Risk Factors for Preterm Birth in Pregnant Women Randomized to Lopinavir- or Efavirenz-based ART

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Methods

Results

• Preterm birth is a major cause of perinatal morbidity and mortality.

• 2013 World Health Organization Consolidated Guidelines recommend combination antiretroviral therapy (ART) for all HIV-infected pregnant and breastfeeding women.1

• There are conflicting data on the association between ART, particularly protease inhibitors, and preterm birth.2,4

• One randomized trial showed an increased risk of preterm birth with lopinavir/ritonavir-based vs. triple ART ART.5

As more HIV-infected pregnant women start ART in resource-limited settings, it will be critical to understand potential risk factors for preterm birth, including ART.

Study Population

Study Design

Objectives

Methods (cont’d)

Multivariate Analysis

Conclusions

ART Regimens

Randomized to LPV/r/ATZ/3TC or EFV/ATZ/3TC

LPV/r dose was increased from 400/100 mg BID to 300/100 mg BID from 30 weeks gestation until delivery.

Study Procedures and Ultrasound Dating

• All women given daily TS and insecticide-treated bednets

• Placental malaria was evaluated by histopathology

Results (cont’d)

Inclusion Criteria:

Recruited from Tororo District Hospital and antenatal and labor wards at 202 women.

Infectious Diseases Research Collaboration, Kampala, Uganda; St. Andrews University, Zambia

Primary outcomes: preterm birth <37 weeks gestation

Secondary outcomes:

Very preterm birth <32 weeks gestation

Composite birth outcome:

Stillbirths and spontaneous abortions excluded

Effect of ART on very preterm birth in 202 women (N=194) after 24 weeks gestation.

In 123 women randomized to LPV/r, the composite birth outcome was not associated with preterm birth during ART.

In 123 women randomized to EFV, the composite birth outcome was not associated with preterm birth during ART.

The authors thank the PROMOTE study participants, the study staff, and the practitioners for their contributions to this study.

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