



Financial resources required to achieve universal access to HIV prevention, treatment, care and support

Research & Development for new prevention technologies

Methodological Annex - V

Uniting the world against AIDS

Annex 5

Research & Development for new prevention technologies

Increased and more efficient research and development (R&D) spending could significantly reduce the time to develop HIV vaccines, microbicides, and other new prevention technologies and deliver them to populations most in need¹. Although funding from public and philanthropic agencies for HIV vaccine and microbicide R&D efforts more than doubled from 2000 to 2006, significant resource gaps still remain.

If any of the numerous vaccine or microbicide candidates currently in advanced testing shows efficacy in the next few years, the HIV prevention field will need to rapidly scale-up manufacturing and service delivery while sustaining the development of improved second generation candidates. Thus, a key area requiring more targeted resources today is the applied research stage, where innovation is needed to develop new and improved R&D approaches. The financial resources needed for vaccine and microbicide R&D are large and must be sustained over the long term. However, the enormous potential benefits of successful products, measured in infections averted and lives saved, make these investments worthwhile.

Expanding efficacy trial capacity for new HIV vaccine and microbicide candidates may also require additional R&D investments between now and 2015. Seven microbicide candidates are currently in Phase II clinical trials, and a number of these could soon progress to Phase III trials,² each with a cost of approximately US\$50 million³. Several of the five HIV vaccine candidates currently in Phase II trials could also move to Phase III efficacy testing over the next decade,⁴ at a cost of US\$60-100 million⁵ per trial. At the same time, the field is currently exploring alternative clinical trial paradigms to speed up product timelines and use resources more efficiently.

¹ IAVI and BMGF (2006). HIV Vaccine Research and Development: Modeling the Path to Speedier Success. IAVI Policy Research Working Paper #10.

² Alliance for Microbicide Development *Mapping the Microbicide Effort* (March 2007) p. 46.

³ <http://www.global-campaign.org/fundingneeds.htm>

⁴ <http://www.avac.org/research.htm>

⁵ Estimates derived from interviews.