OVERVIEW

This grant, under the leadership of Larry Corey, Glenda Gray, and Jim Kublin, and awarded to the Fred Hutchinson Cancer Research Center, will support the HVTN 705 trial (also referred to as HPX2008). The trial is entitled “Multicenter, Randomized, Double-blind, Placebo-controlled Phase 2b Efficacy Study of a Heterologous Prime/Boost Vaccine Regimen of Ad26.Mos4.HIV and Aluminum Phosphate-adjuvanted Clade C gp140 in Preventing HIV-1 Infection in Adult Women”.

The vaccine regimen is comprised of 2 administrations of tetravalent Ad26 vaccine (4 recombinant Ad26 vectors expressing mosaic inserts of HIV gag-pol or env genes) at months 0 and 3, followed by 2 administrations of the same tetravalent rAd26 vaccine with soluble trimeric Clade C gp140 formulated in alum at months 6, and 12. The potential efficacy of this approach has been demonstrated through rather stringent non-human primate (NHP) studies, where the per exposure risk against a mucosal SHIV challenge was reduced by 94%. Earlier phase 1-2 trials showed the vaccine regimen to be well-tolerated, with a very good response rate among vaccine recipients. Importantly, initial vaccine immunogenicity data in humans showed humoral and cellular responses that recapitulate those observed as correlates of protection in the NHP model.

As described at clinicaltrials.gov , the primary purpose of the phase 2b study is to assess the preventive vaccine efficacy (VE), safety and tolerability of the aforementioned heterologous prime/boost regimen for the prevention of HIV infection in HIV-seronegative women residing in sub-Saharan Africa. The estimated enrollment is 2600 participants, equally divided between the vaccine recipients and a placebo comparator. The vaccine efficacy primary endpoint will be gauged from confirmed infections diagnosed between the Month 7 and Month 24 visits. The award commenced in May 2017, enrollment will be completed in 1-2Q 2019, and the study is anticipated to run into 4Q2022.

Jim Kublin is the executive director of the HVTN, at the Fred Hutchinson Cancer Research Center. Larry Corey (PI:HVTN, FHCRC) and Glenda Gray (Co-PI:HVTN, South African Medical Research Council) are also in leadership roles for the study. Janssen Vaccines & Prevention B.V. is the study sponsor, with co-funding by NIAID.

RESEARCH OBJECTIVES

1.) To evaluate the vaccine efficacy as derived from the confirmed HIV-1 infections diagnosed between the month 7 and month 24 visits. Secondary endpoints assess vaccine efficacy over different intervals, or by various baseline and demographic characteristics.

2.) To determine the safety and tolerability of the vaccine regimen, based on percentages of participants experiencing reactogenicity signs or symptoms, or participants with adverse events.Secondary study endpoints include measuring the immunogenicity of the vaccine regimen, assessed by vaccine-induced antibody and T cell responses.

Grant at a Glance

Principal Investigator
James Kublin, MD, MPH

Grantee Institution
Fred Hutchinson Cancer Research Center, Seattle, USA

Project Title
HVTN 705: A phase 2b clinical trial to evaluate the efficacy of Ad26 recombinant HIV vaccine + gp140

OPPID
1165951

Grant Award
Up to $34.8 Million, awarded in May, 2017

Collaborating Institutions
- Janssen Vaccines and Prevention B.V., Leiden, NL
- National Institute of Allergy and Infectious Diseases, Bethesda, US
- Hutchinson Center Research Institute of South Africa, Cape Town, South Africa
- Affiliated trial sites in South Africa, Malawi, Mozambique, Zambia, and Zimbabwe