

Access to Treatment and Prevention: Brazil and Beyond

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ARV availability in low and middle income countries, according to geographical region. June, 2005*

Region	Number of people receiving ARVs	Estimated need	Coverage
Sub-Saharan Africa	500,000	4,700,000	11%
East, South and South-East Asia	155,000	1,100,000	14%
North Africa and Middle East	4,000	75,000	5%
Eastern Europe and Central Asia	20,000	160,000	13%
Latin America and the Caribbean	290,000	465,000	62%
Total	970,000	6,500,000	15% (Average)

***Adults only, average figures**

Source: "Progress on Global Access to HIV Antiretroviral Therapy, June 2005 update, World Health Organization

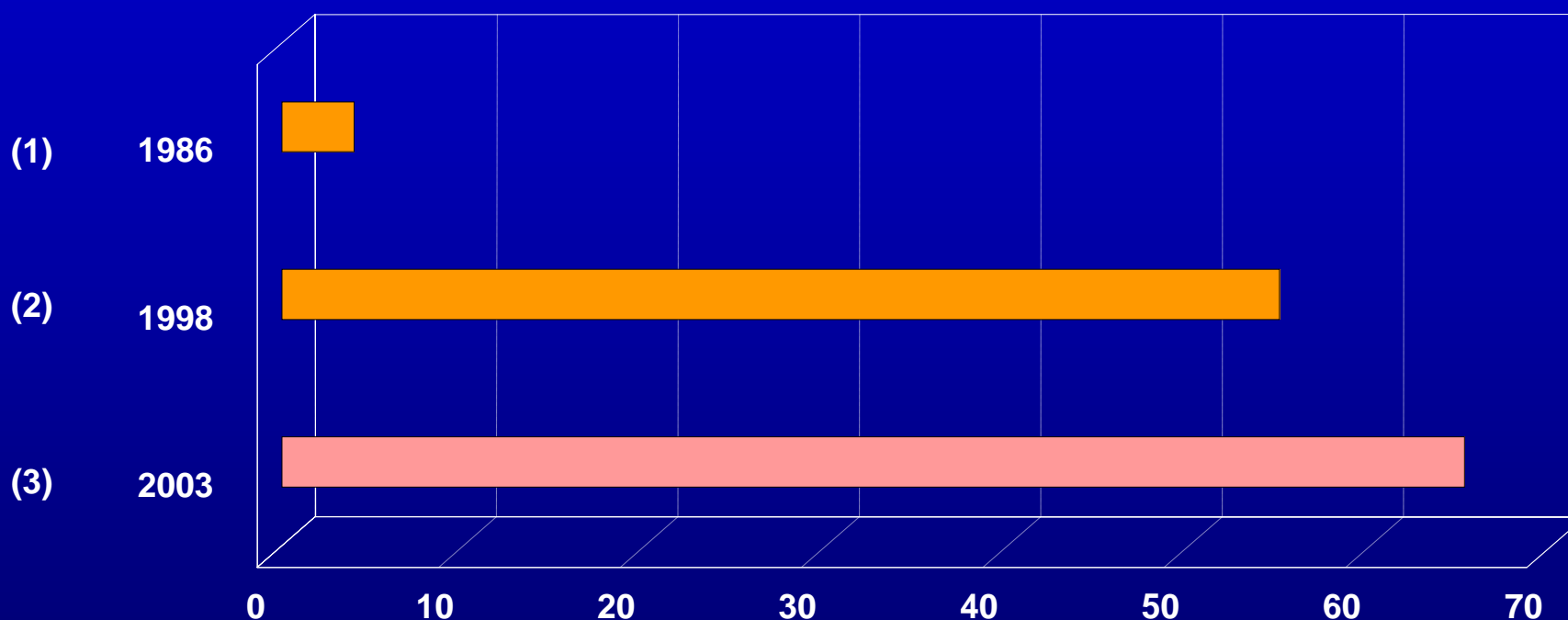
The “backbone” of the response to the AIDS epidemic: the Brazilian Public Health System

- ▶ An outcome of the Brazilian Constitution of 1988
- ▶ Main precepts :
 - comprehensive approach
 - universal access and equity
 - civil society participation
- ▶ Key feature: decentralization
- ▶ Strong catalytic element
- ▶ Virtuous circle (AIDS ↔ Public Health System)

Major features of Brazil's response to HIV/AIDS epidemic

- ▶ Early response by government (since 1983)
- ▶ Robust participation by civil society in all decisions
- ▶ Multisectoral mobilization
- ▶ Balanced prevention and treatment approach, with human rights taken into account in all strategies and actions

Percentage change in condom use among young people at first sexual intercourse. Brazil, 1986, 1998 and 2003



