

Oral Drugs for Type 2

Class	Generic Name	Available as a Generic?	Brand Names	Comments/Cautions
Alpha-glucosidase Inhibitors	acarbose	yes	Precose	<p>Target: Lowers your blood glucose by slowing the digestion of carbohydrates. Use: Take with the first bite of each meal. Advantages: Acarbose and miglitol normally do not cause weight gain. Acarbose and miglitol don't cause hypoglycemia when used alone. Possible side effects: Gas, bloating, and diarrhea. Ask your doctor about starting with a low dose and building up slowly. Caution: Don't take an alpha-glucosidase inhibitor if you have inflammatory bowel disease, other intestinal diseases, or obstructions. When used with certain other diabetes medications, low blood glucose can occur. Acarbose and miglitol delay the breakdown of many other carbohydrates, so those carbs should not be used to treat low blood glucose.</p>
	miglitol	no	Glyset	
Biguanides	metformin	yes	Glucophage	<p>Target: Decreases liver's glucose production and slightly increases muscle glucose uptake. Use: To minimize side effects, take with meals. Advantages: Does not cause weight gain and does not cause hypoglycemia when used alone. Extended-release metformin is taken once daily and may result in fewer gastrointestinal side effects. Possible side effects: Nausea, diarrhea, or loss of appetite, which usually subside within a few weeks. To minimize side effects, ask your doctor about starting with a low dose and building up slowly. Caution: Lactic acidosis is a rare but serious side effect. Metformin may not be right for you if you have kidney problems or severe respiratory problems, are 80 or older, are taking medication for heart failure, have a history of liver disease, drink alcohol excessively (binge drinking), or are hospitalized. If you are scheduled for any medical testing, radiology, or surgical procedures for which you will have to fast or have an iodinated dye injected into your veins, you must inform medical personnel that you are taking metformin.</p>
	metformin (long-acting)	yes	Glucophage XR, Glumetza, Fortamet	
	metformin (liquid)	no	Riomet	
Dopamine Agonist	bromocriptine	no	Cycloset	<p>Target: Lowers blood glucose, though the reasons why aren't fully understood. Use: Take once daily in the morning with food. Begin treatment with one tablet and increase by one tablet per week until maximum tolerated dose of 2-6 tablets taken once daily. Advantages: Unlikely to cause hypoglycemia or weight gain. No adjustment needed for patients with renal impairment. Proven cardiovascular safety. Possible side effects: Nausea, vomiting, fatigue, dizziness, and headache. Caution: People taking dopamine antagonists or those with psychotic disorders should not take Cycloset. Nursing women should not use this drug. May cause low blood pressure when starting therapy or when increasing the dose of medication. In some cases, low blood pressure may cause fainting.</p>
DPP-4 Inhibitors	Alogliptin	No	Nesina	<p>Target: Lowers blood glucose by helping the body increase the level of insulin after meals. Use: Take by mouth once each day (with or without food). Advantages: Unlikely to cause hypoglycemia. Possible side effects: Stuffy or runny nose, headache, cold-like symptoms. Caution: Watch for signs of pancreatitis, such as abdominal pain and nausea, and alert your doctor if any are observed.</p>
	sitagliptin	no	Januvia	<p>Target: Increases insulin production and decreases the liver's production of glucose. Use: Take once daily with or without food. Advantages: Does not cause weight gain. Possible side effects: May occasionally cause stomach discomfort and diarrhea. Caution: If you have kidney problems, your doctor may prescribe lower doses. Your doctor may do blood tests from time to time to see how well your kidneys are working. Watch for signs of pancreatitis, such as abdominal pain and nausea, and alert your doctor if any are observed.</p>
	saxagliptin	no	Onglyza	<p>Target: Lowers blood glucose by helping the body increase the level of insulin after meals. Use: Take by mouth once each day (with or without food). Advantages: Unlikely to cause hypoglycemia. Possible side effects: Headache, upper respiratory tract infection, urinary tract infection. Swelling or fluid retention may become worse in people who also take a thiazolidinedione medication. Caution: You may need a lower dose of this drug if your kidneys are not working well. Watch for signs of pancreatitis, such as abdominal pain and nausea, and alert your doctor if any are observed.</p>
	linagliptin	no	Tradjenta	<p>Target: Lowers blood glucose by helping the body increase the level of insulin after meals. Use: Take by mouth once each day (with or without food). Advantages: Unlike other DPP-4 inhibitors, linagliptin is not excreted through the kidneys so it may not need dose adjustment in people with kidney disease. Possible side effects: Low blood glucose, especially if taken with certain other diabetes medications; stuffy or runny nose with a sore throat. Caution: Watch for signs of pancreatitis, such as abdominal pain and nausea, and alert your doctor if any are observed.</p>
Meglitinides	nateglinide	yes	Starlix	<p>Target: Increases insulin production by the pancreas. Use: Take at start of meals. Advantages: Does not cause weight gain. May decrease risk of hypoglycemia between meals and overnight compared with sulfonylureas. Possible side effects: Can cause low blood glucose. Caution: Skip the dose if you skip a meal.</p>
	repaglinide	yes	Prandin	
SGLT2 Inhibitors	Canagliflozin	No	Invokana	<p>Target: Lowers blood glucose by causing the kidneys to excrete excess glucose into the urine. Use: Take by mouth once with the first meal of each day. Advantages: May spur weight loss and reduction in blood pressure. Possible side effects: Dehydration, yeast infections, urinary tract infections, and changes in urination. Caution: This medication may cause kidney problems, high levels of potassium in the blood, episodes of low blood pressure, and low blood sugar. Monitor LDL cholesterol levels during use. It is not for use in people with severe kidney disease or bladder cancer.</p>
	Dapagliflozin	No	Farxiga	<p>Target: Lowers blood glucose by causing the kidneys to excrete excess glucose into the urine. Use: Take by mouth once each day in the morning, with or without food. Advantages: May spur weight loss and reduction in blood pressure. Possible side effects: Dehydration, yeast infections, urinary tract infections, and changes in urination. Caution: This medication may cause kidney problems, episodes of low blood pressure, high levels of potassium in the blood, and low blood sugar. Monitor LDL cholesterol levels during use. It is not for use in people with severe kidney disease or bladder cancer.</p>

