Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

# Insulin (Oral Inhalation

This information from UpToDate® Lexidrug™ explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

## Brand Names: US

Afrezza

### Warning

- Sudden lung problems can happen with this drug in people with chronic lung disease. Do not use this drug if you have a chronic lung disease like asthma or COPD. Before using this drug, tell your doctor if you have ever had any lung or breathing problems.

## What is this drug used for?

- It is used to lower blood sugar in patients with high blood sugar (diabetes).

## What do I need to tell my doctor BEFORE I take this drug?

- If you are allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell your doctor about the allergy and what signs you had.
- If you have low blood sugar.
- If you have or have had lung cancer.
- If you have an acidic blood problem caused by diabetes.

- If you smoke or have recently stopped smoking.

This is not a list of all drugs or health problems that interact with this drug.

Tell your doctor and pharmacist about all of your drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe for you to take this drug with all of your drugs and health problems. Do not start, stop, or change the dose of any drug without checking with your doctor.

## What are some things I need to know or do while I take this drug?

- Tell all of your health care providers that you take this drug. This includes your doctors, nurses, pharmacists, and dentists.
- Low blood sugar may happen with this drug. Very low blood sugar can lead to seizures, passing out, long lasting brain damage, and sometimes death. Talk with the doctor.
- Low blood potassium may happen with this drug. If not treated, this can lead to a heartbeat that is not normal, very bad breathing problems, and sometimes death. Talk with the doctor.
- Avoid driving and doing other tasks or actions that call for you to be alert until you see how this drug affects you.
- Some diabetes drugs like pioglitazone or rosiglitazone may cause heart failure or make it worse in people who already have it. Using insulin with these drugs may increase this risk. If you also take one of these drugs, talk with the doctor.
- It may be harder to control blood sugar during times of stress such as fever, infection, injury, or surgery. A change in physical activity, exercise, diet, or weight may also affect blood sugar.
- Wear disease medical alert ID (identification).
- Do not drive if your blood sugar has been low. There is a greater chance of you having a crash.

- Check your blood sugar as you have been told by your doctor.
- Have your blood work and other lab tests checked as you have been told by your doctor.
- Avoid drinking alcohol or taking products that have alcohol in them while taking this drug.
- Do not smoke while using this drug.
- In some studies, a few more cases of lung cancer happened in people taking this drug compared to people taking other diabetes drugs. The cause of this is not known. If you have lung cancer or if you have any questions, talk with your doctor.
- If you are 65 or older, use this drug with care. You could have more side effects.
- Tell your doctor if you are pregnant, plan on getting pregnant, or are breast-feeding. You will need to talk about the benefits and risks to you and the baby.

## What are some side effects that I need to call my doctor about right away?

**WARNING/CAUTION:** Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your doctor or get medical help right away if you have any of the following signs or symptoms that may be related to a very bad side effect:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat. Rarely, some allergic reactions have been life-threatening.
- Signs of low potassium levels like muscle pain or weakness, muscle cramps, or a heartbeat that does not feel normal.
- Low blood sugar may happen. Signs may be dizziness or passing out, blurred eyesight, mood changes, slurred speech, headache, feeling sleepy or weak,

shaking, fast heartbeat, confusion, hunger, sweating, or seizures. Call the doctor right away if any of these signs happen. Follow what you have been told to do if low blood sugar happens. This may include taking glucose tablets, liquid glucose, or some fruit juices.

- Lung function has gotten worse in some people taking this drug. Have your lung function checked while taking this drug. Call your doctor right away if you have breathing problems that are new or worse after starting this drug.

## What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your doctor or get medical help if any of these side effects or any other side effects bother you or do not go away:

- Weight gain.
- Cough.
- Throat pain.
- Throat irritation.
- Signs of a common cold.
- Headache.

These are not all of the side effects that may occur. If you have questions about side effects, call your doctor. Call your doctor for medical advice about side effects.

You may report side effects to your national health agency.

You may report side effects to the FDA at 1-800-332-1088. You may also report side effects at https://www.fda.gov/medwatch.

## How is this drug best taken?

Use this drug as ordered by your doctor. Read all information given to you. Follow all instructions closely.

- For breathing in only by an inhaler into the lungs.
- Your doctor will teach you how to take this drug.
- Only use the device that comes with this drug. Do not use any other devices.
- Use at the start of each meal as your doctor has told you.
- If stored in a refrigerator, let the inhaler and cartridge come to room temperature before using it. Leave it at room temperature for at least 10 minutes. Do not heat this drug.
- After a cartridge has been put in, handle the device with care. If the device has been turned upside down, held with the mouthpiece pointing down, shaken, or dropped, replace the cartridge before use.
- Put the cap back on after you are done using your dose.
- Do not let the inhaler or cartridge get wet. The outside of the inhaler can be wiped if needed with a clean, dry cloth only.
- Each cartridge is for 1 use only. Throw away any part left over after the dose is taken.
- If any of this drug spills from the cartridge onto your hands, wash your hands right away.
- Follow the diet and exercise plan that your doctor told you about.
- Be sure you know what to do if you do not eat as much as normal or if you skip a meal.

## What do I do if I miss a dose?

- Be sure you know what to do if you forget to take a dose.
- If you are not sure what to do if you miss a dose, call your doctor.

## How do I store and/or throw out this drug?

- Follow how to store closely. Read the package insert that comes with this drug. If you have questions about how to store this drug, talk with your pharmacist.

- Do not put an opened blister strip in the refrigerator.
- Be sure you know how long you can store an unused inhaler before you need to throw it away.
- Throw away the inhaler 15 days after first use and get a new one.
- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.

## General drug facts

- If your symptoms or health problems do not get better or if they become worse, call your doctor.
- Do not share your drugs with others and do not take anyone else's drugs.
- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your doctor, nurse, pharmacist, or other health care provider.
- This drug comes with an extra patient fact sheet called a Medication Guide. Read it with care. Read it again each time this drug is refilled. If you have any questions about this drug, please talk with the doctor, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

## Consumer Information Use and Disclaimer

This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific

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If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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