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## Oral Abstract – O322

# Pregnant women with HIV on ART in Europe: how many achieve the aim of undetectable viral load at term and are able to deliver vaginally?

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### Purpose of the study

Mother-to-child transmission rates in Europe are below 1% in HIV-infected women on successful combined antiretroviral therapy (cART) irrespective of mode of delivery. Consequently, most national guidelines updated between 2001 and 2009 recommended vaginal deliveries for women with undetectable or very low viral load (VL). The aim of this study was to explore the impact of these new guidelines on the rates of vaginal deliveries following complete viral suppression on cART.

### Methods

A pooled analysis of data on HIV-1-positive women enrolled in the Swiss Mother & Child HIV Cohort Study and the European Collaborative Study with a live birth between 2000 and 2010 was carried out. Deliveries were classified as occurring pre- or post-publication of national guidelines recommending vaginal delivery in women with low/ undetectable VL for each country.

### Summary of results

Overall, 2527 mothers, 2848 deliveries and 2903 births were included from 10 countries. The women were mostly Caucasian (44%) or black (47%) and had a median age of 31 at the time of delivery. They were diagnosed with HIV a median of 3.3 years before pregnancy and 84% were CDC stage A with a median CD4 cell count of 450 cells/mm<sup>3</sup>. 17% reported a history of injecting-drug use (IDU) and 3% current IDU. 29% of women conceived on cART, 63% started in pregnancy and 8% received no antenatal ART. The most common regimen used was PI based cART (50%). Of the deliveries, elective caesarean section (CS) was carried out in 58%, emergency CS in 17% and vaginal delivery in 23%. Of 1869 women with a VL measure within the last trimester of pregnancy, only 65% had undetectable HIV-RNA. Overall, 21% of all deliveries occurring before the guideline change were vaginal, increasing to 48% subsequently. The proportion of women with undetectable VL having a CS decreased from 29% before to 13% after the guidelines update.

### Conclusions

Nearly half of all deliveries subsequent to European guideline changes were vaginal. Nevertheless, there are missed opportunities to achieve fully suppressed viral load at time of delivery and to deliver vaginally in HIV infected women. Further evaluation of treatment regimens, adherence data and barriers to treatment is planned within these cohorts.

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