

Adding It All Up

Funding for AIDS vaccine research and development between 2000 and 2005

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AIDS Vaccine 2005 Conference
7 September 2005
Poster 608P



Background

A number of estimates have been made of global funding for preventive AIDS vaccine research and development (R&D).

In the absence of comparable methodology, these estimates cannot be used to estimate temporal trends in funding.

In 2004, UNAIDS, the Alliance for Microbicide Development (AMD), the AIDS Vaccine Advocacy Coalition (AVAC) and the International AIDS Vaccine Initiative (IAVI) established a collaborative project to track trends in R&D funding for both AIDS vaccines and microbicides (the HIV Vaccines & Microbicides Resource Tracking Working Group).



Why track R&D Funding?

- Monitor current levels of effort
- Identify trends in investment, spending, and research focus over time
- Identify areas where more resources and effort need to be focused
- Assess the impact of public policies aimed at increasing R&D investment



Methods - General

1. Identified key organizations funding preventive HIV vaccine & microbicide R&D
2. Collected published and unpublished data
3. Contacted funders asking for information on specific projects funded between 2000 and 2004, projected funding for 2005.
4. Reviewed data against inclusion criteria for comparability and cross-checked to eliminate double-counting.
5. For those orgs not responding after numerous follow-ups, developed estimates based on publicly available info & discussions with experts in the field.



Investments - General

Investments: annual disbursements by funders

- Took perspective of funder
- Identified funders & classified them as public, philanthropic, or commercial
- Distinguished between primary funders & intermediaries (such as IAVI and SAAVI) to eliminate double-counting



Investments by Sector (1)

Public Sector-

Contacted all of the public sector funding agencies with an interest in HIV vaccines and/ or microbicides, including:

- national and multilateral agencies
- national research and overseas development agencies

Philanthropic Sector-

Contacted foundations known to have awarded >\$100k between 2000 and 2004 with summary of info collated and asked them to review

Contacted those foundations for which we lack solid data



Investments by Sector (2)

Private Sector-

- Compiled list of vaccine and biotech companies involved in HIV vaccine and microbicide R&D
- Contacted key companies from that list
- Generated investment estimates based on data collected, interviews and other available information

Intermediaries

- Contacted to collect data on annual income by source and annual expenditures by activity type



Expenditures – (1)

Expenditures: funding directly spent on HIV vaccine R&D activities in a particular year

- Reviewed information received from primary funders and intermediaries
- Distinguished between funds spent by the primary funders and those spent by intermediaries such as IAVI or SAAVI
- Subtracted funds awarded to intermediaries in order to estimate a funder's non-intermediary expenditures
- Allocated funds spent across 5 categories based on project information received from funder/intermediary and project descriptions



Expenditures – (2)

Allocated HIV vaccine funds spent across five R&D categories based on definitions used by NIH:

- Basic Research
- Pre-clinical Research
- Clinical Trials
- Cohort & Site Development
- Advocacy & Policy Development



Data Limitations

Missing or incomplete information:

- May have missed key organizations/agencies
- Focused public sector data collection on national-level efforts only
- Not able to obtain data from all funders contacted
- Many private sector companies don't track this type of information
- Unable to obtain expenditures data for microbicides

Differences in definitions:

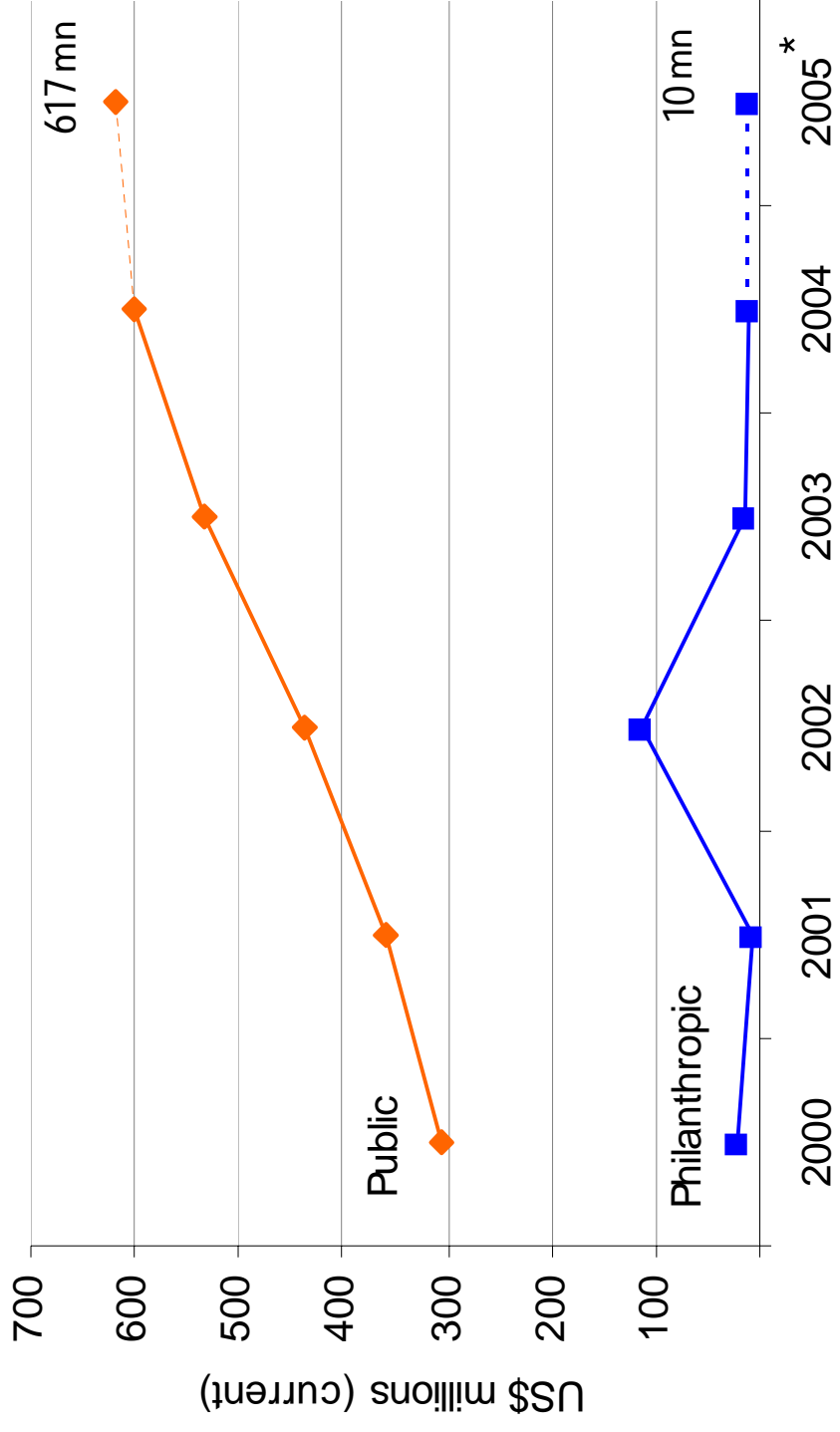
- Not all funders report based on calendar year
- Expenditure estimates are based on combination of intermediary & non-intermediary spending
- Most funder do not break down expenditures by type of R&D activity

Sources of information:

- All self-reported figures
- For private sector, tried to exclude funds received from outside sources such as public research institutions



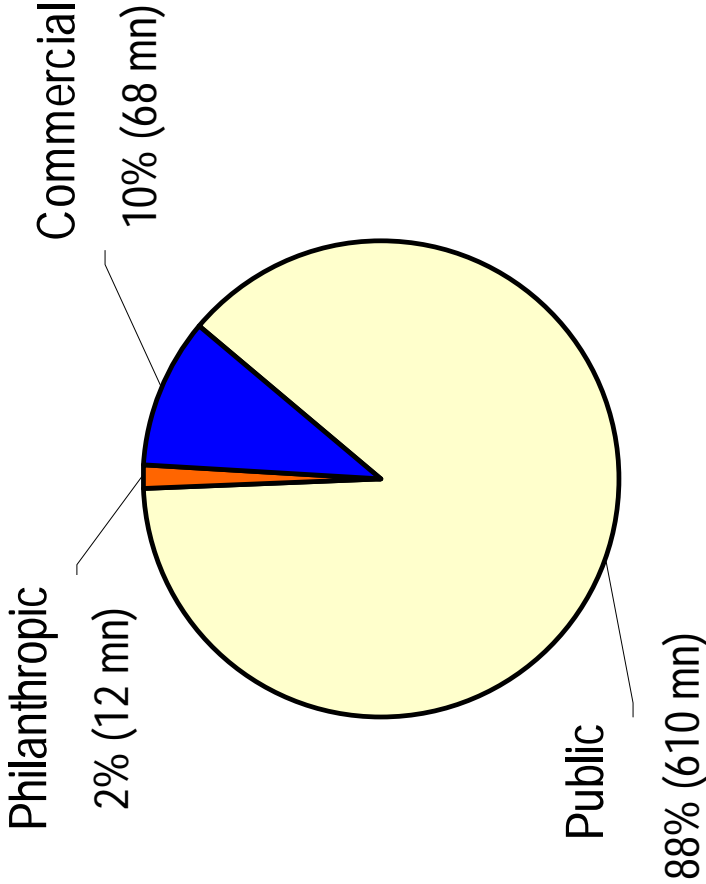
Annual investments in preventive HIV vaccine R&D: Public and Philanthropic sectors (2000 to 2005)