Sources: (1) BEMFAM

(2) CEBRAP/MH/PN-STD/AIDS/SVS

(3) MH/PN-STD/AIDS/SVS – (PCAP_BR_2003, IBOPE)

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Percentage of condom use among sexually-active population according to age group. Brazil, 2004

Condom use	15-24	25-39	40-54	Total
Last sexual intercourse	57.3	36.6	22.3	38.4
Last sexual intercourse with casual partner	74.1	66.5	51.2	67.0
Regular use (any partners)	39.0	22.0	16.1	25.3
Fixed partner	38.8	21.9	16.2	24.9
Casual partner	58.4	48.7	41.5	51.5

Source: Survey on behavior, attitudes and practices related to STD/AIDS, 2004, PN-STD-AIDS/SVS/MH

Harm Reduction: a basic prevention strategy

- ▶ Estimated number of IDUs in Brazil: 193,000 (Source: PCAP, 2004)
- ▶ Percentage of IDUs who reported no syringe/needle sharing: 76% (Source: PCAP - 2004)
- ▶ AIDS cases among IDUs:
 - ▶ 1993 = 4926 cases (28.0% of total reported cases)
 - ▶ 2003* = 1871 cases (10.2% of total reported cases)
- ▶ Number of IDU specific projects supported from 1999 to 2004:
 - ▶ 391, representing US\$ 7.5 million total investment

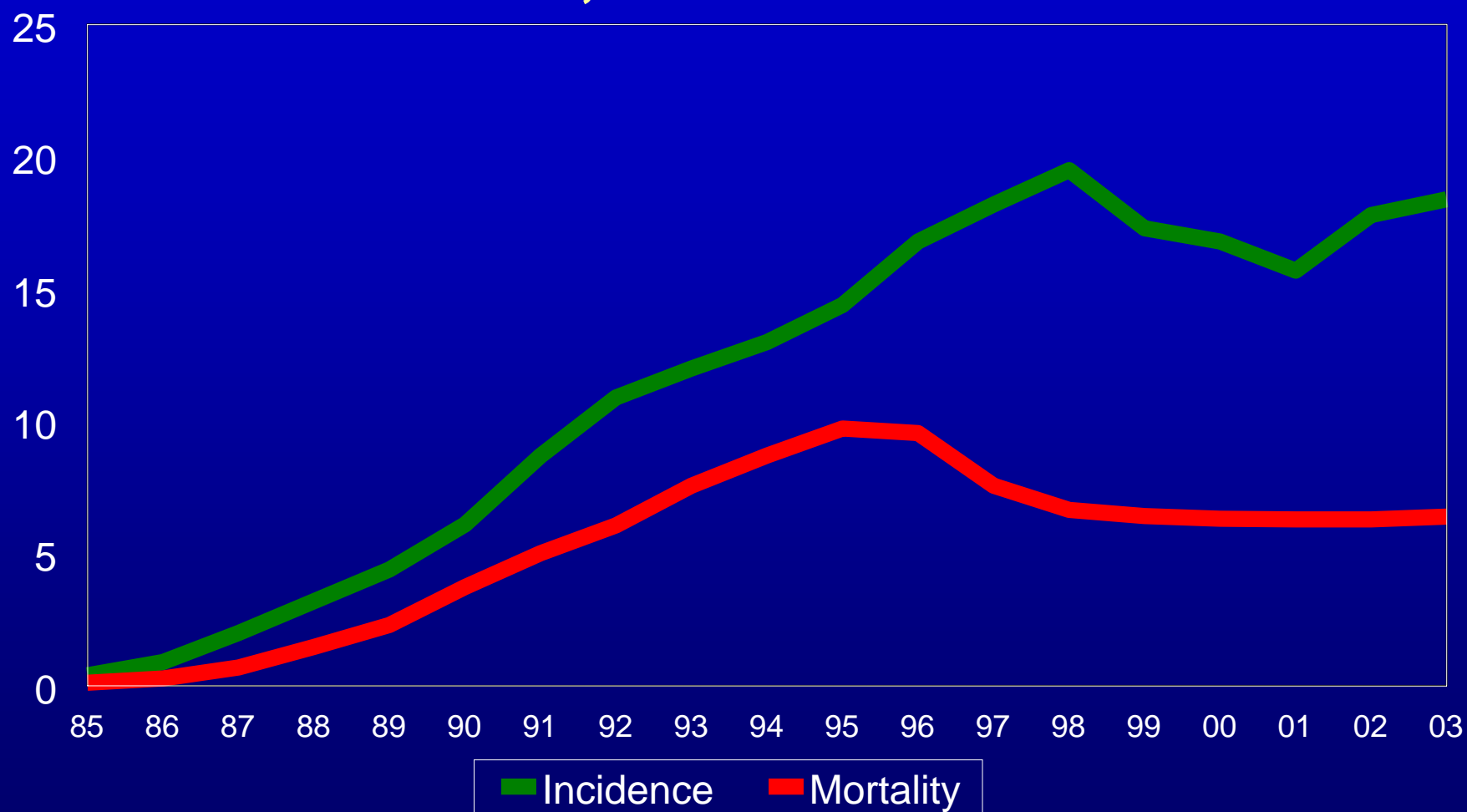
* Not corrected due to reporting delay

Estimated percentage of HIV infection in selected population. Brazil, 1992, 1998, 2000, 2002, 2004

