Patient-Reported Outcomes After Switching to a 2-Drug Regimen of Dolutegravir + Rilpivirine: Week 100 Results From the SWORD-1 and SWORD-2 Studies

P101

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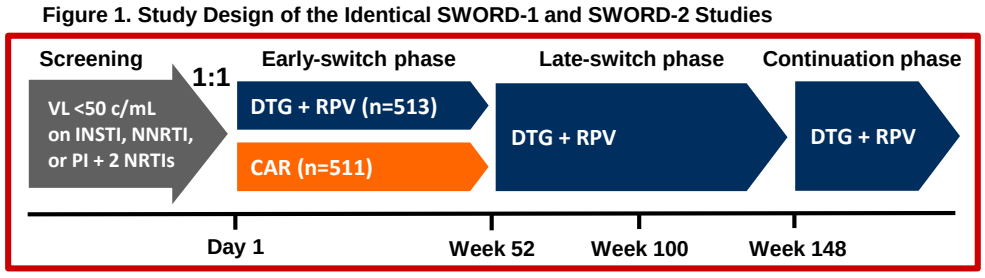
Introduction

- Most antiretroviral regimens consist of ≥3 drugs from 2 distinct classes to achieve and maintain durable virologic suppression
- Two-drug regimens may provide better treatment options for patients with virologic suppression who want to simplify their therapy or reduce the risk of long-term toxicities associated with using a 3- or 4-drug regimen over their lifetime
- In the identically designed phase III studies, SWORD-1 and SWORD-2, the 2-drug regimen of dolutegravir + rilpivirine (DTG + RPV, as single entities) demonstrated high efficacy and was noninferior to the continuation of a 3- or 4-drug antiretroviral regimen in virologically suppressed HIV-1–infected adults at 48 weeks[1]
- The pooled patient-reported outcome measures at Week 48 from the SWORD-1 and SWORD-2 studies demonstrated maintenance of high levels of treatment satisfaction and health status and low levels of symptom burden in patients who switched to DTG + RPV[2]
- This analysis describes the pooled patient-reported outcome measures at Week 100 from the SWORD studies

Methods

- SWORD-1 (NCT02429791) and SWORD-2 (NCT02422797) are phase III, randomized (1:1), multicenter, open-label, parallel-group, noninferiority studies
  - A full description of the study design, including eligibility criteria and endpoints, has been previously reported[1]

Figure 1. Study Design of the Identical SWORD-1 and SWORD-2 Studies



Study Populations

- The early-switch group participants were randomized to DTG + RPV on Day 1 and received at least 1 dose of DTG + RPV
- The late-switch group participants were randomized to continue their current antiretroviral regimen (CAR) and switched to DTG + RPV at Week 52 and received at least 1 dose upon switching
- Baseline for the late-switch group for all measures is the last data point before the switch from CAR to DTG + RPV at Week 52 (late-switch baseline)

Health Outcomes Assessments

- The HIV Treatment Satisfaction Questionnaire, status version (HIVTSQs), is a 10-item, self-reported instrument that measures treatment satisfaction overall (possible scores range from 0 [no satisfaction] to 60 [absolute satisfaction]) and by specific domains[3]
- The Symptom Distress Module is a 20-item, self-reported measure that addresses the presence of and perceived distress linked to symptoms associated with HIV infection or its treatment[4]
  - The symptom bother score assesses the level of bother with a total score for all symptoms ranging from 0 (no symptoms present) to 80 (all symptoms present at worst level)
- The European Quality of Life 5-Dimensional 5-Level instrument is a standardized global health state questionnaire assessing mobility, self-care, usual activities, pain/discomfort, and anxiety/depression; results are translated to a utility score (range, −0.594 to 1)[5]

Results

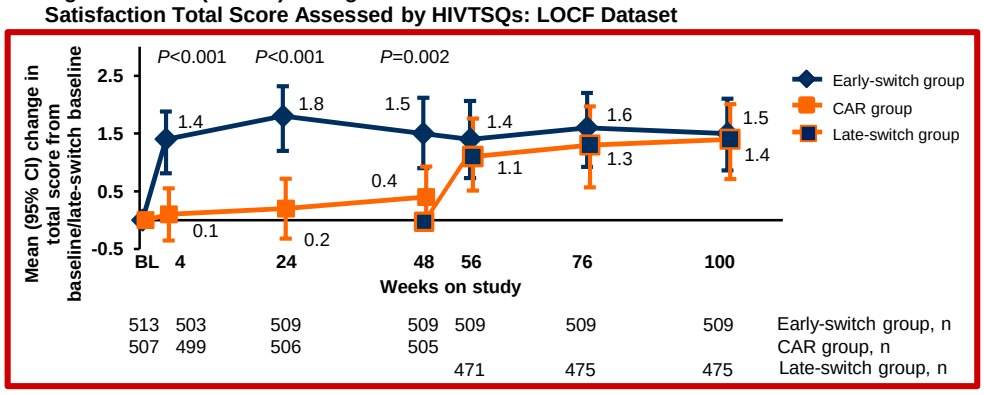
Study Disposition, Virologic Efficacy, and Safety and Tolerability

