**Supplementary material for:**
**Assessing the impact of AGS-004, a dendritic cell-based immunotherapy, and vorinostat on persistent HIV-1 Infection**

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**Table S1.** Effect of AGS-004 and VOR on residual viremia (HIV copies/ml)

| PID | Baseline | Cycle I* | Cycle II | Post-study |
|---|---|---|---|---|
| VV-01 | 0.4 | 0.49; 0.63 | 1.1 | 0.34 |
| VV-02 | 4.3 | 0.42; 0.34 | BLD | 0.29 |
| VV-03 | 0.15 | BLD; 0.14 | 0.55 | 0.5 |
| VV-04 | 0.2 | 0.55; 0.18 | 0.47 | 0.45 |
| VV-06 | 3 | 12; 84$^{\Psi}$ | 0.17 | 19 |

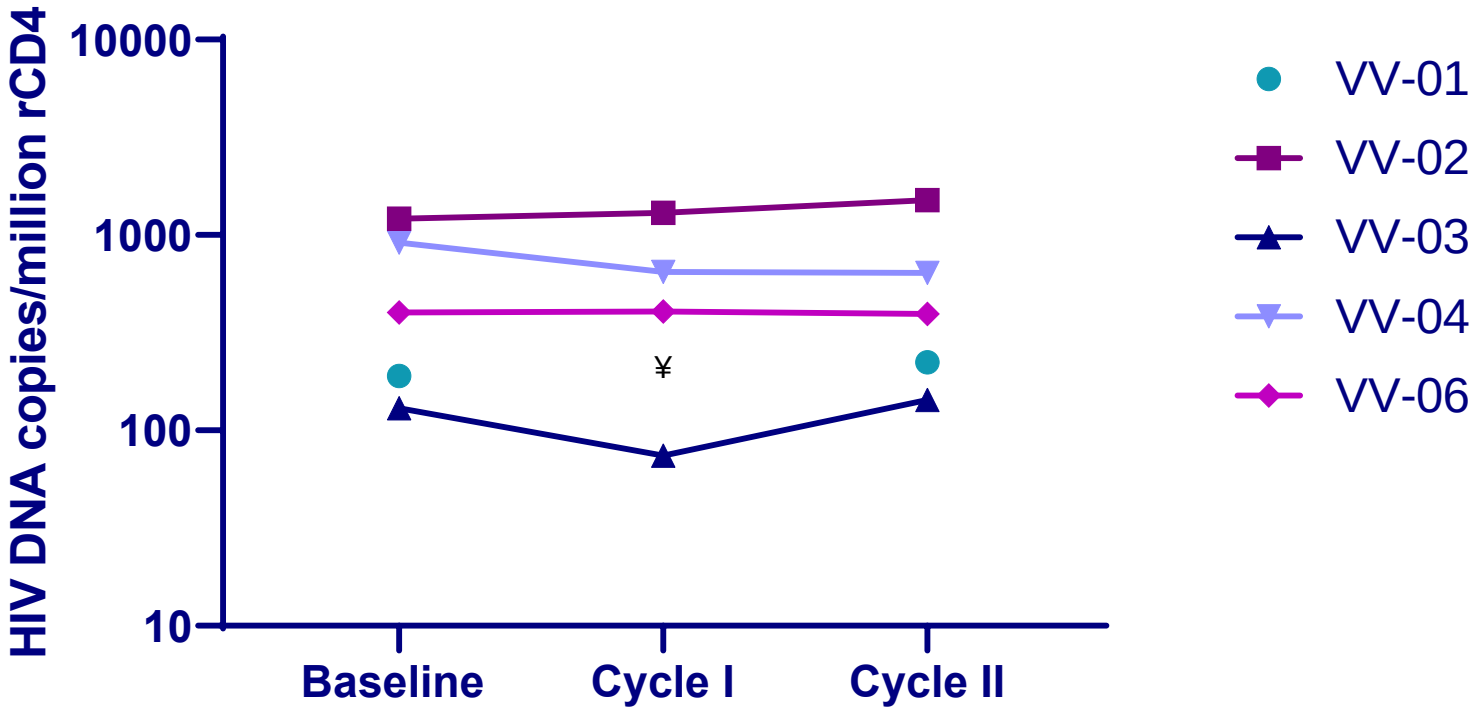
*BLD: below the limit of detection*

** Visits 14 and 17 respectively*

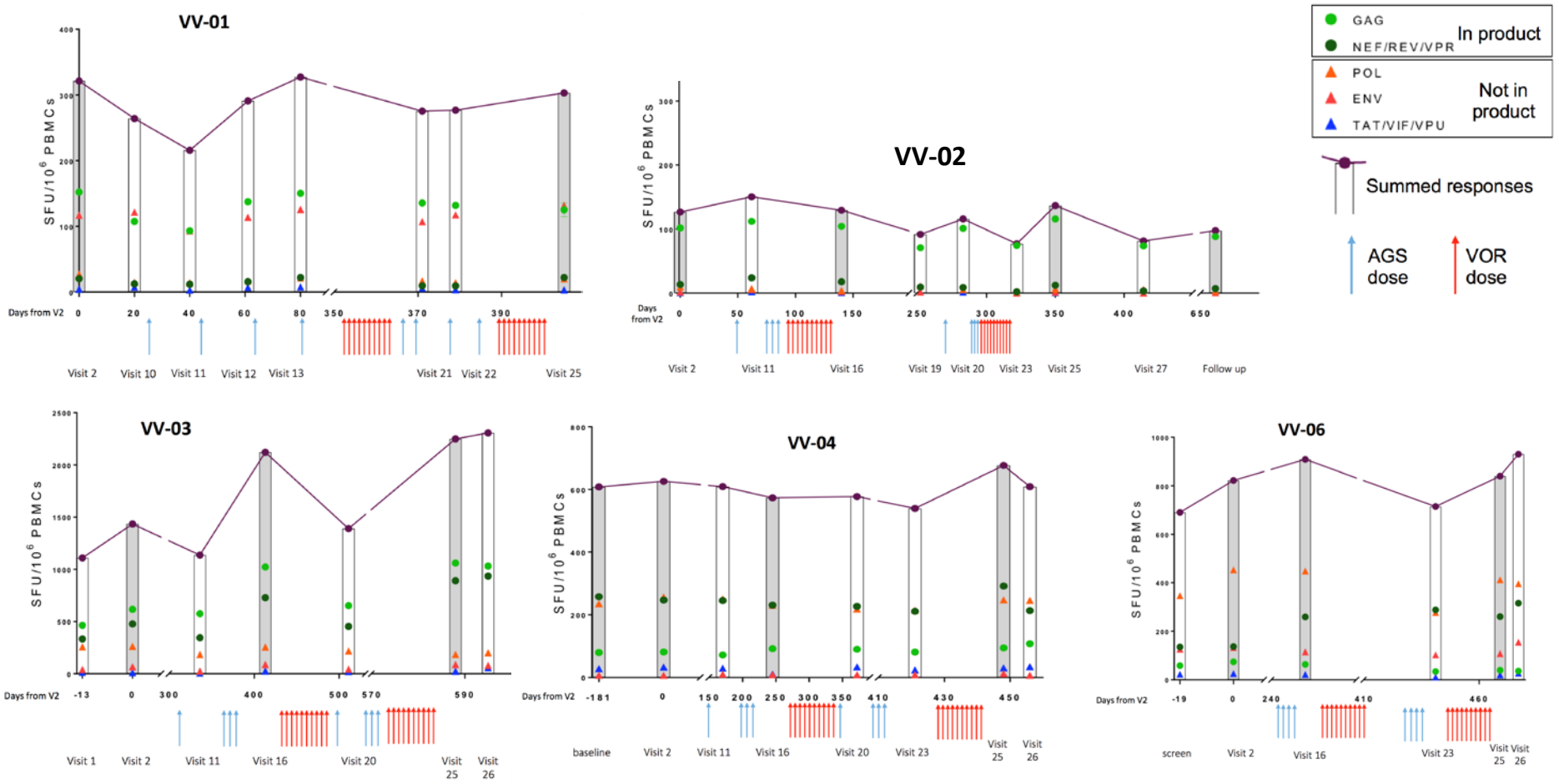
*$\Psi$ Documented episode of blips*

**Table S2.** Participant resting cell infection (infected cells/million resting CD4+ T cells with 95% Confidence Interval)

