## Cheatography

## Antiretroviral Therapy: Cheat Sheet by Carm (Carmilaa) via cheatography.com/49544/cs/16182/

### CDC Stage of HIV Disease

- -Stage I: Acute HIV infection -Stage II: Asymptomatic HIV -Stage III: Early Symptomatic HIV -Stage IV: Late Symptomatic HIV = A Constitutional Disease = B Neurological Disease = C Secondary Infections -C1 AIDS defining -C2 Other infections
- = D Secondary Cancers
- = E Other Conditions

### Clinical Staging of Oral Manifestations of HIV

Stage:	Adults and Adolescents (>15yo)	Children (<15yo):
1	No disease	No disease
2	Angular Chellitis, Recurrent oral ulcerations	Angular Chellitis, Linear gingival erythema, extensive warts, Recurrent oral ulcera- tions, Parotid enlarge
3	Persistent oral candidiasis, Oral hairy leukoplakia, Acute necrotizing ulcerative stomatitis, gingivitis, period- ontitis	Persistent oral candidiasis (after 8wks), Oral hairy leukoplakia, Acute necrot- izing ulcerative gingivitis or periodontitis.
4	Chronic (>1mo) orolabial HSV, Kaposi's sarcoma,	Chronic (>1mo) orolabial HSV, Karpo's Sarcoma, Non-Hodgkin's lymphoma

#### HIV-related Oral Lesions:

Infections:	- Fungal, Viral, Bacteria
Neoplams:	- Kaposi's Sarcoma, Non-Hodgkin's Lymphoma
Other:	- Aphthous-like Ulcers, Lichenoid or drug reactions,
	Salivary Gland Disease

### Oral Candidiasis:

Angular

Erythematous Chelitis Pseudomembranous

	Oral Ulcers:	
	-Herpes Simplex Infection	-HPV Lesiosn
	-Cytomegalovirus Infection	-Lymphoma
	-Aphthous Ulcers	-Necrotizing ulcerative gingivitis/ period- ontitis
	-Histoplasmosis	-Necrotizing Stomamtitis (NS)

There are many different causes of oral ulceration in patients with HIV infection = Herpes simplex infection, Varicella zoster infection. Accurate diagnosis and appropriate management of oral ulceration in patients with HIV infection generally result in complete healing of the ulceration.

Aphthous Lesions Clinical Types						
Topical Therapy:	Intralesional:	Systemic Therapy:				
Topical Corticost- eroids	Triamcinolone: 40 mg /ml (0.5 ml-1.0 ml injected bid)	Prednisone: 0.5-1.0 mg/kg qd x 7-10d, then taper				
		Thalidomide: 200 mg PO qd				

Antiretroviral Cancer:		
NRTIs:	Nucleoside OR Nucleotide Reverse Transcriptase Inhibitors (Nukes)	
NNRTIS:	Non-nucleoside Reverse Transcriptase Inhibitors (non-n-ukes)	
Pls:	Protase Inhibitors	
Fusion Inhibitors		
Chemokine Receptor Antagonists		
Integrase Inhibitors		
See Life cycle of HIV		

### **Current Antiretroviral Targets**



By **Carm** (Carmilaa) cheatography.com/carmilaa/ Published 26th June, 2018. Last updated 26th June, 2018. Page 1 of 2. Sponsored by Readable.com Measure your website readability! https://readable.com

# Cheatography

## Antiretroviral Therapy: Cheat Sheet by Carm (Carmilaa) via cheatography.com/49544/cs/16182/

### **Reverse Transcriptase Inhibitors:**

Nucleoside Analogues Zidovudine (AZT, ZDV) Didanosine (ddl) Zalcitabine (ddC) Stavudine (d4T) Lamivudine (3TC) Abacavir (ABC) Emtricitabine (FTC)

Non-nucleoside analogues: Nevirapine (NVP) delavirdine (DLV) Efavirenz (EFV) etravirine (ETV) rilpivirine (RPV)

### Nucleotide analogue

Tenofovir (TFV)

### Protease Inhibitors:

saquinavir (SQV) ritonavir (RTV) indinavir (IDV) nelfinavir (NFV) amprenavir (APV) lopinavir (LPV) fosamprenavir (FPV) atazanavir (ATV) tipranavir (TPV) darunavir (DRV) dolutegravir (DTG)

Reverse Transcriptase Inhibitors:					
Integrase Inhibitors	Fusion Inhibitor:	Entry Inhibitors:			
raltegravir (RAL)	fuzeon (T20)	maraviroc (MVC)			
elvitegravir (ELV)					

#### NRTIs Mechanism of Action: Nucleoside Analog of thymidine, cytosine or guanine

Analogs (like AZT): Triphosphorylated inside lymphocytes to active compound. Incorporate into growing HIV viral DNA strand by reverse transcriptase. Nucleotide tenofovir (TDF) Analogs: does NOT need to be tri-phosphorylated only diphosphorylated to activate compound.

After incorporation of NRTIs, viral DNA synthesis will be terminated.



By Carm (Carmilaa) cheatography.com/carmilaa/ Published 26th June, 2018. Last updated 26th June, 2018. Page 2 of 2.

### Sponsored by Readable.com Measure your website readability! https://readable.com

with P450 inducers

### Integrase Inhibitors

Raltegravir (Isentress)

Dosed = 400mg BID (1tab BID)

No induction or inhibition on CYP450 enzymes or Pgp

Metabolized by UGT1A1 (glucuronidation) = Only affected by drugs that inhibit or induce UGTs (ie. rifampin)



Non-nucleoside Reverse Transcriptase Inhibitors:

NNRTIs do not require phosphorylation to be active.

that are needed to assemble a new, mature HIV virus.

Protease Inhibitors (PIs) MOA:

assembly of new HIV viruses.

**Fusion Inhibitor:** 

Agents directly bind to reverse transcriptase to inhibit transcription.

Protease enzyme cleaves HIV precursor proteins into active proteins

Pls bind to protease preventing the cleavage and inhibiting the

### Chemokine Receptor Antagonists:

Marviroc (Selzentry)

CCR5 or CXCR4 receptors on cell surface

Virus will bind to one of the 2 receptors (some pt virus will bind to either receptors)

Marviroc blocks viral entry at CCR5

Dosed 300mg BID= 150mg BID with P450 inhibitors. = 600mg BID