

Appendix A: Chronology

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Key	
black	events relating to identification and treatment of HIV/AIDS
blue	developments in UN forums or agencies
dark green	developments in non-UN based multilateral or bilateral aid programs
maroon	developments in World Trade Organization (WTO) relating to TRIPS (Trade Related Aspects of Intellectual Property Rights] Agreement

1981

First immediately-noticed case of AIDS in the USA.

Patient's infection (not yet labeled AIDS) is identified as a new form of immune system suppression, hence a distinct disease.

1982

Sept Acquired Immune Deficiency Syndrome (AIDS) introduced as the standard term for the disease.

1983

Human Immunodeficiency Virus (HIV) identified as the cause of AIDS (genetic tracing has been used to develop what is now the most widely accepted account, that HIV first emerged in west-central Africa during the late 19th or early 20th century).

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1987

Mar AZT, the first drug developed specifically for treatment of HIV, approved for use.

1991

ddi, the first nucleoside reverse transcriptase inhibitor (NRTI), approved for use.

1995

Jan TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) enters into force.

first protease inhibitor (PI) and nonnucleoside reverse transcriptase inhibitor (NNRTI) approved; all elements for Highly Active Antiretroviral Therapy are in place.

WHO closes Global Programme for AIDS in anticipation of 1996 start of UNAIDS.

1996

Jan deadline for all developed country WTO members to incorporate TRIPS rules into their domestic law and provide the protections for locally and foreign-owned intellectual property defined in the TRIPS agreement. Article 31(f) permits compulsory licensing for medicines, but requires production under that compulsory license be “predominantly” for the domestic market of that country.

first successful combination of highly active antiretroviral therapy for slowing progression of AIDS is available in the USA and Europe at an annual cost of \$10,000-\$15,000 per patient.

UN AIDS (Joint United Nations Programme on HIV/AIDS) is established to coordinate UN system efforts to address the pandemic. Cooperating agencies include the UN High Commissioner for Refugees (UNHCR), the UN Children’s Fund (UNICEF), the World Food Programme (WFP), the UN Development Programme (WHO), the UN Fund for Population Activities (UNFPA), the UN ODC, the International Labor Organization (ILO), the UN Educational Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO) and the World Bank.

1997

Brazil is the first developing country to distribute HIV drugs free to poor patients.

2000

Jan Brazil’s “transition period” under TRIPS ends, and becomes obligated to enact and enforce TRIPS-consistent drug patent rules.

May

5 major pharmaceutical companies – Bristol-Meyers Squibb (USA), Hoffmann-LaRoche (Switzerland), Merck (USA), Boehringer Ingelheim (Germany), and GlaxoSmithKline (UK) – agree with WHO, UNAIDS, the World Bank and other UN agencies to establish the Accelerated Access Initiative. This establishes a tiered pricing system in which developing countries get steep discounts and least developed countries receive price reductions of up to 90%.

[World Health Assembly \(WHO assembly of member states\) asks WHO staff to develop a global strategy for addressing HIV/AIDS.](#)

2000-2001

Transnational campaign against the drug companies trying to sue South Africa over its decisions to allow generic firms to produce versions of their HIV drugs draws public attention to the problem of access to HIV treatments in developing countries.

Summer Clinton Administration Executive Order exempts African countries seeking less expensive AIDS treatments from US trade sanctions under TRIPS.

Sep [UN Millennium Summit includes targets on combating AIDS in Millennium Development Goals](#)

2001

Indian firms begin producing generic versions of HIV medications.

Early 2001 [WHO re-establishes its AIDS department.](#)

Mid-2001 annual cost of treatment with India-manufactured generic versions of leading HIV combination therapies is \$395 per patient.

Indian generic drug maker, Cipla, introduces first fixed dose combination (FDC) type ART - a one-pill combination of the three most commonly used HIV medications. Previously the drugs were taken as separate pills.

Apr 39 drug companies abandon efforts to sue South African government for patent violations over its domestic production of generic AIDS medicines. One of the companies involved, GlaxoSmithKline, grants a voluntary license allowing Aspen, a large South African generics producer, to produce three most-sought medications AZT, 3TC and Combivir without paying a royalty.

