IMPAACT 2010:
Phase III Study of Virologic Efficacy and Safety of Dolutegravir-Containing versus Efavirenz-Containing ART Regimens in HIV-1-Infected Pregnant Women and their Infants
Study 2010 Design

**Arm 1: Maternal DTG/FTC/TAF During Pregnancy and Postpartum**
- Maternal follow-up for approximately 12-26 weeks prior to delivery
- Maternal and infant follow-up for 50 weeks after delivery (infant receives local standard prophylaxis)

**Arm 2: Maternal DTG/FTC/TDF During Pregnancy and Postpartum**
- Maternal follow-up for approximately 12-26 weeks prior to delivery
- Maternal and infant follow-up for 50 weeks after delivery (infant receives local standard prophylaxis)

**Arm 3: Maternal EFV/(FTC or 3TC)/TDF During Pregnancy and Postpartum**
- Maternal follow-up for approximately 12-26 weeks prior to delivery
- Maternal and infant follow-up for 50 weeks after delivery (infant receives local standard prophylaxis)

Enrollment at 14-28 weeks gestation

Delivery

Completion of follow-up at 50 weeks postpartum

Weeks on Study
Study 2010 Design

• Randomised 1:1:1 open label 3-arm trial (183/arm, 549 total)
  – DTG/TAF/FTC vs.
  – DTG/TDF/FTC vs.
  – EFV/TDF/XTC

• Women starting ART at 14-28 weeks gestation (and their children), followed through 50 weeks postpartum (prior ARVs for PMTCT permitted)

• Multinational (23 IMPAACT sites, 2 in US)
Study 2010 Endpoints

• Primary endpoints:
  – Virologic efficacy (< 200 cp/mL at delivery)
  – Adverse pregnancy outcomes (spontaneous abortion, fetal death, SGA, or preterm delivery)
  – Maternal and infant toxicity

• Main secondary endpoints:
  – Virologic suppression
    • At 50 weeks postpartum
    • To <50cp/mL at delivery
    • By FDA snapshot algorithm
  – Bone (by DXA) and renal toxicity (mothers and infants)
  – Mother-infant ARV transfer at birth and from breast milk
  – MTCT, ARV drug resistance (in HIV+ infants, mothers with VF)
  – Adherence
  – Postpartum depression

• Anticipate starting in first half of 2017 at 23 sites (most in Africa; few in Thailand, Brazil, India, possibly US)
Adherence Support

• Will outline and strongly encourage minimal package of adherence support (in MOP)
  – Education and adherence planning at initiation
  – Basic support and check-in package
  – Intensified approach, if virologic failure

• Training/support for site staff

• Wish to foster minimal standards, without mandating approach that is unlikely to be offered to non-trial population
Assessment of Adherence

• Virologic suppression
  – HIV-1 RNA at entry, then at 4, 8, 12 and 24 weeks on ART; delivery; then at weeks 14, 26, 38 and 50 postpartum

• Self-report (not used in adherence support)
  – 3-item scale (Wilson et al) at each study visit

• Hair ARV levels at delivery (mother) / birth (infant)
  – Monica Gandhi et al

• Survey at final (50-week postpartum) visit to assess barriers to/facilitators of adherence
Discussion

• Many thanks to Rivet Amico and members of the AWG who have provided input thus far
  – Rivet has joined the protocol team
  – Additional input welcome

• Possible separate capsule to perform qualitative work around adherence (? IDIs, FGDs in participants, study staff)