CONSCRIPTS	0.08 (1998) n= 29,000	0.08 (2002) n= 30,000
PREGNANT WOMEN (DURING DELIVERY)	0.4 (2000) n= 20,000	0.4 (2004) n= 20,000
SEX WORKERS	No comparable studies available	6.1 (2000) n= 2,712
INJECTING DRUG USERS	63 (1992) n= 220	37 (2002) n= 287

Source: Brazilian MOH, 2005

AIDS incidence and mortality rates (by 100,000 inhabitants) Brazil, 1985-2003



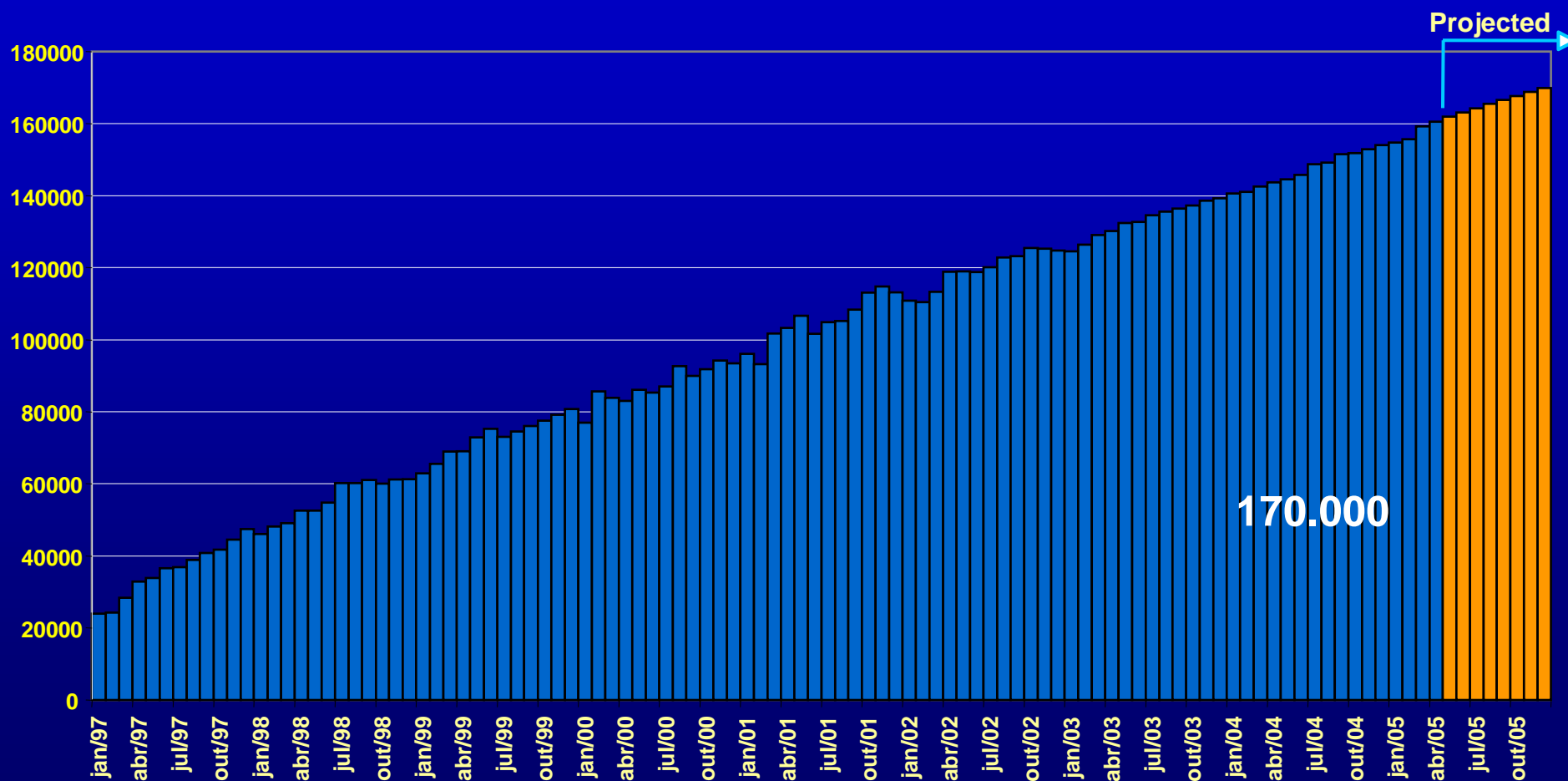
Sources: Incidence - PN STD-AIDS/SVS/MH.

