

**RV534: Phase I, Proof of Concept, Open-Label,
Randomized Clinical Trial to Evaluate the Safety and Effects of
Using Prime-boost HIVIS DNA and MVA-CMDR Vaccine Regimens
with or without Toll-like Receptor 4 Agonist on HIV Reservoirs in
Perinatally HIV Infected Children and Youth**

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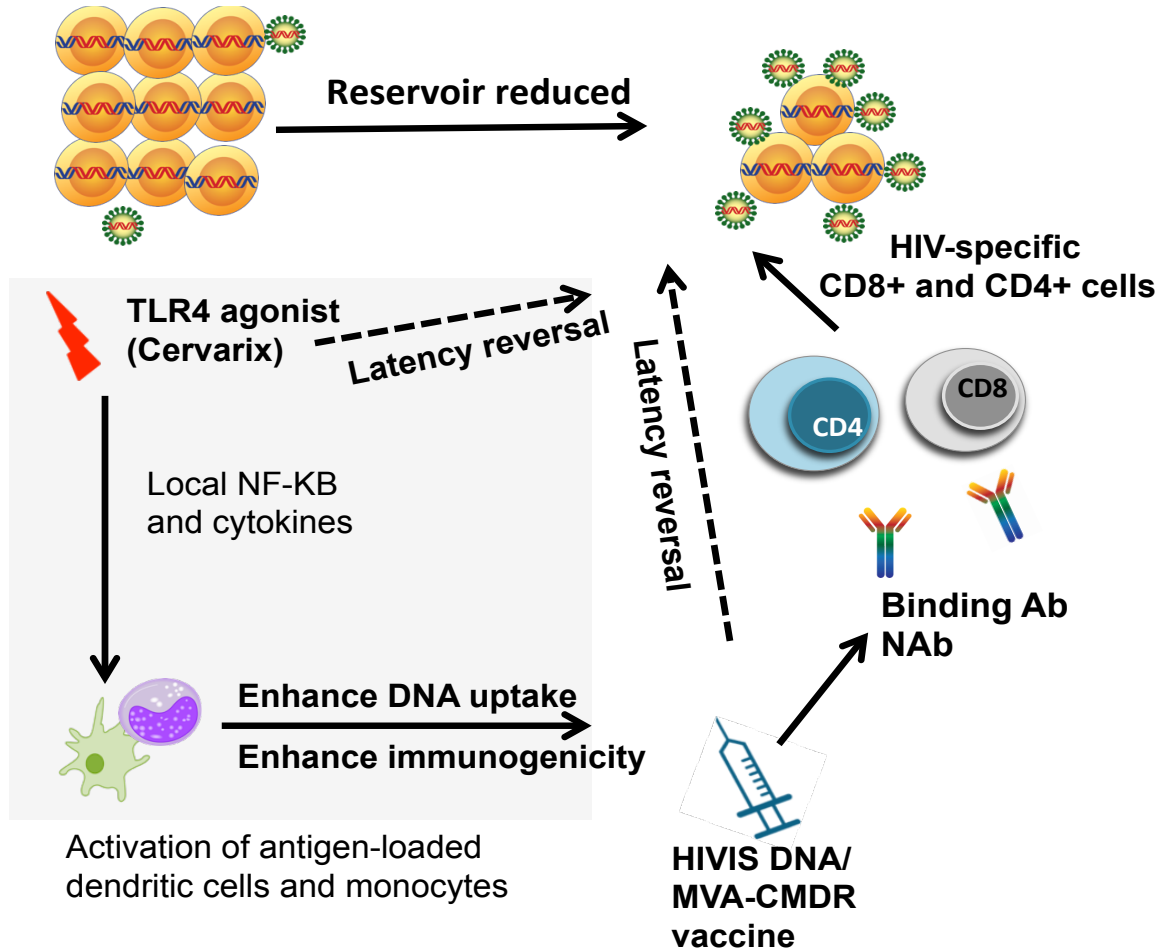
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Introduction

- Immune interventions are needed for reservoir reduction
 - HIVIS DNA and MVA-CMDR induces HIV-specific T cells, binding Ab, NAb and ADCC
 - Cross clade responses
 - Responses to HIVIS DNA may be enhanced by TLR4 agonist adjuvant
- Unique populations
 - Early treated, long-term virally suppressed children and youth
 - Youth previously vaccinated with HIV vaccine in the PEDVAC study in Rome
 - The late boost effect



Products

- Combination HIVIS DNA/MVA-CMDR in > 450 adults with favorable safety profile
- HIVIS DNA
 - 7 plasmids (Env gp160 A, B, C, gag p37 A, B, Rev B, Rtmult B)
- MVA-CMDR
 - Env gp150 E, gag p55 A, Pol (RTmut, PRmut) A
- Licensed HPV vaccine (Cervarix)

Study Design

Up to 45 participants to be enrolled

Enrollment of Group A (max n=25)

Early-treated children/youth aged ≥ 9 years old
(Cape Town, Bangkok, Rome)

Randomization
stratify by sites

Arm 1 (n=10): HIVIS DNA (wk 0, 4, 24)/MVA (wk 36, 48)

Arm 2 (n=10): HIVIS DNA+Cervarix (wk 0, 4, 24)/MVA (wk 36, 48)

Arm 3 (n=5): Cervarix (wk 0, 4, 24)

Enrollment of Group B (max n=20)

Youth previously in PEDVAC trial aged ≥ 9 years old
(Rome)

Randomization
stratify by previous HIVIS DNA
and age (22 yrs)

Arm 4 (n=10): HIVIS DNA (wk 0, 4, 24)/MVA (wk 36, 48)

Arm 5 (n=10): HIVIS DNA+Cervarix (wk 0, 4, 24)/MVA (wk 36, 48)

78 week study duration

Primary endpoints

- Safety
- Reservoirs: Tat/rev induced Limiting Dilution Assay (TILDA) and total HIV DNA

Secondary endpoints

- Reservoirs: IUPM CD4+ T cells by QVOA, cell-associated RNA, SCA
- Immunology: Frequencies of HIV-specific CD8+ and CD4+ T cells, ADCC, binding and neutralizing Ab and gene expression

Timelines

- DAIDS CSRC review
- First participant first visit: March 2018
- Last participant last visit: October 2020

Questions

