

Antiviral Drug-Induced Kidney Injury

Drug	Risk Factors	Nephrotoxicity Clinical Aspects	Incidence (%)	Preventive	Supportive
Acyclovir	High dose	ARF	12–79	Avoid rapid IV bolus	Discontinue or reduce dose
	Bolus therapy (IV)	Chronic renal disease		Adjust dose for renal function	Establish high urine flow
	Volume depletion	Crystal nephropathy		Establish euvoemia before therapy	Hemodialysis
	High dose	Proximal tubulopathy	27–50	Avoid preexisting tubulopathy	
Adefovir dipivoxil	≥ 30 mg/d	ARF	50	Adjust dose for renal function	Discontinue
	Renal impairment	Fanconi syndrome	1	Avoid preexisting tubulopathy or proteinuria	
	Preexisting tubular dysfunction	ARF	12–25	Avoid in patients with significant renal impairment	
Cidofovir	Renal impairment	Chronic renal disease	Unknown	Adjust dose for renal function	Cidofovir dosing should be reduced or therapy stopped if renal function changes during therapy
		Diabetes insipidus	1 case	The recommended dosage, frequency, and infusion rate should not be exceeded	
				Intravascular volume expansion with IV fluids before drug initiation	
				Coadministration of probenecid	
Foscarnet	Renal impairment	ARF	27	Establish euvoemia before treatment	Discontinue
		Diabetes insipidus	4.3	Calcium channel blocker?	Establish high urine flow
		Chronic renal disease	Unknown		

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		Crystalline GN	2 cases		
	Volume depletion	Crystalluria	20–30	Establish euvolemia before treatment	Discontinue or reduce dose
Indinavir	Alkaline urine Renal impairment	Nephrolithiasis	8	Establish high urine flow	Volume resuscitate to euvolemia
		ARF	13	Acidify the urine?	Establish high urine flow
		Chronic renal disease	Unknown	Calcium channel blocker?	Alleviate urinary obstruction
IFN	Renal impairment	Glomerulopathies	Unknown	Adjust dose for renal function	Discontinue or reduce dose
		TMA	Unknown		
Tenofovir	Renal impairment	Fanconi syndrome	0.02		
		ARF	4 cases	Adjust dose for renal function	Discontinue or reduce dose
		Diabetes insipidus			

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Important Note: This document is a guideline, and not a policy statement. Always use clinical judgment when making decisions for an individual