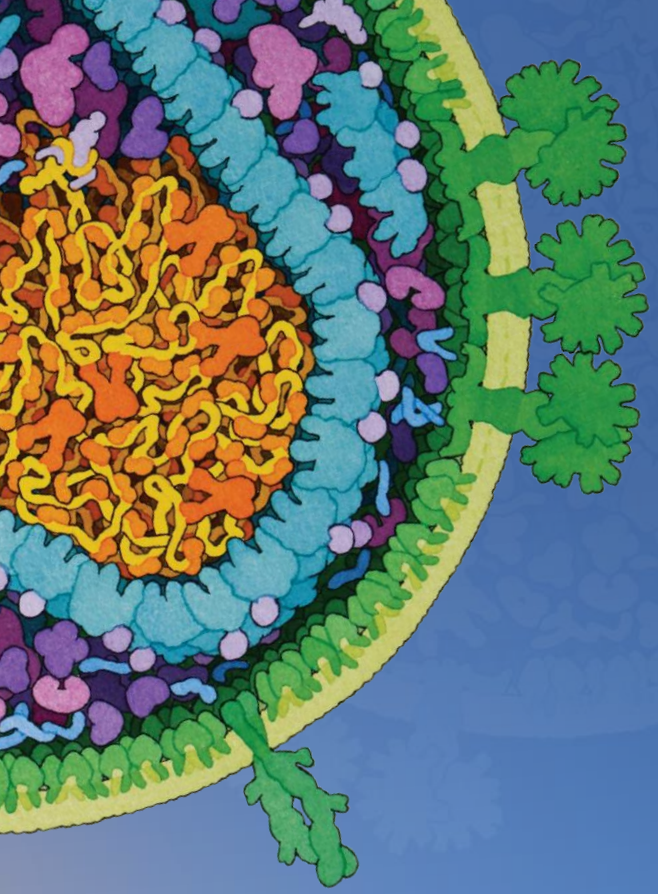

SCIENCE SPOTLIGHT™

INFLAMMATORY AND ATHEROGENESIS MARKERS 148 WEEKS POST-SWITCH TO DTG + RPV IN SWORD-1/-2

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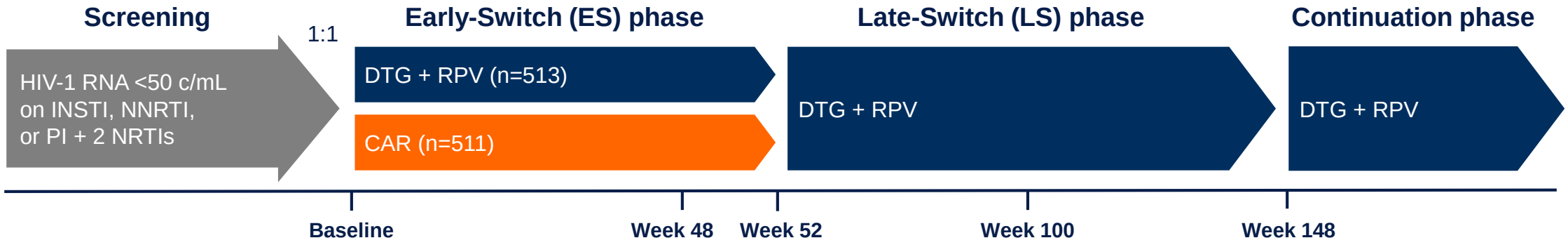
SWORD-1/-2 Are Ongoing, Identically Designed, Randomized, Multicenter, Open-label, Parallel-Group, Non-inferiority Studies

- The SWORD studies demonstrated non-inferiority of switching to the 2-drug regimen DTG + RPV vs continuing 3- or 4-drug current ART (CAR) at Week 48, and virologic suppression was maintained with DTG + RPV through Week 148[1-2]
- Chronic inflammation is a hallmark of HIV despite treatment[3]
- Non–AIDS-defining illnesses are an ongoing challenge, even with current improved regimens in PLHIV. Multiple causes may contribute to inflammation, including HIV and other concomitant factors[3]
- Biomarkers of inflammation and atherogenesis were evaluated from Baseline to Week 48 for DTG + RPV and CAR and non-comparatively for DTG + RPV post-switch through Week 148 (analysis complete)

