Commentary on Shapiro: Clinical Development of Candidate HIV Vaccines: Different Problems for Different Vaccines

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THE EDITORS OF *AIDS Research and Human Retroviruses* seek to promote discussion that will stimulate the exchange of ideas and advance the field of HIV research. In the current edition of the journal we publish an opinion piece by Stuart Shapiro, "Clinical Development of Candidate HIV Vaccines: Different Problems for Different Vaccines,"¹ that has provoked diverse and sometimes emotional feedback, both positive and negative. After completing the peer review process we thought it essential for the field to consider how HIV vaccine trial endpoints and efficacy would be interpreted relating to the complexities of future vaccine trials in the current realities of HIV infection. To stimulate discussion we sought to obtain two commentaries. We were able to secure Drs. Andrew McMichael and Lucy Dorrell to comment on the positive aspects of the piece and the importance of considering vaccine trial endpoints and efficacy. However, we were not able to recruit authors to openly comment on the perceived negative aspects of the concepts presented by Shapiro.

There was an overall reluctance among individuals to express negative reactions to these concepts due to the fact that Dr. Shapiro is a program official within the NIH NIAID Division of AIDS (DAIDS) who occupies a leadership role relating to the support and development of vaccine trials. Because we believe that this debate is important in order to advance the field and policy on this subject, we have chosen to summarize some of the negative feedback we have received relating to the Shapiro commentary.

There were several different contrary viewpoints relating to the Shapiro article. During the review process, it was stated by one reviewer that the article was useful in only the most superficial way. Another reader of the article found it dogmatic and outdated. This reader additionally expressed concern that publicly casting dissent against the article could jeopardize future funding. There was concern that the article focused almost exclusively on vaccines that reduce viral load and not on the great majority of HIV vaccine work toward prevention of acquisition. They continued by stating that the article does not recognize that the concept of a vaccine in humans that reduces acquisition has been met [presumably referring to the RV144 trial], but one that reduces viral load has not [referring to the STEP, Phambili, and HVTN 505 trials]. Finally, there was concern that the article did not acknowledge the results of many nonhuman primate (NHP) studies that have predicted reductions in viremia, but ultimately yielded no apparent clinical benefit in humans.

These points represent many of the central controversies that permeate the HIV vaccine field, including whether the RV144 trial had a significant effect, whether the STEP, Phambili, and HVTN 505 phase II studies had any beneficial outcome or conversely demonstrated enhancement of acquisition, and whether the NHP SIV/SHIV model accurately predicts vaccine efficacy in humans.

We hope that this article by Dr. Shapiro, along with the accompanying commentaries, stimulates discussion relating to future vaccine trial design. We believe that open public discussion is critical in order to advance the field, and invite individuals with opinions relating to this topic to submit a Letter to the Editor of *AIDS Research and Human Retroviruses* to continue this important debate. As perhaps the most troubling issue regarding the comments we received was the concern that voicing dissent might be viewed negatively by the DAIDS program, we will honor all specific requests for anonymity. However, we believe that these fears may be misplaced and may actually stifle discussion on this important topic. It does not seem reasonable that publishing this work to stimulate debate could lead to a negative impact on individuals participating in that debate. It is best that we work together to discuss these issues in a transparent and productive manner in an effort to advance the field and bring the goal of a successful HIV vaccine to the people of the world.

We also invite the submission of further commentaries and perspectives on other important topics relating to HIV research to facilitate more public debate.

Author Disclosure Statement

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Reference

1. Shapiro SZ: Clinical development of candidate HIV vaccines: Different problems for different vaccines. *AIDS Res Hum Retroviruses* 2014;30(4):325–329.

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