*Estimate as of April 2005



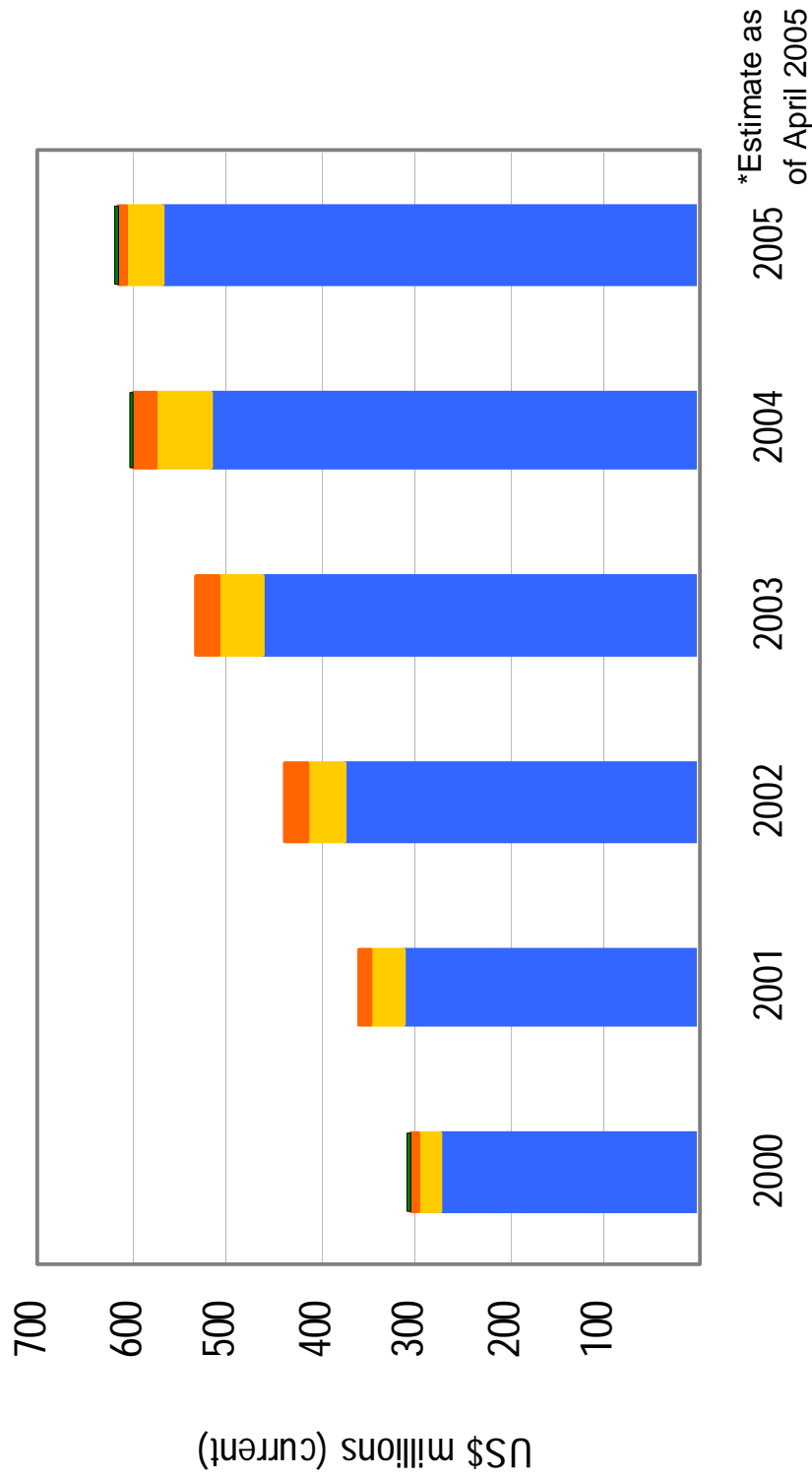
Sources of funding for preventive HIV vaccine R&D in 2004



