Long-Acting Cabotegravir Plus Rilpivirine In Adolescents With HIV: Week 24 Safety/PK

IMPAACT 2017 / More Options for Children and Adolescents (MOCHA) Study

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Abstract 188
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BACKGROUND

- IMPAACT 2017 study participants are the first group of adolescents living with HIV-1 to receive long-acting (LA) cabotegravir (CAB LA) plus rilpivirine (RPV LA) and stop their oral medications

- This CAB LA + RPV LA regimen was approved for treatment of HIV-1 in virologically suppressed adults by the US FDA:
  - In January 2021 as a once-monthly treatment;
  - In February 2022 for every-two-month dosing

- IMPAACT 2017 Cohort 1 data informed approval for CAB LA + RPV LA in virologically suppressed adolescents (≥12 years and weighing ≥35 kg)

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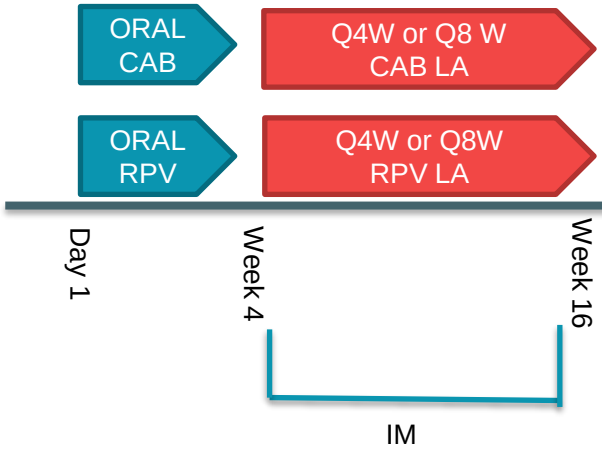
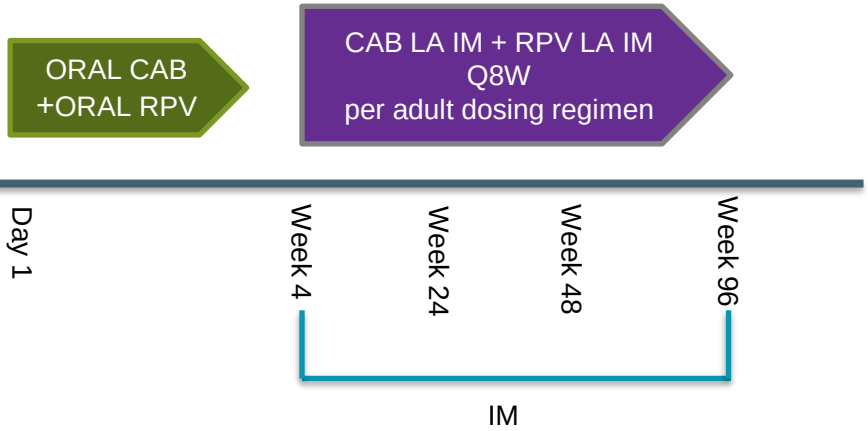
Study Design

Cohort 1
(retain background cART)
Total n = 55:
30 (CAB) + 25 (RPV)



Cohort 2
(switch from background cART)
Total n = 144: 44 (roll over) + 100 (Cohort 1 naïve)

Primary Objective: To assess the safety of CAB LA + RPV LA through Week 24 in virologically suppressed adolescents living with HIV.



