

# Alaska ID ECHO: HCV-HIV-PrEP-STIs



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM



NPAIHB  
*Indian Leadership for Indian Health*

## Injectable HIV Medications

July 11, 2023

*This program is supported by a grant from the Northwest Portland Area Indian Health Board and funding is provided from the HHS Secretary's Minority HIV/AIDS Fund.*

# Welcome to Alaska Infectious Disease ECHO: HCV, HIV, PrEP, STIs

## Approved Provider Statements:



In support of improving patient care, Alaska Native Medical Center (ANMC) is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

## Contact Hours:

ANMC designates this activity for a maximum of 12 contact hours, including 3 total pharmacotherapeutics contact hours, commensurate with participation.

## Financial Disclosures:

Youssef Barbour, MD & Lisa Townshend-Bulson, APRN / faculty for this educational event, are primary investigators in an ANTHC sponsored hepatitis C study funded in part by Gilead Sciences. All of the relevant financial relationships listed have been mitigated.

## Requirements for Successful Completion:

To receive CE credit please make sure you have actively engaged in the entire activity, your attendance is recorded by the facilitator, and complete the course evaluation form found here: <https://forms.gle/18t4EgvN2WdnM4P77>



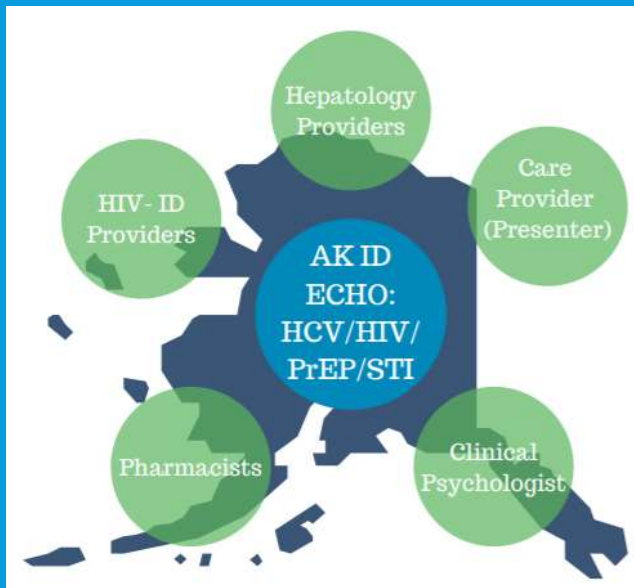
For more information contact  
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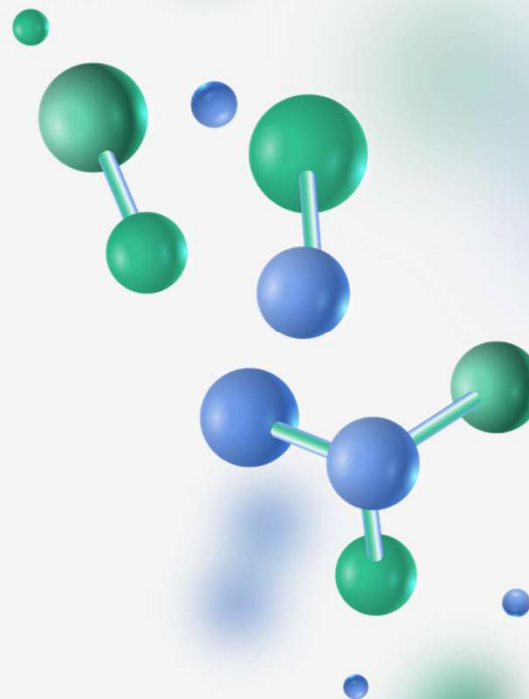
# AK ID ECHO: CONSULTANT TEAM



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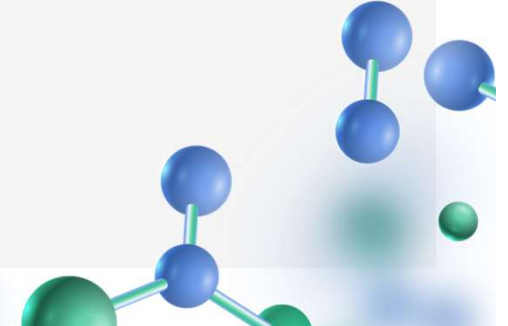
# Injectable HIV Medications

Rod Gordon, RPh, AAHIVP  
SCF RASU Staff Pharmacist  
July 11, 2023





## HIV Injectables to discuss:

- Indications- Treatment vs Prevention
  - Evidence to support use/indications
  - New research to potentially expand use
- 

# FDA Approved Injectable HIV meds

Treatment			Prevention		
Cabotegravir + Rilpivirine	CAB/RPV [INSTI/NNRTI]	<b>Cabenuva®</b> Jan 2021 IM	Cabotegravir	CAB [INSTI]	<b>Apretude®</b> Dec 2021 IM
Lenacapavir	LEN [Capsid Inhibitor]	<b>Sunlenca®</b> Dec 2022 SQ			
Ibalizumab	IBA [CD4 Receptor Inhibitor]	<b>Trogarzo®</b> Mar 2018 IV			

Will not discuss, requires biweekly IV admin  
Lower efficacy, \$\$



## Cabotegravir and Rilpivirine (Cabenuva<sup>®</sup>) ER Injection

### Indication:

- Complete regimen to treat HIV-1
- For adults and adolescents ( $\geq 12$  years who weigh  $\geq 35$  kg)
  - Replace antiretroviral regimen in persons with HIV RNA  $< 50$  copies/mL
  - On stable antiretroviral regimen
  - No history of treatment failure
  - No known or suspected resistance to cabotegravir or rilpivirine
- Oral Lead-In
  - Lead-in is optional
- Continuation Phase Injections
  - Approved for every 1-month and every 2-month injections
  - Doses are different with every 1-month and every 2-month injections
  - Injections may be given up to 7 days before or after the scheduled date



## Cabotegravir and Rilpivirine (Cabenuva®) ER Injection

### Evidence:

#### Phase 3 Trials in Treatment Naïve

- FLAIR: IM CAB + IM RPV monthly versus oral DTG-ABC-3TC: 48 weeks
- FLAIR: IM CAB + IM RPV monthly versus oral DTG-ABC-3TC: 96 weeks
- FLAIR: IM CAB + IM RPV with or without oral lead in 124-week extension

#### Phase 3 Trials in Treatment Experienced

- ATLAS: Switch to monthly IM CAB + IM RPV or continue 3-drug oral ART
- ATLAS-2M: switch to IM CAB + IM RPV taken every 1 or 2 months: 48 weeks
- ATLAS-2M: switch to IM CAB + IM RPV taken every 1 or 2 months: 96 weeks