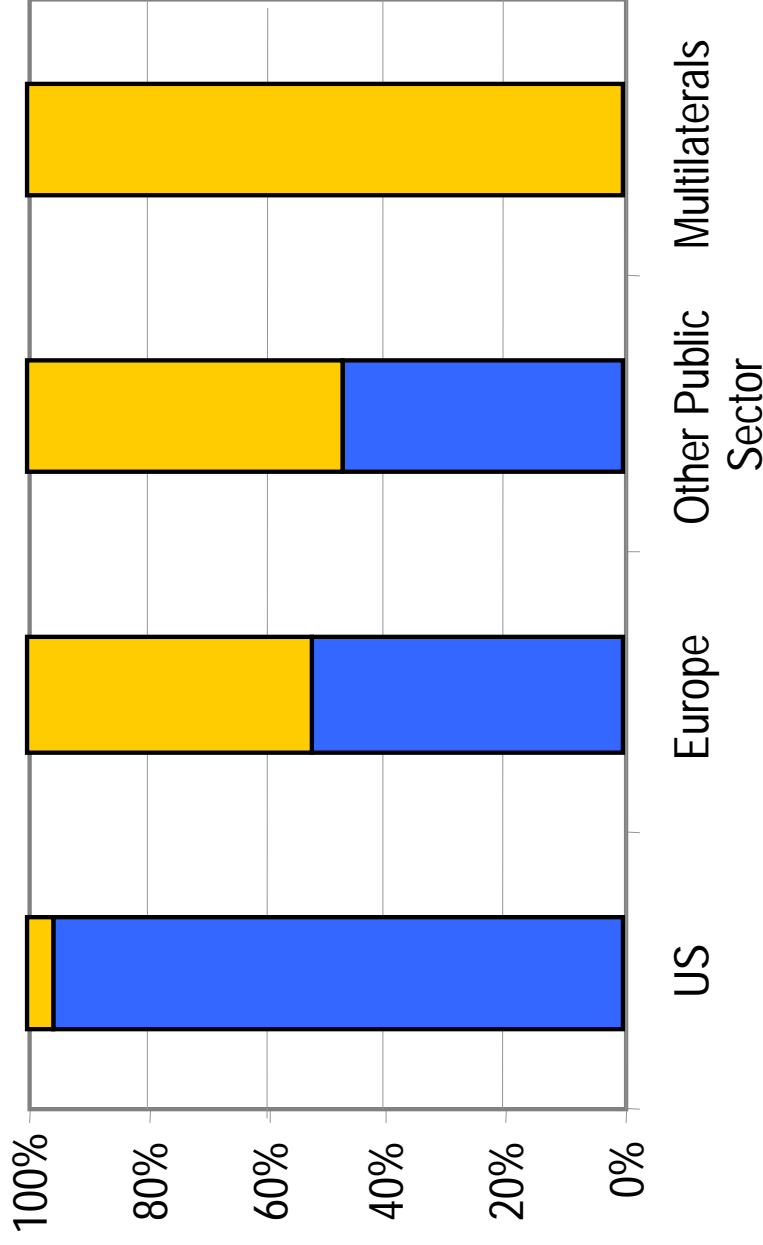
Total: US\$ 682 mn



Public sector investments in preventive HIV vaccine R&D by region (2000 to 2005)