18 IMPAACT 2017 sites enrolled in Cohort 2

2 Botswana
4 South Africa
3 Thailand
2 Uganda
7 US

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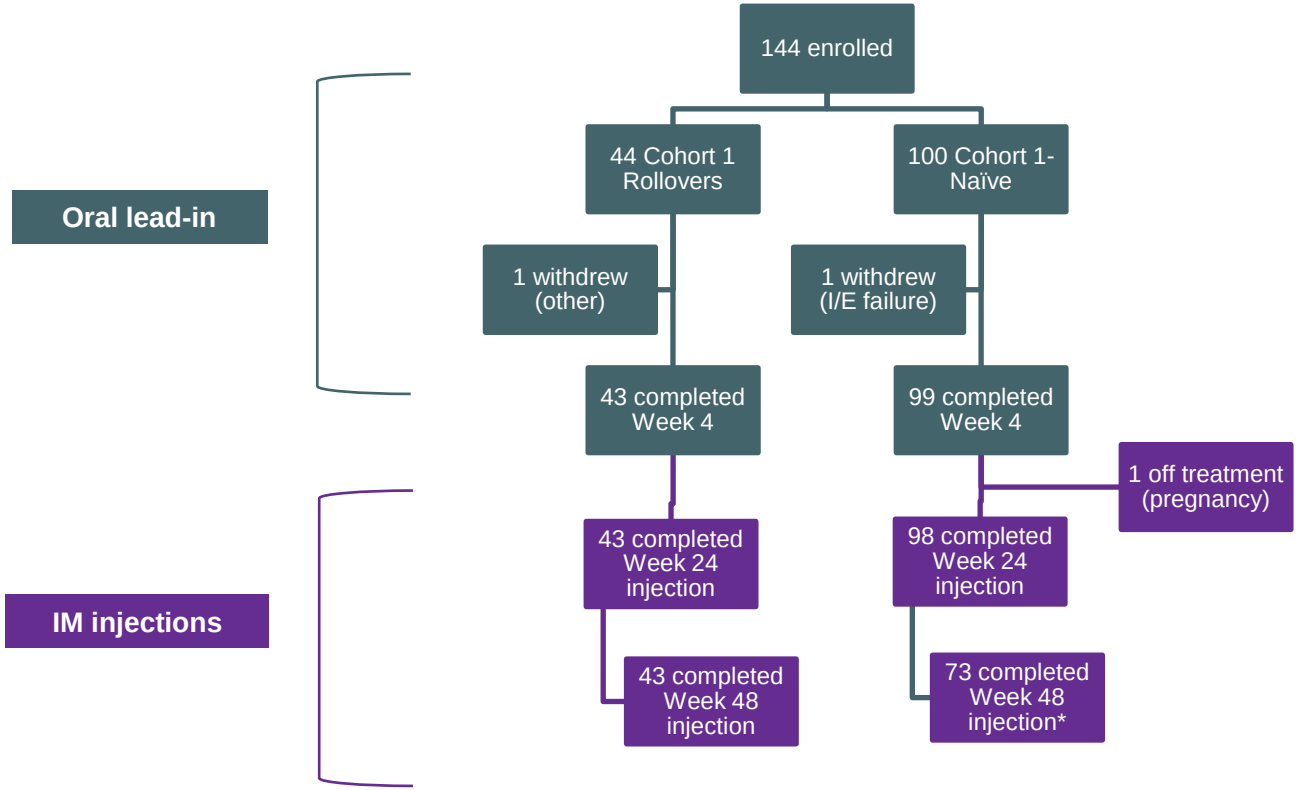
COHORT 2: ACCRUAL AND STUDY STATUS*



*As of database freeze on June 7, 2023 by which last participant completed week 24

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BASELINE (N = 144)

Variable	Value
Age (median [min, max])	15 years (12, 17)
Female	51%
Black or African American	74%
Acquired HIV Vertically	92%
Body Mass Index (median [min, max])	19.5 kg/m^2 (16, 34)
Weight (median [min, max])	48 kgs (35, 101)

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Cohort 2 Safety, PK, Antiviral activity

All treated analysis shown

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SAFETY

- Most participants received ≥1 injection (142/144) and completed the Week 24 visit (141/144)
- 49/142 (35%) participants reported an injection site reaction (ISR), most (86%) ISRs resolved within 7 days
- 1 participant had study drug-related Grade 3 injection site abscess
- 1 participant had study drug-related Grade 3 injection site abscess and Grade 3 injection site pain
- Both participants continued on study

