

Patient Information

APIDRA[®] 3 mL cartridge system (300 units per cartridge system) 100 units per mL (U-100) (insulin glulisine [recombinant DNA origin] injection)

- What is the most important information I should know about APIDRA?
- What is diabetes?
- What is APIDRA?
- Who should NOT take APIDRA?
- How should I use APIDRA?
- What kind of insulin Pen should I use with APIDRA cartridge system?
- Instructions for OptiClik[®] Use
- What can affect how much insulin I need?
- What are the possible side effects of APIDRA and other insulins?
- How should I store APIDRA?
- General Information about APIDRA

Read this “Patient Information” that comes with APIDRA (uh-PEE-druh) before you start using it and each time you get a refill because there may be new information. This leaflet does not take the place of talking with your healthcare provider about your condition or treatment. If you have questions about APIDRA or about diabetes, talk with your healthcare provider.

What is the most important information I should know about APIDRA?

- **Do not change the insulin you are using without talking to your healthcare provider.** Any change of insulin should be made cautiously and only under medical supervision. Changes in insulin strength, manufacturer, type (for example: regular, NPH, analogs), species (beef, pork, beef-pork, human) or method of manufacture (recombinant DNA versus animal-source insulin) may need a change in the dose. This dose change may be needed right away or later on during the first several weeks or months on the new insulin. Doses of oral anti-diabetic medicines may also need to change, if your insulin is changed.
- **You must test your blood sugar levels while using an insulin, such as APIDRA.** Your healthcare provider will tell you how often you should test your blood sugar level, and what to do if it is high or low.
- **APIDRA comes as U-100 insulin and contains 3 milliliter (mL) of APIDRA.** One milliliter of U-100 insulin contains 100 units of insulin. (1 mL = 1 cc).

What is Diabetes?

- Your body needs insulin to turn sugar (glucose) into energy. If your body does not make enough insulin, you need to take more insulin so you will not have too much sugar in your blood.

- Insulin injections are important in keeping your diabetes under control. But the way you live, your diet, careful checking of your blood sugar levels, exercise, and planned physical activity, all work with your insulin to help you control your diabetes.

What is APIDRA?

- APIDRA (insulin glulisine [recombinant DNA origin]) is a rapid-acting insulin analog. Because APIDRA is made by recombinant DNA (rDNA) technology and is chemically different from the insulin made by the human body, it is called an insulin analog. APIDRA is used to treat adults with diabetes for the control of high blood sugar.
- APIDRA is a clear, colorless, sterile solution for injection under the skin (subcutaneously). APIDRA may also be given by infusion into one of your veins (intravenously) by health care professionals only.
- APIDRA starts working faster than regular insulin and does not work as long. APIDRA is used with a longer-acting insulin or by itself as insulin pump therapy to maintain proper blood sugar control.
- The active ingredient in APIDRA is insulin glulisine. The concentration of insulin glulisine is 100 units per milliliter (mL), or U-100. APIDRA also contains metacresol, tromethamine, sodium chloride, polysorbate 20, and water for injection as inactive ingredients. Hydrochloric acid and/or sodium hydroxide may be added to adjust the pH.
- You need a prescription to get APIDRA. Always be sure you receive the right insulin from the pharmacy.

Who should NOT take APIDRA?

Do not take APIDRA if you are allergic to insulin glulisine or any of the inactive ingredients in APIDRA. Check with your healthcare provider if you are not sure.

Before starting APIDRA, tell your healthcare provider about all your medical conditions including if you:

- **have liver or kidney problems.** Your dose may need to be adjusted.
- **are pregnant or plan to become pregnant.** It is not known if APIDRA may harm your unborn baby. It is very important to maintain control of your blood sugar levels during pregnancy. Your healthcare provider will decide which insulin is best for you during your pregnancy.
- **are breast-feeding or plan to breast-feed.** It is not known whether APIDRA passes into your milk. Many medicines, including insulin, pass into human milk, and could affect your baby. Talk to your healthcare provider about the best way to feed your baby.
- **about all the medicines you take including** prescription and non-prescription medicines, vitamins, and herbal supplements.

How should I use APIDRA?

See the "**Instructions for OptiClik® Use**" section for additional information.

