HIV Vaccines and Microbicides Resource Tracking Working Group www.hivresourcetracking.org

Expanding Resources, Expanding Options: Funding for HIV Vaccine Research and Development (R&D) between 2000 and 2005

BACKGROUND

The 2001 UNGASS Declaration of Commitment on HIV/AIDS included among the global indicators financial investments in research and development (R&D) for new prevention technologies – HIV vaccines and microbicides. This is important in understanding political and social commitment to these products and the impact of public policies aimed at accelerating scientific progress.

The Alliance for Microbicide Development, the AIDS Vaccine Advocacy Coalition, the International AIDS Vaccine Initiative and UNAIDS together (the HIV Vaccines & Microbicides Resource Tracking Working Group) developed a comprehensive methodology for tracking resource trends in preventive HIV vaccine and microbicide R&D over time.

FINDINGS

Over the last six years, there has been a marked increase in the level of investment in preventive HIV vaccines development (Figure 1).

- Between 2000 and 2005, non-commercial (public and philanthropic) sector funding more than doubled, increasing from US$327M to US$684M.
- As of July 31, 2006, commitments from the public and philanthropic sectors for 2006 were approximately US$781M.

Fig. 1: Non-Commercial Investment in HIV Vaccine R&D, 2000 to 2005

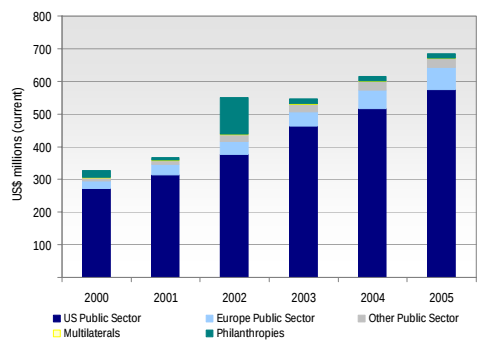
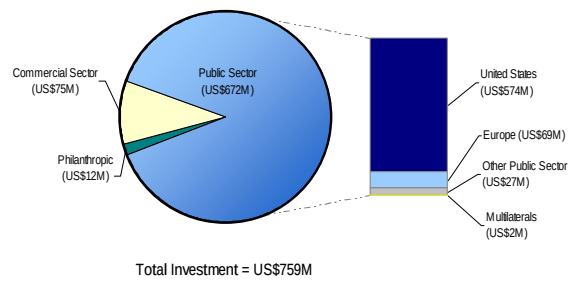


Fig. 2: Global Funding Sources for HIV Vaccine R&D in 2005



In 2005, total global investment in HIV vaccine R&D was approximately US$759M (Figure 2), an 11.3% increase over 2004 funding levels.

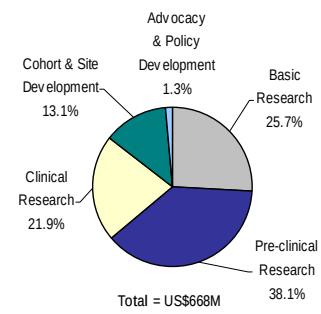
- The public sector was the main source of these funds, accounting for about 88% (US$672M) of total investments in HIV vaccines.
- The commercial sector (pharmaceutical and biotechnology companies) spent about US$75M (10%) and the remaining 2% (US$ 12mn) came from philanthropic sources.

Over 60% of non-commercial funding supported basic or pre-clinical research. Support related to clinical trials including cohort and site development accounted for about 35% of funding. Less than 2% went towards advocacy and policy development (Figure 3).

In 2005, the US provided the single largest portion of public funds, accounting for 85% (US$574M) of the total funds invested by that sector (Figure 2). Other contributions included:

- European national governments and the European Commission together accounted for 10% (US$69M).
- National governments from the rest of the world accounted for 4% (US$27M).
- Multilateral organizations such as WHO, UNAIDS and the World Bank combined accounted for less than 1% (US$2M).

Fig. 3: Non-commercial Funding by R&D Category in 2005



METHODS

- Data analyzed included publicly available information and data provided by funding agencies upon request.
- Key organizations funding HIV vaccine R&D were identified; information was requested on projects funded from 2000-2005 and projected funding for 2006.
- Funding agencies from the public, philanthropic and commercial sectors were asked about annual disbursements (which more accurately describes annual investments than commitments or pledges). Investment figures were based on estimates of the level of funds disbursed each year and generated from the perspective of the funder (i.e., funds were allocated to the year in which they were disbursed by the donor irrespective of whether the funds were expended by the recipient in that year or in future years).
- A broad definition of R&D was used including: product development; clinical trial preparations; community education; and advocacy and policy efforts directed at accelerating HIV vaccine development and future use. A breakdown of global funding allocations by type of activity or stage of product development was estimated from a subset of investments based on project descriptions and information provided by agencies.
- R&D for vaccines with primarily therapeutic applications and research that may have benefits or links to preventive HIV vaccines (e.g., platform technologies), but that was not directed primarily at their development were excluded.

To minimize double-counting, we distinguished between primary funders and 'intermediary organizations' such as IAVI and the South African AIDS Vaccine Initiative (SAAVI) who receive resources from multiple funders and use these resources to fund their own work as well as others.

DISCUSSION

Increasing public sector funding for preventive HIV vaccines has coincided with greater resources for HIV/AIDS globally. Nonetheless, given the monumental scientific challenges posed by the quest for an HIV vaccine current funding levels fall short of those needed to optimize the R&D process. The Global HIV Vaccine Enterprise estimated that between US$1.1-1.2 billion is needed annually to speed the search for a safe, effective HIV vaccine.

Ongoing collection and dissemination of HIV vaccine R&D investment data allows: identification of trends in investment, spending, and research focus - including areas needing more resources and effort; assessment of the impact of public policies aimed at increasing investment; and provides a fact base for policy advocacy on R&D investment and allocations. Future estimates would benefit from a stronger collaboration with industry to track commercial sector resources; analyzing the impact of overhead calculations on funding levels and additional efforts to gather more detailed data on expenditures by R&D activity.

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