#### Phase 2 Trials

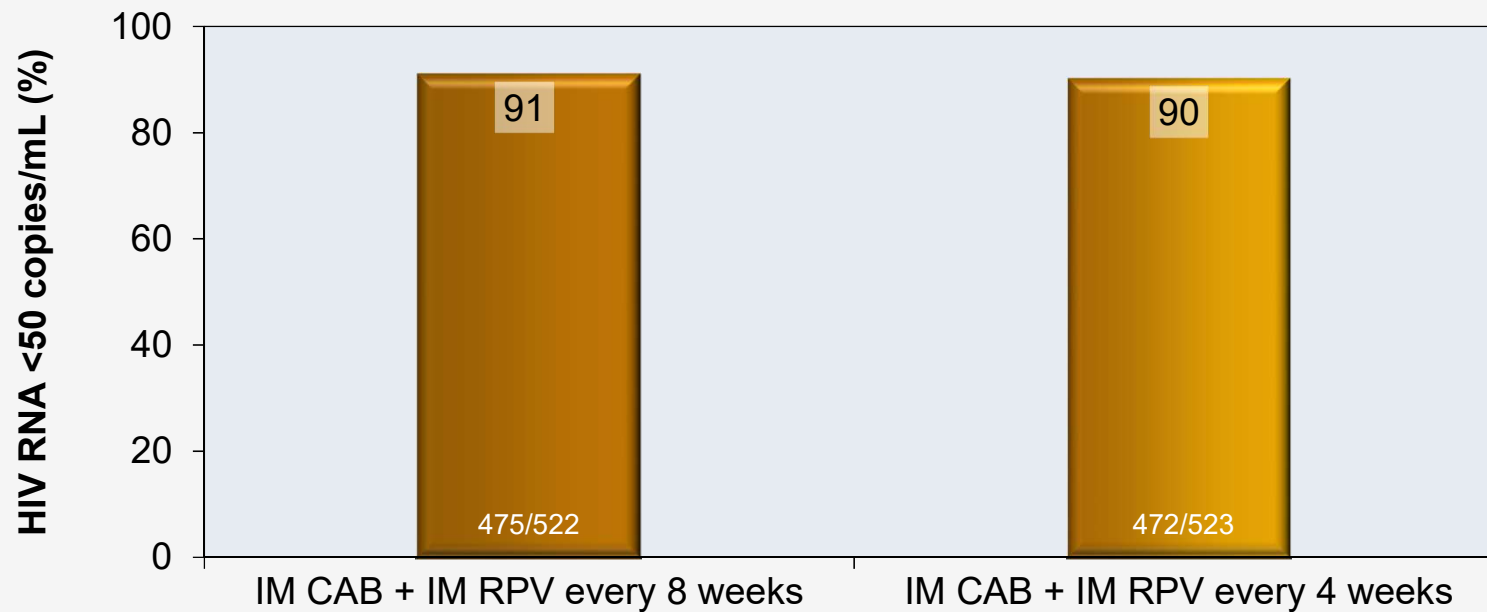
- LATTE: oral CAB + oral RPV daily versus oral EFV plus 2 NRTIs
- LATTE-2: IM CAB + IM RPV every 1 or 2 months versus oral CAB + oral ABC-3TC
- POLAR: every 2-month IM CAB + IM RPV after 5 years or oral CAB + oral RPV





## ATLAS-2M Study: Results (Week 96)

Weeks 96: Virologic Response by FDA Snapshot Analysis



HIV RNA  $\geq$ 50 copies/mL at 96 weeks: 11/522 (2%) in q8-week arm, 6/523 (1%) in q4-week arm

Source: Jaeger H, et al. Lancet HIV. 2021;8:e679-e689.

## ATLAS-2M Study: Results (Week 96)

### Injection Site Reactions (ISRs)\*

Types of Reactions	IM CAB + RPV Every 8 Weeks, n (%)	IM CAB + RPV Every 4 Weeks, n, %
Number of injections	12,832	23,855
Injection site pain	2,662/12,832 (21%)	3,295/23,855 (14%)
Injection site nodule	188/12,832 (2%)	297/23,855 (1%)
Injection site discomfort	134/12,832 (1%)	148/23,855 (1%)
Total number of ISRs	3,400	4,157
Grade 1	2,745/3,400 (81%)	3,446/4,157 (83%)
Grade 2	601/3,400 (18%)	661/4,157 (16%)
Grade 3	54/3,400 (2%)	50/4,157 (1%)
Withdrawal due to ISR	7/516 (1%)	11/517 (2%)

Median duration of ISR: 3 days (IQR 2 – 5)

Source: Jaeger H, et al. Lancet HIV. 2021;8:e679-e689.

# Cabotegravir and Rilpivirine (Cabenuva®) ER Injection

## Risk factors for Virologic Failure (n=1039)

- 13/1039 (1.25%) participants had confirmed virologic failure (CVF) in ATLAS, FLAIR, ATLAS-2M
- Risk factors for CVF identified
- 96.7% had 0 or 1 risk factor for CVF
  - 0.4% of them had CVF

Parameter	OR
RPV RAM(s) at baseline	40.36
Week 8 RPV trough concentration	5.00
Baseline HIV-1 subtype A6/A1	5.92
BMI (kg/m2) at baseline	1.13

--- INDICATIONS AND USAGE----- 475/522  
 CAB/RPV ... is indicated as a complete regimen for the treatment of HIV-1 infection in adults to replace the current antiretroviral regimen in those who are virologically suppressed (HIV-1 RNA less than 50 copies per mL) on a stable antiretroviral regimen with **no history of treatment failure and with no known or suspected resistance to either cabotegravir or rilpivirine.**

# SOLAR Study: Switch to Long-Acting Cabotegravir + Rilpivirine From Bictegravir/F/TAF

- Phase 3b, open-label, noninferiority
  - HIV RNA <50 copies/mL for  $\geq 6$  months with bictegravir/F/TAF (n= 670)
  - Continue bictegravir/F/TAF or switch to long-acting cabotegravir + rilpivirine

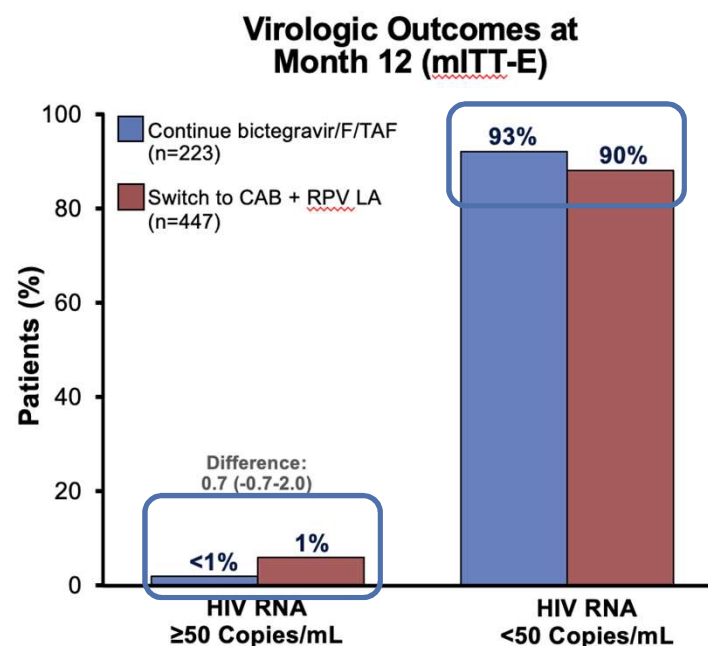
HIV RNA < or  $\geq 50$  copies/mL at month 12

- Switch to cabotegravir + rilpivirine was non-inferior to continue bictegravir/F/TAF

- Confirmed virologic failure (n=3, all in cabotegravir + rilpivirine arm)
- Treatment satisfaction significantly improved following switch to cabotegravir + rilpivirine

Non-inferiority margins:  
HIV RNA < and  $\geq 50$  copies/mL: -12% and 4%, respectively.

