Class of Medication	Main Action	Name of Medication	Dose Range	Considerations/Side Effects	Benefits
Biguanides	 Decreases liver output of glucose First line medication at diagnosis of T2DM 	Metformin (Glucophage/XR) (Glumetza) (Fortamet) Riomet (Liquid)	500-2500mg 500-2000mg 500-2000mg 500-2500mg 500-2500mg 500mg/5ml	 May cause nausea, bloating, diarrhea, metallic taste in mouth hold for dye studies May cause resumption of ovulation in non- ovulating pre- menopausal women 	 Lowers cholesterol, no weight gain, lowers A1c 1-2% Low cost Does not cause hypoglycemia
Sulfonylureas	Stimulates sustained insulin release	Glyburide (Micronase) (Glynase) Glipizide (Glucotrol/XL) Glimepiride (Amaryl)	1.25-20mg 0.75-12mg 2.5-40mg 2.5-20mg 1-8mg	 Can take once or twice before meals May cause weight gain, nausea, vomiting Can cause hypoglycemia Glyburide is not preferred over other sulfonylureas due to increased risk of hypoglycemia 	 Low cost generic Lowers A1C 1-2%
SGLT2 Inhibitors	 Decreases glucose reabsorption in the kidneys Glucose is excreted through urine 	Invokana* (Canagliflozin) Farxiga* (Dapagliflozin) Jardiance* (Empagliflozin) Steglatro (Ertugliflozin)	100-300mg 5-10mg 10-25mg 5-15mg	 May cause hypotension, UTIs, increased urination, genital infections, ketoacidosis Monitor GFR 	 No weight gain or hypoglycemia Lowers A1C 0.6-1.5% *Reduces risk of CV death, heart failure, and preserves long-term kidney function

Class of Medication	Main Action	Name of Medication	Dose Range	Considerations/Side Effects	Benefits
DPP-4 Inhibitors	 Prolongs action of gut hormones Increases insulin secretion after meals Delays gastric emptying 	Januvia (Sitagliptin) Onglyza (Saxagliptin) Tradjenta (Linagliptin) Nesina (Alogliptin)	25-100mg (Eliminated via kidney) 2.5-5mg (Eliminated via kidney&feces) 5mg (Eliminated via feces) 6.25-25mg (Eliminated via kidney)	 May cause headache and flulike symptoms May cause severe, disabling joint pain- notify MD, stop medication May cause pancreatitis Saxagliptin & Alogliptin can increase risk of heart failurenotify MD 	 No weight gain or hypoglycemia Lowers A1C 0.6-0.8%
GLP-1 Agonists (Injectables)	 Increases insulin secretion after meals Delays gastric emptying 	Trulicity (Dulaglutide) Bydureon/Byetta (Exenatide) Ozempic (Semaglutide) Rybelsus (Oral) (Semaglutide) Victoza (Liraglutide) Adlyxin (Lixisenatide)	0.75 or 1.5mg 1x/wk Pen injection 2mg 1x/wk Pen injection 0.5 or 1mg 1x/wk Pen injection 3, 7, or 14mg QD in AM w/ empty stomach 0.6, 1.2, or 1.8mg daily 10mcg 1x/day for 14days 20mcg day 15	 May cause nausea, vomiting, diarrhea, acute pancreatitis Not indicated with a family history of thyroid cancer or multiple endocrine neoplasia 	 No hypoglycemia Helps with weight loss with lifestyle modifications May help reduce risk of cardiovascular complications.

GIP/GLP-1 Agonists	 Increases insulin sensitivity Increases insulin release after meals Reduces glucagon Delays gastric emptying 	Mounjaro (Tirzepatide)	2.5-15mg 1x/wk injection	 May nausea, diarrhea, vomiting, constipation, indigestion, and abdominal pain Not indicated with a family history of thyroid cancer or multiple endocrine neoplasia May cause hypoglycemia when used along with insulin or sulfonylureas 	 Helps with weight loss (12-25lb) and improvement of blood glucose along with diet and exercise Helps reduce A1C
Class of Medication	Main Action	Name of Medication	Dose Range	Considerations/Side Effects	Benefits
Thiazolidined iones (TZDs)	• Increases insulin sensitivity	Actos (Pioglitazone) Avandia (Rosiglitazone)	15-45mg 4-8mg	 BLACK BOX WARNING: May worsen congestive heart failure- Notify MD Monitor routine liver function Can cause hypoglycemia 	• Lowers A1C 0.5-1%
Glucosidase Inhibitors	Delays carbohydrate absorption	Precose (Acarbose) Glyset (Miglitol)	25-100mg 300mg max	 Gradually increase dosage Caution with liver or kidney problems With hypoglycemia, treat with glucose tablets for better absorption 	• Lowers A1C 0.5-1%
Meglitinides	Stimulates rapid insulin burst	Prandin (Repaglinide) Starlix (Nateglinide)	0.5-4mg 60-120mg	 May cause hypoglycemia and weight gain Take before meals 	• Lowers A1C 1-2%
Dopamine Receptor Agonists	Resets circadian rhythm	Bromocriptine Mesylate Cycloset	1.6-4.8mg	 Take within 2 hours of waking May cause nausea, headache, fatigue, hypotension, 	• Lowers A1C 0.6-0.9%

				syncope, somnolence	
Bile Acid	 Decreases 	Welchol	Up to six	• Do not use with history of	• Lowers LDL by 15-30%
Sequestrants	cholesterol and BG levels	(Colesevelam HCL)	625mg pills (3 in AM, 3 in PM)	 bowel obstruction, TG>500, pancreatitis Can decrease absorption of certain medications and soluble vitamins May cause GI upset 	• Lowers A1C 0.5%