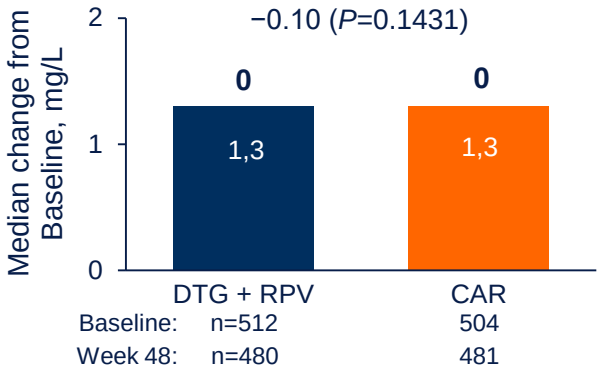


1. Llibre et al. *Lancet*. 2018;391:839-849. **2.** van Wyk et al. *J Acquir Immune Defic Syndr*. 2020;85:325-330. **3.** Deeks et al. *Immunity*. 2013;39:633-645.

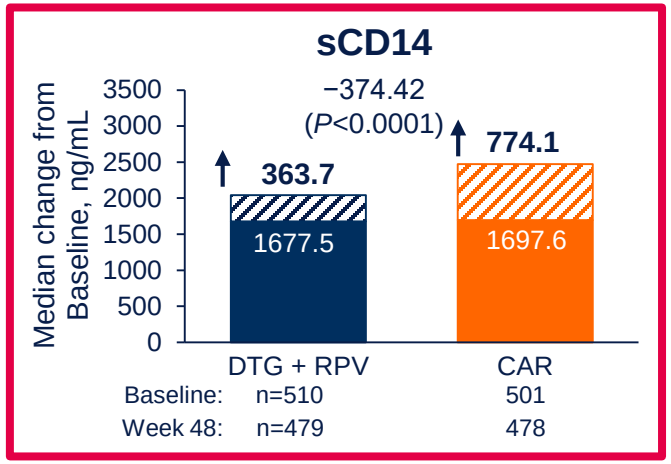
Controlled Early-Switch (ES) Phase: Change From Baseline to Week 48 Across Biomarkers

