



***P1026s Pharmacokinetic Properties of Antiretroviral  
Drugs During Pregnancy V 10.0***

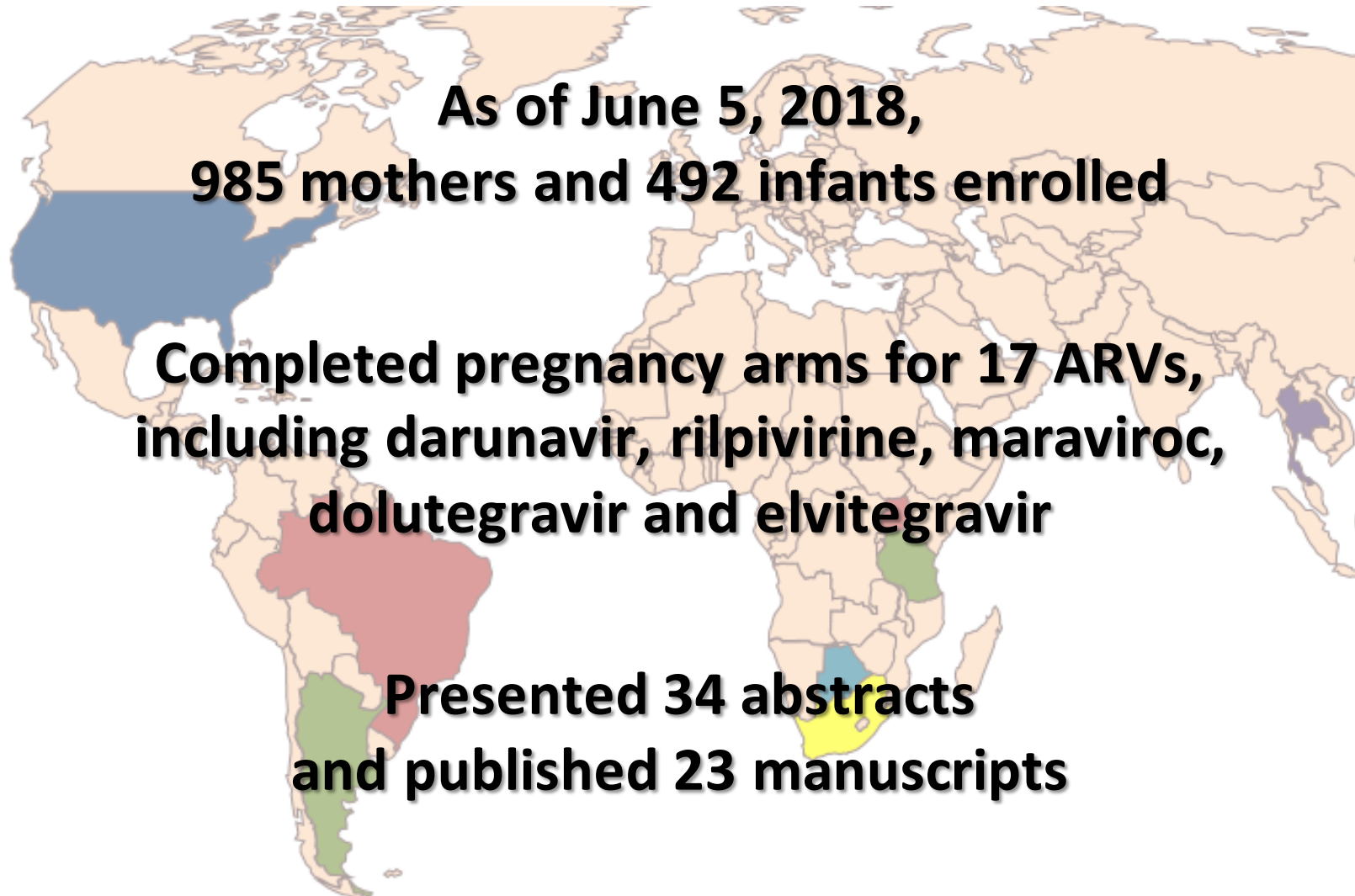
***IMPAACT 2026 Pharmacokinetic Properties Of HIV,  
TB, Contraceptive And Related Drugs During  
Pregnancy And Postpartum V 1.0***

