Background. Poor adherence to antiretroviral therapy (ART) predicts virologic failure (VF). Self-reported adherence and health-related quality of life (QoL) have been associated with 2nd-line ART failure in resource-limited settings (RLS). Our objective was to assess whether QoL metrics added to self-reported adherence data at weeks 2 and 4 predicted early VF in predicting early VF.

Methods. ACTG A5273 was a randomized clinical trial conducted between 2012 and 2014, which showed non inferior virologic efficacy of lopinavir/ritonavir (LPV/r) + tenofovir/emtricitabine compared to LPV/r + nucleos(t)ide reverse transcriptase inhibitors as 2nd-line ART in participants failing non-nucleoside reverse transcriptase inhibitor ART at 15 sites in RLS. Early 2nd-line ART was defined as an HIV-1 RNA >400 copies/mL, as defined in ACTG SF-21, which has 6 QoL domains each scored between (0) and (100), median (75-100) and low (<75), enhanced prediction of early 2nd-line ART in addition to adherence.

Results. 512 eligible adults (64.3% male, median age 39 years) were included in the analysis; 500 individuals with QoL and adherence assessments at week 4. Early VF was more common among participants with self-reported incomplete adherence (14.4% versus 13.8%) and QoL score categories; high = 100; medium = 75-<100; low = <75; poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.

CONCLUSIONS

• Effective second-line ART was associated with improvements in QoL after 4 weeks, with lower improvements after 24 weeks for some domains (CF and E/F).

• Early second-line VF was associated with early incomplete self-reported adherence in RLS.

• Effective second-line ART was associated with improvements in QoL after 4 weeks, with lower improvements after 24 weeks for some domains (CF and E/F).

REFERENCES


ACKNOWLEDGMENTS

1. ACTG A5273 was a randomized clinical trial conducted between 2012 and 2014, which showed non inferior virologic efficacy of lopinavir/ritonavir (LPV/r) + tenofovir/emtricitabine compared to LPV/r + nucleos(t)ide reverse transcriptase inhibitors as 2nd-line ART in participants failing non-nucleoside reverse transcriptase inhibitor ART at 15 sites in RLS.

2. The primary analysis of the trial showed no difference in virologic outcome between the two regimens (4). In this analysis, early 2nd-line ART was defined as HIV-1 RNA >400 c/mL at week 24 with subsequent confirmation.

3. ACTG A5273 was a randomized clinical trial conducted between 2012 and 2014, which showed non inferior virologic efficacy of lopinavir/ritonavir (LPV/r) + tenofovir/emtricitabine compared to LPV/r + nucleos(t)ide reverse transcriptase inhibitors as 2nd-line ART in participants failing non-nucleoside reverse transcriptase inhibitor ART at 15 sites in RLS.

4. Poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.

5. ACTG A5273 was a randomized clinical trial conducted between 2012 and 2014, which showed non inferior virologic efficacy of lopinavir/ritonavir (LPV/r) + tenofovir/emtricitabine compared to LPV/r + nucleos(t)ide reverse transcriptase inhibitors as 2nd-line ART in participants failing non-nucleoside reverse transcriptase inhibitor ART at 15 sites in RLS.

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7. Poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.

8. Poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.

9. Poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.

10. Poorer QoL, particularly CF and E/F, adds to self-reported incomplete adherence score at week 4 (OR=3.87, 95% CI=1.34-12.72, p=0.009) from baseline to week 4 in all domains. Mean QoL improved significantly from baseline to week 4 in all domains (Table 4). This association remained after adjusting for site, CD4 and number of comorbidities.