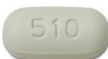
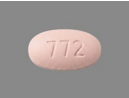


HIV TREATMENT: SINGLE TABLET REGIMENS											
1 Tablet - Once Daily	Brand Names		NRTI Backbone		Anchor Antiretroviral				HIVinfo Rating*	Considerations	Monitor
			1 st NRTI	2 nd NRTI	Integrase Inhibitor	NNRTI	PI	PK Booster			
		Biktarvy	Emtricitabine 200mg	Tenofovir TAF 25mg	Bictegravir 50mg				A1	✓ w/ or w/o food. Take 2 hrs before or after Ca/cations ✓ Good Lipid profile- consider for high cardiac risk ✓ Not recommended in < 30ml/min, severe hepatic impairment. CI w/ dofetilide or rifampin ✓ Severe acute exacerbation of Hep B upon d/c	
		Triumeq	Lamivudine 300 mg	Abacavir 600 mg	Dolutegravir 50 mg				A1	✓ W or w/o food. Take 2 hrs before or 6 hrs after Ca ✓ HLA-B*5701 has to be –ve before giving abacavir ✓ No major CYP drug interactions ☺ ✓ Largest size tablet ✓ CI w/ dofetilide or rifampin	HLA-B*5701 Liver function
		Stribild	Emtricitabine 200 mg	Tenofovir TDF 300 mg	Elvitegravir 150 mg			Cobicistat 150 mg	B1	✓ Take with food. Take 2 hrs before/after Ca/cations ✓ TDF → Can use until 70 mL/min ✓ TAF → Can use until 30 mL/min	Renal Function BMD Lipids
		Genvoya	Emtricitabine 200 mg	Tenofovir TAF 10 mg	Elvitegravir 150 mg			Cobicistat 150 mg	B1	✓ Cobi inhibits renal tubular secretion of creatinine ✓ Cobi has many drug inx via CYP3A4 inhibition (avoid w/ drugs highly dependent on CYP3A4 clearance)	Lipids
		Dovato	Lamivudine 300mg	-	Dolutegravir 50 mg				A1 (*NOT if VL>500,000 or HBV)	✓ W or w/o food. Take 2 hrs before or 6 hrs after Ca ✓ < 50ml/min or Child-Pugh C not recommended ✓ CI w/ dofetilide	Liver function
		Cabenuva	-	-	Cabotegravir 30 mg (po), 600/400 mg IM	Rilpivirine 25 mg (po), 900/600 mg IM			A1	✓ Approved for maintenance therapy but can be considered in those with viremia who otherwise will not take oral ART ✓ Optional Lead-in (≥28 days): CAB 30 mg/RPV 25 mg with a meal . Take antacid/cation 2 hrs before/4hrs after oral CAB ✓ Initiation injection: CAB 600/RPV 900 mg IM ✓ Monthly maintenance: CAB 400/RPV 600 mg IM ✓ Q2month maintenance: CAB 600/RPV 900 mg IM ✓ C/I: enzyme-inducing anticonvulsants, rifampin, rifapentine, St. Johns wort, systemic dexamethasone (>1 dose)	Injection site reactions, pyrexia, fatigue, headache
		Delstrigo	Lamivudine 300mg	Tenofovir TDF 300mg		Doravirine 100mg			B1	✓ Not recommended in CrCl< 50ml/min ✓ w/ or w/o food ✓ May exacerbate hepatitis upon discontinuation ✓ Avoid w/ strong CYP3A4 inducers (ie Rifampin)	Renal Function
		Atripla	Emtricitabine 200 mg	Tenofovir TDF 300 mg		Efavirenz 600 mg			B1	✓ Keep in mind CNS adverse effects of Efavirenz ✓ Not recommended CrCL <50ml/min ✓ C/I: bepridil, elbasvir/grazoprevir	Renal Function Lipids
		Complera	Emtricitabine 200 mg	Tenofovir TDF 300 mg		Rilpivirine 25 mg			B1 (TDF), B2 (TAF), if VL<100,000 and CD4>200	✓ Take with meal (~ 350 kcal) for abs'n of RPV ✓ Use if HIV RNA < 100,000 & CD4 > 200 ✓ Avoid: Acid suppressing (PPI C/I)	Renal Function BMD
		Odefsey	Emtricitabine 200 mg	Tenofovir TAF 25 mg		Rilpivirine 25 mg				✓ RPV fewer CNS s/e compared to Efavirenz ✓ RPV fewer rash and dyslipidemia than Efavirenz	Liver function
		Symtuza	Emtricitabine 200mg	Tenofovir TAF 10mg			Darunavir 800mg	Cobicistat 150mg	A1	✓ Take with food ✓ Not recommended in CrCL <30ml/min or Severe hepatic impairment ✓ C/I: Alfuzosin, Amiodarone, Bepridil	Liver function

