

Diabetic Medications Cheat Sheet for Providers

Medication	How it Works	Benefits	Side Effects	Contraindications	A1c Effect	Line
<p>Class: Biguanides</p> <p>metformin(Glucophage)</p> <p>Administration: Oral</p>	<ul style="list-style-type: none"> - First line - Targets insulin resistance - Decreases glucose production in the liver 	<ul style="list-style-type: none"> - Weight neutral or decreased - Low risk for hypoglycemia 	<ul style="list-style-type: none"> - Nausea, vomiting, diarrhea - Risk of lactic acidosis - B12 deficiency 	<ul style="list-style-type: none"> - GFR 30-60, consider changing dose by 50% - GFR <30 - stop 	1.0-2 or more	First Line
<p>Class: GLP-1 Agonists</p> <p>liraglutide (Victoza) Daily</p> <p>dulaglutide (Trulicity) Weekly</p> <p>semaglutide (Ozempic) Weekly</p> <p>Administration: Injection</p> <p>semaglutide (Rybelsus) - the only oral GLP-1</p>	<ul style="list-style-type: none"> - Suppresses glucose production by inhibiting glucagon secretion - Slows gastric emptying therefore slowing glucose absorption - Stimulates insulin release in response to food 	<ul style="list-style-type: none"> - Weight loss - Decreased appetite - Low risk of hypoglycemia <p>- liraglutide (Victoza) and semaglutide (Ozempic) have shown to have a relative risk reduction in overall MACE (CV death, nonfatal MI, or nonfatal stroke); also reduce renal disease and slows progression of renal disease</p>	<ul style="list-style-type: none"> - N/V/D and stomach cramping, constipation - Rare cases pancreatitis - Can cause benign lumps at sites of injections (mostly Bydureon) 	<p>dulaglutide, liraglutide, semaglutide: No renal or liver dosing needed</p> <ul style="list-style-type: none"> - Do not use in history of pancreatitis or medullary thyroid cancer, MEN 2, gastroparesis - caution in history of diabetic retinopathy - do not use in combination with DPP-4 Inhibitors 	0.5-2.0	Second Line
<p>Class: GLP-1/GIP Agonist</p> <p>tirzepatide (Mounjaro)</p>	<ul style="list-style-type: none"> - decreases appetite - slows gastric emptying - reduces glucagon levels - increases insulin sensitivity - enhances insulin secretion 	<ul style="list-style-type: none"> - The most weight loss of diabetes medications (12-25lbs) 	<ul style="list-style-type: none"> - N/V/D, constipation, decreased appetite, dyspepsia 	<ul style="list-style-type: none"> - Do not use in history of pancreatitis or medullary thyroid cancer, MEN 2, gastroparesis - No liver or renal dosing needed - caution in history of diabetic retinopathy - Lower doses of sulfonyleureas and/or insulin when initiating this class as hypoglycemia is possible - do not use in combination with DPP-4 Inhibitors 	1.7-2.4	Second Line

Medication	How it Works	Benefits	Side Effects	Contraindications	A1c Effect	Line
<p>Class: SGLT-2 Inhibitors</p> <p>canagliflozin (Invokana) dapagliflozin (Farxiga) empagliflozin (Jardiance)</p> <p>Administration: Oral</p>	<ul style="list-style-type: none"> - Increases glucose excretion in the kidneys - decreased reabsorption of filtered glucose in kidneys 	<ul style="list-style-type: none"> - Weight loss (less than GLP-1) - Lowers systolic BP - empagliflozin (Jardiance) and canagliflozin (Invokana) have shown to have a relative risk reduction of overall MACE (CV death, nonfatal MI, or nonfatal stroke); also reduce renal disease and progression of these diseases - recommended for use in heart failure - can decrease proteinuria 	<ul style="list-style-type: none"> - Dizziness - Urinary infections - Yeast infections - Increase in LDL - Rare cases ketoacidosis (usually in setting of dehydration) - rare cases of Fourniers gangrene have been reported 	<ul style="list-style-type: none"> - Jardiance: no renal dosing for GFR >20, not for use <20 - Invokana: GFR 30-60, limit to 100mg daily; do not start in GFR <30 - Farxiga: not for use GFR <25 - Monitor kidney function prior to and during treatment - lower dose of diuretics upon initiation or dose change - hold for three days before surgery to lower risk of ketoacidosis - lower doses of sulfonylureas or insulin to prevent hypoglycemia 	0.5-1.0	Second Line
<p>Class: DPP-4 Inhibitors</p> <p>sitagliptin (Januvia) saxagliptin (Onglyza) linagliptin (Tradjenta) alogliptin (Nesina)</p> <p>Administration: Oral</p>	<ul style="list-style-type: none"> - Increases insulin sensitivity - Targets post meal glucose levels - Increase insulin secretion from pancreas - Decreases glucagon secretion from pancreas 	<ul style="list-style-type: none"> - Very few side effects - Weight neutral - Low risk hypoglycemia (unless used with insulin or sulfonylurea) 	<ul style="list-style-type: none"> - Risk for joint pains - Heart failure risk varies: No risk with sitagliptin - urticaria 	<ul style="list-style-type: none"> - Measure Cr at baseline and adjust for renal function based on medication - Tradjenta has no renal adjustments - Do not use with history of pancreatitis - do not use in combination with GLP-1 agonists 	0.5-0.8	Third Line
<p>Class: Thiazolidinediones</p> <p>pioglitazone (Actos)</p> <p>Administration: Oral</p>	<ul style="list-style-type: none"> - increases insulin sensitivity in peripheral tissues and the liver 	<ul style="list-style-type: none"> - Improved Lipids (decreased TG, Increased HDL) 	<ul style="list-style-type: none"> - Edema, fluid retention - Weight gain 	<ul style="list-style-type: none"> - Avoid if ALR >2.5xULN before treatment of >3ULN during therapy - Avoid in CHF (NYHA Class III/IV), Osteoporosis, Bladder cancer 	0.4-1.4	Fourth Line

Medication	How it Works	Benefits	Side Effects	Contraindications	A1c Effect	Line
Class: Sulfonylureas Second generation (Glipizide, glyburide) Third Generation (Glimepiride) Administration: Oral	- Increases insulin secretion in the pancreas	- Rapidly effective - affordable	- Weight gain (esp when used with basal insulin) - Hypoglycemia - increased cardiovascular risk	- Avoid in elderly due to significant hypoglycemia risk and increased cardiovascular risk - Glyburide – avoid in CrCl <50	1.0-2.0	Fifth Line
Class: Glitinides Prandin, Starlix Administration: Oral	- Administer with meals - Low risk hypoglycemia	- Rapidly effective			0.5-0.9	Fifth Line

Order Sets available in Athena under Assessment and Plan:

Medications:

1. Diabetes_StartOzempic
2. Diabetes_StartTrulicity
3. Diabetes_StartMounjaro

Diabetes Education Referral:

1. Sarah Anderson Diabetes Ed

Standing Orders:

1. Standing Lab Orders – Diabetes

Medical Supplies:

1. Glucometer_ContourNext
2. Glucometer_FreestyleLite
3. Glucometer_Generic
4. Glucometer_OneTouchUltra2
5. Glucometer_OneTouchUltraMini