- Demographics and baseline characteristics have been previously reported[1]
- Through 100 weeks of treatment, DTG + RPV demonstrated continued efficacy in the early-switch group
- Virologic efficacy (93%) in the late-switch DTG + RPV group at Week 100 was similar to that of the early-switch group at Week 48 (95%)[1,7]
- The safety profile of the late-switch DTG + RPV group was similar to that of the early-switch DTG + RPV group 48 weeks after switching, and AEs were consistent with those of DTG and RPV individually[7]

HIV Treatment Satisfaction Questionnaire, status version

- Mean treatment satisfaction score was high at baseline for both groups (early-switch group, 54.4; CAR group, 53.9)
- Participants in the early-switch DTG + RPV group reported significant improvement from baseline in overall treatment satisfaction, which was maintained at each time point over 100 weeks (Figure 2)
  - There was minimal change from baseline in patient-reported treatment satisfaction among subjects who continued on CAR during the first 48 weeks
- After switching from CAR to DTG + RPV at Week 52, participants in the late-switch group showed an improvement in overall treatment satisfaction, similar to that of the early-switch DTG + RPV group after 48 weeks (Figure 2)

Figure 2. Mean (95% CI) Change From Baseline/Late-Switch Baseline of Treatment Satisfaction Total Score Assessed by HIVTSQs: LOCF Dataset

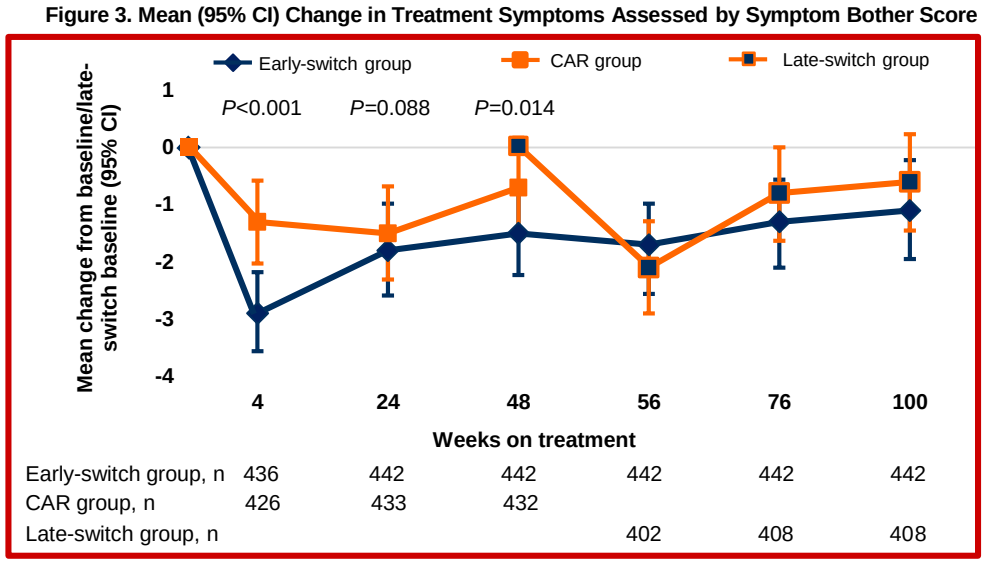


BL, baseline; CAR, current antiretroviral regimen; HIVTSQs, HIV Treatment Satisfaction Questionnaire, status version; LOCF, last observation carried forward. *P* values of early-switch group versus CAR are based on a Wilcoxon rank-sum test.

Symptom Distress Module

- Low levels of treatment burden were reported at baseline: mean (SD) symptom bother scores were 9.6 (10.0) in the early-switch DTG + RPV group, 11.0 (11.2) in the CAR treatment arm; late-switch baseline mean (SD) symptom bother score was 10.3 (11.0)
  - Participants in the early-switch DTG + RPV group reported initial improvement from baseline in symptom burden, which was reduced to a minor improvement from Week 24 to Week 100 (Figure 3)
  - After switching from CAR to DTG + RPV at Week 52, participants in the late-switch group showed a similar pattern of change in symptom burden compared with the early-switch DTG + RPV group, with initial improvement in symptom burden following switch and then attenuated improvement from Week 76 to Week 100 (Figure 3)

Figure 3. Mean (95% CI) Change in Treatment Symptoms Assessed by Symptom Bother Score



CAR, current antiretroviral regimen. *P* values for treatment difference are calculated from an ANCOVA model adjusting for age, baseline third-agent class, sex, race, and baseline symptom bother score.

