# HIGH EFFICACY OF DOLUTEGRAVIR/LAMIVUDINE (DTG/3TC) IN TREATMENT-NAIVE ADULTS WITH HIV-1 AND HIGH BASELINE VIRAL LOAD (VL): 48-WEEK SUBGROUP ANALYSES OF THE GEMINI-1/-2 AND STAT TRIALS

### **Authors:**

Rolle C-P<sup>1</sup>, Arribas JR<sup>2</sup>, Ortiz R<sup>3</sup>, Matthews J<sup>4</sup>, Man C<sup>4</sup>, Grove R<sup>5</sup>, Donovan C<sup>4</sup>, Wynne B<sup>4</sup>, Kisare M<sup>6</sup>, Jones B<sup>6</sup>, <u>Eassey D</u><sup>7\*</sup>

<sup>1</sup>Orlando Immunology Center, Orlando, FL, USA; <sup>2</sup>Hospital Universitario La Paz, Madrid, Spain; <sup>3</sup>Bliss Healthcare Services, Orlando, FL, USA; <sup>4</sup>ViiV Healthcare, Durham, NC, USA; <sup>5</sup>GSK, Brentford, UK; <sup>6</sup>ViiV Healthcare, Brentford, UK; <sup>7</sup>ViiV Healthcare, Abbotsford, VIC, Australia \*Presenting on behalf of the authors.

## **Background:**

Efficacy data for 2-drug vs 3-drug regimens in treatment-naive adults with HIV-1 and high VL (≥500,000 c/mL) are limited. DTG/3TC demonstrated high efficacy and favorable safety in treatment-naive adults in the GEMINI-1/-2 studies and the STAT test-and-treat study. We present 48-week DTG/3TC efficacy and safety in treatment-naive participants in GEMINI-1/-2 and STAT by baseline VL.

## Methods:

GEMINI-1/-2 are randomized phase 3 studies of DTG + 3TC vs DTG + tenofovir disoproxil fumarate/emtricitabine (TDF/FTC) in treatment-naive adults with screening VL ≤500,000 c/mL and no major resistance. STAT is a single-arm study in treatment-naive adults who initiated DTG/3TC ≤14 days after HIV-1 diagnosis without baseline laboratory results (could modify ART based on baseline testing). Week 48 summaries included proportions with VL <50 and ≥50 c/mL (Snapshot), CD4+ cell count, and safety by baseline VL.

#### Results:

Of 1433 GEMINI-1/-2 participants, 18% had baseline VL >100,000 to ≤500,000 c/mL; 2% had >500,000 c/mL. Of 131 STAT participants, 24% had baseline VL >100,000 to ≤500,000 c/mL; 15% had >500,000 c/mL. At Week 48, proportions with VL <50 c/mL were high across all studies, including in participants with baseline VL >500,000 c/mL (GEMINI-1/-2: DTG + 3TC, 85%; DTG + TDF/FTC, 80%; STAT: 84%). Few participants with baseline VL >500,000 c/mL had VL ≥50 c/mL (GEMINI-1/-2, n=1 [DTG + TDF/FTC]; STAT, n=3). Mean increase from baseline to Week 48 in CD4+ cell count was generally similar by baseline VL in GEMINI-1/-2 (DTG + 3TC, 218.0-247.2 cells/mm³; DTG + TDF/FTC, 210.9-278.3 cells/mm³) and STAT (239.4-539.5 cells/mm³). Drug-related adverse event incidence was similar among participants with baseline VL ≤100,000 vs >100,000 c/mL across studies.

## **Conclusion:**

Data support robust efficacy and safety of DTG/3TC as first-line therapy and in a test-and-treat setting in treatment-naive adults with high baseline VL, with similar high efficacy between 2- and 3-drug regimens.

#### **Disclosure of Interest Statement:**

This study was funded by ViiV Healthcare. C-PR has received grants from Gilead and ViiV Healthcare and served on advisory boards/speakers bureaus for Gilead, Janssen, and ViiV Healthcare. JRA has received consulting fees from Alexa, Gilead, Lilly, Janssen, MSD, Serono, Teva, and ViiV Healthcare; and honoraria from Gilead, Janssen, MSD, and ViiV Healthcare. RO has nothing to disclose. JM, CM, RG, CD, BW, MK, BJ, and DE are employees of ViiV Healthcare or GSK and may own stock in GSK.