and if there are any other options.
What is the most important information I should know about aripiprazole?

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

Only your healthcare provider can determine the length of aripiprazole treatment that is right for you.

Missing doses of aripiprazole may increase your risk for a relapse in your symptoms.

Do not stop taking aripiprazole or change your dose without talking to with your healthcare provider first.

For aripiprazole to work properly, it should be taken every day as ordered by your healthcare provider.

Are there specific concerns about aripiprazole and pregnancy?

If you are planning on becoming pregnant, notify your healthcare 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.

Caution is advised with breastfeeding since aripiprazole does pass into breast milk.

What should I discuss with my healthcare provider before taking aripiprazole?

- 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, discuss them with your provider. 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 breast-feeding
- If you smoke, drink alcohol, or use illegal drugs

How should I take aripiprazole?

Aripiprazole tablets and suspension are usually taken 1 time per day with or without food.

Typically, patients begin at a low dose of medicine and the dose is increased slowly over several weeks.

The oral dose aripiprazole usually ranges from 2 mg to 30 mg taken once daily. The dose of aripiprazole maintena extended-release injection ranges from 300 mg to 400 mg given once monthly; the dose of aripiprazole lauroxil extended-release injection ranges from 441 mg to 1064 mg – depending on the dose, it is given once per month, every 6 weeks, or every 2 months. Aripiprazole maintena requires a two-week oral medication overlap; aripiprazole lauroxil requires a three-week oral overlap. Aripiprazole lauroxil Initio is typically given after an oral dose of aripiprazole along with an aripiprazole lauroxil injection – this allows for a one-day initiation and does not require further oral overlap. Only your healthcare provider can determine the correct formulation and 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 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 aripiprazole?**

If you miss a dose of oral aripiprazole, take it as soon as you remember, unless it is closer to the time of your next dose. Do not double your next dose or take more than what is prescribed. If you miss an injection, call your doctor or pharmacist right away. Discuss this with your healthcare provider.

**What should I avoid while taking aripiprazole?**

Avoid drinking alcohol or using illegal drugs while you are taking aripiprazole. They may decrease the benefits (e.g. worsen your confusion) and increase adverse effects (e.g. sedation) of the medication.

**What happens if I overdose with aripiprazole?**

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 aripiprazole does not exist.

**What are the possible side effects of aripiprazole?**

**Common side effects**

- Constipation, nausea, vomiting, headache, insomnia, tremor, blurred vision, anxiety, fatigue

**Rare/serious side effects**

Rash, increased appetite, dry mouth, muscle aches, seizure, agitation

Aripiprazole may increase the blood levels of a hormone called prolactin. Side effects of increased prolactin levels include females losing their period, production of breast milk and males losing their sex drive or possibly experiencing erectile problems. Long term (months or years) of elevated prolactin can lead to osteoporosis or increased risk of bone fractures.

Some people may develop muscle-related side effects while taking aripiprazole. 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 healthcare 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

SGAs have been linked with higher risk of death, strokes, and transient ischemic attacks (TIAs) in elderly people with behavior problems due to dementia.

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 healthcare 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 healthcare provider.
The U.S. Food and Drug Administration (FDA) is warning that compulsive or uncontrollable urges to gamble, binge eat, shop, and have sex have been reported with the use of aripiprazole (Abilify, Abilify Maintena, Aristada, Aristada Initio). These uncontrollable urges were reported to have stopped when the medicine was discontinued or the dose was reduced. These impulse-control problems are rare, but they may result in harm to the patient and others if not recognized.

Are there any risks for taking aripiprazole for long periods of time?
Tardive dyskinesia (TD) is a side effect that develops with prolonged use of antipsychotics. Medications such as aripiprazole 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 healthcare provider immediately. All patients taking either first or second generation antipsychotics should have an Abnormal Involuntary Movement Scale (AIMS) completed regularly by their healthcare 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 aripiprazole?
The following medications may increase the levels and effects of aripiprazole:

- The antibiotic clarithromycin (Biaxin®)
- Antidepressants, such as fluoxetine (Prozac®), paroxetine (Paxil®), and nefazodone
- Antifungals, such as fluconazole (Diflucan®), ketoconazole (Nizoral®), and itraconazole (Sporanox®)
- The antiarrhythmia agent quinidine
- HIV medications, such as the protease inhibitors indinavir (Crixivan®), ritonavir (Norvir®), saquinavir (Fortovase®, Invirase®), and lopinavir/ritonavir (Kaletra®)

The following medications may decrease the levels and effects of aripiprazole: carbamazepine (Tegretol®) and rifampin (Rifadin®)

How long does it take for aripiprazole 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 aripiprazole. It will probably take several weeks to see big enough changes in your symptoms to decide if aripiprazole 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 aripiprazole
- It may take 2-3 months before you get the full benefit of aripiprazole

Summary of Black Box Warnings
Increased Mortality in Elderly Patients with Dementia Related Psychosis

- Both first generation (typical) and second generation (atypical) antipsychotics are associated with an increased risk of mortality in elderly patients when used for dementia related psychosis.
- 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).
- Antipsychotics are not indicated for the treatment of dementia-related psychosis.
Suicidal Thoughts or Actions in Children, Teens, and Young Adults

Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide.

- Patients treated with antidepressants may experience worsening of their depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking medications. This risk may persist until significant remission occurs.
- Patients, their families, and caregivers should be alert to the emergence of anxiety, restlessness, irritability, aggressiveness and insomnia. If these symptoms emerge, they should be reported to the patient’s prescriber or healthcare professional.
- All patients being treated with this medication for depression should watch for and notify their healthcare provider for worsening symptoms, suicidality and unusual changes in behavior, especially during the first few months of treatment.

Important Disclosure: This information is being provided as a community outreach effort of the College of Psychiatric and Neurologic Pharmacists. This information is for educational and informational purposes only and is not medical advice. This information contains a summary of important points and is not an exhaustive review of information about the medication. Always seek the advice of a physician or other qualified medical professional with any questions you may have regarding medications or medical conditions. Never delay seeking professional medical advice or disregard medical professional advice as a result of any information provided herein. The College of Psychiatric and Neurologic Pharmacists disclaims any and all liability alleged as a result of the information provided herein.