



DRUG CLASS	How It Works	Generic Name	Brand Name	Cost*
TYPE 2 ORAL MEDICATIONS				
Biguanide (available as a generic)	Lowers the amount of glucose produced by the liver	Metformin	Glucophage	Low
		Metformin extended release	Glucophage XR, Glumetza, Fortamet	High
Sulfonylureas (available as a generic)	Helps beta cells in the pancreas release more insulin	Glimepiride	Amaryl	Low
		Glipizide	Glucotrol	
		Glipizide extended release	Glucotrol XL	
		Glyburide, glibenclamide	Micronase, Glynase, Diabeta	
Meglitinides (available as a generic)		Nateglinide	Starlix	Moderate
		Repaglinide	Prandin	
TZDs (available as a generic)	Helps insulin work better in muscle and fat cells. Lowers glucose production in the liver.	Pioglitazone	Actos	Low
Alpha-glucosidase inhibitors (available as a generic)	Blocks the breakdown of starches in the intestines	Acarbose	Precose	Moderate
		Miglitol	Glyset	
DPP-4 inhibitors (not available as a generic)	Prevents the breakdown of GLP-1, a compound in the body that lowers blood glucose levels	Alogliptin	Nesina	High
		Linagliptin	Tradjenta	
		Saxagliptin	Onglyza	
		Sitagliptin	Januvia	
Bile acid sequestrants (not available as a generic)	Lowers cholesterol and blood glucose levels	Colesevelam	Welchol	High
Dopamine-2 agonists (not available as a generic)	Helps lower blood glucose levels after a meal	Bromocriptine quick release~^	Cycloset	High

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SGLT2 inhibitors (not available as a generic)	Blocks glucose from being reabsorbed by the kidneys. Excess glucose is released in the urine.	Canagliflozin	Invokana	High
		Dapagliflozin	Farxiga	
		Empagliflozin	Jardiance	

*Cost is based on the lowest-priced drug in its class. Low-cost drugs cost less than \$1 per day. Medium-cost drugs cost between \$1 and \$2 per day. High-cost drugs cost more than \$2 per day. There is much variation in cost, even within drug classes. ^This drug is not recommended for use in conjunction with basal insulin therapy. ~This drug is not recommended for use in conjunction with mealtime insulin therapy.

Each medication has its own side effects; read labels carefully to be sure you know what they are. The sulfonylureas chlorpropamide (Diabinese) and tolazamide and the TZD rosiglitazone (Avanda) are available but rarely prescribed.

Oral Combination Therapy

Because the drugs listed in this chart act in different ways to lower blood glucose levels, providers will often prescribe multiple drugs to a patient. For example, a doctor might prescribe both a biguanide and a sulfonylurea. Several of the more popular combinations of oral drugs can be prescribed together in a single pill.

TYPE 2 INJECTED MEDICATIONS (NON-INSULIN)

Amylin (not available as a generic)	Slows food moving through the stomach. Also indicated for type 1 diabetes.	Pramlintide	Symlin	High
GLP-1 receptor agonists (not available as a generic)	Helps release insulin when blood glucose is high and lower the amount of glucose produced by the liver.	Albiglutide~	Eperzan, Tanzeum	High
		Dulaglutide^	Trulicity	
		Exenatide~	Byetta	
		Exenatide extended release	Bydureon, Bydureon BCise	
		Liraglutide~	Victoza	
		Lixisenatide~	Adlyxin	
		Semaglutide	Ozempic	
Insulin + GLP-1 receptor agonists (not available as a generic)	Combines long-acting insulin with a GLP-1 receptor agonist. The insulin helps glucose enter the cells to be used as fuel. The GLP-1 helps release insulin when blood glucose is high and lower the amount of glucose.	Insulin glargine/ Lixisenatide~	Soliqua 100/33	High
		Insulin degludec/ Liraglutide	Xultophy 100/3.6	

