

IMPAACT 2040: Cabotegravir & Rilpivirine Antiretroviral Therapy in Pregnancy (CREATE)

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Background & Rationale

- ▶ Long-acting (LA) injectable cabotegravir (CAB) & rilpivirine (RPV) offer a monthly or bi-monthly alternative to daily oral antiretroviral therapy (ART)
- ▶ Preclude barriers of pill burden, daily adherence, & disclosure of HIV status/stigma
- ▶ **Critical need to evaluate:**
 - Pregnancy-associated changes in pharmacokinetics (PK) & pharmacodynamics (PD) of CAB LA + RPV LA
 - Maternal and fetal/neonatal safety

Study Design

- ▶ Phase I/II, multicenter, open-label, non-randomized, parallel (two) group, step-wise study

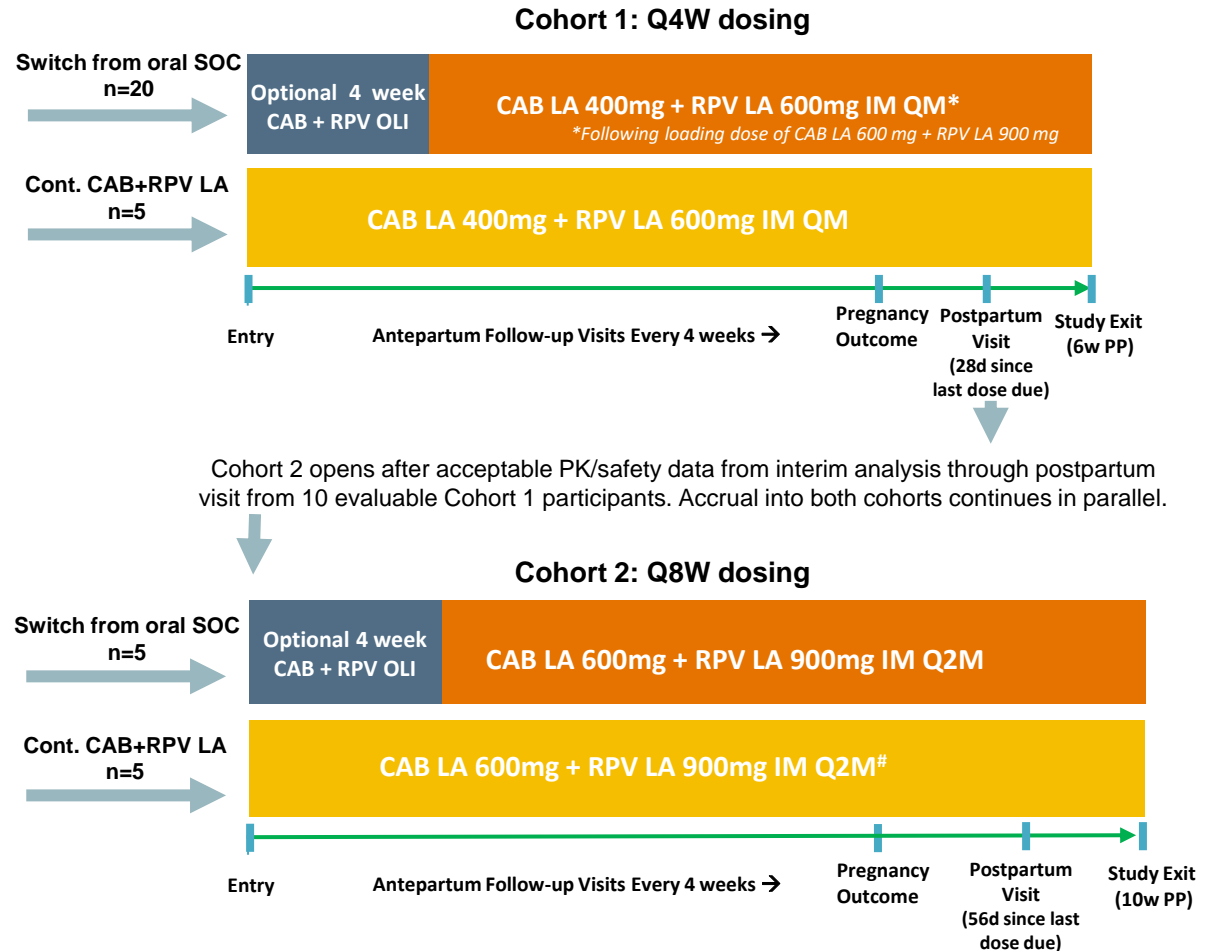
Primary Objective

- ▶ Characterize the pharmacokinetics (PK) of CAB LA + RPV LA during pregnancy up to 6-10 weeks postpartum in people with virally suppressed HIV-1 switching to CAB LA + RPV LA (from oral ART) and continuing on CAB LA + RPV LA