Inflammatory biomarkers

CRP

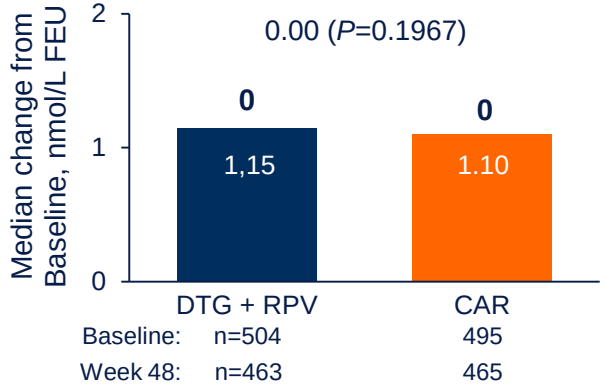


sCD14

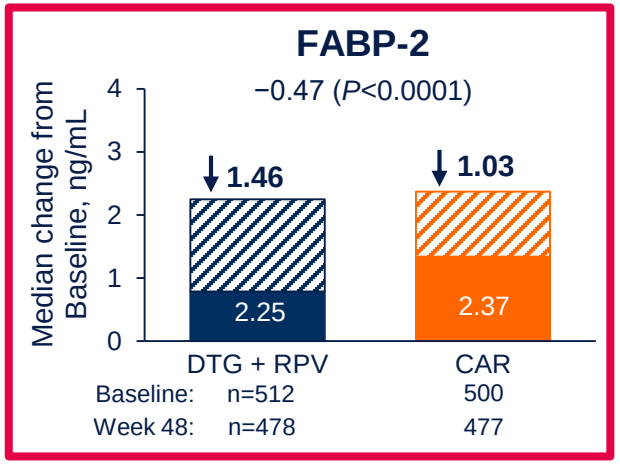


Atherogenesis biomarkers

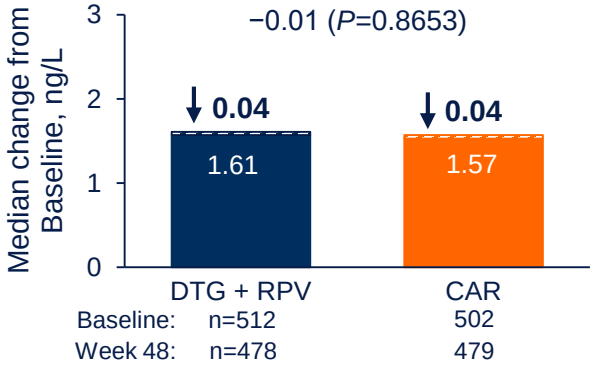
D-dimer



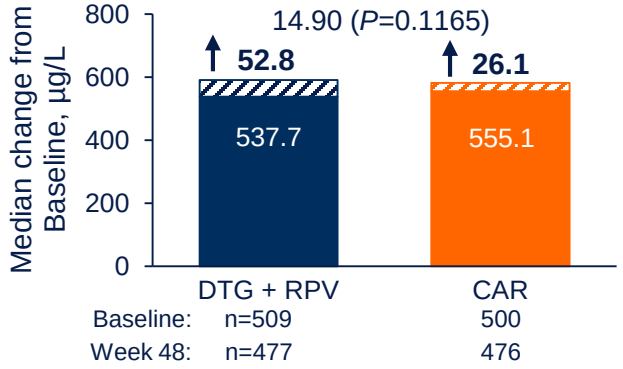
FABP-2



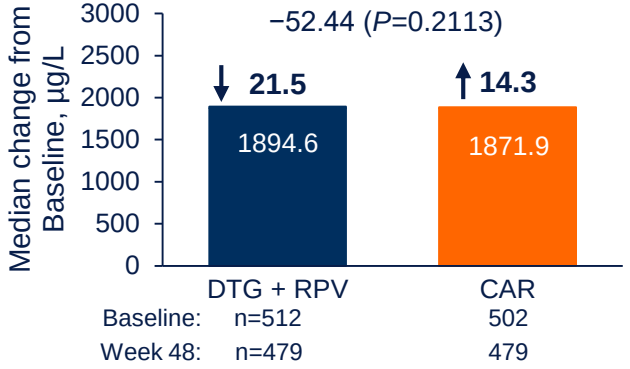
IL-6



sCD163

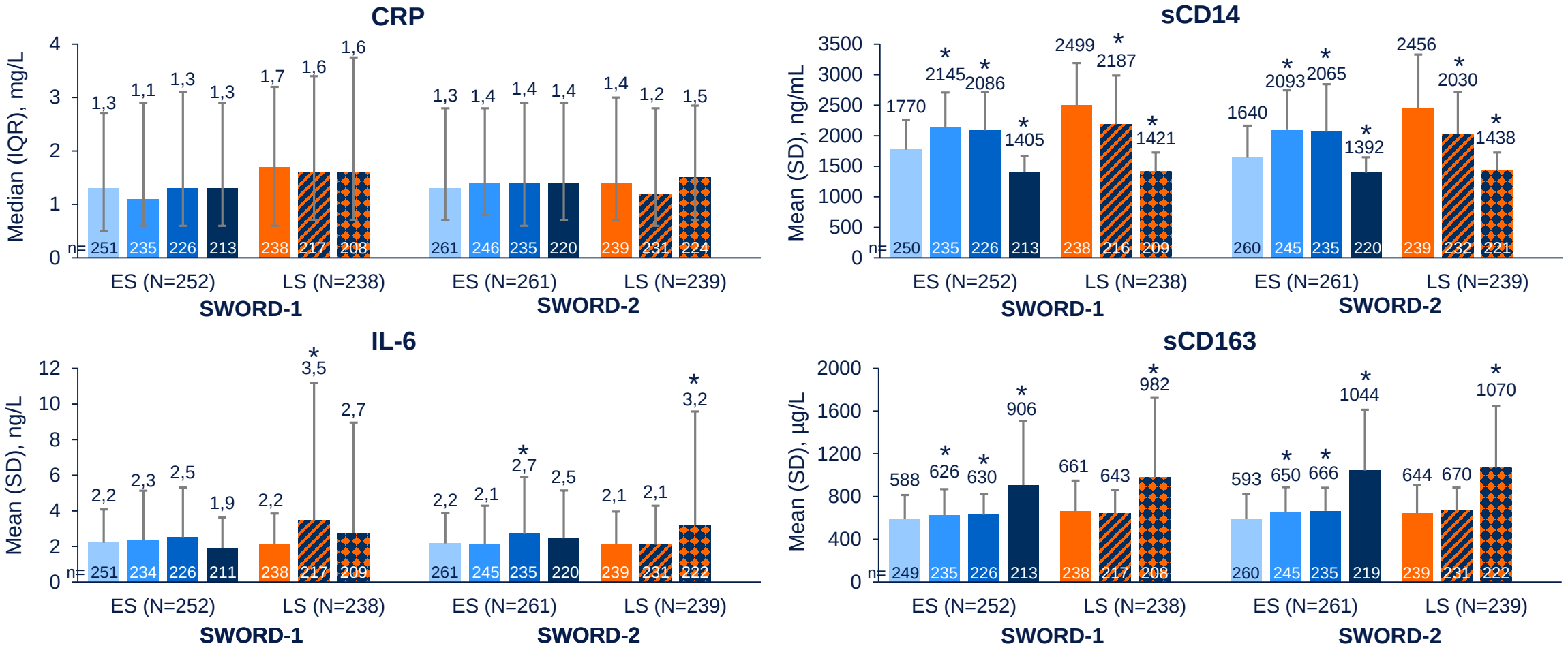


sVCAM-1



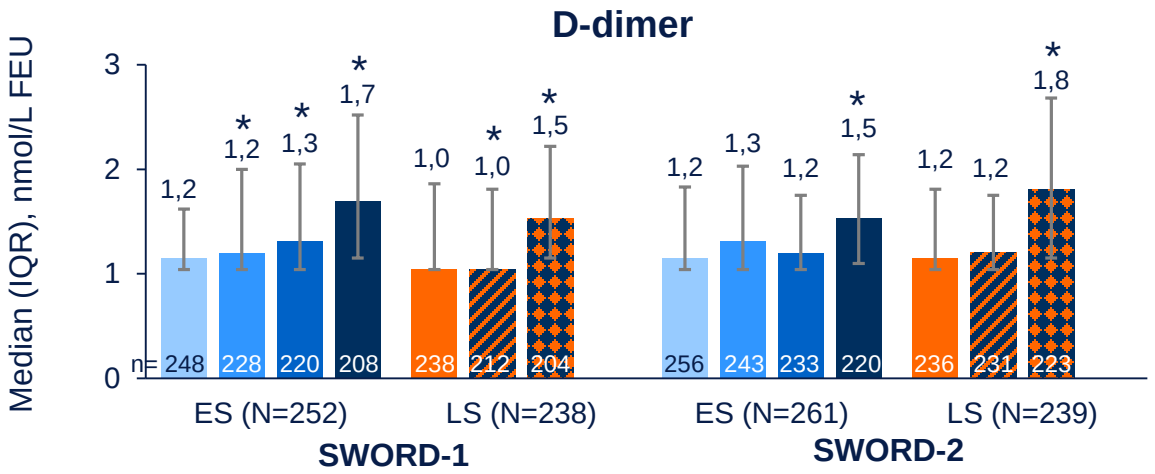
