Diabetic Medication
E-Z Reference Sheet

Type of Insulin/Brand Name	Onset	Peak/Duration	Role	Side Effects	Precautions	Contraindications
Rapid-Acting				Hypoglycemia, lipodystrophy and/or hypertrophy at injection site, rash at injection site or over entire body. Insulin resistance, insulin induced hyperglycemia.	Infection, stress or diet changes may alter requirements. Some medications may alter effects of insulin. Insulin resistance may require change in type or addition of insulin sensitizer.	Hypoglycemia
Humulog or Lispro	15-30 min	30-90 min (3-5hrs)	Covers insulin needs for meals eaten at same time as injection. Used w/longer acting insulin			
Novolog or Aspart	10-20 min	40-50 min (3-5 hrs)				
Apridra or Glulisine	20-30 min	30-90 min (1-2 1/2 hrs)				
Short-Acting						
Regular Humulin or Novolin	30-60 min	2-5 hrs (5-8 hrs)	Covers insulin needs for meals eaten within 30-60 min			
Velosulin (used in pump)	30-60 min	2-3 hrs (2-3 hrs)				
Intermediate-Acting						
NPH (N)	1-2 hrs	4-12 hrs (18-24 hrs)	Covers insulin needs for 1/2 day or overnight. Used w/ rapid or short-acting insulin			
Lente (L)	1-2 1/2 hrs	3-10 hrs (18-24 hrs)				
Long-Acting						
Ultralente (U)	30 min-3 hrs	10-20 hrs (20-36 hrs)	Covers insulin needs for about one full day. Combined prn w/rapid acting insulin			
Lantus	1-1 1/2 hrs	No peak time-delivered at				
Levenir/Detemir	1-2 hrs	6-8 hrs (Up to 24hrs)				
Pre-Mixed*						
Humulin 70/30	30 min	2-4 hrs (14-24 hrs)	Generally taken twice a day before meals			
Novolin 70/30	30 min	2-12 hrs (Up to 24 hrs)				
Novolog 70-30	10-20 min	1-4 hrs (Up to 24 hrs)				
Humulin 50/50	30 min	2-5 hrs (18-24 hrs)				
Humalog mix 75/25	15 min	30 min-2 1/2 hrs (16-20 hrs)				

*Premixed insulins are combinations of intermediate and short-acting insulin within one bottle. The numbers following the brand name indicate the percentage of each type of insulin

Types/Brands Oral Diabetes Medications	Role	Side Effects	Precautions	Contraindications
Sulfonylureas*			Use cautiously in geriatric patients; dosage reductions may be necessary. Infection, stress and/or changes in diet may alter requirements. *With sulfonylureas use caution in pateints with history of cardiovascular disease. **May cause lactic acidosis, should not be used in pts with kidney damage or heart failure.	Hypersensitivity (cross-sensitivity with other sulfonylureas and sulfonamides may exist). Hypoglycemia, Type I DM. Avoid use in pts with severe kidney, liver, thyroid, and other endocrine dysfunction. Should not be used in pregnancy or lactation.
glyburide (Micronase, Diabeta, Glynase); **glypizide** (Glucotrol, Glucotrol XL); **glimepiride** (Amaryl)	Lower blood glucose by stimulating pancreas to release more insulin	Hypoglycemia, upset stomach, rash/itching, weight gain		
Biguanides**				
metformin (Glucophage)	Improve insulin's ability to move glucose into cells. Prevent liver from releasing stored glucose.	Nausea, diarrhea, metallic taste in mouth, hypoglycemia when used w/other medications. Lactic acidosis		
Thiazolidinediones				
proglitazone (Actos); **rosiglitazone** (Avandia)	Improve insulin's effectiveness in muscle & fat tissue. Lower amount of glucose released by liver and make fat cells more sensitive to the effects of insulin	Rare but may include elevated liver enzymes, liver failure, respiratory infection, headache, fluid retention		
Alpha-glucosidase inhibitors				
acarbose (Precose); **miglitol (**Glyset)	Block enzymes that help digest starches, slowing the rise in blood glucose	gas, diarrhea, nausea, abdominal cramps		
Meglitinides				
repralinide (Prandin); **nateglinide** (Starlix)	Stimulate pancrease to release more insulin. Effects are glucose dependent and only increase insulin with high blood glucose levels	hypoglycemia, diarrhea, nausea		
Dipeptidyl peptidase IV inhibitors				
sitagliptin (Januvia)	Increase insulin secretion from pancreas and reduce sugar production. Increase insuline secretion when blood glucose is high and signal liver to stop producing excess amounts of glucose. Taken alone or with other meds such as Metformin	upper respiratory infection, sore throat, headache, nausea, diarrhea		

Non-insulin Injection	Role	Side Effects	Precautions	Contraindications
Incretin-metic				
exenatide (Byetta)	Enhances efficiency of insulin production by pancreas; delays gastric emptying; suppresses inappropriately elevated glucagon secretion	nausea, diarrhea, "jittery", decreased appetite, weight loss, rare pancreatitis	May alter absorption/efficacy of some oral medications (esp. birth control pills and ATB); NOT used as replacement for insulin; must be taken 60 min BEFORE meals to be effective; increases risks of side effects of warfarin; and may increase risk of hypoglycemia if used with sulfonylureas	Hypoglycemia, Type I DM. Avoid in pts with severe kidney or stomach disorders (gastroparesis)

**injectable medication generally used in combination with oral diabetic medications such as metformin but is never used to replace insulin for patients requiring insulin for