- Follow the instructions given by your healthcare provider about the type or types of insulin you are using. Do not make any changes with your insulin unless you have talked to your healthcare provider. Your insulin needs may change because of illness, stress, other medicines, or changes in diet or activity level. Talk to your healthcare provider about how to adjust your insulin dose.
- You should take APIDRA within 15 minutes before a meal or within 20 minutes after starting a meal. Only use APIDRA that is clear and colorless. If your APIDRA is cloudy or colored, return it to your pharmacy for a replacement.
- Follow your healthcare provider's instructions for testing your blood sugar.
- Inject APIDRA under your skin (subcutaneously) in your upper arm, abdomen (stomach area), or thigh (upper leg). Never inject it into a vein or muscle.
- Change (rotate) injection sites within the same body area.

What kind of insulin Pen should I use with APIDRA cartridge system?

- Always use OptiClik[®] device distributed by **sanofi-aventis U.S. LLC** with your APIDRA cartridge system. If you use any other device than OptiClik[®] insulin Pen with APIDRA cartridge system, you may get the wrong dose of insulin causing serious problems for you, such as a blood sugar level that is too low or too high. Always use a new needle each time you give APIDRA injection.
- **NEEDLES AND INSULIN PEN MUST NOT BE SHARED.**
- Disposable needle should be used only once. Used needle should be placed in sharps containers (such as red biohazard containers), hard plastic containers (such as detergent bottles), or metal containers (such as an empty coffee can). Such containers should be sealed and disposed of properly.

Instructions for OptiClik[®] Use

It is important to read, understand, and follow the step-by-step instructions in the “OptiClik[®] Instruction Leaflet” before using OptiClik[®] insulin Pen. Failure to follow the instructions may result in getting too much or too little insulin. If you have lost your leaflet or have a question, go to www.opticlik.com or call 1-800-633-1610.

OptiClik[®] insulin Pen is for use with BD Ultra-Fine needles.

The following general notes should be taken into consideration before injecting APIDRA:

- Always wash your hands before handling the cartridge system and/or the OptiClik[®] insulin Pen.
- Always attach a new needle before use.
- Always perform the safety test before use.
- Check the insulin solution in the cartridge system to make sure it is clear, colorless, and free of particles. If it is not, throw it away.

- Decide on an injection area - either upper arm, thigh, or abdomen. Do not use the same injection site as your last injection.
- After injecting APIDRA, leave the needle in the skin for an additional 10 seconds. Then pull the needle straight out. Gently press on the spot where you injected yourself for a few seconds. **Do not rub the area.**
- Do not drop the OptiClik[®] insulin Pen.

If your blood glucose reading is high or low, tell your healthcare provider so the dose can be adjusted.

What can affect how much insulin I need?

Illness. Illness may change how much insulin you need. It is a good idea to think ahead and make a "sick day" plan with your healthcare provider in advance so you will be ready when this happens. Be sure to test your blood sugar more often and call your healthcare provider if you are sick.

Medicines. **Many medicines can affect your insulin needs.** Other medicines, including prescription and non-prescription medicines, vitamins and herbal supplements, can change the way insulin works. You may need a different dose of insulin when you are taking certain other medicines. **Know all the medicines you take,** including prescription and non-prescription medicines, vitamins and herbal supplements. You may want to keep a list of the medicines you take. You can show this list to all your healthcare providers and pharmacists anytime you get a new medicine or refill. Your healthcare provider will tell you if your insulin dose needs to be changed.

Meals. The amount of food you eat can affect your insulin needs. If you eat less food, skip meals, or eat more food than usual, you may need a different dose of insulin. Talk to your healthcare provider if you change your diet so that you know how to adjust your APIDRA and other insulin doses.

Alcohol. Alcohol, including beer and wine, may affect the way APIDRA works and affect your blood sugar levels. Talk to your healthcare provider about drinking alcohol.

Exercise or Activity level. Exercise or activity level may change the way your body uses insulin. Check with your healthcare provider before you start an exercise program because your dose may need to be changed.

Travel. If you travel across time zones, talk with your healthcare provider about how to time your injections. When you travel, wear your medical alert identification. Take extra insulin and supplies with you.

Pregnancy or nursing. The effects of APIDRA on an unborn child or on a nursing baby are unknown. Therefore, tell your healthcare provider if you are planning to have a baby, are pregnant, or nursing a baby. Good control of diabetes is especially important during pregnancy and nursing.

What are the possible side effects of APIDRA and other insulins?

Insulins, including APIDRA, can cause hypoglycemia (low blood sugar), hyperglycemia (high blood sugar), allergy, and skin reactions.