Graphs show pooled data from SWORD-1/-2 studies. Median treatment difference (DTG + RPV group − CAR group) and *P* values on each graph were performed post hoc.
CRP, C-reactive protein; FABP-2, fatty acid binding protein-2; IL-6, interleukin-6; s, soluble; VCAM-1, vascular cell adhesion molecule-1.

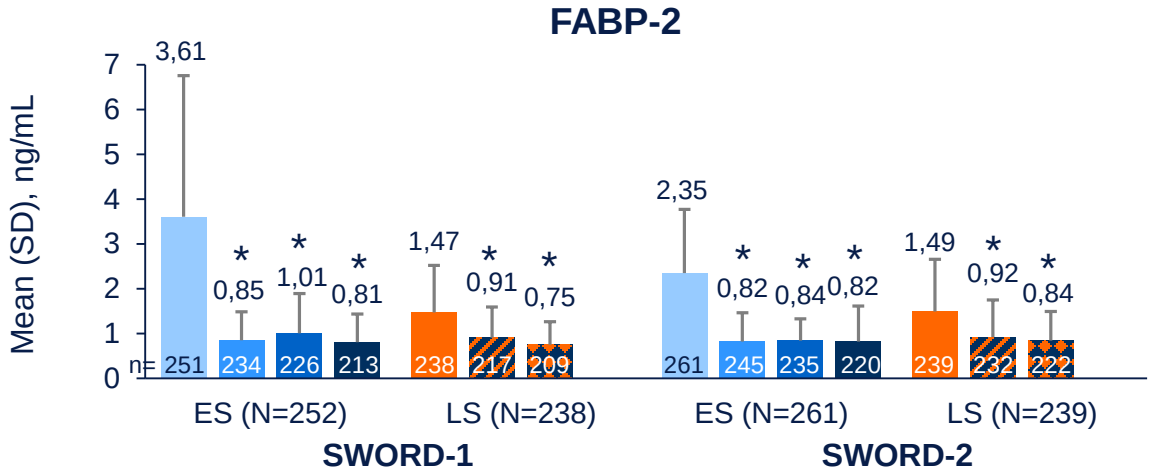
No Consistent Pattern of Change Across Inflammatory Biomarkers Was Observed Post-Switch to DTG + RPV Up to Week 148