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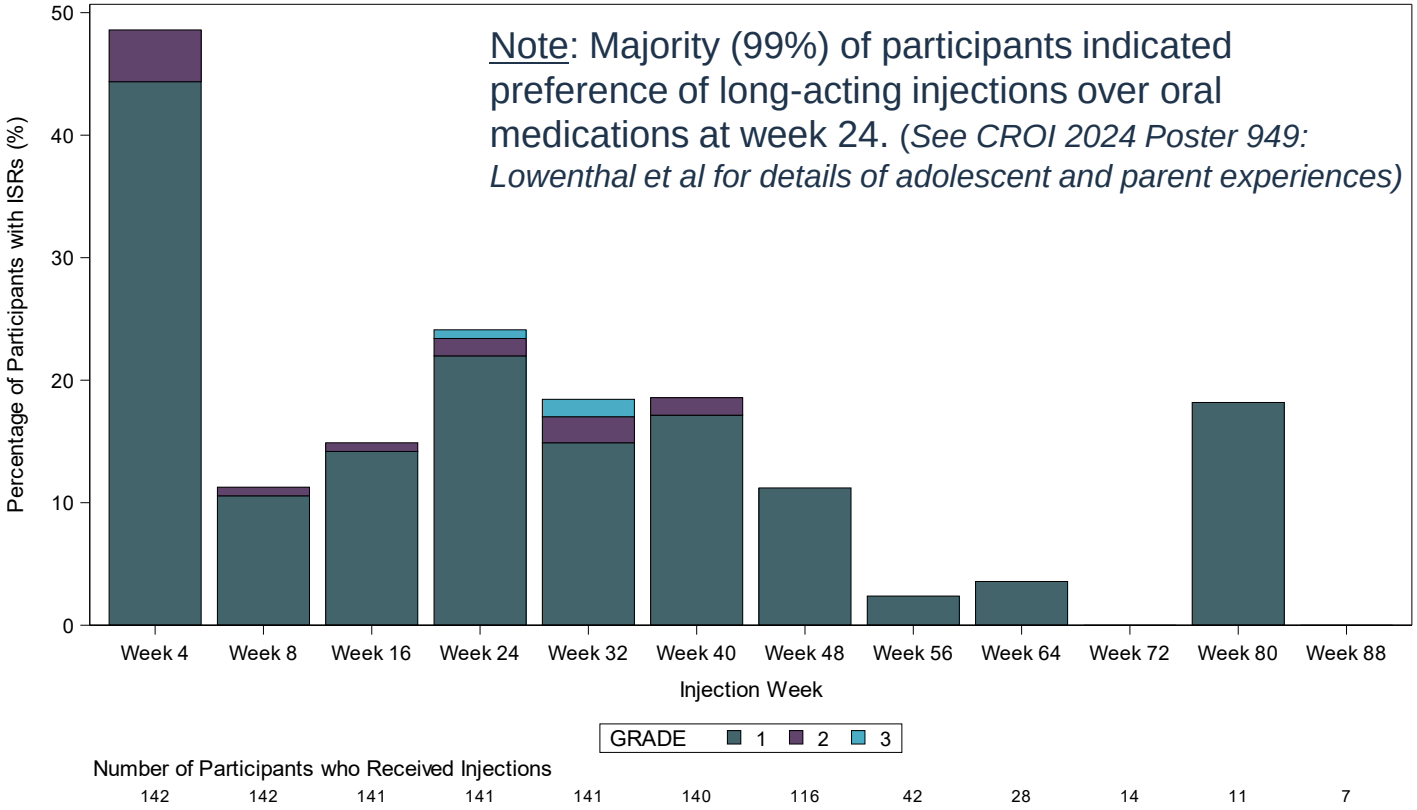
Injection Site Reactions (ISR) by study visit



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SAFETY (CONTINUED)

- Through Week 24, 16/144 (11%) had a non-injection site reaction, ≥ Grade 3 AE. The most common of which were increases in blood creatine phosphokinase (n=6) and systolic blood pressure (n=3). None of these non-injection site reaction AEs were considered study drug related.

- There were no deaths or life-threatening events that were attributable to either study product, or permanent discontinuations from treatment due to study product-related toxicities