Public sector investment in preventive HIV vaccines in 2004 by source of funding



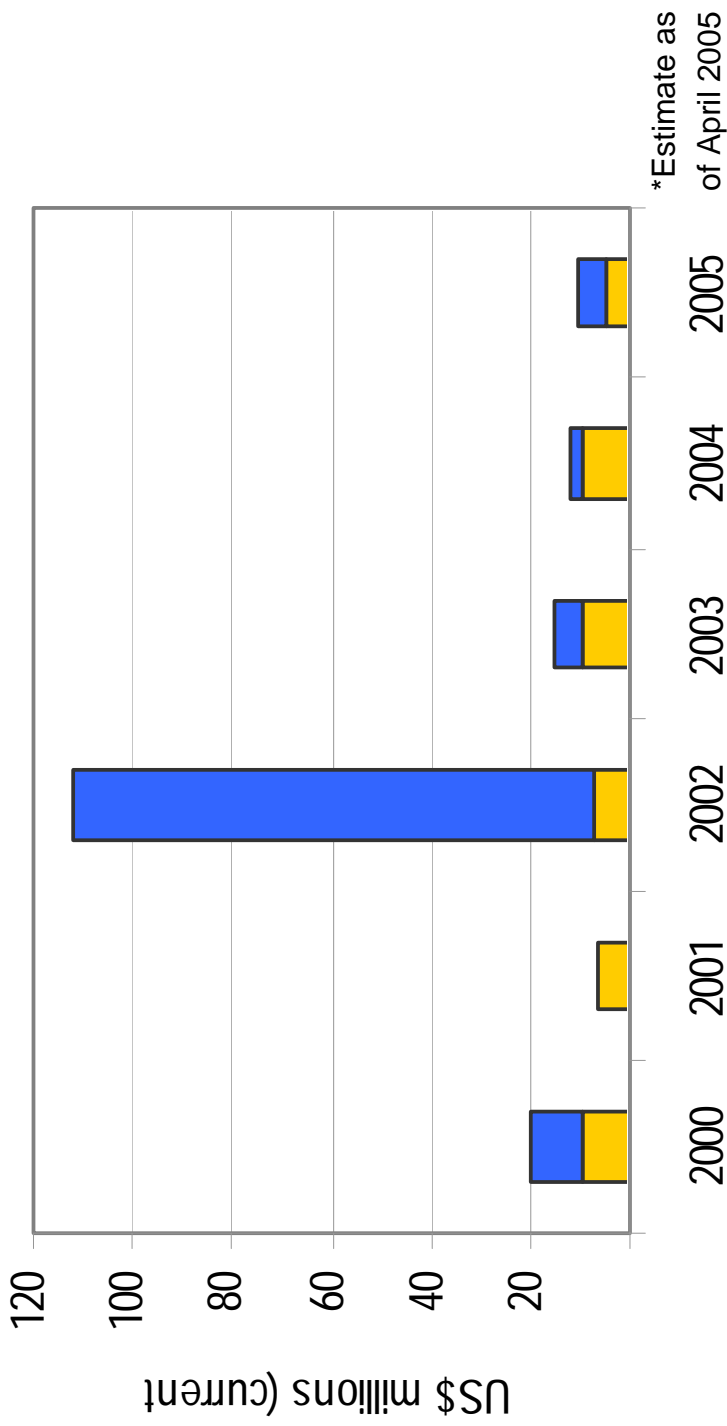
■ Research/ Health funding agencies

■ Development funding agencies



UNAIDS
 Joint United Nations Programme on HIV/AIDS
 UNHCR-UNICEF-WFP-UNDP-UNFPA
 UNDC-IO-UNESCO-WORLD BANK