Mortality - SIM/DASIS/SVS/MH

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Number of patients receiving ARV therapy. Brazil, 1997 – 2005



* Dados preliminares

Antiretroviral drugs distributed through Brazilian public health system, according to therapeutic category. Brazil, 2005



ITRN and ITRNt

- ⇒ ZIDOVUDINE (1993)*
- ⇒ ESTAVUDINE (1997)*
- ⇒ DIDANOSINE (1998)*
- ⇒ LAMIVUDINE (1999)*
- ⇒ ABACAVIR (2001)
- DIDANOSINE EC (2005)
- TENOFOVIR (2003)

IP

- ⇒ RITONAVIR (1996)*
- ⇒ SAQUINAVIR (1996)*
- ⇒ INDINAVIR (1997)*
- ⇒ NELFINAVIR (1998)
- ⇒ AMPRENAVIR (2001)
- ⇒ LOPINAVIR/r (2002)
- ⇒ ATAZANAVIR (2004)

ITRNN

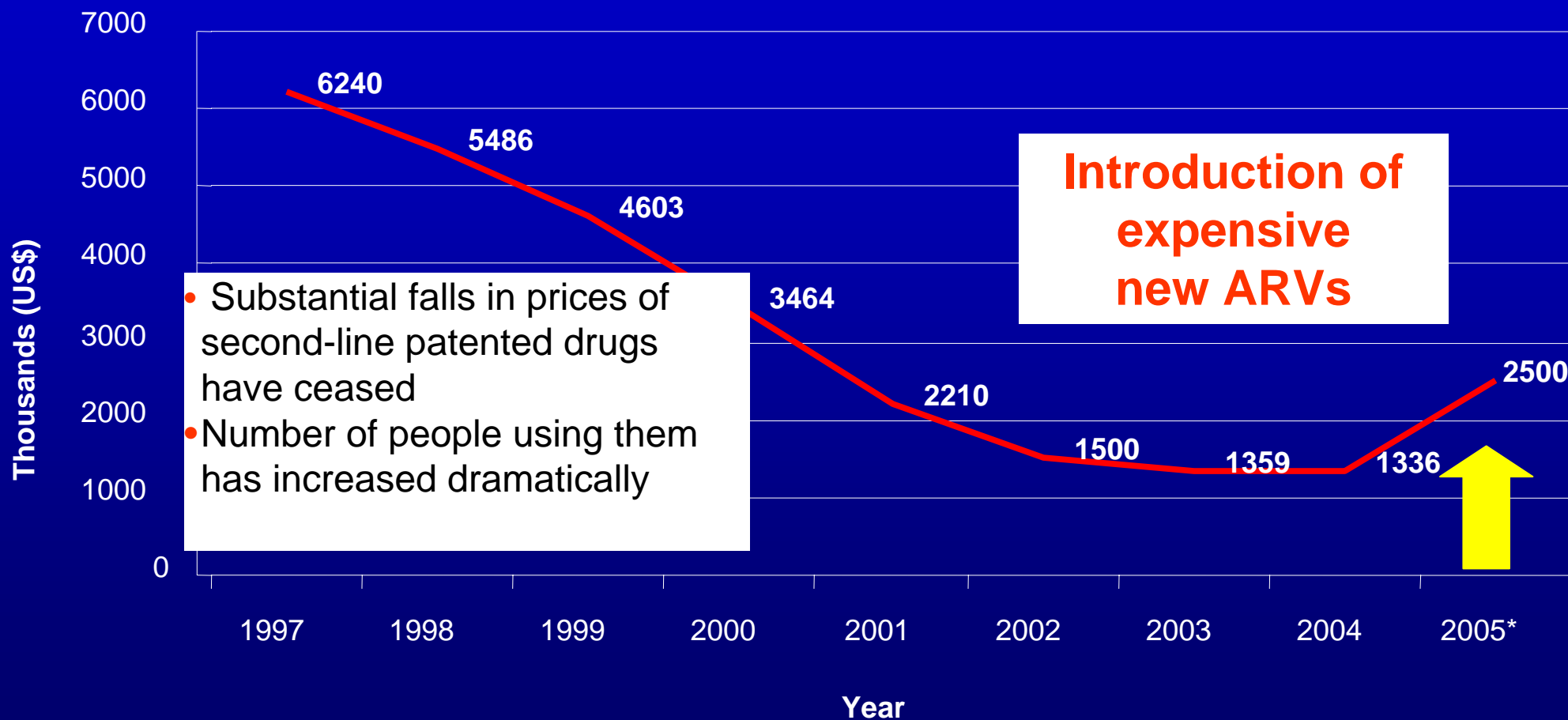
- ⇒ NEVIRAPINE (2001)*
- ⇒ EFAVIRENZ (1999)