*Strength of Recommendation: A=strong, B=moderate, C=optional. Quality of Evidence: I=≥1 randomized trials with clinical outcomes/validated lab endpoints, II=≥1 non-randomized trials/observational cohort studies with long-term clinical outcomes, III=expert opinion

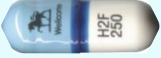
HIV TREATMENT: 2-DRUG SWITCH REGIMENS (for those already virologically suppressed and no resistance)

	Image	Brand Name	NRTTI	Capsid Inhibitor	Integrase Inhibitor	NNRTI	PI/PK booster	HIVinfo Rating*	Considerations	Monitor
1 tablet once a day		Juluca	-		Dolutegravir 50 mg	Rilpivirine 25mg		A1	✓ Take with a meal. Take 4 hrs before/6 hrs after antacids/polyvalent cations. ✓ A/E: HSR, Hepatotoxicity. Monitor for ADE if CrCL < 30ml/min ✓ C/I: Dofetilide, enzyme-inducing anticonvulsants, rifampin, rifapentine, PPIs, St. Johns wort, systemic dexamethasone (>1 dose)	Liver Function
		Bixlenvo		Lenacapavir 50 mg	Bictegravir 75 mg				✓ w/ or w/o food. Take 2 hrs before or after Ca/Fe cations; take 2 hrs before/6 hrs after Al/Mg cations ✓ Initiation dosing (days 1 & 2): bictegravir 75 mg/lenacapavir 50 mg tablet once daily plus lenacapavir 600 mg (2 x 300 mg tablets) once daily ✓ Maintenance dosing (day 3 onward): bictegravir 75 mg/lenacapavir 50 mg tablet once daily ✓ If more than 7 days have elapsed since last dose, restart initiation dosing ✓ C/I: Dofetilide, strong CYP3A inducers	Headache, nausea, diarrhea
		Idvynso	Islatravir 0.25 mg			Doravirine 100mg			✓ w/ or w/o food. ✓ C/I: strong CYP3A inducers, 3TC/FTC	Stevens-Johnson syndrome/toxic epidermal necrolysis, drug rash with eosinophilia and systemic symptoms (rare)
Injectable ART		Cabenuva	-	-	Cabotegravir 30 mg (po), 600/400 mg IM	Rilpivirine 25 mg (po), 900/600 mg IM		A1	✓ Optional Lead-in (≥28 days): CAB 30 mg/RPV 25 mg with a meal. Take antacid/cation 2 hrs before/4hrs after oral CAB ✓ Initiation injection: CAB 600/RPV 900 mg IM ✓ Monthly maintenance: CAB 400/RPV 600 mg IM ✓ Q2month maintenance: CAB 600/RPV 900 mg IM ✓ C/I: enzyme-inducing anticonvulsants, rifampin, rifapentine, St. Johns wort, systemic dexamethasone (>1 dose)	Injection site reactions, pyrexia, fatigue, headache

Updated Sep 2026 by Alice Tseng, Toronto General Hospital and Linda Robinson, Windsor, ON. Initial version created by: Afshin Azami, PharmD, RPh, ACPR(c) & Linda Robinson, BSc.PhM, RPh, AAHIVP Sept 2016. References: 1) HIVinfo Guidelines May 2026; 2) IAS-USA HIV Treatment & Prevention Recommendations, and 2025 update. 3) Lexi-Comp Drug Monographs for each respective drug; 4) RxTx Drug Monographs for each respective drug.

