Maternal, Adolescent, and Pediatric HIV/AIDS Therapeutics Clinical Trials Network:

Pregnant Women in the NIAID HIV/AIDS Clinical Trials Network Recompetition

Carl W. Dieffenbach, Ph.D.

Director Division of AIDS, NIAID March 14, 2018



National Institute of Allergy and Infectious Diseases

Setting the 2027 Research Agenda

- Every 7 years, NIH competitively reviews its HIV network funding, addressing significant changes in research priorities that have occurred since the last competition
- By establishing a forward-looking agenda now, NIH will determine the focus and structure of its HIV clinical trial networks through 2027



Proposing Four Areas of Research Emphasis

- HIV/AIDS Adult Therapeutics
- HIV/AIDS Maternal, Adolescent and Pediatric Health Therapeutics
- HIV Prevention
- HIV Vaccines

Leadership and Operations Center for Maternal, Adolescent, and Pediatric HIV/AIDS Therapeutics Clinical Trials Network

Objective: To establish a Leadership and Operations Center to carry out the NIAID maternal, adolescent, and pediatric HIV related agenda domestically and internationally in conjunction with Network Laboratory and Statistical and Data Management Centers

Mechanism: UM1 (cooperative agreement)

New/Continuation/Renewal/Expansion: Renewal

Duration of award: 7 years

Number of awards: 1 award

Participating ICs: NICHD, NIMH, DMID

Major Scientific Foci of the Maternal, Adolescent and Pediatric Therapeutics Network

- Novel and durable interventions for treatment of HIV
- ART-free remission
- Tuberculosis
- Complications and co-infections

Novel and Durable Interventions for Treatment of HIV

- Accelerate evaluation (PK, safety, antiviral efficacy) and licensure of promising antiretroviral drugs:
 - In pediatric HIV-infected populations from newborns to adolescent/young adults
 - In maternal populations including HIV-infected pregnant postpartum and lactating women for optimization of ART for maternal and newborn health and around the critical period of vertical transmission risk
 - Using innovative approaches for rational selection and prioritization of ARVs towards accelerated path to licensure
- Advance evaluation of long acting and novel drug delivery strategies with extended dosing intervals for HIV-infected maternal, pediatric and adolescent populations
- With partners, demonstrate effectiveness of these approaches as integrated behavioral, biomedical, and structural interventions with an emphasis for adolescent populations

Tuberculosis

- Evaluate (PK, safety, efficacy) new anti-tuberculous drugs and regimens, for treatment and prevention of drug sensitive and drug resistant TB disease
 - In pediatric and adolescent populations with and without HIV infection
 - In maternal populations including HIV-infected and uninfected pregnant, postpartum and lactating women
- Within the context of clinical trials or other appropriate settings, evaluate diagnostic, prognostic or treatment response biomarkers for TB disease with a particular focus on young children, non-sputum samples, and suitability for POC platforms

Points of Emphasis for Pregnant Women & Children

- Get the best drugs for HIV and TB licensed for use in pregnancy
 - Also get drugs approved across the lifespan (including children and newborns)
- PrEP and PEP in pregnancy
 - PEP should be as readily available in pregnancy as treatment is
- Role of NICHD in defining drug interactions
 - Drug safety and pharmacology in pregnancy
- Women specific drug interactions
 - How are contraceptive hormones altered by HIV and TB medications.
 Also, how do medications for depression, anxiety, other psychological agents effect and are effected by ART, TB drugs and contraceptives?
- Improving therapy uptake and adherence in pregnant and breast feeding women. Health systems strengthening, role of BSSR
- Prevention in adolescents
- New vaccines for childhood diseases such as flu and RSV IMPAACT led with partnership with DMID/NIAID and NICHD
- HIV vaccines across the lifespan. First stop after adults is adolescents. Care must be taken when moving into younger children.

Collaborations and Partnerships

- Adult therapeutic network: across treatment, ARTfree remission and TB scientific areas
- HIV prevention network: prevention in adolescents, pregnant and breastfeeding women, biomedical, adherence and other non biomedical approaches
- Vaccine network: safety, immunogenicity, or other studies required for product licensure in adolescents and HIV exposed, breastfeeding infants, correlates of vaccine prevention, TB vaccines
- Others: Community, DMID, NIH ICs/OAR, Industry/product developers, implementers, regulators and normative bodies