Key Secondary & Other Objectives

- Maternal & neonatal safety signals
- Maternal viral suppression
- Perinatal HIV transmission
- Delivery and post-natal infant outcomes
- Breast/chest milk and placental transfer
- Tolerability and acceptability
- PK modeling

Study Schema



Cohort 1: Q4W dosing

Switch from oral SOC
n=20

Optional 4 week
CAB + RPV OLI

CAB LA 400mg + RPV LA 600mg IM QM*

**Following loading dose of CAB LA 600 mg + RPV LA 900 mg*

Cont. CAB+RPV LA
n=5

CAB LA 400mg + RPV LA 600mg IM QM

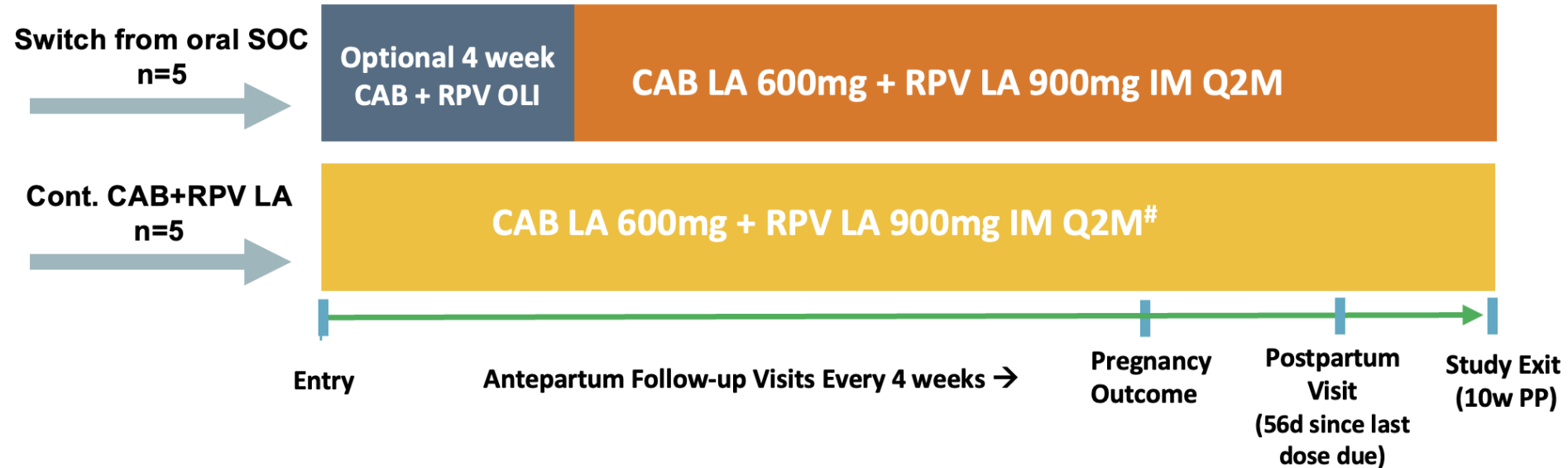
Entry

Antepartum Follow-up Visits Every 4 weeks →

Pregnancy
Outcome

Postpartum
Visit
(28d since
last dose due)

Study Exit
(6w PP)

Cohort 2: Q8W dosing

Sample size & Sites

- ▶ **Sample size:** Up to 45 pregnant people with virally suppressed HIV-1 & their infants to achieve 25 evaluable pairs in the switch group and 10 evaluable pairs in the continuation group
- ▶ **Sites:** United States & South Africa

	Switch Group	Continuation Group	Total
Cohort 1: Q4W dosing	20	5	25
Cohort 2: Q8W dosing	5	5	10
Total	25	10	35

Eligibility Criteria

INCLUSION	EXCLUSION
<ul style="list-style-type: none"> ➤ ≥18 years ➤ Single, live, intrauterine pregnancy ➤ Virally suppressed HIV-1 on oral ART (<i>switch</i> group) or CAB LA + RPV LA (<i>continuation</i> group) ➤ EGA: <ul style="list-style-type: none"> • 10w – 13w4d for switch group <i>with OLI</i> • 14w – 19w4d for switch group • ≤19w4d for continuation group 	<ul style="list-style-type: none"> ➤ Contraindication to CAB or RPV ➤ Contraindication to IM injection ➤ History of virologic/treatment failure ➤ Hepatitis B or C ➤ History of Nevirapine use ➤ Uncontrolled maternal co-morbidities, including seizure disorder and severe hepatic impairment ➤ Known/active TB and/or COVID-19 ➤ Therapeutic anticoagulation

Thank you & Questions