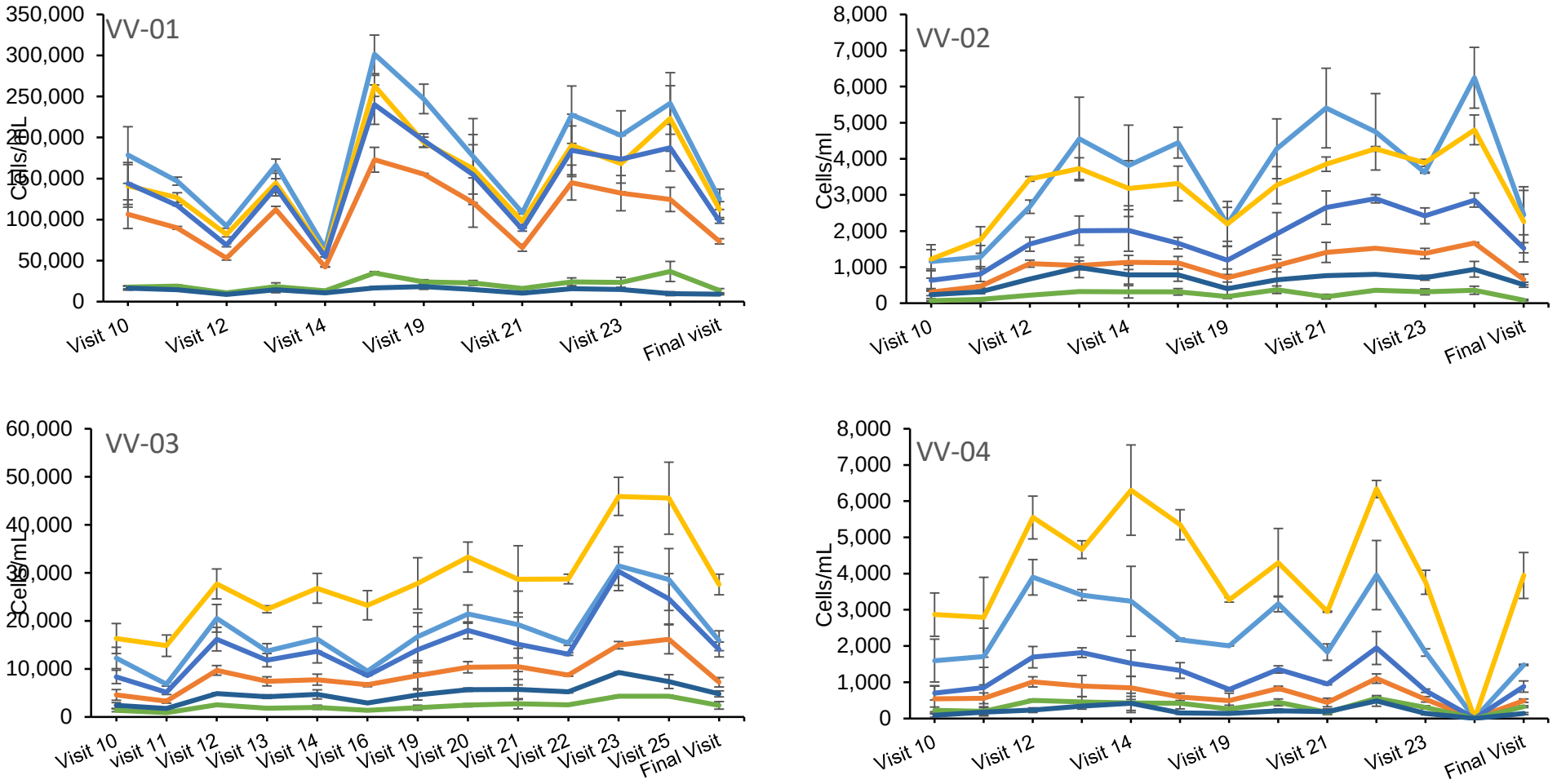
| Participant ID | Baseline | After 2nd cycle |
|---|---|---|
| VV-01 | 0.315 (0.187, 0.525) | 0.258 (0.138, 0.447) |
| VV-02 | 1.035 (0.612, 2.256) | 0.591 (0.323, 1.106) |
| VV-03 | 0.544 (0.313, 0.947) | 0.527 (0.304, 0.927) |
| VV-04 | 1.042 (0.648, 2.011) | 1.260 (0.780, 2.512) |
| VV-06 | 0.326 (0.146, 0.672) | 0.390 (0.217, 0.697) |




**Supplementary Figure 1. No significant changes in total HIV DNA after AGS-004 and VOR administration.** Cell associated HIV DNA was measured in 5 million resting CD4+ T cells for each time point shown by ddPCR. The gene RPP30 was used as a reference to normalized to copies/million. ¥, samples for this time point not available.