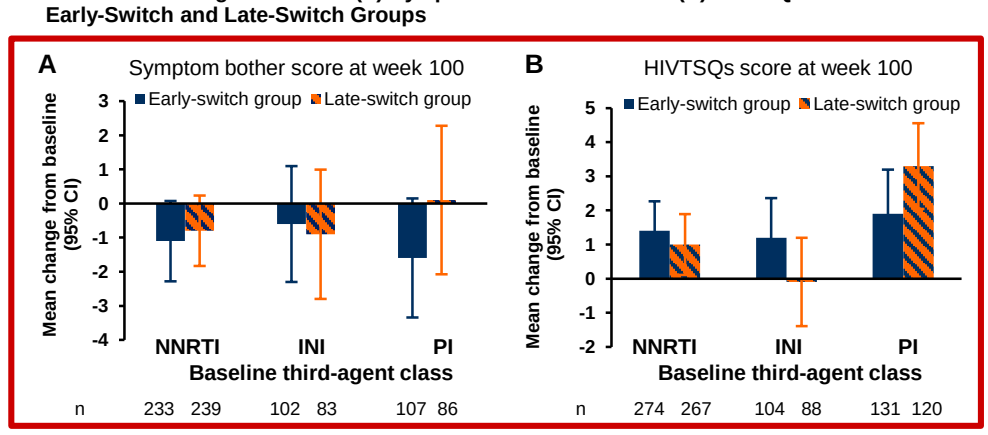
European Quality of Life 5-Dimensional 5-Level Instrument

- Baseline health status was high in the early-switch and CAR groups (EQ-5D mean utility, 0.96 and 0.94, respectively) and at late-switch Baseline for the late-switch group (EQ-5D mean utility, 0.94); there was no change from baseline after 48 weeks in the CAR group or between weeks 48 and 100 in the late-switch group (mean change, 0.00 for both groups), and little change from Baseline at Weeks 48 and 100 in the early-switch group (mean change, −0.01 at both time points)

Patient-Reported Outcome Change From Baseline By Baseline Third-Agent Class

- At Week 100, subgroup analysis by third-agent class suggests potential improvement of overall symptoms in participants in the early-switch DTG + RPV group who switched from NNRTI- or PI-based regimens (Figure 4A)
- Overall treatment satisfaction improved from baseline regardless of baseline third agent in the early-switch DTG + RPV group at Week 100 and among those who switched from an NNRTI- or PI-based regimen after 48 weeks in the late-switch DTG + RPV group (Figure 4B)

Figure 4. Mean (95% CI) Change From Baseline/Late-Switch Baseline at Week 100 by Baseline Third-Agent Class in (A) Symptom Bother Score and (B) HIVTSQs Score in the Early-Switch and Late-Switch Groups



DTG, dolutegravir; HIVTSQs, HIV Treatment Satisfaction Questionnaire, status version; INI, integrase inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; PI, protease inhibitor; RPV, rilpivirine.

Conclusions

- High levels of treatment satisfaction and health status and a low level of symptom burden were reported by participants entering the study and were slightly improved and maintained 100 weeks after switching to DTG + RPV
  - These results are consistent with previously reported tolerance and toxicity data
- Results after 48 weeks of exposure to DTG + RPV in the late-switch group (Weeks 52-100) were similar to the results from the first 48 weeks in the early-switch group
- These results provide long-term evidence that the 2-drug regimen of DTG + RPV is a well-tolerated, alternative treatment option for virologically suppressed patients who are on a 3- or 4-drug regimen and have not experienced previous virologic failure

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References: 1. Llibre et al. *Lancet.* 2018;391:839-849. **2.** Oglesby et al. Presented at: 16th European AIDS Conference; October 25-27, 2017; Milan, Italy. **3.** Woodcock and Bradley. *Value Health.* 2006;9:320-333. **4.** Justice et al. *J Clin Epidemiol.* 2001;54(suppl 1):S77-S90. **5.** Herdman et al. *Qual Life Res.* 2011;20:1727-1736. **6.** Devlin et al. *Health Econ.* 2018;27:7-22. **7.** Aboud et al. Presented at: 22nd International AIDS Conference; July 23-27, 2018; Amsterdam, the Netherlands.