

Antihyperglycemic Therapies

Yale JF December 2015

Class	Agent	A1c	BW	Hypos	Comments	\$/d	RAMQ
Biguanide	Metformin (Glucophage)	↓ ↓	↓	No	Diarrhea, lower mortality	0.18	OK
DPP-4 Inhibitors	Sitagliptin (Januvia)	↓ ↓	Stable	No	Neutral cardiovascular outcome trials for sita, saxa and alogliptin. Small rise in CHF with saxagliptin.	2.62	EXCEP
	Saxagliptin (Onglyza)	↓ ↓				2.30	EXCEP
	Linagliptin (Trajenta)	↓ ↓				2.25	EXCEP
	Alogliptin (Nesina)	↓ ↓				2.10	EXCEP
GLP-1R Agonists	Liraglutide (Victoza)	↓ ↓ ↓	↓ ↓	No	Injection (bid for exenatide, die for liraglutide, once weekly for the others), long-term safety not established	6.85	EXCEP
	Exenatide (Byetta)	↓ ↓ ↓				2.49	NO
	Exenatide QW (Bydureon)	↓ ↓ ↓				?	NO
	Dulaglutide (Trulicity)	↓ ↓ ↓				?	NO
	Albiglutide (Eperzan)	↓ ↓				?	NO
SGLT2 Inhibitors	Canagliflozin (Invokana)	↓ ↓ to ↓ ↓ ↓ ↓	↓ ↓	No	Hypotension, genital mycotic infections. Cardiovascular benefit for empagliflozin, on-going trials for the others	2.62	EXCEP
	Dapagliflozin (Forxiga)	↓ ↓ to ↓ ↓ ↓ ↓				2.45	EXCEP
	Empagliflozin (Jardiance)	↓ ↓ to ↓ ↓ ↓ ↓				2.62	NO
Thiazolidinediones	Rosiglitazone (Avandia)	↓ ↓	↑ ↑	No	Edema, heart failure, fractures	2.87	EXCEP
	Pioglitazone (Actos)	↓ ↓				1.05	EXCEP
Insulin Secretagogues	Glyburide (Diabeta)	↓ ↓	↑ ↑	+++		0.23	OK
	Gliclazide (Diamicron)	↓ ↓		++		0.50	EXCEP
	Glimepiride (Amaryl)	↓ ↓		++		0.77	EXCEP
	Repaglinide (GlucoNorm)	↓ ↓		+++		0.84	EXCEP
	Nateglinide (Starlix)	↓		++		1.95	EXCEP
α-Glucosidase Inhibitors	Acarbose (Glucobay)	↓	↓	No	Gas	1.03	OK
Insulins	Human insulins	↓ ↓ ↓	↑ ↑	+++++	Injections	1.77	OK
	Analogue Insulins	↓ ↓ ↓	↑ ↑	++++	Injections	1.95R 2.94L	EXCEP