**METHODS**

viral clinical The persistence viral treatment was quantified cellular alone combination—analyzed randomized immune interruption (CD4+ T cells). The ACTIVATE study is a prospective, randomized clinical trial in which the histone deacetylase inhibitor panobinostat (PBT) is administered as a latency-reversing agent in combination with pegylated IFN-α2a (IFN-α2a) as an innate immune modulator to reduce the viral reservoir.

**RESULTS**

- **Panobinostat treatment increases histone acetylation and viral replication**
  - A. Increased proportion of CD4 and CD8 T cells (data not shown) expressing GrzA, GrzB and Perforin
  - B. Increased proportion of mDC2-3 expressing co-stimulatory molecules
  - C. Increased proportion of pDCs expressing co-stimulatory molecules and the migratory marker CCR7
  - D. Increased frequency of activated CD8+ and NKp30+ cytotoxic NK cells (CD16+ CD56+)

- **IFN-α treatment induces immune activation**
  - A. Increased proportion of CD4 and CD8 T cells expressing GrzA, GrzB and Perforin
  - B. Increased proportion of mDC2-3 expressing co-stimulatory molecules

- **Combined treatment do not induce changes in HIV-1 DNA level**
  - A. Total provirus
  - B. Intact
  - C. 5’ deleted
  - D. 3’ deleted

**CONCLUSIONS** - Results from ACTIVATE study indicate that the study medication induces HIV-1 transcription and augments innate and adaptive immune effector cells, without appreciably affecting HIV-1 DNA levels in our current analysis. Further studies will be conducted to evaluate possible changes in proviral positioning relative to activating epigenetic chromatin features.