Philanthropic investment in preventive HIV vaccines



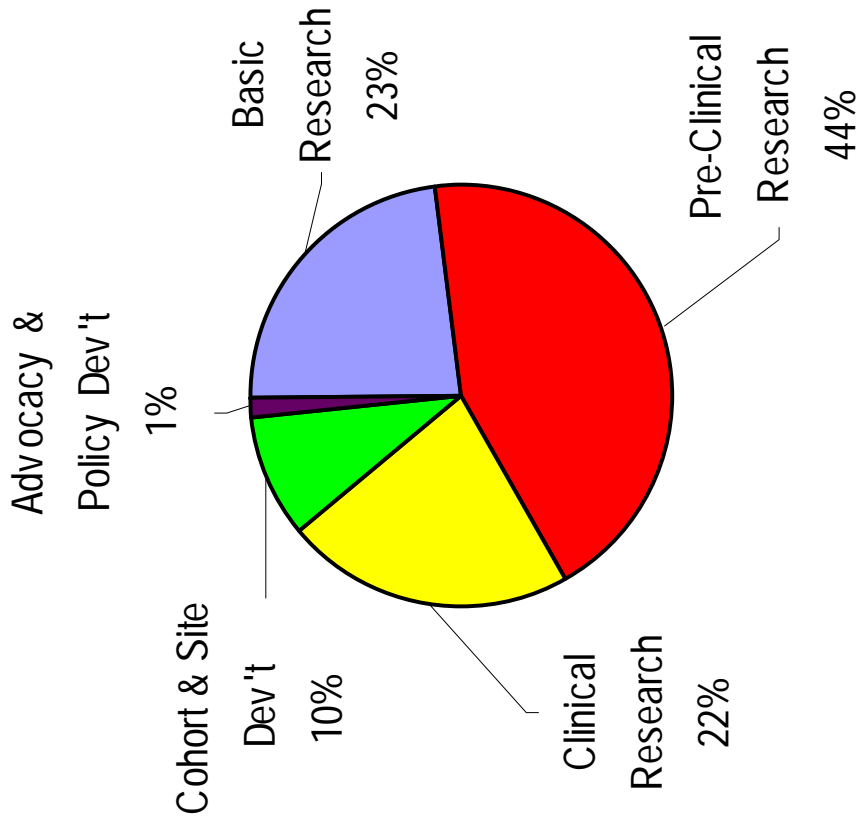
■ Other Philanthropies
 ■ Bill & Melinda Gates Foundation



Commercial Sector Investments

	2002	2004
Pharmaceutical Companies	US\$ 57 mn (58%) <i>range (48 to 67)</i>	US\$ 59 mn (87%) <i>range (47 to 71)</i>
Biotechnology Companies	US\$ 42 mn (42%) <i>range (36 to 49)</i>	US\$ 9 mn (13%) <i>range (7 to 11)</i>
Total	US\$ 99 mn <i>range (84 to 116)</i>	US\$ 68 mn <i>range (54 to 82)</i>

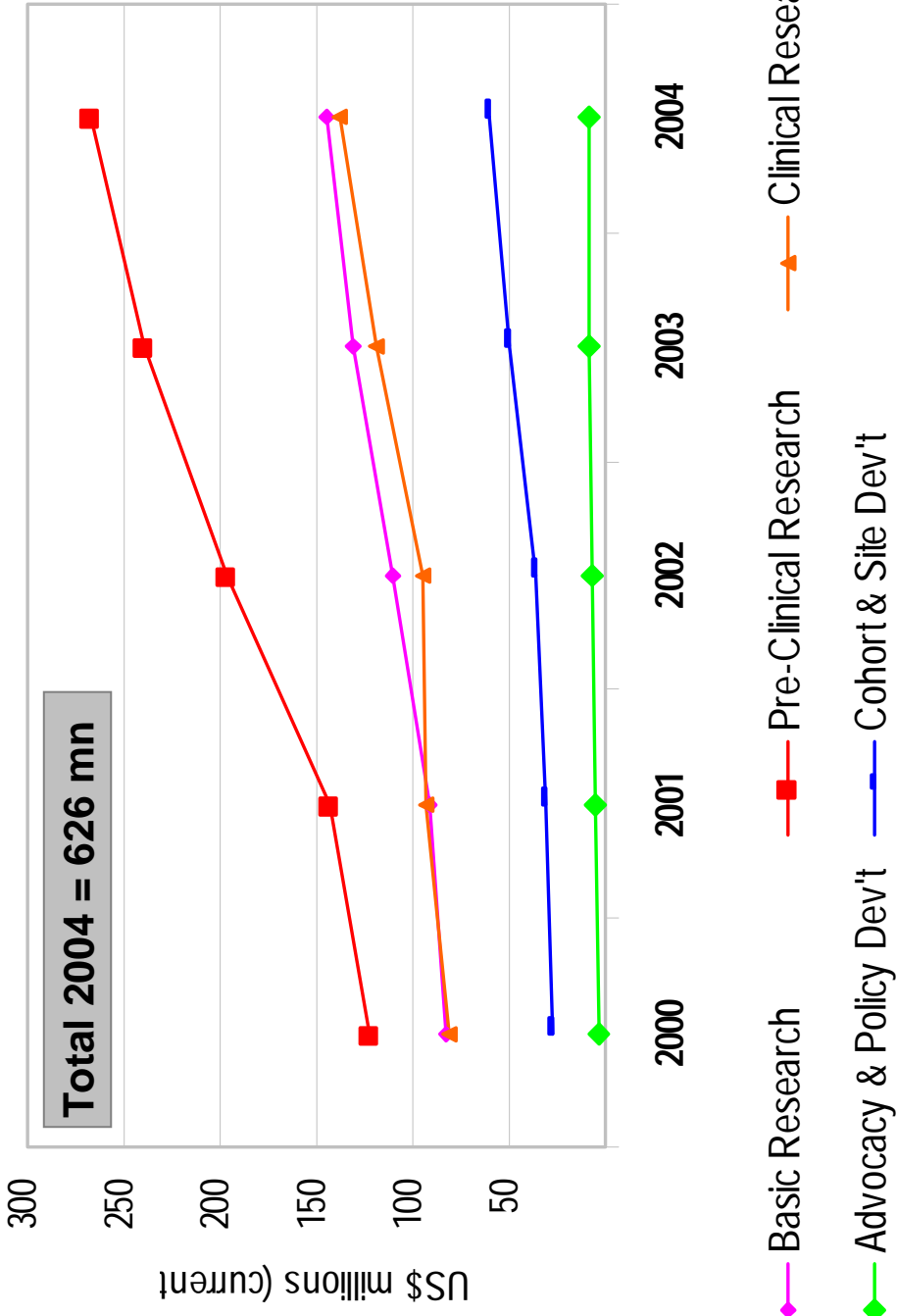
Total Expenditures in 2004: Breakdown by type of expenditure



