Class	Mechanism	Drug (brand)	CV Outcome	PDAP
DPP4 inhibitors (all once daily orals)-- 4 available	inhibit DPP4 which would otherwise inactivate GLP1. AS a result GLP1 stays activated	alogliptin	increased risk of heart failure (possible)	
	all may cause severe joint pain	sitagliptin (JANUVIA)*	no augmented risk of HF unlike others in its class (TECOS trial)	
		linagliptin (TRADJENTA)		
GLP1 agonists (all injectable as once weekly injections)-- 6 available	reduce gastric motility, stimulate insulin release and decrease glucagon release	lixisenatide	ELIXA TRIAL: no change in CV risk c/w placebo	
	OF NOTE liraglutide and semaglutide also used for weight reduction in obese pts	liraglutide (VICTOZA)	LEADER TRIAL: 13% RRR in major CV events in pts at risk	
	should NOT be used in pts at risk for pancreatitis	semaglutide (OZEMPIC)	SUSTAIN -6 trial: 26% RRR in CV outcomes with the greatest reduction in nonfatal stroke	
		dulaglutide (TRULICITY)		
		exanetide (BYETTA)		
SGLT2 inhibitors (AKA GLIFOZINS)-- 3 available	inhibit distal reabsorption in the nephron of glucose by the Sodium-Glucose Transporter 2 (SGLT2)	empaglifozin (JARDIANCE)-- tablet	EMPA-REG trial-- 14% RR reduction of compositie CV outcomes in pts with atherosclerotoc disease c/w placebo no matter the dose of 10-25 per day.38% RR reduction in CV death and 35% RRR in HF hospitalizations	Boehringer (for legal US residents only)
	Secondary effects include reduction in BP independent of diuretic effects and MILD weight loss; POTENTIALLY NEPHROPROTECTIVE	canaglifozin (INVOKANA)		Johnson and Johnson pharmacy card
	Caution for potential at risk pts: 1. Pts with low BPs need aggressive monitoring particularly during drug initiation; could consider stopping diuretics ; 2. Consider reducing insulin and sulfonylureas; 3. Increase in candidal infections possible; 4. May worsen diabetic ketoacidosis when pt's are ill and should be withheld on such days-- increase ketone body firmation at a low level which contrinbutes to its beneficial effects but when a person is ill this can increase susceptibility to DKA	dapagliflozin (FORXIGA)-- UK only		
How do these work?				

INCRETIN MODULATORS after a meal, small intestine secretes incretins, GLP1 and Gastric inhib peptide, which **-reduce gastric motility** **-stimulate pancreatic insulin release** **-decrease post prandial glucagon release**				
these are inactivated by DPP4 protease; thus DPP4-I all inhibit the degradatioon of GLP1				