



## **Appendix 1**

**This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.**

Appendix to: Gunton JE, Cheung NW, Davis TME, et al. A new blood glucose management algorithm for type 2 diabetes. A position statement of the Australian Diabetes Society. *Med J Aust* 2014; 201: 650-653. doi: 10.5694/mja14.01187.

Table 1. Medications and chronic kidney disease.

Drug/Class	Usual daily dose	CKD 3 30-60ml/min	CKD 4 15-30ml/min	CKD 5 <15ml/min	Pharmacokinetic changes	Specific Concerns or Comments
<u>Metformin</u>						
Metformin	500-1000 mg bd-tds	eGFR 45-60, max 1500 mg/d.	Avoid	Avoid	Reduced clearance	GI disturbance, Lactic acidosis
		If eGFR30-45, max 850mg/d			Reduced clearance	
<u>Sulfonylureas</u>						
Gliclazide	40-320 mg	Use at low doses, titrate.	Use at low doses, titrate	Avoid	Hepatically metabolised	Hypoglycaemia
Gliclazide MR	30-120 mg	Use at low doses, titrate	Avoid	Avoid	Hepatically metabolised	Hypoglycaemia
Glibenclamide	2.5-20 mg	Avoid	Avoid	Avoid	Reduced clearance	Hypoglycaemia, hepatic complications
Glimepiride	2-4 mg	Max dose 1 mg	Avoid	Avoid	Reduced clearance	Hypoglycaemia, increased transaminases
Glipizide	5-20 mg	Max dose 5-10 mg/day	Use at low doses 2.5 mg/day	Avoid	Hepatically metabolised	Hypoglycaemia, increased transaminases
<u>Acarbose</u>						
Acarbose	50-300 mg	No dose change	Avoid	Avoid	Increased plasma levels	GI disturbances
<u>TZDs</u>						
Pioglitazone	15-45 mg	No dose change	No dose change	Limited data, not recommended		Weight gain, fluid retention, bladder cancer, peripheral fractures (women)
Rosiglitazone	2-8mg	No dose change	Limited data, not recommended	Limited data, not recommended		Weight gain, fluid retention, peripheral fractures (women)
<u>DPP4i</u>						
Sitagliptin	100 mg/d	50 mg daily	25 mg daily	25 mg daily	Increased plasma levels	GI disturbances, rare liver complications, use with dose reduction in dialysis

Vildagliptin	50 mg bd	50 mg daily	50 mg daily	50 mg daily	Increased plasma levels	GI disturbances, rare liver complications, use with dose reduction in dialysis
Saxagliptin	5 mg/d	2.5 mg/day	2.5 mg/day	Not recommended	Increased plasma levels	GI disturbances, rare liver complications
Linagliptin	5 mg/d	No dose change	No dose change	No dose change	Hepatically metabolised	GI disturbances, rare liver complications, use <u>with</u> dose change in dialysis.
Alogliptin	25 mg/d	12.5 mg/day	6.25 mg/day	6.25 mg/day	Increased plasma levels	GI disturbances, rare liver complications, use with dose reduction in dialysis
<b>Incretin mimetics</b>						
Exenatide	5-10 µg bd	5 µg bd	Avoid	Avoid	Reduced clearance	GI disturbances
Exenatide XR	2 mg/ week	No dose change	Avoid	Avoid	Reduced clearance	GI disturbances
Liraglutide	0.6-1.2 mg	No dose change	Limited data, not recommended	Limited data, not recommended		GI disturbances
<b><u>SGLT2i</u></b>						
Dapagliflozin	5-10 mg	Avoid	Avoid	Avoid	Increased plasma levels	Reduced efficacy, volume depletion, genitourinary infections
Canagliflozin	300 mg	eGFR 45-60 Use 100 mg/day eGFR 30-45 Avoid	Avoid	Avoid	Increased plasma levels	Reduced efficacy, volume depletion, genitourinary infections

eGFR=estimated glomerular filtration rate. CKD=chronic kidney disease. Max=maximum. TZD= thiazolidinedione. DPP4i = di-peptidyl peptidase 4 inhibitor. SGLT2i = sodium glucose co-transporter inhibitor.