Ramgopal MN, et al. CROI 2023. Abstract 191.



# LA CAB/RPV for PWH with treatment challenges- Ward-86 UCSF Study

Cohort of 133 PWH connected to care at WARD 89 (UCSF) who began LA CAB/RPV - 57 with viremia

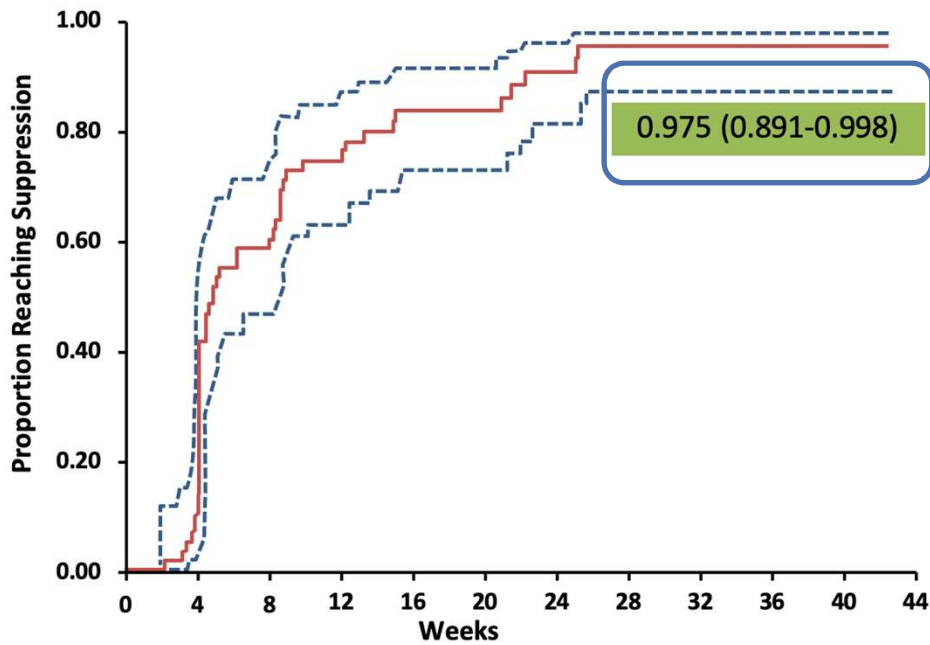
Characteristic	Distribution, n (%)
<b>Age (median, range)</b>	45 (38-45) years
<b>Gender</b>	
Cis Man	117 (88%)
Cis Woman	11 (8%)
Transgender Woman	5 (4%)
<b>Race/ethnicity</b>	
Black	21 (16%)
Latino/a	50 (38%)
White	43 (32%)
Multiracial	19 (14%)
<b>Housing</b>	
Unstable	77 (58%)
Stable	45 (34%)
Homeless	11 (8%)

Characteristic	Distribution, n (%)				
<b>Insurance</b>					
Medicare or Medicaid or both	130 (98%)				
ADAP	3 (2%)				
<b>Current stimulant use</b>	44 (33%)				
<b>Major mental illness</b>	51 (38%)				
<b>Virologically non-suppressed (&gt;30 copies/ml)</b>	57 (43%) with log <sub>10</sub> viral load (mean, STD) 4.21 (1.30)				
<b>CD4 count (median with interquartile range)</b>	<table border="0"> <tr> <td>Virologically suppressed</td> <td>616 (395-818)</td> </tr> <tr> <td>Virologically non-suppressed</td> <td>215 (75-402)</td> </tr> </table>	Virologically suppressed	616 (395-818)	Virologically non-suppressed	215 (75-402)
Virologically suppressed	616 (395-818)				
Virologically non-suppressed	215 (75-402)				

\*Note: ADAP is AIDS Drug Assistance Program; Baseline CD4 defined as the CD4 count closest to and including date of first injection. Median time from CD4 count to first injection was 70 (range 0 to 882) days

## LA CAB/RPV for PWH with treatment challenges- Ward-86 UCSF Study

**Figure:** KM curve of probability of reaching virologic suppression (VL <30) on LA ART (n=57); dotted lines 95% CI



Two patients failed to suppress


Patient #1 – baseline HIV RNA > 200,000 c/mL  
< 2 log<sub>10</sub> response, rebound with 181C & 100I

Patient #2 – baseline HIV RNA > 100,000c/mL  
< 2 log<sub>10</sub> response. Rebounded with 263K & 138K

472/523

## LA CAB/RPV – 16 Week PK Sub-Study : IM Thigh Injections

- ATLAS-2M trial participants with 3yr of LA CAB+ RPV by IM gluteal injections volunteered for **short-term, 16-wk switch to IM thigh injections**: N = 118 (Q4W: n = 64; Q8W: n = 54)
  - Thigh IM injections into vastus lateralis
  - Injection schedule (Q4W or Q8W) maintained during thigh injection phase
- Plasma trough concentrations remained above PA-IC<sub>90</sub> throughout thigh injection phase for both dose intervals
  - **Plasma concentration differences for gluteal vs thigh injection deemed not clinically relevant**
- **No serious AEs; pain most common ISR**: 52% in Q8W arm, 33% in Q4W arm
  - ISRs: 93% to 96% grade 1/2; 4% to 7% grade 3; median duration: 3.0-3.5 days
  - 1 participant withdrew for injection site pain (grade 2; Q8W arm)
  - 1 case of potential maladministration with high CAB levels 2 hr post dose
- **No CVF**; high viral suppression rates maintained in both arms (Q8W, 94.4%; Q4W, 95.3%) at substudy Wk 16
- **30% preferred thigh injections**, with top reason noted to be ease of access to injection site



## Lenacapavir (Sunlenca®) Subcutaneous Injection

### Type of Medication

- HIV capsid inhibitor (novel class)

### Indication

- Treatment of HIV-1 in combination with other antiretroviral medications in heavily treatment-experienced adults with multidrug resistant HIV virus and failing their current regimen due to resistance, intolerance, or safety concerns