HIV PREVENTION: Pre-Exposure Prophylaxis (PrEP)										
Class	Generic		Brand	Preparations		Dosing	Side Effects	Drug Interactions	Indicated Populations	Comments
Nucleoside / Nucleotide Reverse Transcriptase Inhibitors	Emtricitabine, tenofovir alafenamide	FTC, TAF	Descovy		Emtricitabine 200 mg/TAF 10 or 25 mg	1 tablet daily	Mostly Well Tolerated N/V/D/Gas	TAF- Substrate of P-gp and BCRP	recommended in gbMSM and transgender women, and for people who are at risk via receptive vaginal sex	- only combo also effective against Hep B - TAF has ↓ rates of renal insufficiency and bone mineral density reduction vs TDF - Not recommended if Clcr<15 and not on hemodialysis (HD)
	Emtricitabine, tenofovir disoproxil fumarate	FTC, TDF	Truvada		Emtricitabine 200 mg/TDF 300 mg	<u>Daily dosing:</u> 1 tablet daily <u>On-demand ("2-1-1") dosing:</u> 2 tabs between 2-24 hours before sex, then 1 tab every 24 hours until 2 days after last sexual encounter	Mostly Well Tolerated - N/V/D/Gas - Renal impairment - Reduced bone density	Monitor renal function with concomitant use of other nephrotoxic agents (incl. chronic high-dose NSAIDS)	<u>Daily dosing:</u> HIV-negative individuals at risk of acquiring HIV <u>On-demand dosing:</u> HIV-negative gbMSM - NOT indicated for those who are at risk via receptive vaginal sex or for those who inject drugs	- only combo also effective against Hep B - Renal dosing: 1 tablet q2days if Clcr 30-49 mL/minute; not recommended if <30 mL/min or HD
Integrase inhibitors	Cabotegravir	CAB	Apretude		Cabotegravir 200 mg/mL IM injection	Oral lead in (optional): 30 mg QD for 28 days Initiation (3mL): 600 mg CAB IM q1month x 2 consecutive months Maintenance (3mL): 600 mg CAB IM q2month	Well Tolerated Injection site reactions, pyrexia, fatigue, headache, MSK pain, nausea, dizziness, sleep problems, rash (mild), diarrhea	No CYP3A4 inx UGT1A1 , UGT1A9 (minor), P-gp, BCRP substrate ↓ [CAB] with: Inducers of UGT1A1/3A4	HIV-negative individuals weighing at least 35 kg at risk of sexually acquired HIV	- CAB is 1st long acting injectable indicated for PrEP - Optional oral CAB as lead-in dosing (≥28 days) to assess tolerability or for use as oral bridging therapy for missed Apretude injections - C/I: carbamazepine, oxcarbazepine, phenobarbital, phenytoin, rifampin, rifapentine.
Capsid inhibitor	Lenacapavir	LEN	Yeztugo		Lenacapavir 300 mg tab 309 mg/mL (1.5 mL vials) <i>Approved in US</i>	Initiation: Day 1: 927 mg SC and 600 mg po Day 2: 600 mg po Maintenance: 927 mg q6mo (i.e q26 weeks +/- 2 weeks)	- Injection site reactions - nausea	Substrate of CYP3A4, P-gp, UGT1A1. Supplemental LEN dosing required with moderate/strong CYP3A4 inducers. Moderate CYP3A4 inhibitor.	- HIV-negative individuals at risk of sexual acquisition of HIV - People who inject drugs and have sexual exposures	If discontinuing LEN for PrEP, alternative methods of HIV prevention are recommended beginning 6 months after last injection if exposures are ongoing

