

Table 10. Characteristics of Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

(Updated December 1, 2007)

Generic Name (abbreviation)/ Trade Name	Formulation	Dosing Recommendations	Food Effect	Oral Bio-availability	Serum half-life	Intracellular half-life	Elimination	Adverse Events
Abacavir (ABC) ZIAGEN TRIZIVIR - w/ ZDV+3TC EPZICOM - w/ 3TC	ZIAGEN 300mg tablets or 20mg/mL oral solution TRIZIVIR-ABC 300mg + ZDV 300mg + 3TC 150mg EPZICOM-ABC 600mg + 3TC 300mg	300mg two times/day; or 600mg once daily; or as TRIZIVIR- 1 tablet two times/day EPZICOM- 1 tablet once daily	Take without regard to meals; Alcohol increases abacavir levels 41%; abacavir has no effect on alcohol	83%	1.5 hours	12–26 hours	Metabolized by alcohol dehydrogenase and glucuronyl transferase. Renal excretion of metabolites 82% TRIZIVIR & EPZICOM not for patients with CrCl < 50 mL/min	Hypersensitivity reaction that can be fatal, symptoms may include fever, rash, nausea, vomiting, malaise or fatigue, loss of appetite, respiratory symptoms such as sore throat, cough, shortness of breath
Didanosine (ddI) VIDEX EC, Generic didanosine enteric coated (dose same as VIDEX EC)	VIDEX EC 125, 200, 250, or 400mg Buffered tablets (non-EC) are no longer available.	Body weight \geq 60kg: 400mg once daily EC capsule with TDF: 250mg/day $<$ 60 kg: 250mg daily EC capsule with TDF: 200mg/day	Levels decrease 55%; Take 1/2 hour before or 2 hours after meal	30–40%	1.5 hours	>20 hours	Renal excretion 50% Dosage adjustment in renal insufficiency (See Table 16)	Pancreatitis; peripheral neuropathy; nausea Lactic acidosis with hepatic steatosis is a rare but potentially life-threatening toxicity associated with use of NRTIs.
Emtricitabine (FTC) EMTRIVA Also available as : ATRIPLA - w/ EFV & TDF TRUVADA - w/ TDF	EMTRIVA- 200mg hard gelatin capsule and 10mg/mL oral solution ATRIPLA - EFV 600mg + FTC 200mg + TDF 300mg TRUVADA - FTC 200mg + TDF 300mg	EMTRIVA - 200mg capsule once daily or 240mg (24 mL) oral solution once daily ATRIPLA - One tablet once daily TRUVADA - One tablet once daily	Take without regard to meals	93%	10 hours	>20 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 16) ATRIPLA - not for patients with CrCl < 50 mL/min TRUVADA - not for patients with CrCl < 30 mL/min	Minimal toxicity; lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs.) Hyper-pigmentation/skin discoloration
Lamivudine (3TC) EPIVIR COMBIVIR- w/ ZDV EPZICOM - w/ ABC TRIZIVIR- w/ ZDV+ABC	EPIVIR 150mg and 300mg tablets or 10mg/mL oral solution COMBIVIR- 3TC 150mg + ZDV 300mg EPZICOM - 3TC 300mg + ABC 600mg TRIZIVIR - 3TC 150mg + ZDV 300mg + ABC 300mg	EPIVIR 150mg two times/day; or 300mg daily COMBIVIR - 1 tablet two times/day EPZICOM - 1 tablet once daily TRIZIVIR - 1 tablet two times/day	Take without regard to meals	86%	5–7 hours	18–22 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 16) COMBIVIR, TRIZIVIR & EPZICOM not for patients with CrCl < 50 mL/min	Minimal toxicity; lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs)

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Stavudine (d4T) ZERIT	ZERIT 15, 20, 30, 40mg capsules or 1mg/mL for oral solution	Body weight <u>>60 kg</u> : 40mg two times/day; Body weight <u>≤60 kg</u> : 30mg two times/day	Take without regard to meals	86%	1.0 hour	7.5 hours	Renal excretion 50% Dosage adjustment in renal insufficiency (See Table 16)	<ul style="list-style-type: none"> Peripheral neuropathy; Lipodystrophy Pancreatitis Lactic acidosis with hepatic steatosis-higher incidence than w/ other NRTIs Hyperlipidemia Rapidly progressive ascending neuromuscular weakness (rare)
Tenofovir Disoproxil Fumarate (TDF) VIREAD Also Available as : ATRIPLA - w/ EFV + FTC TRUVADA - w/ FTC	VIREAD 300mg tablet ATRIPLA - EFV 600mg + FTV 200mg + TDF 300mg TRUVADA - TDF 300mg + FTC 200mg	VIREAD 1 tablet once daily ATRIPLA - One tablet once daily TRUVADA 1 tablet once daily	Take without regard to meals	25% in fasting state; 39% with high-fat meal	17 hours	>60 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 16) ATRIPLA - not for patients with CrCl <50 mL/min TRUVADA - not for patients with CrCl < 30 mL/min	<ul style="list-style-type: none"> Asthenia, headache, diarrhea, nausea, vomiting, and flatulence; renal insufficiency; Lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs)
Zidovudine (AZT, ZDV) RETROVIR COMBIVIR - w/ 3TC TRIZIVIR - w/ 3TC+ABC	RETROVIR 100mg capsules, 300mg tablets, 10mg/mL intravenous solution, 10mg/mL oral solution COMBIVIR 3TC 150mg + ZDV 300mg TRIZIVIR -3TC 150mg + ZDV 300mg + ABC 300mg	RETROVIR 300mg two times/day or 200mg three times/ day COMBIVIR or TRIZIVIR - 1 tablet two times/day	Take without regard to meals	60%	1.1 hours	7 hours	Metabolized to AZT glucuronide (GAZT). Renal excretion of GAZT Dosage adjustment in renal insufficiency (See Table 16) COMBIVIR & TRIZIVIR - not for patients with CrCl < 50 mL/min	<ul style="list-style-type: none"> Bone marrow suppression: macrocytic anemia or neutropenia; Gastrointestinal intolerance, headache, insomnia, asthenia; Lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity associated with use of NRTIs).