Aug [UN General Assembly 26th Special Session adopts Declaration of Concern on HIV/AIDS and creates the Global Fund to Fight AIDS.](#)

Nov Proposal by industrial countries to simplify compulsory licensing by using an agreed list of drugs based on the WHO list of Essential Medicines dropped after strong opposition by developing countries and health activists.

WTO Ministerial Meeting issues the Doha Declaration on Trade and Development. It includes an agreed statement of what became known as the "Paragraph 6 System" (from its location in the Declaration) that application of TRIPS rules regarding compulsory licensing of medicines to combat health emergencies should be widened to permit supplying developing countries which lack domestic production.

2002

Jan Group of 8 (G-8, the leading industrial countries) establishes the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

2003

Jan US government establishes the President's Emergency Plan for AIDS Relief (PEPFAR).

Aug WTO General Council follows up on the Doha Declaration by formalizing the "Paragraph 6 System" through a general waiver to Articles 31(f) and 31(h) of the TRIPS Agreement.

Sep WHO begins planning its "3 by 5" program.

Oct Thailand announces addition of access to ART for all HIV-positive persons to its universal health care coverage.

Nov Malaysia becomes the first country to use the "Paragraph 6 System" to issue compulsory licenses on 3 antiretroviral drugs it wants from Indian generics makers.

WHO establishes a list of "quality drugs" recommended as effective in treating HIV. The list includes any drug produced legally in any country regardless of patent status.

2004

Feb Thai AIDS groups win lawsuit overturning Thai patent on Bristol-Meyers Squibb (USA) pill formulation of didanosine on grounds it lacked sufficient novelty to qualify for a patent; Bristol-Meyers Squibb decided not to appeal ruling.

Mid-2004 Medecins sans frontiers (Doctors without Borders) warning that the impending need to move to newer "second line" ART because many strains of HIV virus are becoming resistant to the older "first line" drug combinations in many countries, will create a new crisis in access to treatments.

US Food and Drug Administration establishes a program to expedite evaluation of applications to produce true generic versions of HIV drugs.

May Canada announces program under which Canadian drug companies will be authorized to produce HIV drugs for developing countries with little or no domestic manufacturing capacity under Canada-issued compulsory licenses.

May & Aug WHO removes five HIV drugs from its "preapproved" list when external checks indicate they are not fully bioequivalent to the drugs of which they are supposed to be true generics.

2005

Jan end of TRIPS "transition period" regarding drug patents for most developing states. India, a major source of generic versions of HIV drugs, comes within TRIPS.

- Early 2005 Brazilian AIDS and health activists complain about high cost of imported second-line drugs. They claim that 80% of the National AIDS Program budget is being spent on foreign-made patented drugs and that 70% of that money is used on purchases of four drugs: the lopinavir/ritonavir combination, tenofovir, efavirenz, and nevirapine.
- Jun Brazilian Chamber of Deputies passes a draft law authorizing the government to issue compulsory licenses for local production of three HIV drugs or drug combinations patented by US companies Abbott Laboratories, Gilead, and Merck.
- Jul-Aug Brazilian government is diverted from issuing compulsory licenses by strong US pharmaceutical industry pressure plus offers of lower prices for the drugs Brazil wants most.
- Sep GlaxoSmithKline's patent on Retrovir (AZT, or zidovudine) expires. US Food and Drug Administration authorizes other US firms to begin production and sale of 4 generic versions on September 19th.
- [UN General Assembly-sponsored "Millennium plus 5" World Summit agrees on additional goals and stepped up programs to combat HIV/AIDS.](#)
- XX First challenge to a drug patent under India's 2005 Patent Act (against Novartis's anti-leukemia drug Glivec (imatinib mesylate) on grounds it is merely a new form of an already-known substance (imatinib, patented by Novartis in 1993). This is the first legal test of the 2005 Patent Act's definition of the "novelty" required to qualify for a patent.
- Dec [WTO adopts formal amendments to the TRIPS Agreement incorporating the "Paragraph 6 System" and transmits them to member states for ratification \[the amendments have not yet entered into force\].](#)
- 2006**
- May Two Indian NGOs, the Indian Network of People Living with HIV/AIDS (INP+) and the Positive Women's Network (PWN), submit pre-grant oppositions Boehringer Ingelheim's application for an Indian patent on a syrup form of the anti-AIDS drug nevirapine.
- Jun Highly critical external review of WHO's "3 by 5" [three-in five years] released online by WHO.
- [UN General Assembly reviews progress; adopts a 53-point Political Declaration on AIDS](#)
- Sep G-8 establishes UNITAID – an international drug purchase facility – to ensure a stable source of funding for supplying HIV, malaria and tuberculosis medications to persons in developing countries.
- new military government of Thailand issues compulsory license on Merck's efavirenz. The government announces it will import Indian generics until the Thai Government Pharmaceutical Organization can start its own production.