HIV Antiretroviral (ART) Medications										
Class		Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
	Combined NRTI Tablet Formulations									
Nucleoside / Nucleotide Reverse Transcriptase Inhibitors - NRTI	AIDSinfo rating: paired with INSTI: Dolutegravir A1 Raltegravir B1 or a boosted PI: Darunavir A1 Atazanavir B1	Emtricitabine, tenofovir alafenamide	FTC, TAF	Descovy		Emtricitabine 200 mg/TAF 10 or 25 mg	1 tablet daily	Mostly Well Tolerated N/V/D/Gas	TAF- Substrate of P-gp and BCRP	✓ only combo also effective against Hep B ✓ Better viral suppression than Kivexa if VL > 100,000 ✓ TAF has ↓ rates of renal insufficiency and bone mineral density reduction vs TDF ✓ If on a booster, use 10 mg TAF instead of 25 mg ✓ Not recommended if Clcr<30 mL/minute or hemodialysis (HD)
		Emtricitabine, tenofovir disoproxil fumarate	FTC, TDF	Truvada		Emtricitabine 200 mg/TDF 300 mg	1 tablet daily	Mostly Well Tolerated - N/V/D/Gas - Renal impairment - Reduced bone density	↓ [atazanavir]; need to boost	✓ only combo also effective against Hep B ✓ Better viral suppression than Kivexa if VL > 100,000 ✓ Renal dosing: 1 tablet q2days if Clcr 30-49 mL/minute; not recommended if <30 mL/min or HD
	paired with: Darunavir B2	abacavir, lamivudine	ABC, 3TC	Kivexa		Abacavir 600 mg/lamivudine 300 mg	1 tablet daily	Mostly Well Tolerated - Headache/N//D/malaise - Hypersensitivity reaction		✓ Abacavir not ideal for those with CV risk factors ✓ HLA needs to be negative before giving abacavir ✓ Comments also apply to Triumeq
	Single Agent NRTI Formulations									
	MOA: Analogues of nucleo(t)side which replace a base during reverse transcription of viral RNA to DNA → chain termination Resistance: - "low genetic barrier to resistance" - many mutations confer cross resistance to others in the class Renal Dosing: Use with caution & check for renal dosing for each agent	Tenofovir alafenamide Adenosine analogue Nucleotide Reverse Transcriptase Inhibitor (NtRTI)	TAF	Vemlidy (for chronic HBV)		Descovy ^{1 QD} Genvoya ^{1 QD} Odefsey ^{1 QD} Biktarvy ^{1 QD} Symtuza ^{1 QD}	25 mg po QD (10 mg po QD if using with booster) Renal	Mostly Well Tolerated N/V/D/Gas	TAF- Substrate of P-gp and BCRP	✓ TAF = tenofovir alafenamide (targeted pro-drug), less bone & renal issues ✓ safe until renal function with CrCl of 30 mL/min ✓ Preferred agent in cases of co-infection with HBV
		Tenofovir disoproxil fumarate Adenosine analogue Nucleotide Reverse Transcriptase Inhibitor (NtRTI)	TDF	Viread		Truvada ^{1 QD} Stribild ^{1 QD} Complera ^{1 QD} Delstrigo ^{1 QD} Atripla ^{1 QD}	300 mg po QD Renal avoid TDF in CKD	Mostly Well Tolerated - N/V/D/Gas - Renal impairment^{TDF} - Reduced bone density^{TDF}	↓[atazanavir] ↑[didanosine - ddi] Clinically not used with TDF anyways any longer	✓ TDF = tenofovir disoproxil fumarate (pro-drug), efficacy of TDF = TAF ✓ Renal: < 10 mL/min not recommended, 10 - 29 mL/min give 300 mg po q72-96h, 30-49 mL/min give 300 mg po q48h, ≥ 50 mL/min no adjustment ✓ Preferred agent in cases of co-infection with HBV ✓ Favorable lipid profile
		Emtricitabine Cytidine analogue	FTC	Emtriva		With TAF or TDF products above	200 mg po QD ^{cap} 240 mg po QD ^{sol'n} Renal	Well Tolerated - Headache^{common}, dizziness - N/D - Rash, skin pig'n	Lamuvudine [X] → both Cytosine analogues (no point in using both)	✓ Black Box: severe exacerbation of hep B on stopping drug in pts w Hep B ✓ Only part of combos w Tenofovir in Canada ✓ Rarely pts may experience bad diarrhea. Headache most common s/e.
		Lamivudine Cytidine analogue	3TC	3TC		Kivexa ^{1 QD} Triumeq ^{1 QD} Dovato ^{1 QD} Delstrigo ^{1 QD} Combivir ^{1 BID} Trizivir ^{1 BID}	150 mg po BID 300 mg po QD Renal	Well Tolerated - Headache^{beginning} - N/D/Abd pain^{transient} - Insomnia^{uncommon} - Pancreatitis^{more peds}	Emtricitabine [X] → both Cytosine analogues (no point in using both)	✓ Some people have headache in first few days, stick with it and use Tylenol and Advil if needed ✓ May exacerbate Hep B upon discontinuation
		Abacavir Guanosine analogue	ABC	Ziagen		Kivexa ^{1 QD} Triumeq ^{1 QD} Trizivir ^{1 BID}	300 mg po BID 600 mg po QD can safely use in CKD	Common: - Headache, N/D, malaise Serious: - Hypersensitivity reaction (HSR)		✓ Black Box: Only Rx for HLA-B*5701 negatives → Testing predicts HR in Caucasians. Rechallenge in HSR patients C/I → life threatening ✓ Signs of HSR: fever, rash, tired, upset stomach, vomit, belly pain, flu-like sx, sore throat, cough. Occurs < 6 wks after start (mean 11 days). Stop ASAP & see MD. ✓ Meta-analysis → no sign of ↑ MI → but if higher MI risk, ABC not best choice ✓ Can cause hepatitis and lactic acidosis esp in women and obese

HIV Antiretroviral (ART) Medications										
Class		Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
	Zidovudine no longer recommended as first-line therapy for most patients	Zidovudine Thymidine analogue	AZV	Retrovir	 100, 250 mg cap 10 mg/mL syrup 10 mg/mL inject	Trizivir ¹ BID Combivir ¹ BID	300 mg po BID Also I.V. form Renal	Not Well Tolerated - Headache^{62%} - N^{50%} / V^{17%} / Anorexia^{20%} - Insomnia - Nail pigmentation - Hematologic toxicity	stavudine [X] also a thymidine analogue	✓ Black Box: hematologic toxicity, myopathy, anemia, granulocytopenia, thrombocytopenia ✓ Often in subtherapeutic mono- and dual therapy regimens ✓ Resistance likely in Long term survivors ✓ Place for therapy: IV form and syrup still used in MTCT in pregnancy and delivery and infants with HIV ✓ No longer recommended

