

OA-013 **VIROLOGICAL RESPONSE TO EARLY COMBINED ANTIRETROVIRAL THERAPY IN HIV-INFECTED INFANTS: EVALUATION AFTER TWO YEARS OF TREATMENT IN THE PEDIACAM STUDY**

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**Background** Little is known about virological responses to early combined antiretroviral therapy (cART) in HIV-infected infants in limited-resource settings. We estimated the probability of achieving viral suppression within two years of cART initiation, and investigated the factors associated with success.

**Methods** We analysed all 190 infants from the Cameroon PediaCAM study who began free cART before the age of 12 months. The main outcome measure was viral suppression (<1000 cp/mL) on at least one occasion. The other outcome measures considered were viral suppression (<400 copies/mL) on at least one occasion and confirmed viral suppression (both thresholds) on two consecutive occasions. We used competing-risks regression for a time-to-event analysis to estimate the cumulative incidence of outcomes, and univariate and multivariate models to identify risk factors.

**Results** During the first 24 months of cART, 20.0% (38) of the infants died, giving a mortality rate of 11.9 deaths per 100 infant-years [95% CI: 8.1–15.7]. The probability of achieving a viral load below 1000 or 400 copies/mL was 80.0% [69.0–81.0] and 78.0% [66.0–79.0], respectively. The probability of virological suppression (with these two thresholds) on two consecutive occasions was 67.0% [56.0–70.0] and 60.0% [49.0–64.0], respectively. Virological success was associated with not having missed any doses of treatment before the visit, but not with socioeconomic and living conditions.

**Conclusions** The long-term daily administration of drugs to babies seems to be difficult. Mortality remained high despite early cART initiation. Future studies should focus on longer-term treatment outcomes in children still alive after two years of treatment.