

National Institutes of Health National Institute of Allergy and Infectious Diseases Bethesda, Maryland 20892

August 31, 2017

Dear Mark and Treatment Action Group,

Thank you for taking the time to write a very thought-provoking letter. I would like to address each of your five major topics. For ease, I have abstracted the five major points from your letter and provided written responses below.

1. a. Maintain the HIV Prevention Trials Network (HPTN), HIV Vaccine Trials Network (HVTN), and Microbicide Trials Network (MTN)—rather than combine all three networks into a single HIV prevention network—

It is our priority to develop and license prevention modalities that are safer, easier to use and deliver, and provide systemic protection against HIV. Ultimately, one of these modalities must be a safe, effective, and durable HIV vaccine to dramatically reduce the rate of new infections. Achieving a significant reduction in HIV incidence will also require that we bring the current effective treatment and prevention tools to scale through our successful partnerships and collaborators around the world.

With these goals in mind, we agree that having separate HIV prevention and HIV vaccine leadership groups is likely the best way forward given the complexities associated with vaccine development. Additionally, future microbicide activities could be included in the landscape of a broader prevention network powered to work across technologies and study populations. This will ensure that researchers evaluate the most innovative and effective prevention strategies that are acceptable and desirable to the people that would benefit most from them. One of the most relevant populations is adolescents, and we plan to emphasize development of strategies to reach this population to address the heightened risk facing young people worldwide. We will also continue to emphasize collaborations between the network leadership groups to advance cross-cutting science, as we have done with the antibody-mediated protection studies across HPTN and HVTN.

b. To continue important early-stage research, and to strengthen HPTN to ensure the infrastructure and multi-disciplinary expertise necessary to fully evaluate combination-based HIV prevention modalities; We agree. The evaluation of combination prevention modalities remains a high priority for NIAID and the current HIV prevention leadership group. We will continue to engage partners in these studies in the future to cooperatively evaluate these combination methods at scale to reduce HIV incidence.

2. Maintain the important work of the AIDS Clinical Trials Group (ACTG), and continue to support a separate network focused on maternal, pediatric, and adolescent populations to ensure their appropriate inclusion in research;

I think it is important that we acknowledge the state of pediatric HIV/AIDS research. With the completion of the PROMISE study, the most pressing questions in prevention of perinatal transmission have now been answered. The next step is for governments and health systems to implement and scale up testing for all pregnant women early in pregnancy, starting antiretroviral therapy (ART) early and achieving durable undetectable viral loads, and sustaining ART in women through breast-feeding and beyond. Beyond PROMISE, however, we agree that there are remaining research areas in pediatric HIV/AIDS that need to be addressed, including:

- Developing and evaluating the safest, most potent, new antiretrovirals and TB drugs that are formulated for all ages
- Evaluating ways of achieving a classic or functional cure, not only in children but across the entire life span
- Evaluating HIV vaccine safety in children once proven to be safe in adults. Work must also continue to evaluate childhood vaccines for safety in HIV-infected children.
- Developing strategies to prevent HIV infection in people between the ages of 10-24 years old. Establishing effective prevention methods that adolescents, young women in southern Africa, and young black MSM in the United States is a top priority and can best be accomplished within a prevention network framework.

After careful consideration, we propose that it would be more prudent for the HIV cure, therapeutics, and prevention research agendas to be driven by answering high-priority scientific questions, rather than being driven by the population. Addressing HIV in the global pediatric population is so critical at this juncture that we need to shift to an approach that is increasingly focused on results and answers. This can be accomplished by integrating pediatrics into the prevention, vaccine, and treatment networks. Rather than reducing support for pediatric research, this approach will grow NIH's research capacity on these key groups of individuals.

The goal is for us to develop, evaluate, and ultimately license new drugs and vaccines for all ages. This will require a plethora of highly productive clinical sites to support and perform these studies. NIAID and NICHD are committed to fully supporting a robust portfolio of sites to address these gaps. We believe that by focusing the pediatric questions in these ways, we can achieve the scientific goals and enhance the science, and improving health across the lifespan.

3. Conduct research relevant to populations mono-infected with TB and HCV, in addition to including populations co-infected with HIV;

We agree that studies of infectious co-morbidities benefit greatly from studies of mono-infected patients. Because TB and HIV infections are inextricably linked when they occur around the globe, addressing TB remains the most important aim in the HIV co-infection research portfolio. To truly address the HIV epidemic, we must tackle TB. Our future focus will also include curative strategies for HBV coinfection in adults. DAIDS has de-prioritized work on HCV until truly novel interventions, such as an HCV vaccine, emerge.

4. Ensure that any plans to strengthen trials networks to be scalable and

flexible to respond to other infectious disease outbreaks do not detract from network and trial site resources and infrastructure dedicated to HIV, TB, and HCV clinical research;

We completely agree. We will continue to stress that participation in trans-NIAID, outbreak focused research will be supported with an appropriate, non-HIV source of funding, and such work will be in addition to, not instead of, ongoing or planned HIV research.

- 5. Maintain and expand research in:
  - biomedical prevention and vaccines for HIV, TB, and HCV;
  - antiretroviral drug and biologics discovery and development;
  - the management of comorbidities associated with HIV infection;
  - diagnostics and treatments for TB;

NIAID is committed to conducting research in the bullets listed above. However, not all of them are within the purview of the HIV/AIDS clinical trials networks. Many of these bullets are being supported by other parts of NIAID, including the Division of Microbiology and Infectious Diseases.

I hope my responses have addressed some of your concerns. If you have any additional questions or concerns, I would be happy to schedule a call with you and TAG leadership to discuss any of these topics in further detail.

Best regards,

Carl W. Dieffenbach, Ph.D. Director, Division of AIDS