## **Comparison of GLP-1 and Dual Agonist Drugs**

Drug (Brand Names)	Dosing / Route	Main Indications	Key Benefits	Common Side Effects	Major Warnings / Risks	CV Benefit	Weight Loss Effect	Practical Notes
Exenatide (Byetta, Bydureon)	Byetta: 2× daily inj. Bydureon: weekly inj.	T2D	Modest A1c reduction, lower cost	Nausea, vomiting, injection-site nodules	Avoid in severe renal impairment; pancreatitis risk	No	Moderate	Older option; less potent
Liraglutide (Victoza, Saxenda)	Daily injection	T2D, Obesity	Proven CV benefit (LEADER); good glycemic control	Nausea, vomiting	MTC/MEN2 contraindication; pancreatitis/gallbladder risk	Yes	5-8%	Daily dosing limits adherence
Dulaglutide (Trulicity)	Weekly injection	T2D	Proven CV benefit (REWIND); easy to use	GI upset (nausea, diarrhea)	MTC/MEN2 warning; pancreatitis risk	Yes	3–5%	Convenient weekly pen
Semaglutide (Ozempic, Wegovy, Rybelsus)	Weekly inj. or daily oral	T2D, Obesity	Very potent for A1c & weight loss; CV benefit	GI issues, early satiety	MTC/MEN2 warning; retinopathy risk	Yes	10-15%	Oral option available
Lixisenatide (Adlyxin)	Daily injection	T2D	Good post- meal glucose control	Nausea, vomiting	MTC/MEN2 warning	No	2–3%	Short-acting; less used
Tirzepatide (Mounjaro, Zepbound)	Weekly injection	T2D, Obesity	Dual GIP/GLP-1 → superior A1c & weight loss	GI effects, constipation, nausea	MTC/MEN2 warning; pancreatitis risk	Pending	Up to 20%	Most potent; high cost