POOR OUTCOME IN EARLY-TREATED HIV-PERINATALLY INFECTED INFANTS IN AFRICA

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BACKGROUND

- HIV-infected infants should be treated early after diagnosis.
- Mortality and morbidity peak in the first 6 months after ART initiation and in infants <1-year-old.
- Mortality is linked to advanced disease at diagnosis. There are few data about determinants of poor outcome in early-treated infants.

AIM

To assess risk factors for poor outcome despite early ART in a cohort of infants in South Africa and Mozambique

METHODS

EARTH is a multi-centre cohort enrolling HIV-infected infants diagnosed and treated in the first 3 months of life. Enrolment started in May 2018. ART regimens followed national guidelines. Poor outcome was defined as mortality or severe disease (progression to WHO clinical stage 3 or 4 or CD4 below 25%). Risk factors for poor outcome and viral load (VL) suppression adjusting for socio-demographics, clinical, immunological and virological measures were assessed by multivariable time-dependent Cox-proportional hazards model, including time-dependent coefficient for follow-up VL and CD4.

RESULTS

To date, 135 infants were enrolled.
- 12 (9%) of infants died, 7 (5%) progressed to stage 3 or 4, and 16 (12%) had CD4 <25%.
- 32 (24%) had poor outcomes.
- 34 (25%) infants suppressed VL during follow-up at a median time of 5.2 months.
- Determinants of poor outcome were VL during follow-up (not baseline) and age at ART, after adjustment by site, baseline WAZ and ART regimen. (Figure 1)

THE RISK OF POOR OUTCOME IN EARLY TREATED INFANTS WAS
- 3 TIMES HIGHER PER EACH LOG10 (VL) DURING FOLLOW-UP
- 1.5 TIMES HIGHER PER MONTH THAT ART WAS DELAYED

THE TIME TO SUPPRESSION WAS INFLUENCED BY
- BASELINE VL
- MATERNAL SEVERE LIFE EVENTS OR HEALTH ISSUES

CONCLUSIONS

Despite early ART, a significant proportion of infants had a poor outcome during the first months of life. The poor outcome is mainly influenced by viral load during follow-up and time to ART.