### Preparations

- Oral: 300 mg tablets
- Subcutaneous injection: 463.5 mg/1.5 mL vial

### Adverse Reactions

- Most common adverse effects are nausea and injection site reactions

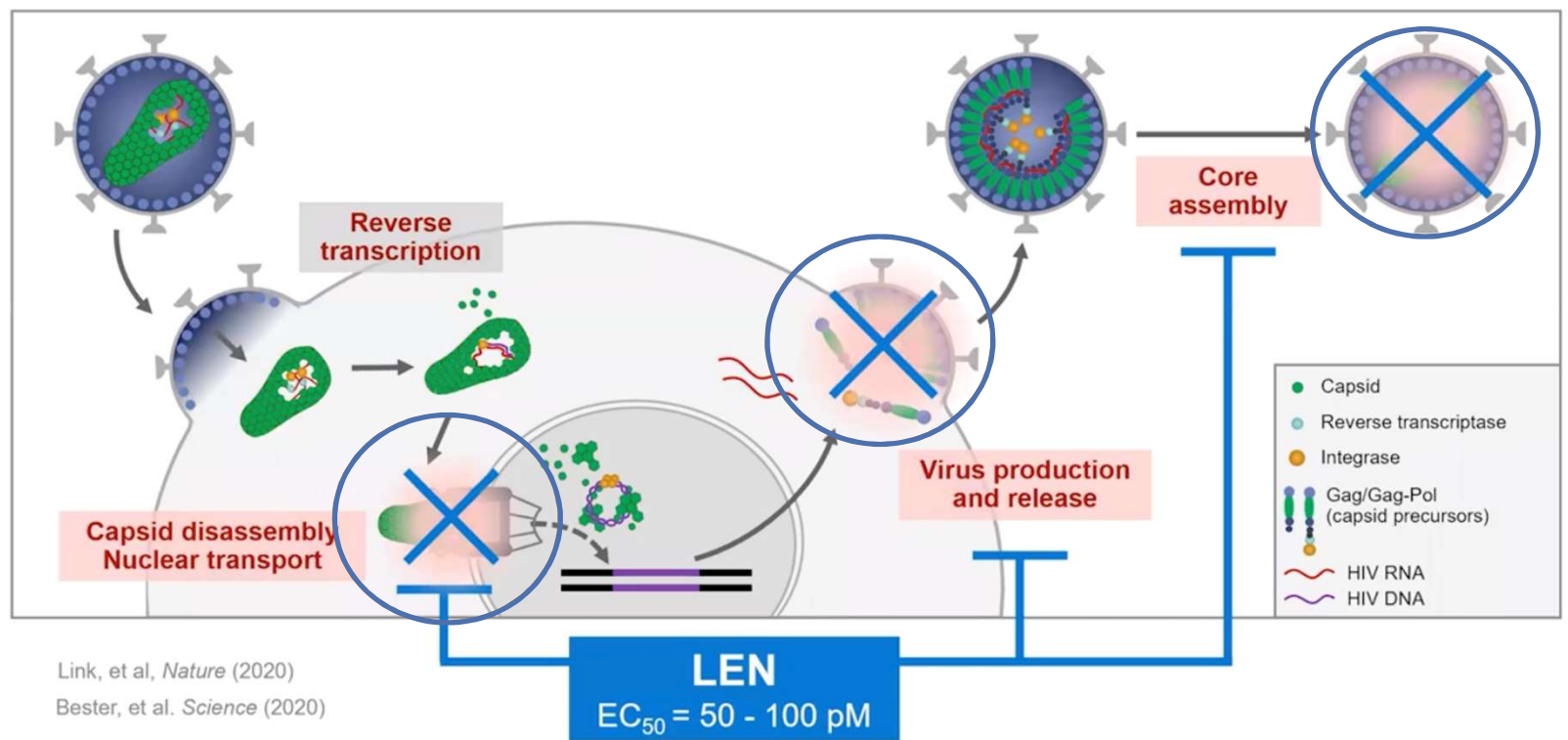
### Contraindications

- Contraindicated to give with strong CYP3A inducers

Source: Lenacapavir Prescribing Information.



# Lenacapavir (Sunlenca®) Subcutaneous Injection: Mechanism



## Lenacapavir (Sunlenca®) Subcutaneous Injection: Dosing Schedule

### Lenacapavir Dosing Schedule

#### Initiation Option 1

Day 1	927 mg by subcutaneous injection (2 x 1.5 mL injections) + 600 mg orally (2 x 300 mg tablets)
Day 2	600 mg orally (2 x 300 mg tablets)


#### Initiation Option 2

Day 1	600 mg orally (2 x 300 mg tablets)
Day 2	600 mg orally (2 x 300 mg tablets)
Day 8	300 mg orally (1 x 300 mg tablets)
Day 15	927 mg by subcutaneous injection (2 x 1.5 mL injections)

#### Maintenance

927 mg by subcutaneous injection (2 x 1.5 mL injections) every 6 months (26 weeks) from date of the last injection +/-2 weeks

Missed dose: If more than 28 weeks since last injection and clinically appropriate to continue lenacapavir, restart initiation from Day 1, using either Option 1 or Option 2




## Lenacapavir (Sunlenca<sup>®</sup>) Subcutaneous Injection: Evidence

### **Salvage Therapy for Treatment-Experienced with Multidrug Resistance**

CAPELLA (Phase 3): Lenacapavir plus Optimized Background Therapy

### **Initial and Maintenance Therapy for Treatment-Naïve**

CALIBRATE (Phase 2): Lenacapavir with Various ARV Combinations



## Lenacapavir (Sunlenca<sup>®</sup>) Subcutaneous Injection: Capella Study

### **Background**

Phase 3, randomized trial with oral and subcutaneous lenacapavir + OBR, versus Tx with an optimized background therapy (OBR)