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Generic Name (U-100, except where noted)	Brand Name	Manufacturer	Form	Delivery	Onset	Peak	Duration
RAPID-ACTING INSULIN							
Insulin aspart	Fiasp	Novo Nordisk	Analog	Syringe; prefilled, 300-unit disposable pen	2.5 minutes	50 to 70 min.	About 5 hours
Insulin aspart	NovoLog	Novo Nordisk	Analog	Syringe; prefilled, 300-unit disposable pen; reusable pen with 300-unit cartridges; pump	10 to 20 min.	40 to 50 min.	3 to 5 hours
Insulin glulisine	Apidra	Sanofi	Analog	Syringe; prefilled, 300-unit disposable pen; pump	10 to 20 min.	30 to 90 min.	2 to 4 hours
Insulin human (inhaled powder)	Afrezza	MannKind	Human	Inhaler with 4-, 8-, and 12-unit cartridges	3 to 7 min.	12 to 15 min.	1.5 to 3 hours
Insulin lispro (Also available in U-200 [†])	Humalog	Eli Lilly	Analog	Syringe; prefilled, 300-unit disposable pen; reusable pen with 300-unit cartridges; prefilled, 600-unit disposable pen; pump	10 to 20 min.	30 to 90 min.	3 to 5 hours
SHORT-ACTING INSULIN							
Regular	Humulin R[*]	Eli Lilly	Human	Syringe	30 to 60 min.	2 to 4 hours	5 to 8 hours
Regular	Novolin R, ReliOn Novolin R	Novo Nordisk	Human	Syringe	30 min.	80 to 120 min.	Up to 8 hours
INTERMEDIATE-ACTING INSULIN							
NPH	Humulin N	Eli Lilly	Human	Syringe; prefilled, 300-unit disposable pen	1 to 3 hours	8 hours	12 to 16 hours
NPH	Novolin N, ReliOn Novolin N (Walmart)	Novo Nordisk	Human	Syringe	90 min.	4 to 12 hours	Up to 24 hours

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LONG-ACTING INSULIN							
Insulin detemir	Levemir	Novo Nordisk	Analog	Syringe; prefilled, 300-unit disposable pen	1.6 hours	No peak	Up to 24 hours
Insulin glargine	Basaglar	Eli Lilly	Analog	Prefilled, 300-unit disposable pen	1 hour	No peak	24 hours
Insulin glargine	Lantus	Sanofi	Analog	Syringe; prefilled, 300-unit disposable pen	1 hour	No peak	24 hours
ULTRA-LONG-ACTING INSULIN							
Insulin degludec (Also available in U-200 [^])	Tresiba	Novo Nordisk	Analog	Prefilled, 300-unit disposable pen; prefilled, 600-unit disposable pen	1 hour	No peak	At least 42 hours
Insulin glargine (U-300 [^])	Toujeo	Sanofi	Analog	Prefilled, 450-unit disposable pen	6 hours	No peak	36 hours
INSULIN MIXTURES							
50% lispro protamine (NPL)/ 50% insulin lispro	Humalog Mix 50/50	Eli Lilly	Analog	Syringe; prefilled, 300-unit disposable pen	10 to 15 min.	Varies	16 to 22 hours
75% lispro protamine (NPL)/ 25% insulin lispro	Humalog Mix 75/25	Eli Lilly	Analog	Syringe; prefilled, 300-unit disposable pen	10 to 15 min.	Varies	16 to 22 hours
70% aspart protamine/30% insulin aspart	NovoLog Mix 70/30[~]	Novo Nordisk	Analog	Syringe; prefilled, 300-unit disposable pen	10 to 20 min.	Varies	Up to 24 hours
70% NPH/30% Regular	Humulin 70/30	Eli Lilly	Human	Syringe; prefilled, 300-unit disposable pen	30 to 60 min.	Varies	12 to 16 hours
70% NPH/30% Regular	Novolin 70/30[~], ReliOn Novolin 70/30 (Walmart)	Novo Nordisk	Human	Syringe	30 min.	Varies	Up to 24 hours
LESS COMMONLY USED INSULIN							
Regular U-500	Humulin R U-500^{*^}	Eli Lilly	Human	Syringe	30 min.	4 to 8 hours	Up to 24 hours

*Note difference between Humulin R and Humulin R U-500. ~Note difference between NovoLog Mix 70/30 (70% aspart protamine/30% insulin aspart) and Novolin 70/30 (70% NPH/30% Regular) [^]U-100, U-200, U-300, and U-500 are different concentrations of insulin. Higher concentrations of insulin are typically used in very insulin-resistant people.