FUSION INHIBITOR

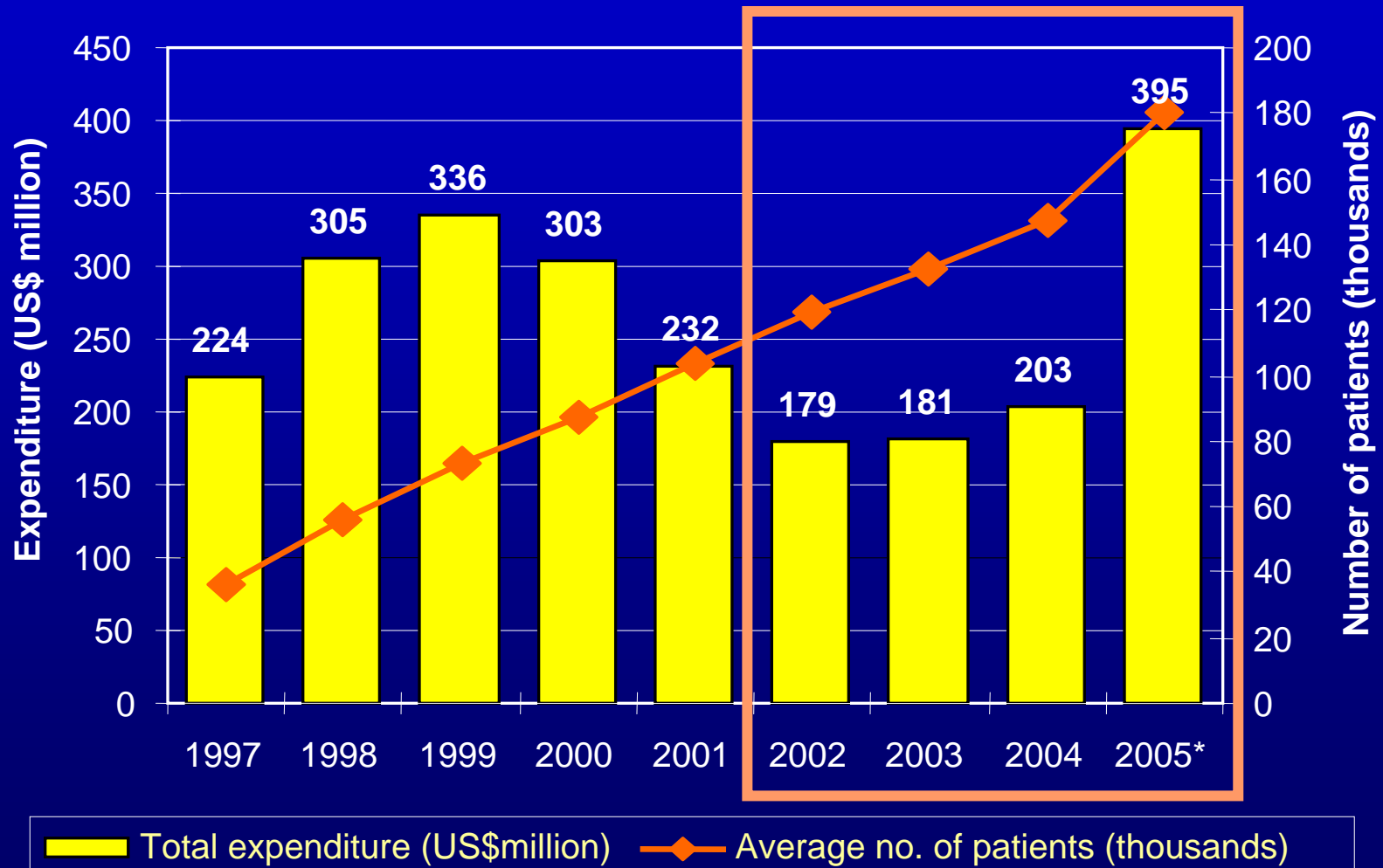
- ⇒ ENFUVIRTIDE (2005)

