

Review

Antiretroviral Drug Interactions: Overview of Interactions Involving New and Investigational Agents and the Role of Therapeutic Drug Monitoring for Management

R. Chris Rathbun ^{1,*} and Michelle D. Liedtke ¹

¹ Department of Pharmacy: Clinical & Administrative Sciences, College of Pharmacy, University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA 73117

* Author to whom correspondence should be addressed

Received: / Accepted: / Published:

Abstract: The clinical significance of antiretroviral drug interactions is reviewed, with a focus on new and investigational agents. An overview of the mechanistic basis for drug interactions and the effect of individual antiretrovirals on CYP450 and UGT isoforms are provided. Interactions between antiretrovirals and medications for other co-morbidities are summarized. The role of therapeutic drug monitoring in the detection and management of antiretroviral drug interactions is also briefly discussed.

Keywords: antiretrovirals; pharmacokinetics, drug interactions

	Antiretroviral	Predicted Enzyme Effect						
		3A4	2B6	2C9	2C19	2D6	1A2	UGT
PIs	Atazanavir		—		— ^a	—		
	Darunavir/r					— ^a		
	Fosamprenavir			—	— ^a	—	—	—
	Indinavir		—	—	—	— ^a	—	
	Lopinavir/r					— ^a		
	Nelfinavir		—			—		
	Ritonavir	^b						
	Saquinavir		—	— ^a	—	—	—	—
	Tipranavir/r							