### **Enrollment Criteria:**

N = 72; two cohorts: 36 randomized/36 non-randomized

Age  $\geq$ 12 years

Virologic failure on current ART

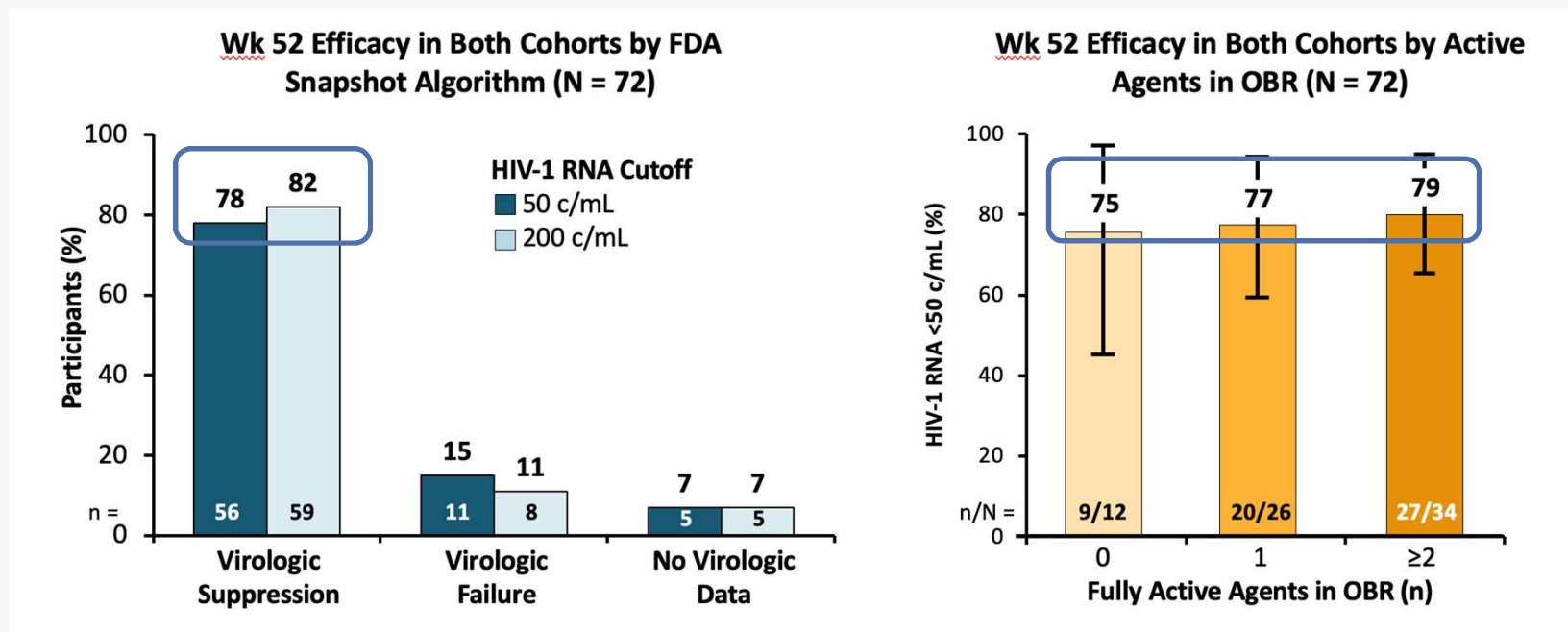
HIV RNA >400 copies/mL for  $\geq$ 8 wks

Documented HIV drug resistance to at least 2 HIV medications from at least 3 of the 4 main classes

At least one fully active agent available for HIV treatment

# Lenacapavir (Sunlenca®) Capella Study: Results

Virologic Responses at 52 Weeks in Randomized and Nonrandomized Cohorts

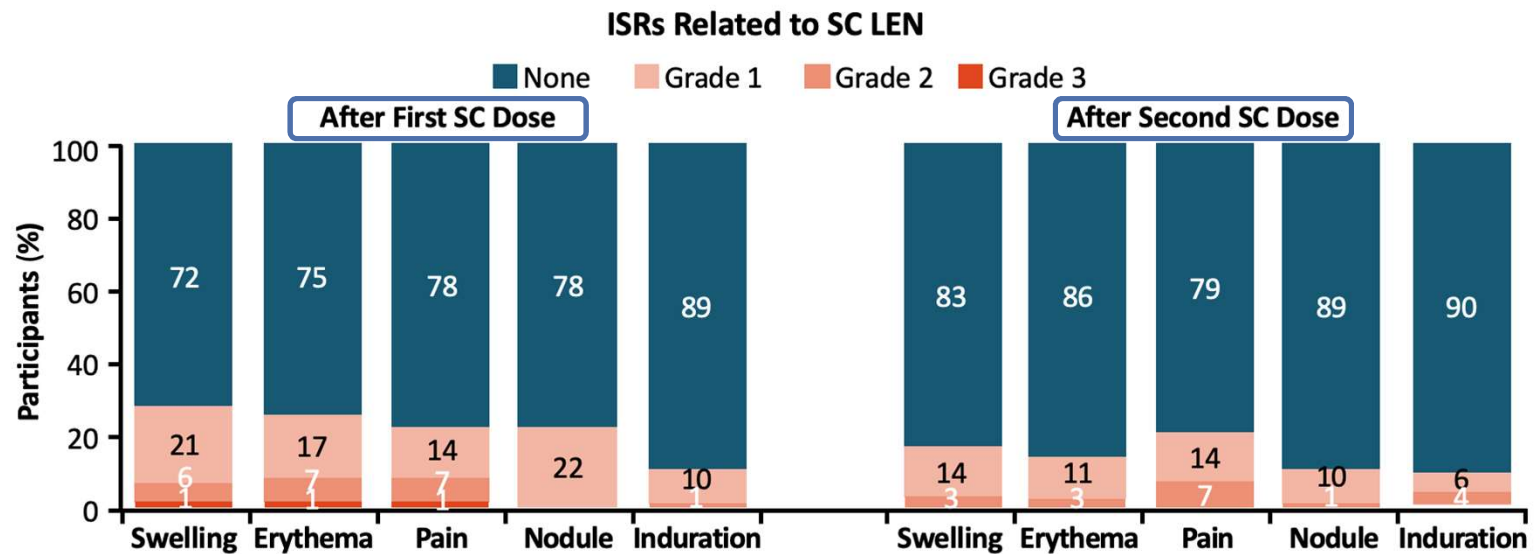


## Lenacapavir (Sunlenca®) Capella Study: Safety

Any-Grade AEs Other Than ISRs in ≥10% of Participants, n (%)	LEN + OBR (N = 72)
Diarrhea	10 (14)
Nausea	10 (14)
Constipation	9 (13)
Cough	8 (11)
Pyrexia	8 (11)

- Median follow-up: 498 days (IQR: 421-612)
- No study drug-related AEs observed in >5% of participants
- No serious AEs considered related to study drug
- 2 deaths observed, with neither deemed related to study drug
  - n = 1 each of malignant neoplasm, acute respiratory failure

## Lenacapavir (Sunlenca®) Capella Study: Injection Site Reactions



- Most ISRs mild or moderate
  - 1 participant discontinued study drug at Wk 52 for ISR (grade 1 nodule)
  - Swelling was most common ISR (after first dose, 28%; after second dose, 17%)

# Lenacapavir (Sunlenca®) + TAB/ZAB Study: Proof of Concept Study [SC Lenacapavir + IV bNABs every 26 weeks for Treatment]

## Phase 1, single-dose study

HIV RNA <50 copies/mL for ≥18 months

Susceptible to teropavimab and znlirimab

CD4 nadir ≥350 cells/μL

CD4 at entry ≥500 cells/μL

bNABs: broadly neutralizing antibodies.

Baseline characteristics:

N = 20, double blinded to TAB dose

Age (median): 44 years.