Integrase Strand Transfer Inhibitors - INSTI

Class	Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Integrase Strand Transfer Inhibitors _____tegravir Favorable lipid profile as a class Resistance: Low genetic barrier to resistance with RAL and EVG. Higher with BIC, CAB, DTG Class Interaction: Oral absorption is diminished when co-administered with polyvalent cations (Mg, Ca, Al, Fe...). • BIC: take 2 hrs apart or together with food • CAB: take 2 hrs before/4 hrs after ORAL CAB • DTG: take 2 hrs before/6 hrs after or together with food • EVG: take 2 hrs apart • RAL: avoid (only Ca OK with Isentress; not HD)	Bictegravir	BIC	-	 (Biktarvy)	Biktarvy ^{1 QD}	50mg po QD	Well Tolerated • Headache • Nausea/Diarrhea • Insomnia	CYP3A & UGT1A1 substrate (~50:50) Inhibits OCT2 & MATE1 • ↑[Metformin]	✓ Only exists in combination ✓ Increase serum creatinine due to tubular inhibition without affecting glomerular function (increases usually in the first 4 weeks with median increase of 9.96umol/L after 48 weeks) ✓ May increase bilirubin ✓ Interacting classes: anticonvulsants, rifamycins, atazanavir ✓ C/I: Dofetilide, rifampin, St. John’s wort
	Cabotegravir	CAB	Vocabria	 200 mg/mL inj 30 mg tab	Cabenuva IM injection	Oral: 30 mg QD (+25 mg RPV) Initiation (3mL): 600 mg CAB/900 mg RPV IM Maintenance: 400 mg CAB/600 mg RPV IM monthly <u>or</u> 600 mg CAB/900 mg RPV IM q2months	Well Tolerated Injection site reactions, pyrexia, fatigue, headache, MSK pain, nausea, dizziness, sleep problems, rash (mild), diarrhea	No CYP3A4 inx UGT1A1 , UGT1A9 (minor), P-gp, BCRP substrate ↓ [CAB/RPV] with: Inducers of UGT1A1/3A4	✓ CAB/RPV is 1st long acting injectable combination indicated as a switch regimen in virologically suppressed patients ✓ Optional oral CAB as lead-in dosing (≥28 days) to assess tolerability or for use as oral bridging therapy for missed Cabenuva injections ✓ NB: initiation injections: one month initiation if using q1month maintenance injections. For q2month maintenance, start with two initiation injections one month apart. ✓ Oral CAB C/I: carbamazepine, oxcarbazepine, phenobarbital, phenytoin, rifampin, rifapentine. Cabenuva C/I: as above plus rifabutin, systemic dexamethasone (>1 dose), St. John’s wort
	Dolutegravir	DTG	Tivicay	 50 mg tab Pediatric: 10 mg, 25 mg tab 5 mg dispersible tabs	Triumeq ^{1 QD} Juluca ^{1 QD} Dovato ^{1 QD}	50 mg po QD 50 mg po BID*	Well Tolerated • Insomnia • Headache • ↑ SCr small (↑~0.11mg/dL)	No CYP3A4 inx P-gp, UGT1A1 , CY3A4(10-15%)substrate Inhibits OCT2 - Metformin (inc 2 fold [metformin]) - C/I Dofetilide	✓ Take with/without food ✓ Inhibits renal tubular secretion of creatinine, SCr “falsely” increases ✓ May cause neural tube defects if taken at the time of conception ✓ Higher barrier to resistance than EVG or RAL ✓ *BID dosing if heavily tx-experienced, INSTI resistant, or given w enzyme inducers ✓ High efficacy in those with baseline HIV RNA > 100,000 copies/mL ✓ C/I: Dofetilide, fampridine
	Elvitegravir	EVG	Vitekta	 85, 150 mg tab	Stribild Genvoya	85-150 mg po QD boosted w/ food	Well Tolerated • Hyperlipidemia • D/N • Headache	CYP3A4 substrate induces 2C9 (EVG) Inhibits CYP3A4, P-gp, BCRP, OATP1B1/3, OCT2, MATE1 (cobi)	✓ Better absorption w food/snack ✓ Coformulated with PK booster cobicistat ✓ Cobicistat inhibits tubular secretion of creatinine w/o affecting glomerular function (if >35.36umol/L need renal monitoring) ✓ Lower genetic barrier to resistance than PIs or DTG ✓ C/I: Eplereone, Lovastatin
	Raltegravir	RAL	Isentress & Isentress HD	 400 mg tab 600mg tab (HD)	None	400 mg po BID 1200 mg po QD new study QDMRK	Well Tolerated • Rash • N/D, Headache • Insomnia ↑ LFTs, ↑ CK, rhabdo	No CYP3A4 inx UGT1A1 substrate	✓ Take without regards to meals ✓ 1st to market INSTI → Being studied: 1200 mg po QD (given as 2X 600mg) ✓ Aluminum or Magnesium antacids reduce abs’n RAL (Can take Ca Antacids if on Isentress, NOT Isentress-HD) ✓ Lower genetic barrier to resistance than PIs or DTG ✓ Avoid strong inducers of UGT (ie carbamazepine)