Hypoglycemia (low blood sugar):

Hypoglycemia is often called an "insulin reaction" or "low blood sugar". It may happen when you do not have enough sugar in your blood. Common causes of hypoglycemia are illness, emotional or physical stress, too much insulin, too little food or missed meals, and too much exercise or activity.

Early warning signs of hypoglycemia may be different, less noticeable or not noticeable at all in some people. That is why it is important to check your blood sugar as you have been advised by your healthcare provider.

Hypoglycemia can happen with:

- **Taking too much insulin.** This can happen when too much insulin is injected. For pump users it could happen if the pump dose is too high.
- **Not enough carbohydrate (sugar or starch) intake.** This can happen if: a meal or snack is missed or delayed.
- **Vomiting or diarrhea** that decreases the amount of sugar absorbed by your body.
- **Intake of alcohol.**
- **Medicines that affect insulin.** Be sure to discuss all your medicines with your healthcare provider. **Do not start any new medicines until you know how they may affect your insulin dose.**
- **Medical conditions that can affect your blood sugar levels or insulin.** These conditions include diseases of the adrenal glands, the pituitary, the thyroid gland, the liver, and the kidney.
- **Too much glucose use by the body.** This can happen if you exercise too much or have a fever.
- **Injecting insulin the wrong way or in the wrong injection area.**

Hypoglycemia can be mild to severe. Its onset may be rapid. Some patients have few or no warning symptoms, including:

- patients with diabetes for a long time
- patients with diabetic neuropathy (nerve problems)
- or patients using certain medicines for high blood pressure or heart problems.

Hypoglycemia may reduce your ability to drive a car or use mechanical equipment and you may risk injury to yourself or others.

Severe hypoglycemia can be dangerous and can cause temporary or permanent harm to your heart or brain. **It may cause unconsciousness, seizures, or death.**

Symptoms of hypoglycemia may include:

- anxiety, irritability, restlessness, trouble concentrating, personality changes, mood changes, or other abnormal behavior
- tingling in your hands, feet, lips, or tongue
- dizziness, light-headedness, or drowsiness
- nightmares or trouble sleeping
- headache
- blurred vision
- slurred speech
- palpitations (fast heart beat)
- sweating
- tremor (shaking)
- unsteady gait (walking).

If you have hypoglycemia often or it is hard for you to know if you have the symptoms of hypoglycemia, talk to your healthcare provider.

Mild to moderate hypoglycemia is treated by eating or drinking carbohydrates such as fruit juice, raisins, sugar candies, milk or glucose tablets. Talk to your healthcare provider about the amount of carbohydrates you should eat to treat mild to moderate hypoglycemia.

Severe hypoglycemia may require the help of another person or emergency medical people. A person with hypoglycemia who is unable to take foods or liquids with sugar by mouth, or is unconscious needs medical help fast and will need treatment with a glucagon injection or glucose given intravenously (IV). Without medical help right away, serious reactions or even death could happen.

Hyperglycemia (high blood glucose):

Hyperglycemia happens when you have too much sugar in your blood. Usually, it means there is not enough insulin to break down the food you eat into energy your body can use. Hyperglycemia can be caused by a fever, an infection, stress, eating more than you should, taking less insulin than prescribed, or it can mean your diabetes is getting worse.

Hyperglycemia can happen with:

- **Insufficient (too little) insulin.** This can happen from:
 - injecting too little or no insulin
 - incorrect storage (freezing, excessive heat)
 - use after the expiration date.

For pump users this can also be caused when the bolus dose of APIDRA infusion or the basal infusion is set too low or the pump is delivering too little insulin.

- **Too much carbohydrate intake.** This can happen if you eat larger meals, eat more often or increase the amount of carbohydrate in your meals.
- **Medicines that affect insulin.** Be sure to discuss all your medicines with your healthcare provider. **Do not start any new medicines until you know how they may affect your insulin dose.**
- **Medical conditions that affect insulin.** These medical conditions include fevers, infections, heart attacks, and stress.
- **Injecting insulin the wrong way or in the wrong injection area.**

Testing your blood or urine often will let you know if you have hyperglycemia. If your tests are often high, tell your healthcare provider so your dose of insulin can be changed.