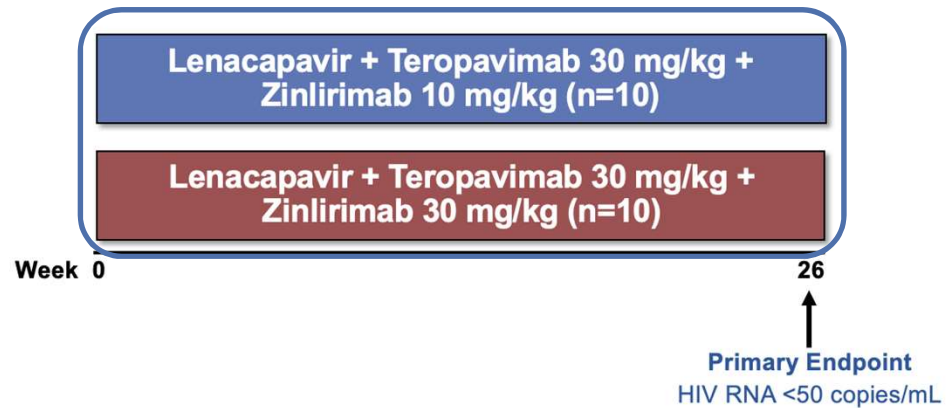
Male: 86%.

BMI: 30 kg/m<sup>2</sup>.

Median CD4: 909 cells/μL.

Median ART duration: 2.6 hrs.

Median Time since Dx: 8.2 yrs

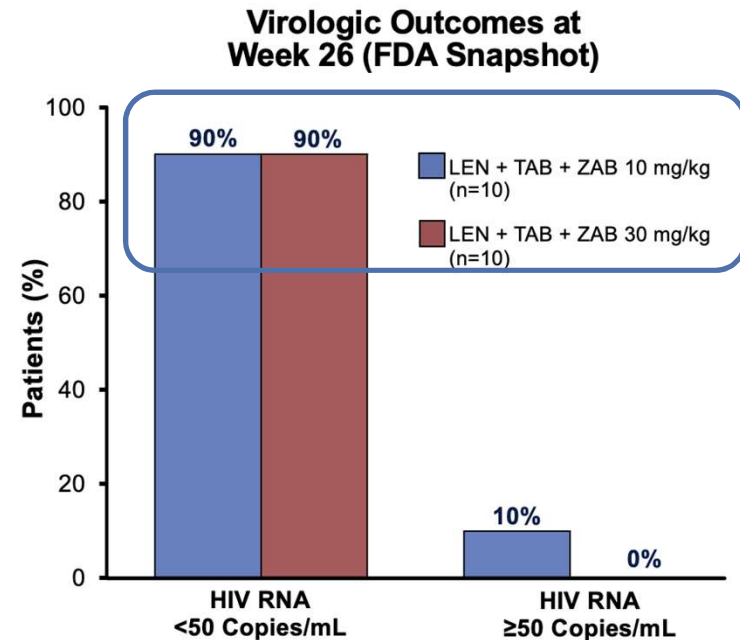


PRACTICE POINT<sup>®</sup> CME  
Communications



## Lenacapavir (Sunlenca®) + TAB/ZAB Study: Proof of Concept Study 26-week efficacy and safety results

- Viral suppression sustained for 6 months after 1 dose
  - 1 virologic rebound but resuppressed on baseline ART
  - 1 discontinued, to go back on oral ART
- CD4 counts remained stable
- Generally safe and well tolerated
- Good PK data for all drugs above minimum susceptibility cutoffs
- Phase 2 study being planned



PRACTICE POINT® CME  
Communications

## Lenacapavir (Sunlenca®) Future Research for HIV Prevention:

Study Names: **PURPOSE 1**; GS-US-412-5624; [NCT04994509](https://clinicaltrials.gov/ct2/show/NCT04994509)<sup>1</sup>  
Phase: 3; with 5010 participants  
Status: This study is currently recruiting participants.  
Locations: South Africa and Uganda

Actual Study Start Date ⓘ : August 30, 2021  
Estimated Primary Completion Date ⓘ : March 2024  
Estimated Study Completion Date ⓘ : July 2027

A Phase 3, Double-Blinded, Multicenter, Randomized Study to Evaluate Safety and Efficacy of Twice Yearly Long-Acting Subcutaneous Lenacapavir, and Daily Oral Emtricitabine/Tenofovir Alafenamide for Pre-Exposure Prophylaxis in Adolescent Girls and Young Women at Risk of HIV Infection

Study Names: **PURPOSE 2**; GS-US-528-9023; [NCT04925752](https://clinicaltrials.gov/ct2/show/NCT04925752)<sup>2</sup>  
Phase: 3; with 3000 participants  
Status: This study is currently recruiting participants.  
Locations: United States, Brazil, Puerto Rico, and South Africa

Actual Study Start Date ⓘ : June 28, 2021  
Estimated Primary Completion Date ⓘ : January 2024  
Estimated Study Completion Date ⓘ : April 2027

A Phase 3, Double-Blind, Multicenter, Randomized Study to Evaluate the Efficacy and Safety of Subcutaneous Twice Yearly Long-Acting Lenacapavir for HIV Pre-Exposure Prophylaxis in Cisgender Men, Transgender Women, Transgender Men, and Gender Nonbinary People ≥ 16 Years of Age Who Have Sex With Male Partners and Are at Risk for HIV Infection

