



### **Transformative Science at IAS Conferences**

The IAS Conferences provide an important platform for presenting groundbreaking HIV science that can change the status quo.

IAS 2011 attracted over 7'000 participants and 337 media, who witnessed the first presentation of data from the seminal HPTN 052 trial of antiretroviral therapy for prevention and the first two preexposure prophylaxis (PrEP) trials in heterosexuals, Partners PrEP and TDF2 (**Table 1**). IAS 2005 in Rio de Janeiro featured results of the first randomized trial of circumcision in heterosexual men, the Orange Farm study. Results of the first successful vaginal microbicide trial, CAPRISA 004, highlighted the International AIDS Conference (AIDS 2012) in Vienna, a meeting which was also convened by the IAS.

Top investigators have opted to present their latest research at these meetings because the original data presented at the International AIDS Society (IAS) annual meetings have changed the practice of HIV medicine globally and locally. The IAS meetings create a unique forum where researchers from four disciplines—basic science, clinical medicine, prevention, and operations and implementation—can share scientific innovations that shape the global response to HIV in front of an audience of thousands of delegates and media representatives from around the world. Such a high-level and global audience ensures that critical findings are widely disseminated, reaching key policy makers and clinicians.

There are many examples of how the science presented at IAS Conferences has altered HIV practice (**Tables 1-4**). Findings first presented at IAS meetings have transformed HIV care. CHER led to revision of World Health Organization (WHO) guidance on immediate treatment of infants under 2 years old. Mma Bana, Kesho Bora, and BAN shaped revisions in WHO vertical transmission and maternal treatment guidelines. Orange Farm and later circumcision trials prompted wide endorsement and uptake of this prevention strategy. Along with iPrEx, Partners PrEP and TDF2 ushered antiretroviral prevention from the realm of hope to the reality of practice. HPTN 052 became the first randomized trial to demonstrate the preventive and clinical benefits of starting antiretrovirals at a CD4 count between 250 and 550. CAMELIA broadened the understanding of when people taking anti-TB medications can start antiretrovirals. The Partners in Prevention hormonal contraception study spurred a WHO review and new technical statement on contraception for women with HIV.

On 30 June, 2013 senior investigators and renowned scientists will again present potentially transformative work at the 7th IAS Conference on HIV Pathogenesis, Treatment and Prevention in Kuala Lumpur.

**Late breaker submissions for IAS 2013 may be made from 3 April through 7 May.**

Table 1. High-impact adult HIV prevention trials first presented at annual IAS meetings

Study	First presented	Impact	Published
Orange Farm circumcision trial	IAS 2005 Rio de Janeiro (TUOA0402)	Established protective value of circumcision in heterosexual men	2005 PLoS Medicine
CAPRISA 004	AIDS 2010 Vienna (TUSS0502)*	Established protective potential of vaginal microbicide	2010 Science
HPTN 052	IAS 2011 Rome (MOAX0102)*	Established antiretroviral treatment as prevention	2011 N Engl J Med
Partners PrEP	IAS 2011 Rome (MOAX0106)*	Established preventive value of PrEP in heterosexual couples	2012 N Engl J Med
TDF2	IAS 2011 Rome (WELBC01)*	Established preventive value of PrEP in in heterosexuals	2012 N Engl J Med

\*Late breaker.

Among the other critical reports at recent IAS Conferences, three landmark studies of antiretroviral treatment for pregnant women and prevention of vertical transmission—Mma Bana, Kesho Bora, and BAN—headlined IAS 2009 in Cape Town (**Table 2**). Results of pivotal antiretroviral treatment trials in infants (CHER) and adults (HPTN 052, CAMELIA, PEARLS) first appeared at IAS and AIDS Conferences from 2007 through 2011 (**Table 3**). Through the years, many new antiretrovirals, antiretroviral classes, and antiretroviral strategies first gained wide attention at annual IAS Conferences.