* Brazilian local production

Average cost of ARV therapy per patient/year (US\$). Brazil, 2005



Total expenditure (in US\$ million) on ARVs and average number of patients on ARV therapy. Brazil, 1997 – 2005*



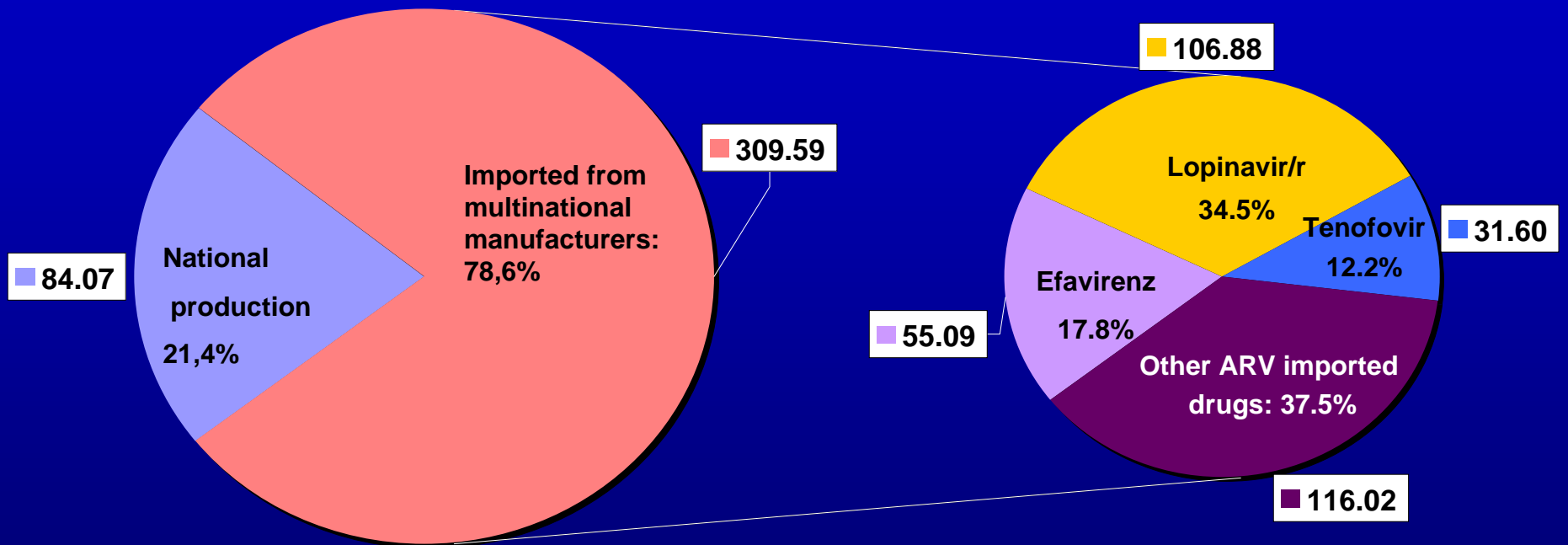
