UW Medicine

Medicines for Type 2 Diabetes

Basic facts

This handout explains the drugs that are most often used by people with type 2 diabetes.

What is type 2 diabetes?

Type 2 diabetes is a complex disease. It involves the pancreas and other organs in the body.

In type 2 diabetes, the body may not fully use the insulin it makes. This is called *insulin resistance*. The body may also not produce enough insulin. This is called *insulin deficiency*.

You may need medicine to help keep your blood glucose at healthy levels. Some people may need more than 1 kind of diabetes medicine to treat their type 2 diabetes.



Your healthcare provider will help you find the right medicine(s) for you.

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Medicines

Medicine Names	Primary Site of Action and <i>Drug Class</i>	How It Works	How Is It Given?	Possible Adverse Effects
Metformin (<i>Glucophage</i>)	Liver <i>Biguanide</i>	Decreases amount of glucose the liver releases into bloodstream and may help reduce insulin resistance	Orally (by mouth)	Nausea, vomiting, diarrhea, gas (lessen effects by slowly increasing dose)

Drug Names	Primary Site of Action and Drug Class	How It Works	How Is It Given?	Side Effects
Glyburide (<i>Micronase,</i> <i>DiaBeta</i>) Glipizide (<i>Glucotrol</i>) Glimepiride (<i>Amaryl</i>) Repaglinide (<i>Prandin</i>) Nateglinide (<i>Starlix</i>)	Pancreas Insulin Secretagogues	Makes the pancreas release more insulin	Orally	<i>Hypoglycemia</i> (low blood glucose)
Exenatide (Byetta, Bydureon) Liraglutide (Victoza) Dulaglutide (Trulicity) Albiglutide (Tanzeum)	Pancreas, liver, and gut <i>Incretin</i>	Makes the pancreas release more insulin Prevents the production of glucose in the liver Slows movement of food out of the gut Decreases appetite	Injected into the fatty layer just below the skin <i>(subcutaneous</i> injection)	Nausea, vomiting, hypoglycemia
Sitagliptin (Januvia) Saxagliptin (Onglyza) Linagliptan (Tradjenta)	Pancreas and liver DPP-IV inhibitor	Increases insulin released into bloodstream Decreases glucagon levels	Orally	No major side effects Possible cold symptoms
Rosiglitazone (Avandia) Pioglitazone (Actos)	Muscle Thiazolidine- diones (TZDs)	Improves the ability of muscle and other cells to use insulin	Orally	Weight gain, swelling
Acarbose (Precose) Miglitol (Glyset)	Gut Alpha Glucosidase Inhibitors	Slows breakdown of carbohydrates from food eaten	Orally	Diarrhea, gas, nausea (lessen effects by slowly increasing dose)
Canagliflozin <i>(Invokana)</i> Dapagliflozin <i>(Farxiga)</i> Empagliflozin <i>(Jardiance)</i>	Kidneys SGLT2 Inhibitor	Lowers blood glucose by decreasing reabsorption of glucose by the kidneys	Orally	Yeast infections, urinary tract infections, increased urination

Questions?

Your questions are important. Call your doctor, pharmacist, or healthcare provider if you have questions or concerns.

Endocrine and Diabetes Care Center: 206.598.4882

UW Medicine Neighborhood Clinics: 206.520.5000