1. <https://classic.clinicaltrials.gov/ct2/show/NCT04994509>

2. <https://classic.clinicaltrials.gov/ct2/show/NCT04925752>

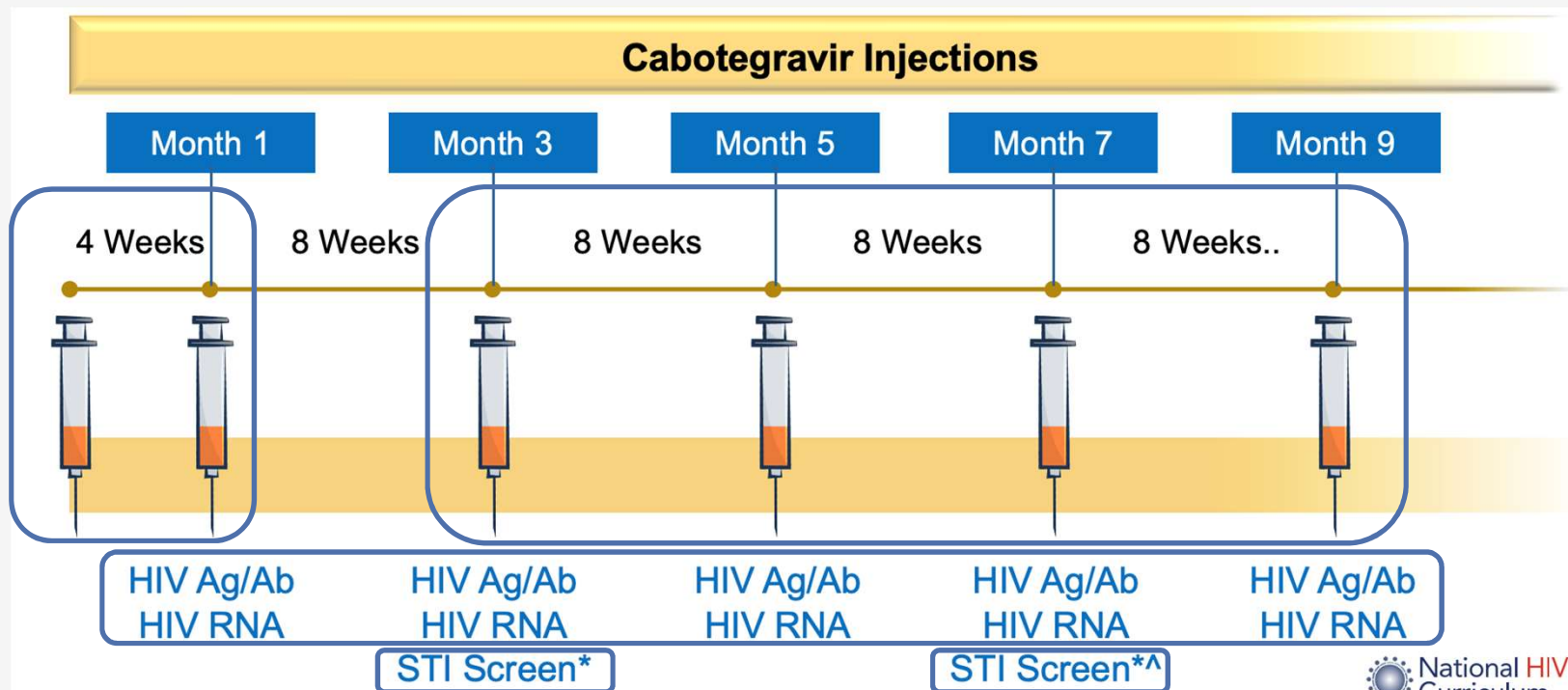


## Cabotegravir (Apretude®) ER Injection for PrEP

### Indication:

- Integrase strand transfer inhibitor (INSTI) regimen indicated to reduce the risk of sexually acquired HIV-1 infection for use in adults and adolescents who weigh  $\geq 35$  kg
- Must have a baseline negative HIV-1 test within 7 days of starting [HIV RNA test, HIV-1/2 Ag/Ab Test]
- STI Testing (syphilis, gonorrhea, chlamydia)
- NO baseline: Sr Creatinine, Hep B serology, lipid panel, or liver function
- Oral Lead-in is optional [28 days CAB 30mg PO daily]
- Initiation/Continuation Phase Injections [CAB 600mg/3mL]  
(See prescribing information)

# Cabotegravir (Apretude®) ER Injection: Initiation-Continuation-Monitoring



\*Bacterial STI screening for men who have sex with men and transgender women who have sex with men (every 4 months)

^Bacterial STI screening for heterosexually active women and men (syphilis and gonorrhea every 6 months; chlamydia every 12 months)

# Cabotegravir (Apretude®) ER Injection: Evidence

## HPTN 083 and 084: LA IM CAB Q2M vs Daily Oral FTC/TDF for PrEP

- International, randomized, double-blind phase IIb/III (083) and phase III (084) trials
- LA IM CAB met criteria for **superiority** vs daily oral FTC/TDF in both trials

### HPTN 083<sup>1</sup>

- N = 4566 MSM and TGW
- 12 incident infections on LA CAB
  - **4 with on-time injections**
    - Additional 3 identified after initial analysis (**7 reported with on-time injections to date**)<sup>2</sup>
- HR for CAB vs FTC/TDF: **0.34 (95% CI: 0.18-0.62)**

### HPTN 084<sup>3</sup>

- N = 3224 cisgender women
- 4 incident infections on LA CAB
  - **1 with on-time injections**
    - 1 later determined to be infected at baseline
- HR for CAB vs FTC/TDF: **0.12 (95% CI: 0.05-0.31)**

## Cabotegravir (Apretude®) ER Injection: HIV Monitoring on PrEP

- 2021 CDC guidelines recommend **HIV-1 RNA assays** for monitoring patients on **both oral and LA injectable PrEP**<sup>1</sup>
  - Every 3 mo with oral PrEP; every 2 mo with LA CAB

- In HPTN 083, HIV detection with antigen/antibody testing was delayed compared with qualitative HIV-1 RNA testing<sup>2</sup>

Delays in Diagnosis, Median Days <sup>3</sup>	Baseline Infections	Incident Infections
CAB	62	98
FTC/TDF	34	31

- 5 patients in HPTN 083 (0 in HPTN 084) received LA CAB after HIV infection and developed INSTI resistance<sup>3,4</sup>

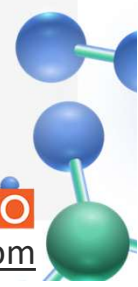
1. [cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf](https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf). 2. Marzinke. CROI 2021. Abstract 153.  
3. Marzinke. J Infect Dis. 2021;224:1581. 4. Delany-Moretlwe. Lancet. 2022;399:1779. .

# Cabotegravir (Apretude®) ER Injection: LEVI Phenomenon [Long-Acting Early Viral Inhibition]

Feature	AHI	LEVI
<b>Cause</b>	Phase of natural HIV infection	LA ARV for PrEP
<b>Onset</b>	New infection	Infection during PrEP; initiation of PrEP during acute/early infection
<b>Viral replication</b>	Explosive	Smoldering
<b>Symptoms</b>	Fever, chills, rash, night sweats, muscle aches, sore throat, fatigue, swollen glands	Minimal, variable, often no symptoms reported
<b>Detection</b>	Ag/Ab, RNA (including point-of-care and pooled tests), DNA, and total nucleic acid assays	Ultrasensitive RNA assay (often low/undetectable HIV-1 RNA and HIV-1 DNA, diminished/delayed Ab production)
<b>Assay reversion</b>	Rare	Common for many test types
<b>Duration</b>	1-2 wk (until Ab detection)	Mo (until viral breakthrough, drug clearance, or ART start); can persist months after ARV is discontinued
<b>Transmission</b>	Very likely	Unlikely (except possibly via blood transfusion)
<b>Drug resistance</b>	No (unless transmitted)	Yes (can emerge early when HIV-1 RNA is low)

Eshleman. CROI 2023. Abstract 160.

Slide credit: [clinicaloptions.com](https://clinicaloptions.com)



# Cabotegravir (Apretude®) ER Injection: Analysis of Delayed Injections Among Cisgender Women in HPTN 084

- CAB concentrations assessed in participants randomized to LA CAB during blinded phase of HPTN 084
- Delayed CAB injections:

– **Type 1:** second injection occurred 8-14 wk after first injection

– **Type 2:** any subsequent injection (after second injection) occurred 12-18 wk after preceding injection

- 194 participants had ≥1 type 1 or 2 delay for total of 224 delay occurrences: 19 type 1; 205 type 2


CAB Trough Concentrations With Type 2 Injection Delays, n (%)	Time Between Injections, Wk		
	12-14 (n = 109)	14-16 (n = 57)	16-18 (n = 39)
>8x PA-IC <sub>90</sub>	95 (87)	48 (84)	24 (62)
>4-8x PA-IC <sub>90</sub>	12 (11)	6 (11)	11 (28)
1-4x PA-IC <sub>90</sub>	1 (1)	2 (4)	2 (5)
<1x PA-IC <sub>90</sub>	1 (1)	1 (2)	2 (5)

Goal concentrations


- **Most CAB concentrations remained at goal 16-18 wk after the prior injection (8- to 10-wk delay in dosing)**


Marzinke. CROI 2023. Abstr 159.