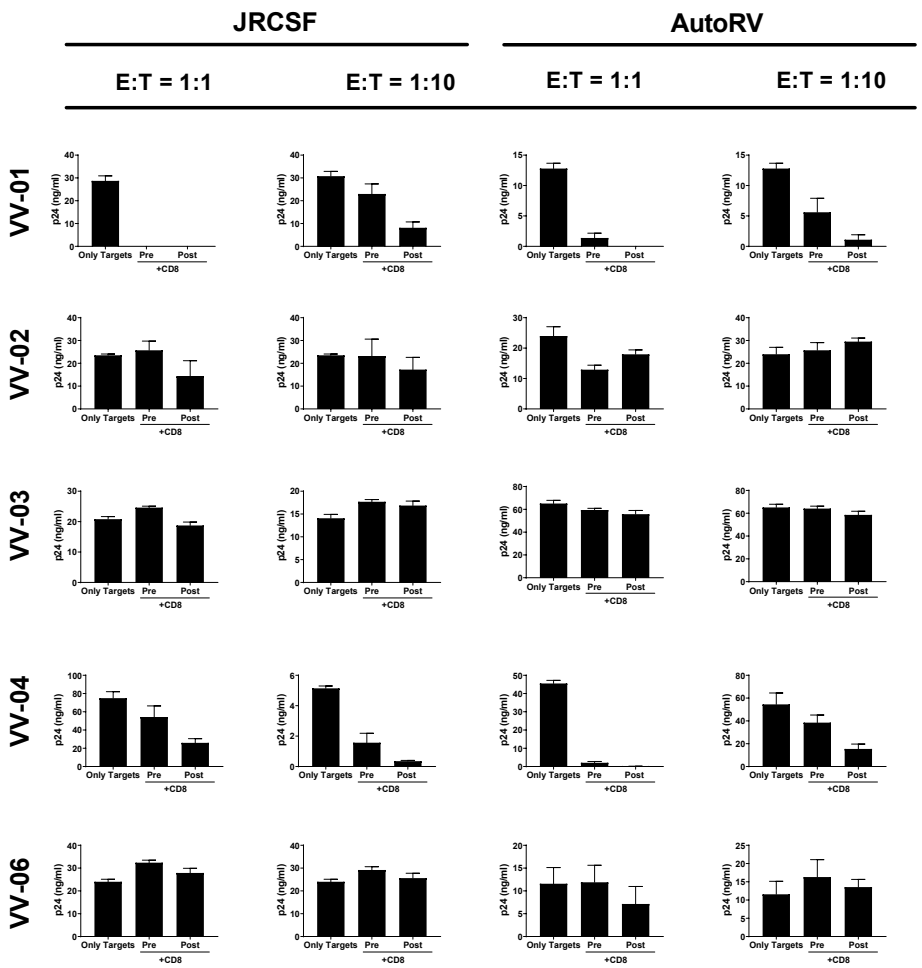



**Supplementary Figure 2. T cell response to HIV proteins before and after VOR and AGS-004 dosing.** Cryopreserved PBMCs were thawed, rested overnight, added to ELISpot plates containing peptide pools representing proteins within the AGS-004 vaccine (Gag, Nef-Rev-Vpr), and others not in the vaccine (Env, Pol, Tat-Vif-Vpu and incubated overnight. Media and PHA were used as negative and positive controls respectively. Detection and enumeration of IFN-y producing cells in response to peptide stimulation was quantitated by ELISpot assay. Positive T cell responses were defined as ≥12.5 SFU per million, > 4 times the average of replicate background wells. The AGS-004 vaccine induced T cell responses in *ex vivo* ELISpot in participant VV-03 only.  Grey bars indicate PBMC from leukapheresis products; white bars indicate PBMC from whole blood.




**Supplementary Figure 3. Proliferative and cytokine responses in CD28$^+$/CD45RA$^-$ CD8$^+$ Memory CTLs during combination therapy.**

PBMCs, from whole blood collected at the indicated visits, were cultured with autologous DCs. The number (cells/mL) of proliferating cells or cells expressing CD107a, GrB, IFN-g, Il-2, or TNF-α were determined from CD28$^+$/CD45RA$^-$ CD8$^+$ T-cell subset. Each functional marker is represented by the following symbols BrdU ■, CD107a ■, Grb ■, IFN-γ ■, IL-2 ■, and TNF-α ■. Cells/mL values were determined by the average of triplicate cultures. Visit 10 designates the time prior to administration of AGS-004.




**Supplemental Figure 4. Non-normalized data from viral inhibition assays using isolated CD8+T cells from each of the participants before and after the clinical treatment.** CD8 depleted PBMCs were stimulated with PHA and infected with either the viral strain JRCSF or autologous reservoir virus (AutoRV), and then CD8+T cells were added at E:T ratio of 1:1 or 1:10. Viral replication was assessed in the supernatant after 6 days of culture by HIV gag p24 ELISA.