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Class		Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Non-nucleoside RT Inhibitors - NNRTI	NNRTI ____vir____ MOA: NNRTIs bind allosterically in a pocket located near the catalytic site in the palm domain of the p66 subunit site of the Reverse Transcriptase (RT) enzyme Resistance: Low genetic barrier to resistance with first generation (EFV ,NVP) , but second generation often still active depending upon genotype.	<i>Doravirine</i>	DOR	<i>Pifeltro</i>	 100mg tab	<i>Delstrigo</i> ^{TDF 1 QD}	100mg po OD	Well tolerated Common SE - Headache - Diarrhea, Ab pain - Abnormal Dreams	Cyp3A4 Substrate	✓ Take BID if using with rifabutin ✓ Taken without regards to food ✓ Favourable lipid profile – consider for high cardiac risk ✓ Avoid use with Strong inducers of CYP3A4 (ie Carbamazepine, rifampin) ✓ C/I: carbamazepine, oxcarbazepine, phenobarbital, phenytoin, enzalutamide, rifampin, rifapentine, mitotane, St.John’s wort
		<i>Efavirenz</i>	EFV	<i>Sustiva</i>	 600 mg tab 50, 200 mg cap	<i>Atripla</i> ^{TDF 1 QD}	600 mg po QD avoid fatty meals on empty stomach (inc abs’n leading to s/e)	CNS S/E 52% - Dizziness, vivid dreams - Insomnia, somnolence - Impaired concentration Hyperlipidemia Rash 26% (can treat through it mostly)	CYP3A4 & 2B6 Substrate Potent inducer of CYP3A4,2B6, UGT1A1; inhibitor of CYP2C9/2C19 ↓ [conc] of: - Benzos (-olam are issues, -pams are ok) - most opioids	✓ Let MD know if history of psych illness → should avoid this med ✓ Vivid dreams bothersome to some, enjoyable to some other ✓ CNS s/e worst after 1 st or 2 nd dose, often improve in 2-4 weeks ✓ Methadone: monitor for symptoms of opioid withdrawal ✓ May cause false +ve cannabinoid test ✓ Pregnancy: birth defects reported in primate studies but no evidence of ↑ risk in human studies; screening for antenatal/postpartum depression recommended ✓ C/I: St. John’s wort, elbasavir/grazoprevir, cisapride, midazolam, triazolam, pimozide, ergot ✓ Inducers of CYP3A4 will decrease serum concentration of EFV; EFV may decrease concentrations of CYP3A4 substrates
		<i>Etravirine</i>	ETR	<i>Intelligence</i>	 100, 200 mg tab	None	200 mg po BID or 400 mg po QD w/ food	Rash 9% - Dyslipidemia - Nausea - Rhabdomyolysis uncommon	CYP3A4, 2C9, 2C19 substrate Weak inducer of CYP2B6/ 3A4 Weak Inhibitor of 2C9/ 2C19	✓ Tabs are large: dissolve readily in water for liquid dosing, however whole tablet is chalky, large and often difficult to swallow. ✓ Severe rash reported ✓ C/I: ombitasvir/paritprevir/ritonavir and dasabuvir regimens
		<i>Nevirapine</i>	NVP	<i>Viramune</i>	 200 mg IR tab 400 mg SR tab	None	200 mg QD X 14 days then 200 mg po BID OR 400mg XR QD (more common)	Rash 37% - Hepatic failure - Fever - Nausea	CYP3A4 substrate Potent inducer of CYP2B6/ 3A4	✓ Black Box: severe rash & hepatotoxicity. AVOID if CD4>250 (women) or 400 cells/mm3 (male) ✓ hypersensitivity → can treat through rash, but if with fever and elevated LFTs = sign of hypersensitivity, d/c ✓ C/I: St. John’s wort; avoid Strong inducers of CYP3A4 (Carbamazepine) ✓ Lead-in phase to reduce rash, occurs in 1 st 6 wks, more in women... also drug is auto inducer (will reduce its own level)
		<i>Rilpivirine</i>	RPV	<i>Edurant</i>	 25 mg tab	<i>Complera</i> ^{TDF 1 QD} <i>Odefsey</i> ^{TAF 1 QD} <i>Juluca</i> ^{1 QD} <i>Cabenuva</i> ^{IM q1-2 months}	25 mg po QD w/ food ++ q2 monthly IM injection (with cabotegravir/ Cabenuva)	- Rash 3% - Headache 3% - Insomnia - Depression 8% - Hyperlipidemia - Hepatotoxicity	CYP3A4 Substrate ↓ [Edurant] with: Inducers of CYP3A Drugs ↑ pH	✓ Among smallest HIV tablets ✓ Best absorbed with a good meal (350-500 calories) ✓ PPI contraindicated , H-2 blockers need dose reduction. ✓ Favorable lipid profile ✓ Lower virologic efficacy , not suggested for VL > 100,000 & CD4 < 200 ✓ Can exacerbate psych symptoms ✓ QTc prolongation (dose related) ✓ Available as long-acting q1-2 monthly injectable with cabotegravir (CAB): 900 mg IM initiation, then 600 mg IM monthly/900 mg IM q2months