Source: PN STD-AIDS/SVS/MH

* Data subject to revision and modification

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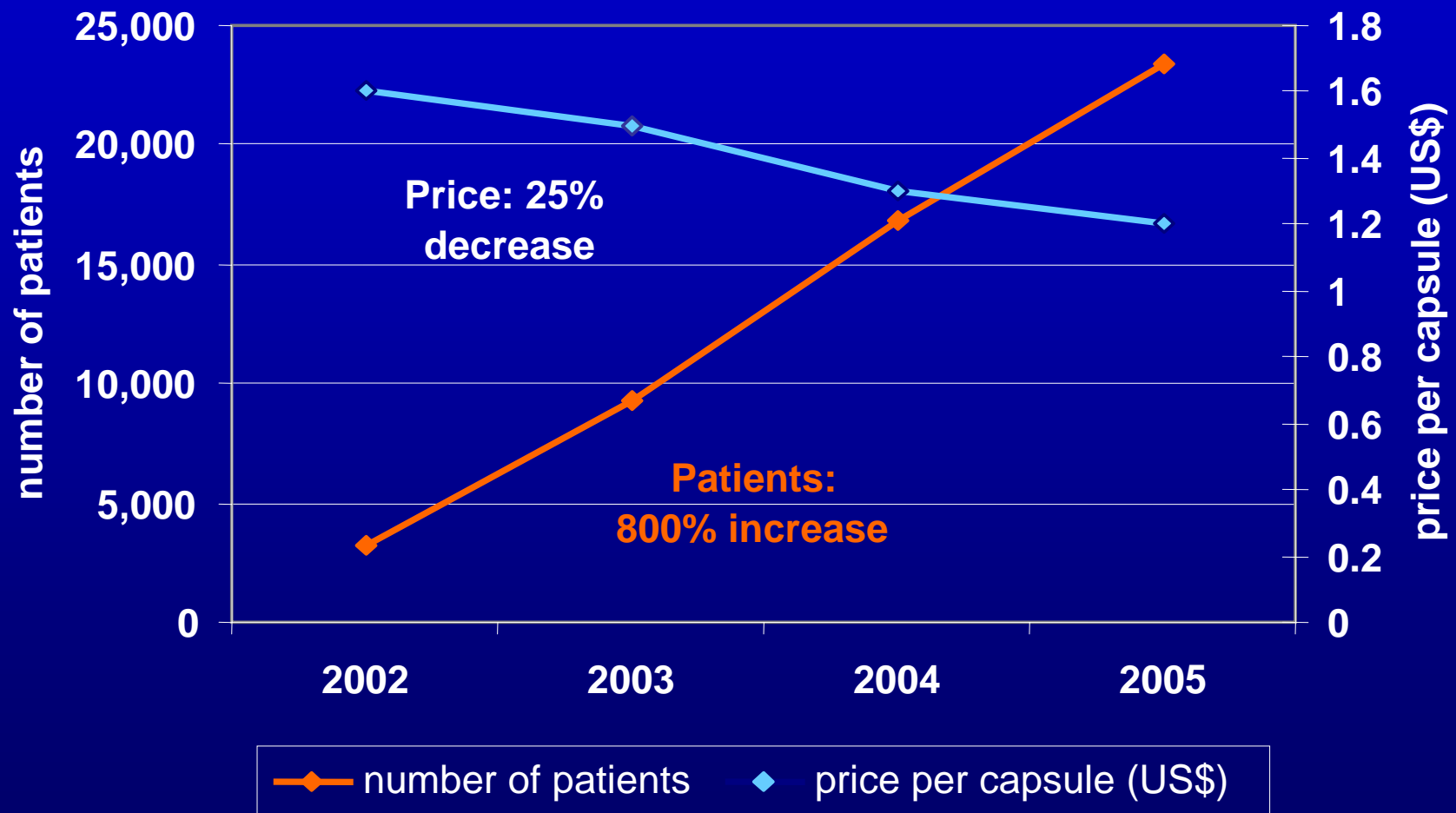


Breakdown of expenditure* on ARV procurement (2005), by source of drug. **Brazil, 2005**