***Overview***

***IMPAACT Annual Meeting June 18, 2018***

# Study Highlight: P1026s

## Pharmacokinetic Properties of Antiretroviral Drugs During Pregnancy



# P1026s Design Summary

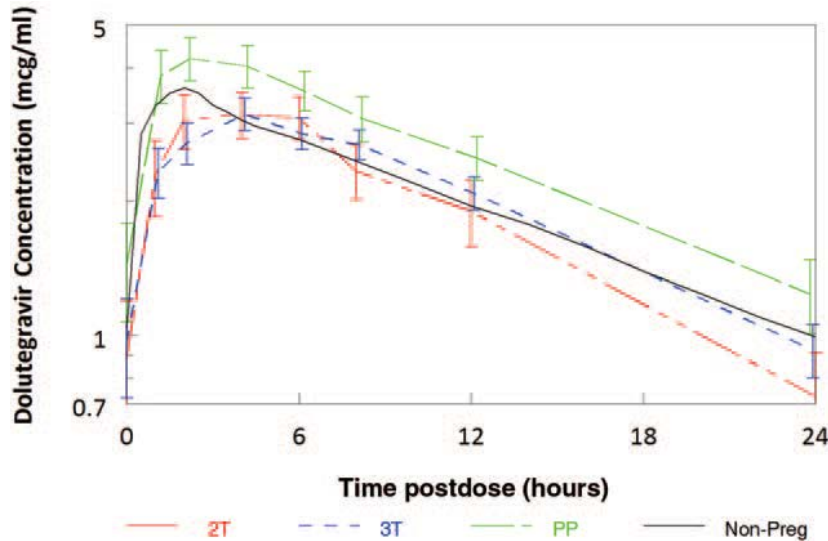
- Opened 6/1/03, now on version 10.0
- Opportunistic design – enroll pregnant/postpartum women receiving selected ARV's, TB drugs and/or postpartum contraceptives as part of clinical care
  - Clinical care providers prescribe all drugs, are responsible for clinical management
- Pregnant subjects – ARV's, TB drugs
  - PK sampling during 2<sup>nd</sup> trimester, 3<sup>rd</sup> trimester and postpartum
  - Rapid turn around of assay results - to clinician within 2 weeks
  - Adjustment of dosing and repeat PK sampling at caregiver discretion
  - At delivery, collection of maternal plasma and cord blood samples
  - After birth, collection of washout PK samples from neonate
- Postpartum subjects – ARV's plus contraceptives
  - PK sampling prior to start of contraception (2-12 weeks postpartum), repeated 6-7 weeks later
- Target sample size – 25 evaluable subjects per arm

# IMPAACT P1026s V10: Current Enrollment Status

Arm	Number Enrolled	Target Accrual	% Completed
<b>Antepartum/HIV-infected Arms</b>			
TAF 25 mg with COBI or ritonavir	15	25	60%
TAF 10 mg with COBI	30	25	100%
TAF 25 mg w/o COBI or ritonavir	27	25	100%
ATZ/COBI	5	25	20%
DRV/COBI	28	25	100%
DRV/r (800/100)	24	25	96%
DRV/r (900/100)	2	25	8%
<b>TB Arms</b>			
First line TB drugs with EFV	20	25	80%
First line TB drugs with LPV/r	1	25	4%
TB Only	14	25	56%
Second Line TB drugs (HIV-infected and uninfected)	3	25	12%
<b>Postpartum Contraception Arms</b>			
DRV/COBI or ATZ/COBI + oral contraceptives	0	25	0%
DRV/COBI or ATZ/COBI + etonogestrel	1	25	4%
EFV + oral contraceptive	27	25	100%