Total = US\$ 694mn



Non-Commercial Expenditures: Breakdown of annual expenditures by type of expenditure



Conclusions (1)

- In 2004, the public, philanthropic and commercial sectors combined invested approximately US\$ 682 million (range US\$ 668 mn to US\$ 696 mn) in preventive HIV vaccine R&D, or around 0.5% of the total funds invested globally in health R&D.
- This represents a significant increase in total investment in the last five years – especially from the public sector – but a figure that is still far short of the estimated US\$ 1.2 billion required annually for an accelerated global search.



Conclusions (2)

- The significant increase in funding for preventive HIV vaccines over the last five years has coincided with a dramatic increase in the overall financial commitment to the HIV/AIDS field in general.
- While the HIV Vaccines and Microbicides Resource Tracking Working Group has not collected data on overall financial commitments to HIV/AIDS, anecdotal evidence suggests that funders have increased funding for the development of preventive HIV vaccines and microbicides in addition to – *not at the expense of* – their commitments to expanding access to the prevention and treatment tools already available.



Conclusions (3)

- Data for the public and philanthropic sectors are more comprehensive than the data for the commercial sector.
- This reflects both how companies track their own funding and corporate concerns about divulging proprietary information.
- Future estimates would benefit from a stronger collaboration with industry to find creative solutions to track commercial sector investments and to track the level of funding the commercial sector receives directly from public and philanthropic sources and from intermediary agencies.



Conclusions (4)

- Future work in this area would also benefit from additional effort being directed at collating more detailed information on the breakdown of expenditures and subdividing some of the expenditure categories, such as pre-clinical research, that cover a wide range of topics.
- Collection of this type of information, combined with estimates of funding needs and absorptive capacity, should help identify areas where more resources and effort need to be focused.



For more information

For more information on HIV vaccines, please contact the AIDS Vaccine Advocacy Coalition (avac@avac.org or www.avac.org) or the International AIDS Vaccine Initiative (publicpolicy@iavi.org or www.iavi.org).

- For more information on microbicides, please contact the Alliance for Microbicide Development (info@microbicide.org or www.microbicide.org).
- For more information on UNAIDS resource tracking activities, please contact the UNAIDS Resource Tracking Unit (rtpdata@unaids.org or www.unaids.org).



Acknowledgements

- The Working Group would like to thank the many individuals from the public, philanthropic, and commercial sectors who provided us with information and whose participation was invaluable to the completion of this project.
- Support for this project was provided by the Alliance for Microbicide Development (AMD), the AIDS Vaccine Advocacy Coalition (AVAC), the International AIDS Vaccine Initiative (IAVI) and the Joint United Nations Programme on HIV/AIDS (UNAIDS).

