- Loxapine
  - Oral capsule: 5 mg, 10 mg, 25 mg, 50 mg
- Adasuve<sup>®</sup>
  - o Inhalation powder: 10 mg

If you or someone you know is in crisis, please call/text 988 to speak with a trained crisis counselor 24/7 and/or call 911 for emergency services. A helpline and other resources are also available through the National Alliance on Mental Illness at nami.org.



## What is loxapine and what does it treat?

Loxapine is a medication that works in the brain to treat schizophrenia. It is also known as a first generation antipsychotic (FGA) or typical antipsychotic. Loxapine rebalances dopamine 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

Loxapine may help some or all of these symptoms.

Loxapine powder for inhalation (Adasuve®) is FDA approved for the treatment of acute agitation associated with schizophrenia or bipolar disorder in adults.

Loxapine may also be helpful when prescribed "off-label" for other mental health conditions. "Off-label" means that it has not 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 loxapine?

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

With input from you, your health care provider will assess how long you will need to take the medication.

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

Do not stop taking loxapine or change your dose without talking with your health care provider first.

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

All FDA warnings are at the end of this fact sheet. Please consult them before taking this medication.



# Are there specific concerns about loxapine 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 it is not known whether loxapine is excreted in breast milk.

## What should I discuss with my health care provider before taking loxapine?

- 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

# How should I take loxapine?

Loxapine is usually taken twice a day

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 10 mg to 250 mg daily. 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 friend to remind you or check in with you to be sure you are taking your medication.

The inhalation form is used once daily

# What happens if I miss a dose of loxapine?

If you miss a dose of loxapine, 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 loxapine?

Avoid drinking alcohol or using illegal drugs while you are taking loxapine. 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 loxapine?

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 loxapine does not exist.

## What are the possible side effects of loxapine?

#### **Common side effects**

Oral: Low blood pressure, fainting, sleepiness, dry mouth, constipation, restlessness

Powder for inhalation: Distortion in sense of taste, respiratory distress

## Rare/serious side effects

Loxapine 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 haloperidol. The technical terms for these are "extrapyramidal symptoms" (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.

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 loxapine for long periods of time?

Tardive dyskinesia (TD) is a side effect that develops with prolonged use of antipsychotics. 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.

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## What other medications may interact with loxapine?

Other medications taken into the lungs may interfere with the effectiveness of the Adasuve® aerosol formulation of loxapine. You should check with your doctor if you also use any type of inhaler for asthma or COPD.



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

## 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)

#### **Bronchospasm (Powder for inhalation)**

- Inhaled loxapine can cause bronchospasm which is a spasm or contraction of the airway. This can lead to severe difficulty breathing or inability to continue breathing.
- Inhaled loxapine should only be administered in an registered enrolled health care facility with immediate access to on-site equipment and personnel trained to manage acute bronchospasm including advanced airway management (intubation and mechanical ventilation).
- Before using loxapine inhalation, prescribers should screen patients for a history of asthma, COPD, or other lung diseases
  that may cause bronchospasm or acute respiratory symptoms. Patients should also be screened for current use of
  medications used to treat airway disease.
- Loxapine can cause sedation, which can mask the signs of bronchospasm.

Important Disclosure: This information is being provided as a community outreach effort of the American Association of Psychiatric 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 American Association of Psychiatric Pharmacists disclaims any and all liability alleged as a result of the information provided herein.