QUALITY OF LIFE IMPROVEMENT DURING SECOND-LINE THERAPY IN RESOURCE-LIMITED SETTINGS

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ABSTRACT

Background: Health-related quality of life (QoL) improves on first-line antiretroviral therapy (ART). However, at first-line treatment failure, we have previously described poorer QoL among people in resource-limited settings (RLS) than in high-income settings. Methods: ACTG A5273 was a randomized clinical trial of second-line ART comparing lopinavir/ritonavir (LPV/r) + raltegravir (RAL) vs. LPV/r + nucleos(t)ide reverse transcriptase inhibitors (NRTI) in participants failing a non-nucleoside reverse transcriptase inhibitor (NNRTI)-containing regimen at 15 sites in 5 RLS conducted between 2012 and 2014. The primary analysis of the treatment trial showed no difference in QoL among the two arms. However, a secondary analysis showed differences in QoL among participants with higher than or lower than median viral load (VL). Individuals with VL at baseline had lower mean QoL at week 0 but larger improvements such that mean QoL was similar at week 48 (Figure 1). Similarly, the difference in mean QoL by CD4 count at baseline had disappeared at week 48. Results: QoL scores remained associated with country in all domains (p>0.05). QoL scores improved significantly from week 0 to 48 (p<0.05 for all domains for both treatments) with larger increases in GHP and RF. There was no significant difference between GHP and RF. There was no association of QoL at week 48 for BMI and history of AIDS for all comparisons: • At baseline participants with higher VL and lower CD4 had lower QoL. Having lower BMI, 3 or more comorbidities, and history of AIDS were associated with lower QoL, in joint domain (Table 4). QoL varied significantly among countries in this analysis, differences in mean QoL between baseline (week 0) and week 48 by treatment arm and baseline VL were evaluated in mixed linear regression analysis using generalized estimating equation methods. Results: The ACTG A5273 study was supported National Institute of Allergy and Infectious Diseases (NIAID; award number AI058517), National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), the National Cancer Institute (NCI), and the National Institute on Drug Abuse (NIDA). The study was conducted as part of the Pittsburgh Virology Specialty Laboratory, University of Washington School of Medicine, Seattle, WA, USA.

REFERENCES


Figure 1. Mean QoL change from week 0 to week 48 by baseline VL (<100,000 copies/mL vs. VL ≥ 100,000 copies/mL)