

## MEDICATION CATEGORIZATION SCHEME FOR CKD STAGE V PATIENTS MEDICATIONS TO AVOID

SOURCE: ESRD Outpatient Medications Project; Network 8 & University of MS, Dept of Pharmacy Administration, June 2005

Therapeutic Category	Pharmacologic Class	Formulary Key Drug Types	Pharmaceutical Preparations	Salts/Esters	TEP Comment	Rationale
Analgesics	Opioid Analgesics	Opioid Analgesics, Short Acting	Meperidine	Hydrochloride	<b>AVOID</b>	Metabolite (normeperidine) accumulation in ESRD leading to potential seizures
	Non-opioid Analgesics	Nonsteroidal Anti-Inflammatory Drugs, Nonspecific	Chloine and Magnesium		<b>AVOID</b>	Mg++ accumulation – potentially life threatening
			Ketorolac	Tromethamine	<b>AVOID (oral form)</b>	> 90% drug/metabolites are renally excreted
Antibacterials	Tetracyclines		Demeclocycline	Hydrochloride	<b>AVOID</b>	Potential for excessive systemic accumulation of drug and possible liver toxicity
			Oxytetracycline	Hydrochloride	<b>AVOID</b>	Potential for excessive systemic accumulation of drug and possible liver toxicity
			Tetracycline		<b>AVOID</b>	Potential for excessive systemic accumulation of drug and possible liver toxicity
	Antibacterials, Other	Nitrofurantoin	Nitrofurantoin		<b>AVOID</b>	Therapeutic

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		Antibacterials				concentrations are not achieved when GFR > 60 mls/min
		Miscellaneous Antibacterials	Methenamine	Hippurate	<b>AVOID</b>	Contraindicated with renal failure
Antigout Agents		Renal Tubular Blocking Agents	Probenecid		<b>AVOID</b>	Ineffective at low GFR
Anti-inflammatories	Nonsteroidal Anti-Inflammatory Drugs	Nonsteroidal Anti-Inflammatory Drugs, Non-specific	Choline and Magnesium Salicylates		<b>AVOID</b>	Poetneial for Mg++ accumulations
			Ketorolac	Tromethamine	<b>AVOID (Oral form)</b>	Rick of GI bleed >90% drug/metabolites renally excreted
Antivirals	Anti-HIV Agents, Nucleoside and Nucleotide Reverse Transcriptase Inhibitors		Abacavir, Lamivudine, and Zidovudine		<b>AVOID</b>	*See note
			Entricitabine and Tenefovir	Disoproxil Fumarate	<b>AVOID</b>	*See note
			Lamivudine and Zidovudine		<b>AVOID</b>	*See note
	Antivirals, Other		Ribavirin		<b>AVOID</b>	Oral route is contraindicated in patient with CrCl <50 mls/min
Blood Glucose Regulators	Hypoglycemics, Oral	Biguanides	Metformin	Hydrochloride	<b>AVOID (includes any combination product)</b>	Contraindicated in renal failure
		Sulfonylureas	Acetohexamide		<b>AVOID</b>	Contraindicated
			Chlorpropamide		<b>AVOID</b>	Contraindicated
			Tolazamide		<b>AVOID</b>	Contraindicated
			Tolbutamide		<b>AVOID</b>	Contraindicated
Blood Products/Modifiers/Volume Expanders	Anticoagulants	Anticoagulants, Oral	Anisindione		<b>AVOID</b>	No dosing information

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						provided for renal dysfunction and agent is not dialyzable
		Anticoagulants, IV and SQ	Ardeparin	Sodium	<b>AVOID if unable to monitor factor Xa</b>	
			Certoparin			
			Dalteparin			
			Enoxaparin			
			Nadroparin			
			Parnaparin			
			Reviparin			
			Tinzaparin			
Cardiovascular Agents	Antiarrhythmics	Antiarrhythmics – Class III	Dofetilide		<b>AVOID</b>	Contraindicated if CrCl is <20 mls/min
	Calcium Channel Blocking Agents	Dihydropyridines	Nicardipine	Hydrochloride	<b>AVOID immediate release formation</b>	Reports of significant hypotension, MI, and death with oral OR sublingual use
	Diuretics	Carbonic Anhydrase Inhibitors	Acetazolamide		<b>AVOID</b>	Contraindicated in ESRD
		Potassium-sparing Diuretics	Amiloride	Hydrochloride	<b>AVOID</b>	Ineffective at low GFR and enhances risk of hyperkalemia
		Thiazide Diuretics			<b>AVOID all as SOLE diuretic</b>	Ineffective at GFR <15 mls/min (except Metolzaone)
			Bendroflumethiazide			
			Chlorothiazide			
				Sodium		
			Chlorthalidone			
			Hydrochlorothiazide			
			Hydroflumethiazide			
			Indapamide			

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			Methyclothiazide			
			Metalazone			
			Polythiazide			
			Trichlormethiazide			
	Dyslipidemics	Fibrates	Fenobirate		<b>AVOID</b>	Contraindicated in ESRD due to fenofibric acid accumulation
Deterrents/Replacements	Alcohol Deterrents		Acamprosate	Calcium	<b>AVOID</b>	Avoid in patients with CrCl<30 mls/min
Gastrointestinal Agents	Protectants		Sucralfate		<b>AVOID concomitant use of citrates</b>	Due to liberation of aluminum, citrate-containing medications should not be used with aluminum based medications
Hormonal Agents, Stimulant/Replacement/Modifying	Parathyroid/Metabolic Bone Disease Agents	Parathyroid/Metabolic Bone Disease Agents (Other)	Gallium	Nitrate	<b>AVOID</b>	Should be avoided in patients with renal disease
Skeletal Muscle Relaxants			Baclofen		<b>AVOID</b>	Risk of Baclofen intoxication

\*Note: Certain agents were identified with clinical restrictions based on GFR and/or toxicity. Accordingly, combination products were considered inappropriate because of the inability to differentially dosage adjust in ESRD. For these medications, single agents are preferable.