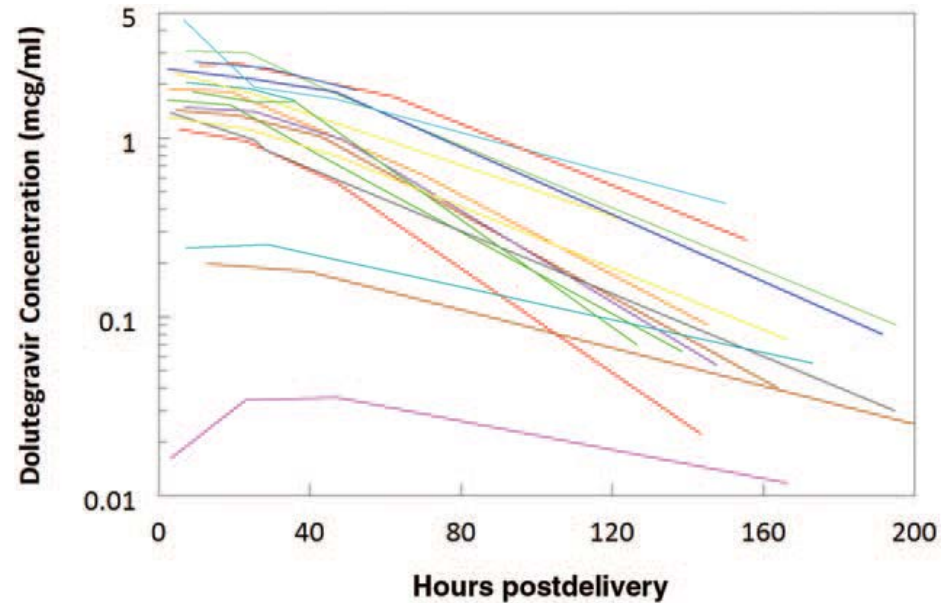
# P1026s Dolutegravir Arm

## Mother



## Infant

- Median (IQR) ratio DTG cord blood to maternal plasma: 1.25 (1.07–1.40)
- Median (IQR) DTG half-life was 32.8 h (25.9–35.9)



# P1026s Elvitegravir/Cobi Arm

Mother

**Elvitegravir**

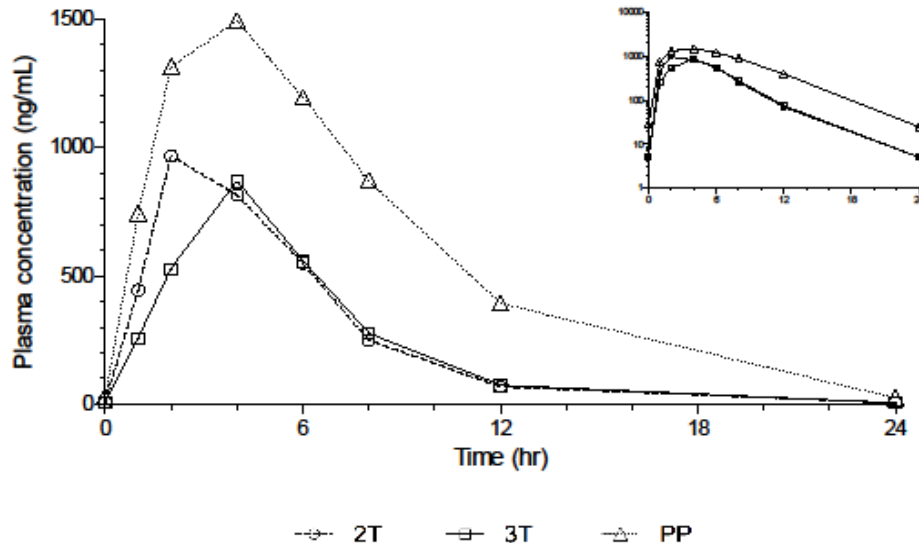
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pending publication

Infant

**Elvitegravir**

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pending publication

(b) **Cobicistat**



## Cobicistat

- Maternal plasma and cord blood Cobi at delivery BQL in 8 of 15 women
- In other 7 women, median (IQR) Cobi ratio cord blood to maternal plasma: 0.09 (0.05–0.12)
- Cobi BQL in all infant washout samples

# Upcoming Changes

- Need arms for new ARV's and need to revise some existing arms:
  - Bictegravir/FTC/TAF
  - Doravirine
  - Intracellular TAF
  - Cabotegravir injectable
  - TB drugs, including breast milk transfer
  - Interaction between DTG and postpartum contraception
- Protocol needs to become compliant with RAVE and CDISC
- **Solution**: Instead of P1026s v11, a new protocol ***IMPAACT 2026*** is being developed

# IMPAACT 2026

- Component 1: HIV infected pregnant women on oral ARVs
  - Bictegravir
  - Doravirine
  - TAF (Intracellular)
- Component 2: HIV infected and uninfected pregnant women on LA/ER ARVs
  - Cabotegravir
- Component 3: HIV infected pregnant women on first line TB treatment (INH/PZA/EMB/PZA/MFX)
  - Dolutegravir
  - ATZ/r or DRV/r
- Component 4: HIV infected and uninfected pregnant women on second line TB treatment
  - Moxifloxacin (MFX)
  - Levofloxacin (LVX)
  - Clofazimine (CFZ)
  - Linezolid (LZD)
  - Bedaquiline (BDQ)
  - Delamanid (DLM)
- Component 5: HIV-infected postpartum women receiving DTG and oral or implant contraceptives
- Component 6: HIV infected and uninfected postpartum women who are breastfeeding while receiving oral ARVs, first or second line TB treatment