Hyperglycemia can be mild or severe. It can **progress to diabetic ketoacidosis (DKA) or very high glucose levels (hyperosmolar coma) and result in unconsciousness and death.**

Although diabetic ketoacidosis occurs most often in patients with type 1 diabetes, it can also happen in patients with type 2 diabetes who become very sick. Because some patients get few symptoms of hyperglycemia, it is important to check your blood sugar regularly.

Symptoms of hyperglycemia include:

- confusion or drowsiness
- increased thirst
- decreased appetite, nausea, or vomiting
- rapid heart rate
- increased urination and dehydration (too little fluid in your body).

Symptoms of DKA also include:

- fruity smelling breath
- fast, deep breathing
- stomach area (abdominal) pain.

Severe or continuing hyperglycemia or DKA needs evaluation and treatment right away by your healthcare provider.

Other possible side effects of APIDRA include:

Serious allergic reactions:

Some times severe, life-threatening allergic reactions can happen with insulin. If you think you are having a severe allergic reaction, get medical help right away. Signs of insulin allergy include:

- rash all over your body
- shortness of breath
- wheezing (trouble breathing)

- fast pulse
- sweating
- low blood pressure.

Reactions at the injection site:

Injecting insulin can cause the following reactions on the skin at the injection site:

- little depression in the skin (lipoatrophy)
- skin thickening (lipohypertrophy)
- red, swelling, itchy skin (injection site reaction).

You can reduce the chance of getting an injection site reaction if you change (rotate) the injection site each time. An injection site reaction should clear up in a few days or a few weeks. If injection site reactions do not go away or keep happening, call your healthcare provider.

Tell your healthcare provider if you have any side effects that bother you.

These are not all the side effects of APIDRA. Ask your healthcare provider or pharmacist for more information.

How should I store APIDRA?

- **Unopened cartridge system:**

Store new unopened APIDRA cartridge systems in a refrigerator (not the freezer) between 36°F to 46°F (2°C to 8°C). Do not freeze APIDRA. Keep APIDRA out of direct heat and light. If a cartridge system has been frozen or overheated, throw it away.

- **Open (In-Use) cartridge system:**

Once a cartridge system is opened, you can keep it below 77°F (25°C) but away from direct heat and light for 28 days. Cartridge system in OptiClik® insulin Pen must be discarded 28 days after the first use even if it still contains APIDRA. The opened cartridge system when inserted in OptiClik® insulin Pen should **NOT** be refrigerated but should be kept below 77°F (25°C) and away from direct heat and light for up to 28 days. For example, do not leave it in a car on a summer day. Do not store OptiClik® insulin Pen, with or without cartridge system, in a refrigerator at any time.

These storage conditions are summarized in the following table:

	Not in-use (unopened)	Not in-use (unopened)	In-use (opened)
	Refrigerated	Below 77°F (25°C)	(See Temperature Below)
3 mL Cartridge system	Until expiration date	28 days	28 days Refrigerated or below 77°F (25°C)
3 mL Cartridge system inserted in OptiClik® insulin Pen			28 days below 77°F (25°C only) (Do not refrigerate)

- Do not use a cartridge system of APIDRA after the expiration date stamped on the label.
- Do not use APIDRA if it is cloudy, colored, or if you see particles.

General Information about APIDRA

- Use APIDRA only to treat your diabetes. **Do not** give or share APIDRA with another person, even if they have diabetes also. It may harm them.
- This leaflet summarizes the most important information about APIDRA. If you would like more information, talk with your healthcare provider. You can ask your healthcare provider or pharmacist for information about APIDRA that is written for healthcare providers. For more information about APIDRA call 1-800-633-1610 or go to website www.apidra.com.

ADDITIONAL INFORMATION

DIABETES FORECAST is a national magazine designed especially for patients with diabetes and their families and is available by subscription from the American Diabetes Association, (ADA), P.O. Box 363, Mt. Morris, IL 61054-0363, 1-800-DIABETES (1-800-342-2383). You may also visit the ADA website at www.diabetes.org.

Another publication, **COUNTDOWN**, is available from the Juvenile Diabetes Research Foundation International (JDRF), 120 Wall Street, 19th Floor, New York, New York 10005, 1-800-JDF-CURE (1-800-533-2873). You may also visit the JDRF website at www.jdf.org.

To get more information about diabetes, check with your healthcare professional or diabetes educator or visit www.DiabetesWatch.com.

Additional information about APIDRA or OptiClik[®] can be obtained by calling 1-800-633-1610 or by visiting www.apidra.com or www.opticlik.com.

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