Table 2. High-impact perinatal HIV prevention trials first presented at annual IAS meetings

Study	First presented	Impact	Published
Mma Bana	IAS 2009 Cape Town (WELBB101)*	Established that triple ART through pregnancy and 6 months postpartum cuts vertical transmission rate to 1.1%	2010 N Engl J Med
Kesho Bora	IAS 2009 Cape Town (LBPEC01)*	Established superiority of triple ART over other interventions in preventing vertical transmission	2011 Lancet Infect Dis
BAN Study	IAS 2009 Cape Town (WELBC103)*	Established value of maternal ART and infant nevirapine in preventing vertical transmission	2010 N Engl J Med

\*Late breaker.

Table 3. High-impact pediatric and adult antiretroviral trials first presented at annual IAS meetings

Study	First presented	Impact	Published
CHER	IAS 2007 Sydney (WESS103)*	Established that immediate ART protects infants from AIDS and death	2008 N Engl J Med
PEARLS	AIDS 2008 Mexico City (THAB0404)	Established feasibility of international, cross-cultural antiretroviral trials	2010 PLoS Medicine
Phase 2a dolutegravir trial	IAS 2009 Cape Town (TUAB105)	Established robust antiviral activity of second-generation integrase inhibitor	2011 AIDS
CAMELIA	AIDS 2010 Vienna (THLBB106)*	Established value of starting ART within 2 weeks of anti-TB therapy	2011 N Engl J Med
HPTN 052	IAS 2011 Rome (MOAX0105)* AIDS 2012	Established clinical value of starting ART at CD4 count between 250 and 550	2011 N Engl J Med

	Washington (THLBB05)*		
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\*Late breaker.

Practice-transforming results of the first trial of the quadrivalent human papillomavirus (HPV) vaccine in men emerged as a late breaker at AIDS 2010, and the first two HPV vaccine trials in HIV-positive women appeared back-to-back at AIDS 2012 (**Table 4**). The Partners in Prevention study that first linked injectable hormonal contraceptives to a higher HIV transmission risk came to light at IAS 2011 (**Table 4**).

Table 4. High-impact HPV vaccine trials and contraceptive studies first presented at annual IAS meetings

Study	First presented	Impact	Published
Quadrivalent vaccine for men	AIDS 2010 Vienna (THLBB101)*	Established value of quadrivalent vaccine in preventing HPV infection and genital lesions in young men	2011 N Engl J Med
Quadrivalent vaccine for HIV-positive women	AIDS 2012 Washington (WEAB0202)	Established safety and immunogenicity of quadrivalent vaccine in young HIV-positive women	Still unpublished
Quadrivalent vaccine for HIV-positive women	AIDS 2012 Washington (WEAB0203)	Established safety and immunogenicity of quadrivalent vaccine in young and middle-aged HIV-positive women	Still unpublished
Partners in Prevention hormonal contraceptive study	IAS 2011 Rome (WEAX0206)*	Linked hormonal contraceptives to a doubled risk of HIV transmission and acquisition	2012 Lancet Infect Dis

\*Late breaker.

Presenters, attendees, and stake holders across the world appreciate the ready access to meeting data offered at all annual IAS meetings. IAS conferences are the only international scientific HIV meetings to provide live Webcasts of all abstract-driven oral sessions, all plenary sessions, and many symposia. During July 2011, the month of IAS 2011, more than 46,400 users visited the IAS 2011 website, compared with 42,475 users during the month when IAS 2009 was held.

At the conclusion of each conference the IAS archives schedules, abstracts, videos, slides, and rapporteur analyses of session presentations, offering an invaluable database accessible to everyone. Before the meeting, free online access to the full program allows media to plan optimal coverage.

Online day-to-day coverage of IAS meetings by [www.aidsmap.com](http://www.aidsmap.com), <http://www.clinicaloptions.com/HIV>, the conference blog, Facebook, and Twitter provides same-day access to key presentations. As the largest and most media-friendly HIV meetings held every year, the IAS conferences give science, health, and development journalists intimate access to the world's top scientists, clinicians, public health experts, and community leaders—and to their latest data.