Background

Eligibility criteria

- Age: 18 to 70 years with HIV-1 infection
- At least 6 weeks of suppressive ART
- HIV RNA < 50 copies/mL
- At least 6 weeks of ART
- No prior ART intensification
- No prior HIV vaccine

Methods

- A total of 28 patients (14 in each arm) were enrolled.
- Baseline characteristics:
  - Median CD4 count: 636 (IQR: 146–419) cells/mm³
  - Median HIV DNA: 220 (IQR: 146–419) copies/mL

Results

- No significant change in HIV DNA or CD4 count
- No significant change in HIV-specific T-cell responses

Conclusions

- RAL/MVC intensification with or without HIV-Ad5 vaccination did not significantly reduce the total HIV DNA reservoir in either peripheral blood or rectal tissue.
- There was no significant effect of RAL/MVC intensification with or without HIV-Ad5 vaccination on CD4 or CD8 cell counts.
- DNA virus with HIV-Ad5 boost vaccination was safe and induced significant T-cell responses against Gag, Pol, and Env in HIV-infected patients on long-term suppressive ART.

This vaccine should be studied further in combination with HIV latency reversal interventions as a novel eradication strategy.

The EraMune 02 Study Group

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Figure 1: Patient Flowchart

Figure 2: Change in HIV DNA (log₁₀ copies/10⁶ PBMCs)

Table 1: Baseline Characteristics

Table 2: Safety – Serious Adverse Events

Table 3: Median (IQR) Change in HIV DNA (Baseline to Week 56) in Blood Compartments and Rectal Tissue

Table 4: Mean (SD) Changes in CD4/CD8 Count (Baseline to Week 56)