HIV VACCINES & MICROBICIDES RESOURCE TRACKING WORKING GROUP

From Research to Reality

Investing in HIV Prevention Research in a Challenging Landscape

The HIV Vaccines & Microbicides Resource Tracking Working Group uses a comprehensive methodology to track annual investment and analyze trends in HIV prevention research and development (R&D) that can be compared year to year and across funders. In its most recent report, "From Research to Reality: Investing in HIV Prevention Research in a Challenging Landscape", the Working Group analyzed funding for HIV prevention R&D in the context of recent scientific advances in a challenging economic climate.

In 2012, reported funding for HIV prevention R&D increased by six percent compared to 2011, reaching a total of US\$1.31 billion [Figure 1]. However, a significant portion of this increase is likely due to improved reporting by several donors. The actual increase is thought to be moderate, and the overall funding prospect is essentially one of stagnation.

The US remained the largest investor, making up 70 percent of the total investment in HIV prevention R&D [Figure 2]. A more diverse global cadre of funders, both involved in and dedicated to advancing HIV prevention R&D would better utilize global resources and represent a powerful force in the effort to bring down new infections.

HIV science has taken rapid strides toward new, safe and effective methods of prevention and treatment with the potential to drive down infection rates. Challenging basic immunologic questions remain to be answered and ultimately translated into new products and strategies to be moved through the development pipeline.

Over the past eight years, total investment in HIV prevention R&D research nearly **US\$10 billion**. Investment in HIV vaccine research accounted for nearly US\$7 billion of that total and funding for microbicide research for almost US\$2 billion.

Meanwhile, late-stage trials of vaccine and microbicide candidates that have emerged from that pipeline must continue to proceed in parallel with demonstration projects for pre-exposure prophylaxis (PrEP) and treatment as prevention, as well as the translational research needed to keep new concepts and products moving expeditiously through the development pipeline.

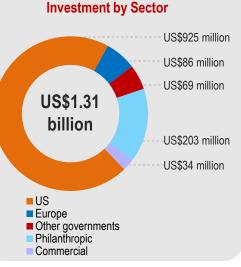


Figure 2: 2012 HIV Prevention R&D

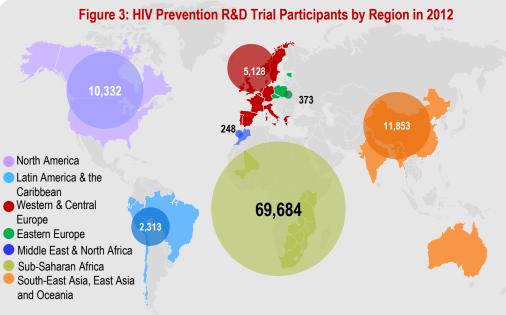
The development of new HIV prevention tools will take place in the context of steady increases in research costs¹, driven by the annual rise in the consumer price index², and is likely to be of particular concern as new prevention interventions are rolled out, standards of care³ and prevention⁴ change, and larger numbers of trial participants are required for efficacy trials.⁵ The track record of HIV research efforts in terms of infections prevented and lives saved underscores the importance of continued support for an expanded, more comprehensive set of tools.

2012 saw a shift in the HIV/AIDS field toward a growing consensus that the end of the global epidemic is an attainable goal. HIV science has taken rapid strides toward new, safe and effective methods of prevention and treatment that have the potential to drive down infection rates. Yet, the fact that there are still 2.5 million new HIV infections⁶ globally each year speaks to the need for continued investment implementing existing prevention modalities, while also developing new ones, in order to ultimately take that number to zero.⁶

Figure 1: Global HIV Prevention R&D Investments 2011 to 2012



HIV prevention research cannot be accomplished without those who volunteer to participate in clinical trials, or without engagement of communities in which those trials take place. In 2012, there were 99,931 participants in HIV prevention research trials [Figure 3], primarily based in sites with high HIV burdens in South Africa, Uganda and the US. Without their generous contributions to the field. research will not progress. There is no way to quantify the contribution of such participants in economic terms-it is both immeasurable and essential.



*Countries by region follow UNAIDS regions and countries available at http://www.unaids.org/en/regionscountries/countries/

2012 HIV Prevention R&D Investment Conclusions

In a climate of continuing fiscal austerity, HIV prevention R&D maintained levels of investment and support for ongoing research. 2012 funding patterns support the following conclusions regarding the state of HIV prevention R&D investments:

- Partnerships are vital to advancing products in the pipeline. International cross-sectoral collaborations in almost every area of HIV prevention R&D—that includes collaborators from all sectors and sites in 36 countries—are clearly advancing the field of HIV prevention.
- Resource allocation must reflect ongoing, strategic prioritization of candidates in the pipeline. As trials proceed and new information on the safety and efficacy of new products accumulates, the pipeline and the basis for decisions about prioritization are illuminated.
- In order to effectively roll out products and approaches, implementation research needs to expand. Capitalizing on the potential of treatment as prevention, PrEP and medical male circumcision will require -continued research into how to best deliver them to the populations most in need and in combinations that foster their acceptance, use and impact.
- HIV prevention R&D investment should be seen in the context of the larger global health landscape. Ongoing conversations regarding post-Millennium Development Goal strategies and the European Union's research and innovation funding package should consider how HIV prevention R&D fits within the new, emerging global health and development landscape.
- Budget realities in the US highlight the need for other donors to enter (and re-enter) the HIV prevention R&D funding space. The US government provided 75 percent of all global investments in HIV prevention R&D in 2012, but austerity-driven budget reductions across the US government are very likely to have an impact on this significant public-sector portion of the field's support. A more diversified and stable funding base for HIV prevention R&D could include BRICS countries, countries in which HIV prevention R&D takes place and recommitment from traditional HIV/AIDS donor countries within the OECD. It is vital that advocates, researchers and policy makers in both donor countries and regions heavily impacted by HIV look to engage non-traditional donors in the importance of HIV prevention R&D.

Please visit www.hivresourcetracking.org for a copy of the full report on funding for HIV Prevention R&D in 2012, July 2013. The HIV Vaccines and Microbicides Resource Tracking Working Group is composed of AVAC: Global Advocacy for HIV Prevention (AVAC), the International AIDS Vaccine Initiative (IAVI) and the Joint United Nations Programme on HIV/AIDS(UNAIDS).

4. AVAC and UNAIDS. Good Participatory Practice: Guidelines for biomedical HIV prevention trials. June 2011.

6. Number of new HIV infections in 2011. UNAIDS Global Report 2012.

^{1.} Kramer JM, Schulman KA. Transforming the Economics of Clinical Trials: Discussion Paper. Washington, DC: Institute of Medicine. 2012. http://www.iom.edu/~/media/Files/Perspectives-Files/2012/Discussion-Papers/HSP-Drugs-Transforming-the-Economics.pdf

^{2.} DiMasi, JA, RW Hansen, and HG Grabowski. The price of innovation: New estimates of drug development costs. Journal of Health Economics. 2003. 22:151-185.

^{3.} UNAIDS and WHO. Ethical considerations in biomedical HIV prevention trials. UNAIDS/WHO guidance document. 2012.

^{5.} Fuchs JD, Sobieszczyk ME, Madenwald T, et al. Intentions to use pre-exposure prophylaxis among current phase 2B preventive HIV-1 vaccine efficacy trial participants. JAIDS. March 2013. In advance of publication.

www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120_UNAIDS_Global_Report_2012_en.pdf.