XX Indian Patent Office denies Novartis' application for a patent on Glivec. Novartis appeals; health activists launch a global campaign to pressure Novartis into withdrawing its challenge.

2007

Jan Thai government issues compulsory licenses on Kalestra and Plavix.

Abbott Laboratories retaliates against Thailand for issuing compulsory license on one of its drugs by refusing to export seven others to the country.

Apr Office of US Trade Representative increases pressure on Thailand by moving it to the "priority watch list" of countries deemed likely to violate TRIPS agreement.

May Clinton Foundation and UNITAID announce agreements with Indian generics makers Cipla and Matrix to supply generic versions of newer HIV treatments.

XX Brazil amends patent law to a) give the Health Ministry's National Surveillance Agency rather than the Patent Office final say on whether to grant a drug patent, and b) adopt a provision equivalent to one in US Patent Law permitting others to have access to the confidential data and test results submitted by a drug company seeking a patent when the patent expires.

Jun Brazil imposes its first compulsory license on Merck's Sustina (efavirenz), and announces plans to import the drug from India-based generic producers. This decision came one day after the Brazilian government rejected Merck's offer to sell the drug at a 30 percent discount, and marks the first Brazilian resort to compulsory licensing.

Aug Madras High Court rejects Novartis challenge to India Patent Office use of Section 3(d) of Indian Patents Act to reject application on patent for Glivec (imatinib mesylate) on grounds that challenges to national law as incompatible with TRIPS must be decided through the WTO dispute settlement process (an inter-state procedure not open to private litigants). Local activists interpret the ruling as a general mandate to subordinate patent rights to patients' needs.

Nov Thai government lists 20 drugs as likely candidates for compulsory licensing.

Thai plan to issue a compulsory license on imatinib cancelled after Novartis agrees to provide some supplies free of charge.

2008

Jan US Patent Office revokes four patents issued to Gilead Sciences relating to its VIREAD (generic name: tenofovir disoproxil fumarate or TDF), used in HIV treatments, after challenges asserting that the development of the drug involved insufficient innovation to qualify for a patent.

Thai government widens compulsory licensing by extending it to patented versions of three cancer medications letrozole (breast cancer), docetaxel (breast and lung cancer) and erlotinib (lung, pancreatic, and ovarian cancer).

Mar Brazil Patent Office rejects Gilead application for patent on TDF, citing lack of innovativeness. Health Ministry and activist comments focus more on the advantages of using TDF over other drug treatments and on the price difference of \$158 per patient per year for India-manufactured generic versions compared to \$1,387 per patient per year for Gilead's branded VIRAID version.

civilian government (elected 12/2007) announces intention to continue compulsory licensing on drugs deemed "essential."

Jun Indian Patent Office rejects Boehringer Ingelheim application for a patent on the syrup form of the anti-AIDS drug nevirapine. It invokes Sections 3d and 3e of the Indian Patent Law defining the degree of innovation required for reward of a patent in supporting its conclusion that the application covered only a "new form" of a known substance rather than a significant improvement in the efficiency of the substance. Indian NGOs that had filed oppositions are pleased; see decision as precedent to limit patents.

2009

May UNITAID proposing creation of patent pools to promote development of drugs for treating diseases endemic in developing countries.

Sep India rejected patent applications on two antiretroviral drugs, from Gilead Science (USA) covering tenofovir and from Tibotec Pharmaceuticals (Ireland) covering darunavir. The Tibotec application covered its method for preparing hexahydro furo furanol, one of the starting materials used for the synthesis of darunavir.

2012

Merck patent on Sustiva (efavirenz) will expire.

2016

Jan currently-set end of TRIPS "transition period" for less advanced developing states; they will be required to incorporate TRIPS-defined standards of intellectual property rights into their national law and enforce them domestically.

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