



PATIENT & CAREGIVER EDUCATION

Insulin (Oral Inhalation)

This information from Lexicomp® 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. 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 have an allergy to insulin or any other part of 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.
- Allergic reactions have happened with this drug. Rarely, some reactions can be very bad or life-threatening. Talk with the doctor.
- 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, or diet 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 blood work checked as you have been told by the doctor. Talk with the doctor.
- Avoid drinking alcohol or taking products that have alcohol in them while taking this drug.

- Do not smoke while using this drug.
- 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 or plan on getting pregnant. You will need to talk about the benefits and risks of using this drug while you are pregnant.
- Tell your doctor if you are breast-feeding. You will need to talk about any risks to your 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.

- Signs of low potassium levels like muscle pain or weakness, muscle cramps, or a heartbeat that does not feel normal.
- Anxiety.
- Change in eyesight.
- Chills.
- Dizziness or passing out.
- Feeling very sleepy.
- Mood changes.
- Seizures.
- Slurred speech.
- Cough that does not go away.
- Cough that goes away and comes back.
- Wheezing.
- Low blood sugar may occur. Signs may be dizziness, headache, feeling sleepy, feeling weak, shaking, a fast heartbeat, confusion, hunger, or sweating. Call the doctor right away if any of these signs occur. Follow what you have been told to do if low blood sugar occurs. 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.

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.
- Only use the device that comes with this drug. Do not use any

other devices.

- Use at the start of a meal as your doctor has told you.
- Put the cap back on after you are done using your dose.
- 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.
- Follow the diet and workout 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.
- Be sure you know how long you can store this drug 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 information should not be used to decide whether or not to take this medicine or any other medicine. Only the healthcare provider has the knowledge and training to decide which medicines are right for a specific patient. This information does not endorse any medicine as safe, effective, or approved for treating any patient or health condition. This is only a brief summary of general information about this medicine. It does NOT include all information about the possible uses, directions, warnings, precautions, interactions, adverse effects, or risks that may apply to this medicine. This information is not specific medical advice and does not replace information you receive from the healthcare provider. You must talk with the healthcare provider for complete information about the risks and benefits of using this medicine.

Last Reviewed Date

2018-11-02

Copyright

© 2020 UpToDate, Inc. and its affiliates and/or licensors. All rights reserved.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

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

Insulin (Oral Inhalation) - Last updated on August 5, 2020

©2020 Memorial Sloan Kettering Cancer Center