*US\$ million for 180,000 patients

Price and use patterns – the case of Lopinavir/r. Brazil, 2002 - 2005

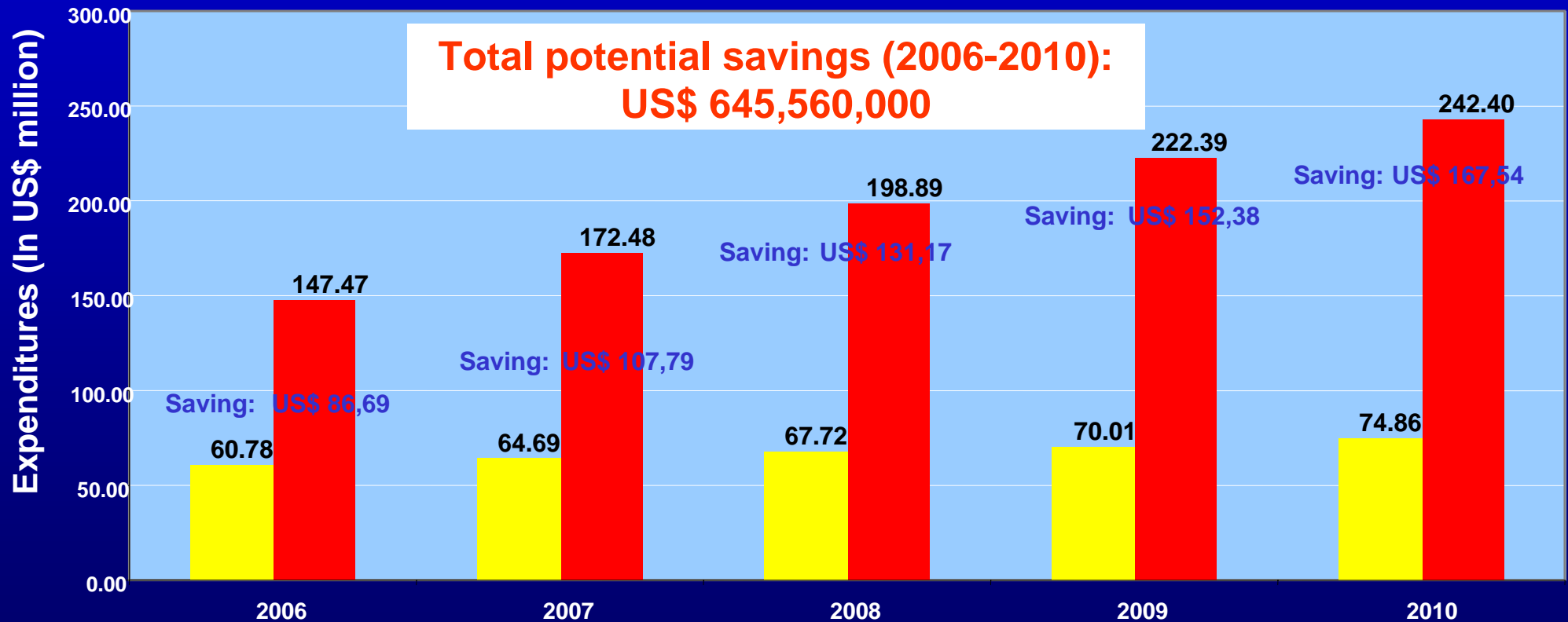


Price and use patterns – the case of Lopinavir/r

- ▶ Fresh negotiations launched in early 2005
- ▶ Offer submitted by drug company committed the Ministry of Health to buying around US\$ 70-million worth of LPV/r per year from 2006-2010, regardless of actual demand
- ▶ By significantly over-estimating future demand it over-estimated potential savings
- ▶ **Current price (2005): US\$ 1.20/capsule**
Estimated price if manufactured locally:
US\$ 0.40/capsule
- ▶ High-quality, low-cost local manufacturing is possible

EFV, LPV/r and TDF – Estimated savings if manufactured locally (Far-Manguinhos)

Source of data: PN-STD/AIDS and Far-Manguinhos; includes a yearly depreciation rate of 10% for EFV and LPV/r in 2006-2009 and 5% in 2010



Expenditure estimated as result of local production (Far-Manguinhos)
 Expenditure estimated using 2005 prices paid by MOH for branded products

FONTE MS/SVS/PN-DST/AIDS

Prospects for the future provision of antiretroviral treatment

Apparent affordability of antiretrovirals:

- **Countries will increasingly switch to 2nd line drugs**
- **Current 2nd line drugs may become 1st line regimes**
- **Prices of “3rd-line” drugs may skyrocket (e.g. T-20)**

Current monopolies/oligopolies configuration of the market of active principle ingredients (API's) may reduce number of potential suppliers and hinder ARV availability and price reductions

Lack of publicly-available, internationally-validated monographs and accredited laboratories for quality control

Building partnerships with Civil Society

- ▶ **Civil society participation**
- ▶ **Human rights advocacy for people living with HIV and AIDS**
- ▶ **Strengthening community-based projects and interventions**

International Cooperation and the Brazilian AIDS Program

Two main areas:

Technical cooperation in program management, development and monitoring/evaluation on the basis of technology transfer

There is growing interest in financing South-South cooperation (UNAIDS, GTZ, DFID, Ford Foundation)

South-South Cooperation: The Program of International Cooperation with Developing Countries Second Phase

Aim on Care area: To provide free access to first line Brazilian- produced antiretroviral drugs to 100% of patients in need

Countries covered: Cape Verde, Sao Tome and Principe, Guinea-Bissau, East Timor, Bolivia and Paraguay

South-South Cooperation: Network for Technological Cooperation in HIV/AIDS

Launched in 2004, involving Argentina, Brazil, China, Cuba, Nigeria, Russia, Thailand and Ukraine

Key support provided by the Ford Foundation: US\$ 1 million

Objectives: technology transfer, R&D and production:

- antiretrovirals
- vaccines and microbicides
- condoms
- laboratory supplies

International Center for Technical Cooperation: a Joint Brazil/UNAIDS Initiative

Created in 2005, the ICTC aims to **create and strengthen national technical capabilities for** implementing comprehensive AIDS responses **through horizontal technical cooperation;**

Example of activities undertaken:

- ▶ Coordination of technical missions in Honduras, Nicaragua, Peru, Ecuador and Bolivia
- ▶ Identification of technical assistance needs of Latin American countries receiving financial support from the Global Fund

Total investments:

- ▶ Brazilian Government (US\$ 500,000), UNAIDS (US\$ 500,000), DFID (£ 250,000 - under negotiation), GTZ (€ 250,000 – under negotiation)

Challenges: to develop new technologies and systems to halt spread of the HIV/AIDS epidemic

Technologies:

Prevention (e.g., microbicides, etc)

Treatment and care (e.g., new FDCs)

Vaccine

Systems:

Monitoring and Evaluation and Operational Research

Personnel (health and management)

Management