

Oral Diabetes Medications

Class	Drug	Action	Daily Dose	Onset/ Peak	Duration	Patient Education
<u>Sulfonylurea</u>	Glyburide- DiaBeta Micronase Glynase	*Lowers blood glucose by increasing insulin secretion by the pancreatic beta cells.	2.5-10 mg <u>Max/day</u> 20mg	1-4 h 2-4 h	24 h	Take 30 minutes before meals. Increased risk for hypoglycemia, even at low doses, teach s/sx/tx for hypoglycemia.
	Glipizide- Glucotrol		2.5-20 mg <u>Max/day</u> 40mg	30 min 1-3 h	24 h	
	Glipizide XL- Glucotrol XL	*May also lead to increased peripheral sensitivity to insulin.	5-20 mg <u>Max/day</u> 20 mg	2-3 h 6-12 h	24 h	Take with first meal of the day. Teach s/sx/tx for hypoglycemia.
	Glimepiride- Amaryl		1-4 mg <u>Max/day</u> 8 mg	<1 h 2-3 h	>24 h	Take with first meal of the day. Teach s/sx/tx for hypoglycemia.
<u>Meglitinide</u>	Repaglinide- Prandin	*Stimulates insulin secretion; rapid onset and elimination. *Associated with less hypoglycemia.	0.5-4 mg ac meals <u>Max/day</u> 16 mg/day	¼- ½ h 1 h	2-3 h	Take up to 30 minutes before all meals (if extra meal is added, take extra dose of med). Do not take the med if not eating (no meal = no med). Test blood sugar 2 hours after eating to determine effectiveness of dose.
	Nateglinide- Starlix		120 mg ac meals <u>Max/day</u> 120 mg ac	Within 20 min 1 h	2-3 h	
<u>Glitazone</u>	Pioglitazone- Actos	*Reduces insulin resistance *Improves insulin sensitivity in muscle and adipose tissue. **Use cautiously in patients with CHF or edema. **	15-30 mg <u>Max/day</u> 45 mg	Unknown 2 h	Unknown	May be taken with or without meals. Do not double up if a dose is missed. Have liver enzymes tested every 2 months for the first year, then periodically after that. Report jaundice, nausea, vomiting, fatigue, abdominal pain, anorexia, or dark urine to physician immediately.
	Rosiglitazone- Avandia		4 mg <u>Max/day</u> 8 mg	Unknown 1 h	Unknown	

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<u>Biguanide</u>	Metformin- Glucophage	*Improves peripheral insulin sensitivity and glucose uptake *Decreases hepatic gluconeogenesis	500-850 mg tid or 1000 bid <u>Max/day</u> 2550 mg	Unknown 2-4 h	Unknown	May cause GI upset/diarrhea; these symptoms last only a few weeks. Take with food to reduce symptoms. Usually no risk for hypoglycemia. Not for use in patients with liver or kidney disease or CHF.
<u>Alpha-Glucosidase Inhibitor</u>	Acarbose- Precose Prandase Glucobay	*Delays digestion of carbohydrates, resulting in a smaller rise in post-meal blood glucose.	50-100 mg ac <u>Max/day</u> 300 mg	Immediate	~6 h	Take at every meal with first bite of food. May cause gas/ bloating. Dose will be gradually increased to decrease GI side effects. Not for use in patients with chronic bowel disorders.
	Miglitol- Glyset	*Can improve over-all glucose levels.	25-100 mg ac	Rapid	“short”	
<u>DPP-4 Inhibitor</u>	Sitagliptin Januvia	*Enhances glucose-dependent insulin secretion. *Suppresses glucagon secretion. *Slows gastric emptying, reducing food intake.	<u>Sitagliptin</u> 100 mg daily in one dose. 50 mg daily for renal failure, 25 mg for ESRD	Rapidly absorbed/ peaks at 1-4 h with half-life of 12h	~24 h	For type 2 diabetes ONLY. Take once daily at a consistent time. May be taken with or without food. May cause low blood sugar when used in combination with a sulfonyl-urea; lower doses of sulfonylurea may be needed. Lower doses are available for those with renal disease.
	Saxagliptin Onglyza		<u>Saxagliptin</u> 2.5 - 5.0mg Once daily Renal dose: 2.5 mg			

New Diabetes Medications

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<u>Incretin Hormone</u>	Exenatide Byetta	*Enhances glucose-dependent insulin secretion. *Suppresses glucagon secretion. *Slows gastric emptying, reducing food intake.	<u>Exenatide</u> Starting dose: 5 mcg bid ac Breakfast & Supper Final dose: 10 mcg bid ac Breakfast & Supper	Indicated for Type 2 diabetes only. NOT for use in those with gastroparesis. Given by subcutaneous injection. May cause hypoglycemia in patients taking sulfonylureas. <u>Exenatide</u> Take 15 – 60 minutes prior to meals. If dose forgotten, do not take after the meal. May cause nausea; if nausea is a problem try to eat within 15 minutes of the injection. Do not take Byetta if blood sugar is too low. <u>Liraglutide</u> Take once a day at the same time. Does not need to be timed with meals *Liraglutide should not be used in pts with history or family history of thyroid cancer.
	Liraglutide Victoza	*Increases beta cell mass and function.	<u>Liraglutide</u> Starting dose: 0.6 mg daily x 1 week Final dose: 1.2 – 1.8 mg daily	
<u>Amylin</u>	Pramlintide Acetate Symlin	* Suppresses glucagon secretion. *Slows gastric emptying, reducing food intake.	Type 1 Diabetes: 2 ½ units (15mcg) before major meals. Increase dose by 2 ½ units (15 mcg) every 3 – 7 days if no nausea up to maximum dose 10 units (60 mcg). Type 2 Diabetes: Start with 10 units (60 mcg) before major meals. Increase dose to 20 units (120 mcg) in 3 – 7 days if no nausea.	Indicated for Type 1 diabetes, and Type 2 diabetes using insulin. NOT for use in those with gastroparesis. With first dose decrease usual mealtime insulin dose by 50% to reduce the risk of hypoglycemia. Major meals have at least 30 gm carbohydrate or at least 250 calories). Use standard U-100 insulin syringe. Inject in same manner as insulin. Never mix insulin and Symlin; use separate syringes for each. May cause nausea initially; usually subsides after the first few weeks. DO NOT TAKE Symlin if blood sugar is too low, or when not eating.