For complete drug information, see the medication's package insert. Before taking any new medication, tell your doctor if you are pregnant or may become pregnant, if you're breast-feeding or plan to breast-feed, or if you have kidney or liver problems.

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Sulfonylureas	glimepiride	yes	Amaryl	Target: Increases insulin production by the pancreas. Use: Take once daily with breakfast or the first meal of the day. Advantages: May be used with or without insulin. Possible side effects: Hypoglycemia. Caution: Should be used with caution by people with impaired kidney and liver function.
	glipizide	yes	Glucotrol	Target: Increases insulin production by the pancreas. Use: Take once or twice daily before a meal. Possible side effects: Hypoglycemia. Caution: Should be used with caution by people with impaired kidney and liver function.
	glipizide (long-acting)	yes	Glucotrol XL	Target: Increases insulin production by the pancreas. Use: Take once daily before a meal. Possible side effects: Hypoglycemia. Caution: Should be used with caution by people with impaired kidney and liver function.
	glyburide	yes	DiaBeta,	Target: Increases insulin production by the pancreas. Use: Take once or twice daily before a meal. Possible side effects: Hypoglycemia. Caution: Effects may last entire day. May not be suitable for patients with kidney disease.
	glyburide (micronized)	yes	Glynase	Target: Increases insulin production by the pancreas. Use: Take once or twice daily before a meal. Possible side effects: Hypoglycemia.
	chlorpropamide	yes	Diabinese	Target: Increases insulin production by the pancreas. Use: Take once or twice daily before a meal. Advantages: Longest-acting drug in this class. Possible side effects: Higher potential to cause hypoglycemia. Caution: Not recommended for the elderly or those with kidney disease. May cause low blood sodium, jaundice, and skin rash.
	tolbutamide	yes	Available only as a generic	Target: Lowers blood glucose by stimulating the release of insulin from the pancreas. Use: Take several times daily as prescribed by your doctor. Possible side effects: Hypoglycemia. Caution: May make skin sensitive to sunlight and cause sunburn.
	tolazamide	yes	Available only as a generic	Target: Lowers blood glucose by stimulating the release of insulin from the pancreas. Use: Take once a day. Possible side effects: Hypoglycemia. Caution: May make skin sensitive to sunlight and cause sunburn.
Thiazolidinediones (TZDs)	pioglitazone	yes	Actos	Target: Decreases insulin resistance at the muscle and liver. Use: Typically takes 4 to 6 weeks to see an effect on blood glucose. Advantages: May improve HDL ("good") cholesterol and triglycerides. Possible side effects: Can cause weight gain and fluid retention. Caution: These drugs can cause heart failure. People with heart failure and those at risk for heart failure should not take these drugs. Avandia carries a potential increased risk of heart attack. Have liver function checked prior to starting these medications and periodically throughout your treatment. Call your doctor right away if you have any symptoms of liver damage, such as nausea, vomiting, abdominal pain, fatigue, jaundice, loss of appetite, or dark urine. These medications may cause women who are not ovulating and haven't gone through menopause to begin ovulating again, enabling them to conceive. Oral contraceptives may be less effective when taking these medications.
	rosiglitazone	yes	Avandia	
Combination Pills	metformin + glyburide	yes	Glucovance	See comments and cautions for each drug in the combination, listed separately above.
	metformin + rosiglitazone	no	Avandamet	
	metformin + glipizide	yes	Available only as a generic	
	metformin + linagliptin	no	Jentaducto	
	metformin + pioglitazone	yes	Actoplus Met	
	metformin (long-acting) + pioglitazone	no	Actoplus Met XR	
	metformin + sitagliptin	no	Janumet	
	metformin (long-acting) + sitagliptin	no	Janumet XR	
	metformin + repaglinide	no	PrandiMet	
	pioglitazone + glimepiride	yes	Duetact	
	rosiglitazone + glimepiride	no	Avandaryl	
	metformin (long-acting) + saxagliptin	no	Kombiglyze XR	
	metformin + alogliptin	no	Kazano	
	pioglitazone + alogliptin	no	Oseni	
	simvastatin + sitagliptin	no	Juvisync	

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