Class		Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Protease Inhibitors - PI	Protease Inhibitor	<i>Ritonavir</i> PK booster	RTV	<i>Norvir</i>	 100 mg tab 80 mg/mL oral	None	100-200 po/day	- Bitter aftertaste - Numbness around mouth at HIV doses - N/V/D ↑ LFTs, ↑ TG - Hyperlipidemia	Inducer of: 1A2, 2B6, 2C9, 2C19, UGT Inhibitor of: 3A4 strong 2D6, 2C8,	✓ Black Box: many drug interactions → life threatening ✓ Extremely strong inhibition 3A4, P-GP and other transporters ✓ HIV activity at higher doses but toxicity & inx (not used for HIV treatment) ✓ 100 mg per dose to boost (e.g. if using with BID drug, give 100 mg BID) ✓ Fluorinated steroids (even inhaled, injected, topical) can lead to Cushing's syndrome
	Class S/E: Hyperlipidemia	<i>Darunavir</i>	DRV	<i>Prezista</i>	 <i>Prezista:</i> 600, 800 mg tab <i>Prezcobix:</i> 800 mg + 150 mg COB tab	Prezcobix ^w cobicistat 1 QD Symtuza ^w cobicistat 1 QD	600 mg po BID or 800 mg po QD w/ food + RTV 100 mg QD-BID or cobicistat 150 mg QD	- Rash 10% - Headache - N/D ↑ amylase - Hepatotoxic - Kidney stones?	CYP3A4 Substrate/ Inhibitor CYP 2C9 inducer Failure of contraceptives	✓ Currently highest prescribed PI: 2nd Gen PI ✓ Works in those who are resistant to other PIs ✓ Cobicistat will cause tubular creatinine reabsorption → SCr “pseudo” rise of 10-30 mmol/L from pts normal baseline ✓ Needs RTV or COBI boosting ✓ When boosted with RTV: 800 QD + 100 mg RTV for naïve, [600 mg + 100 RTV] BID for experienced ✓ Contains Sulfa moiety ✓ Avoid with use of drugs that depend on CYP3A4 metabolism and has narrow therapeutic window (ie Alfuzosin)
	MOA: High genetic barrier to resistance when boosted	<i>Atazanavir</i>	ATV	<i>Reyataz</i>	 <i>Reyataz:</i> 150, 200, 300mg tab <i>Evotaz:</i> 300 mg + 150 mg COB tab	Evotaz ^w cobicistat	300 mg po QD boosted w RTV 100 mg or cobicistat 150 mg 400 mg po QD unboosted w/ food (>390 cals)	- Kidney stone 10 fold inc - Increased billi 60% (cosmetic, not harmful) - D/N/Abd pain - Headache 6% - Rash 20%	CYP3A4 substrate/ inhibitor inducers/inhibitors of 3A4 will interact Drugs inc pH	✓ 2X150 mg (300 mg) + RTV 100 mg daily (TDF increases excretion of ATZ) ✓ 2X200 mg (400 mg) unboosted with Kivexa (needs RTV boost w others) ✓ Increased QTc, PR, more torsades ✓ Jaundice as result of increased direct bilirubin → not harmful, pt may decide to switch for cosmetic reason ✓ Absorption reduced when taken with H2Ra and PPI ✓ H2RA: Unboosted → ATV ≥ 2 hrs before or ≥ 10 hrs after Boosted → same time or >10 hrs after H2RA ✓ PPI: Unboosted → not recommended for co-administration, Boosted → ≥ 12 hrs after PPI ✓ Consider avoiding in CKD
	1 st gen PIs not used usually:	<i>Lopinavir</i> / RTV	LPV	<i>Kaletra</i>	 200 mg + 50 mg RTV tab	Kaletra ⁴ QD or 2 BID	400 mg po BID 800 mg po QD	- Diarrhea 24% - N ↑ LFTs, billi, Lipids, MI	CYP3A4 Substrate/ Inhibitor Many ↑ [benzos] Fentanyl Phenytoin	✓ Dangerous (deadly) interaction with fentanyl ✓ Unpredictable interaction with phenytoin → RTV inhibitor, LPV inducer of CYP. Unpredictable pheny level (unpredictable) ✓ +++ diarrhea, worse with q24h ✓ May need higher doses if tx experienced or later in pregnancy ✓ May have Cardiac risk
	Fosamprenavir FPV (Telzir) Indinavir IDV (Crixivan) Nelfinavir NFV (Viracept) Saquinavir SQV (Invirase) Tipranavir TPV (Aptivus)									