ANTIVIRAL ACTIVITY

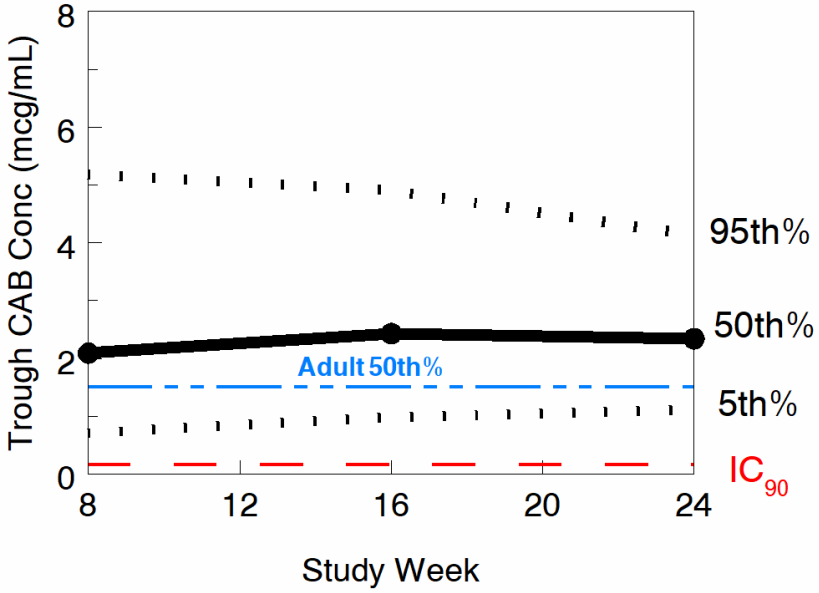
- Majority (96.5%) of participants maintained virologic suppression (HIV-1 RNA < 50 copies/mL, per the FDA Snapshot algorithm) at Week 24.

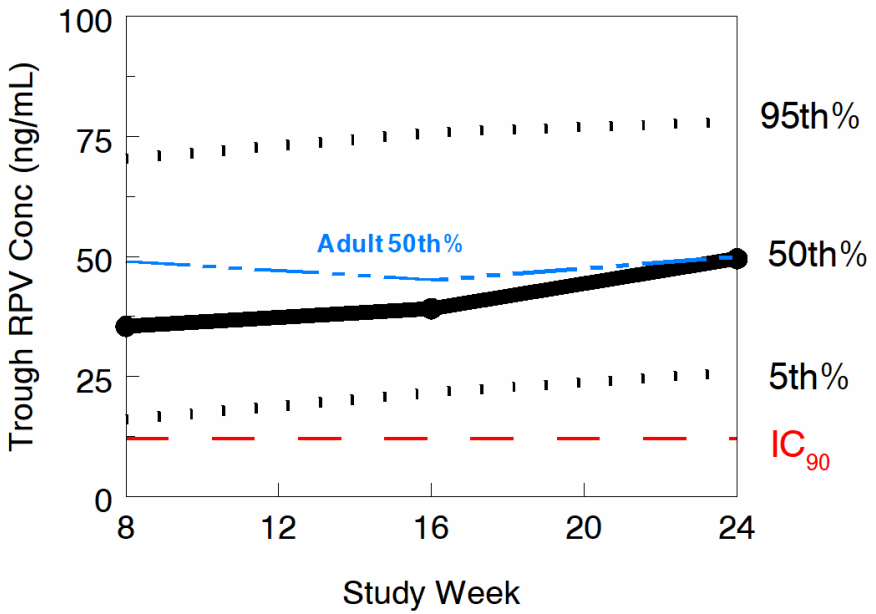
- There were no confirmed virologic failure (2 consecutive HIV VL ≧ 200 copies/mL)

PREGNANCY

- One pregnancy in a Cohort 2 (Cohort 1 naïve) study participant
- Relative study week of estimated conception: Week 5
  - Note: Study injections were discontinued upon confirmation of pregnancy.
- Two study injections (Week 4 and Week 8) received prior to pregnancy confirmation
- Pregnancy outcome: Term delivery, live birth, Birth weight 2.58 kgs

PHARMACOKINETICS





IMPAACT 2017 CAB and RPV troughs (Black lines - medians [solid] with 5th%-95th% [dashed]) compared to adults (Blue lines) from LATTE-2 / ATLAS-2M studies and protein adjusted IC_{90}s (Red lines)

Conclusions based on Week 24 data from Cohort 2 of the IMPAACT 2017 STUDY

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In this first group of virologically suppressed adolescents switched to long-acting CAB + RPV every 2 months

- There were no unexpected safety events
- Week 24 CAB and RPV troughs were similar to those in adults
- Virologic suppression was maintained.
- Overwhelming preference for long-acting injections over oral medications.

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In summary

- IMPAACT 2017 data continue to support using CAB LA and RPV LA, given every 4 or 8 weeks, per the adult-dosing regimens, in virologically suppressed adolescents ≥12 years and weighing ≥35 kg

- Ongoing follow-up of study participants through Week 96 continues

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