**COMPARATIVE QUALITY OF LIFE OUTCOMES OF DOLUTEGRAVIR-BASED OR EFAVIRENZ-BASED ANTIRETOVIRAL TREATMENT IN PREGNANCY FOR LATE PRESENTORS BETWEEN THE 3RD TRIAL-MESTER AND 48 WEEKS POSTPARTUM**

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OBJECTIVES: Evidence on safety and health related quality of life outcomes is needed for rollout of new antiretroviral therapies. Dolutegravir-based treatment is being rolled out as the preferred first-line treatment for HIV in many low- and middle-income countries. We compared HRQoL between treatment-naïve pregnant women randomized to dolutegravir-based or efavirenz-base regimen in Uganda and South Africa.

METHODS: As part of the DoIPHIN-2 RCT, HRQoL data was gathered from 203 pregnant women mean age 28years, randomized to dolutegravir (101) and efavirenz (102). The medical outcomes study-HIV health survey was used at baseline, 24weeks and 48weeks between years 2017 and 2019. Physical health summary and mental health summary scores were primary-endpoints, while the 11 MOS-HIV subscales were secondary-endpoints. Pairwise t-tests were followed by ANCOVA analysis for within-group and between-group comparisons. Standardized multivariate regressions were included to associate selected-variables and MOS-HIV sub-scales with PHS and MHS scores.

RESULTS: After 24weeks postpartum, significant improvements were seen in dolutegravir-treatment; PHS-scores (11.9±1.4, P<0.001); MHS-scores (10.7±1.7, P<0.001) and efavirenz-treatment; PHS-scores (9±1.1, P<0.001); MHS-scores (6.7, P<0.001) groups. Changes were not significantly different (PHS: P=0.106, MHS: P=0.087) between treatment-group comparison. Dolutegravir-treated women presented significantly higher improvements in physical function scores (8.18±3.2, P=0.012) than efavirenz treatment-group. Treatment-effects were not significant on PHS-scores (F(1,178)=0.00, P=0.967) and MHS-scores (F(1,177)=0.60, P=0.441) adjusting for viral-loads and CD4-count. After 48weeks postpartum, increase in PHS-scores and MHS-scores remained significant in both treatment-groups but were not significantly different between-groups (PHS: 1.1±1.0, P=0.269, MHS: -0.8±1.6, P=0.606). Dolutegravir-treated women presented higher scores in 8/11 MOS-HIV subscales relative to efavirenz group. Treatment effects remained insignificant on PHS-scores F(1,193)=1.32, P=0.252 and MHS-scores F(1,191)=0.04, P=0.841 adjusting for viral-loads and CD4-count.

CONCLUSIONS: Increases in HRQoL-scores were generally higher in dolutegravir-treated women at 24weeks and 48weeks postpartum but not significantly different from those in efavirenz. Relationship between viral-load, CD4-count with PHS-scores and MHS-scores were similar in both treatments-groups.