Class	Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
CCR-5 Co Receptor Antagonists	<i>Maraviroc</i>	MVC	<i>Celsentri</i>	 150, 300 mg tab	None	150-600 mg po BID Standard: 300mg BID with or without food	- cough¹³ - Rash^{10%}, Abdo pain - Dizziness, myalgia - Ortho hypo, syncope - Upper resp infection	CYP3A4, P-gp substrate inducers/inhibitors of 3A4 or P-gp will interact	✓ Black Box: hepatotoxicity, systemic allergic reaction ✓ Used later in tx only for CCR-5-tropic HIV virus, cannot use for CXCR-4-tropic virus which is seen more and more in advance dx ✓ Avoid: Rifapentine, Dasabuvir + Ombitasvir/Paritaprevir/RTV
Fusion Inhibitor	<i>Enfuvirtide</i>	ENF	<i>Fuzeon</i>	 90 mg vial	None	90 mg SC BID	- Inj site reaction~100% pt - Bacterial pneumonia - Hypersensitivity<1%	Neither inducer or inhibitor of CYP enzymes	✓ Was historically used in era between 1st and 2nd generation PIs ✓ Unstable drug, dose needs to be prepared before administering each dose ✓ No cross resistance with other ARVs
Entry Inhibitor	<i>Ibalizumab-uiyk</i>	IBA	<i>Trogarzo</i>	 150mg/mL vial	None	2000mg IV single dose then, 800mg Q2W	- Dizziness - Diarrhea, Nausea - Skin Rash	Neither inducer or inhibitor of CYP enzymes	✓ Indication: Treatment of HIV with combination of other ARV in heavily experienced patients with multidrug resistant infection failing current therapy ✓ Infused over 15-30 minutes (Loading dose no less than 30 minutes) ✓ Each 2 mL vial delivers 1.33mL containing 200mg of IBA ✓ If maintenance dose missed (>3 days) then loading dose needs to be given again ✓ No cross resistance with other ARVs ✓ Not Approved in Canada
gp120 Attachment Inhibitor	<i>Fostemsavir</i>	FTR	<i>Rukobia</i>	 600 mg tab	None	600 mg BID with or without food	- Headache - Skin Rash - Micturition Urgency - N/V/D - Fatigue	CYP3A4 (Partial), P-gp, BCRP substrate Strong CYP3A4 inducers will interact; inhibits OATP1B1/3, BCRP	✓ Indication: Treatment of HIV in combination with other ARV in heavily treatment experienced HIV patients with multi-drug resistant HIV-1 failing current ARV due to resistance, intolerance or safety considerations ✓ Prodrug of small molecule Temsavir ✓ BRIGHT study 96 wks (Ackerman et al. AIDS 2021;35:1061-72.) ✓ Contraindicated with strong CYP3A4 inducers (anticonvulsants, mitotane, enzalutamide, rifampin, St. John's wort)

Class	Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Capsid inhibitor	Lenacapavir	LEN	Sunlenca	  300 mg tab 309 mg/mL (1.5 mL vials)	None	Initiation: Day 1 & 2: 600 mg po daily Day 8: 300 mg po Day 15: 927 mg SC Simplified initiation (approved in US): Day 1: 927 mg SC and 600 mg po Day 2: 600 mg po Maintenance: 927 mg q6mo (i.e q26 weeks +/- 2 weeks)	- Injection site reactions - nausea	Substrate of CYP3A4, P-gp, UGT1A1. Strong inducers of CYP3A4/P-gp/UGT1A1 are contraindicated; not recommended with moderate CYP3A4 and P-gp inducers, and not with strong inhibitors of CYP3A4/P-gp/UGT1A1 together. Moderate CYP3A4 inhibitor.	✓ Indication: Treatment of HIV in combination with other ARV in adults with multi-drug resistant HIV-1 for whom it is otherwise not possible to construct a suppressive antiviral regimen ✓ Contraindicated with strong CYP3A4/P-gp/UGT1A1 inducers (anticonvulsants, rifampin, St. John's wort)

OBT = optimized background therapy