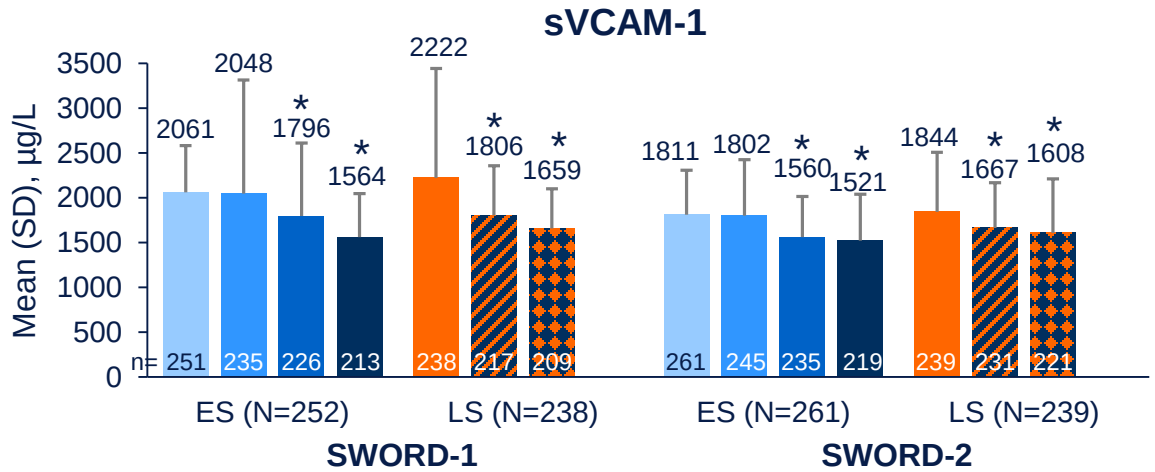


Plots represent absolute values for each biomarker. Error bars show variance from median or mean value. *P* values that reached statistical significance for a longitudinal change from Baseline or LS Baseline are indicated with an asterisk.
CRP, C-reactive protein; ES, Early Switch; IL-6, interleukin-6; LS, Late Switch; s, soluble.

No Consistent Pattern of Change in Atherogenesis Biomarkers Was Observed Post-Switch to DTG + RPV Up to Week 148







- The increase in D-dimer was not consistent with the other biomarkers of atherogenesis or across the 2 SWORD studies
- Reductions consistently observed for FABP-2 post-switch across ES and LS groups in SWORD-1 and SWORD-2 suggest no impact on enterocyte integrity and fatty acid metabolism
- Reduction in sVCAM-1 post-switch in SWORD-1 and SWORD-2 but timing differed in ES vs LS groups

ES Baseline Week 48 Week 100 Week 148

LS LS Baseline Week 100 Week 148

Plots represent absolute values for each biomarker. Error bars show variance from median or mean value. *P* values that reached statistical significance for a longitudinal change from Baseline or LS Baseline are indicated with an asterisk.
ES, Early Switch; FABP-2, fatty acid binding protein-2; LS, Late Switch; sVCAM-1, soluble vascular cell adhesion molecule-1.

Conclusions

- In the randomized controlled ES phase, comparison of change from Baseline to Week 48 in the DTG + RPV group vs the CAR group revealed no consistent patterns for inflammatory or atherogenesis biomarkers
- Longitudinally up to Week 148, no consistent pattern of change was observed after switch to DTG + RPV from CAR in
  - Inflammatory biomarkers: no change was observed in CRP, and the pattern of change was generally inconsistent across sCD14, IL-6, and sCD163
  - Atherogenesis biomarkers: FABP-2 and sVCAM-1 showed sustained reductions post-switch, and increases in D-dimer were inconsistent across both the ES and LS groups and across the 2 SWORD studies
- Overall, these results from SWORD-1 and SWORD-2 illustrate the lack of a consistent pattern of change in biomarkers post-switch to the 2DR DTG + RPV and hence provide no evidence for an association of increased inflammation or atherogenesis with the 2DR while maintaining virologic suppression

CRP, C-reactive protein; ES, Early Switch; FABP-2, fatty acid binding protein-2; IL-6, interleukin-6; LS, Late Switch; s, soluble; VCAM-1, vascular cell adhesion molecule-1.