## Summary

1. CAB/RPV can be expected to maintain suppression in pts who are currently suppressed on high barrier to resistance regimens like Biktarvy.
  2. CAB/RPV IM thigh rather than gluteal injections become a possibility with more research.
  3. CAB/RPV use to achieve suppression in pts who are currently viremic is an interesting research area, but not ready for widespread clinical application
  4. LEN is one of the most promising new ARV agents due to its potency and long duration of effect. We may see new approvals for prevention as well as treatment soon.
  5. CAB for PrEP has impressive efficacy but comes with a cost of resistance for Tx failures. Emphasizes the need to monitor use by HIV RNA screening and be aware of LEVI.
  6. Something to watch: CAB use for PrEP in Cis Women may be considered for interval extension to once every 3 months rather than every 2 months, due to promising PK data.
- 



## References

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# Thanks!

Do you have any questions?

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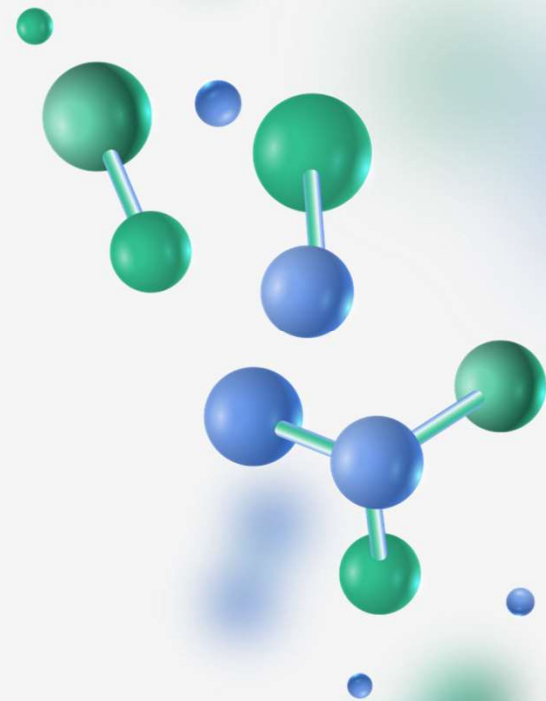
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# AK ID ECHO

## AK Infectious Disease ECHO

- Second Tuesday of every month from noon-1:00 PM
- To join, <https://echo.zoom.us/meeting/register/tZ0qc--qqj0qH9cw7gRs1d7K98I3AlvQJjHa>
- [www.anthc.org/ak-id-echo](http://www.anthc.org/ak-id-echo)
- Upcoming sessions
  - August 8: *Mycoplasma genitalium* STI
  - September 12: Hepatitis B
  - October 10: DoxyPEP



# ADDITIONAL LEARNING OPPORTUNITIES

## Alaska Liver Disease ECHO

- Third Thursday of every month from noon-1:00 PM
  - <https://echo.zoom.us/meeting/register/tZUrcOqqqTwjHt2OI6vWpnJ9v1v3pG0BqjBc>
  - [www.anthc.org/ak-id-echo](http://www.anthc.org/ak-id-echo)
- 2023 theme ~ *Ways You Can Help Reduce Morbidity of Mortality From Liver Disease*
- July 20: Emphasizing Nutrition for Liver Health

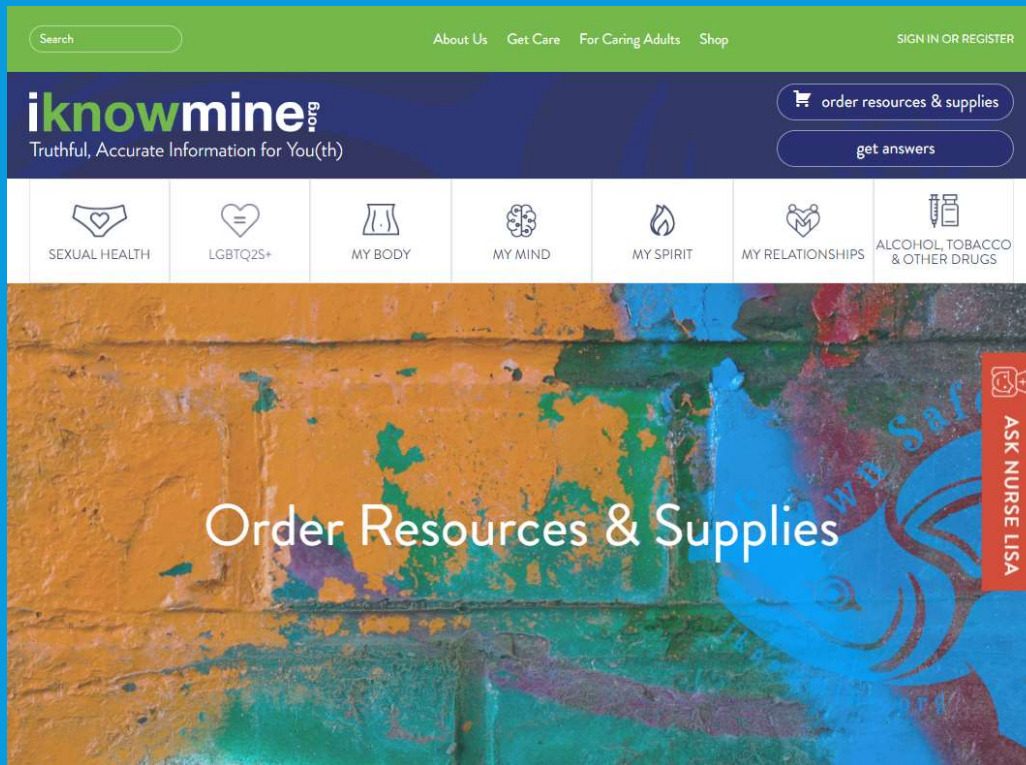
## LiverConnect

- Second Tuesday of every month 8:00-9:00 AM
  - <https://echo.zoom.us/meeting/register/tJUvdeytqT4vGtzmN4TyvltMINRIZW7U38EU#/registration>
  - [www.anthc.org/hep/liverconnect](http://www.anthc.org/hep/liverconnect)
- August 8: Portal Hypertension and Beta Blockers



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# Free prevention resources available at [iknowmine.org/shop](https://iknowmine.org/shop)



HARM REDUCTION KIT



CONDOMS FOR ORGANIZATIONS



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM



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*Thank you!*

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