

Accessing ARVs:

**Untangling the Web of Price Reductions
for Developing Countries**

Carmen Perez-Casas, Cécile Macé, Daniel Berman, Julia Double

October 05, 2001

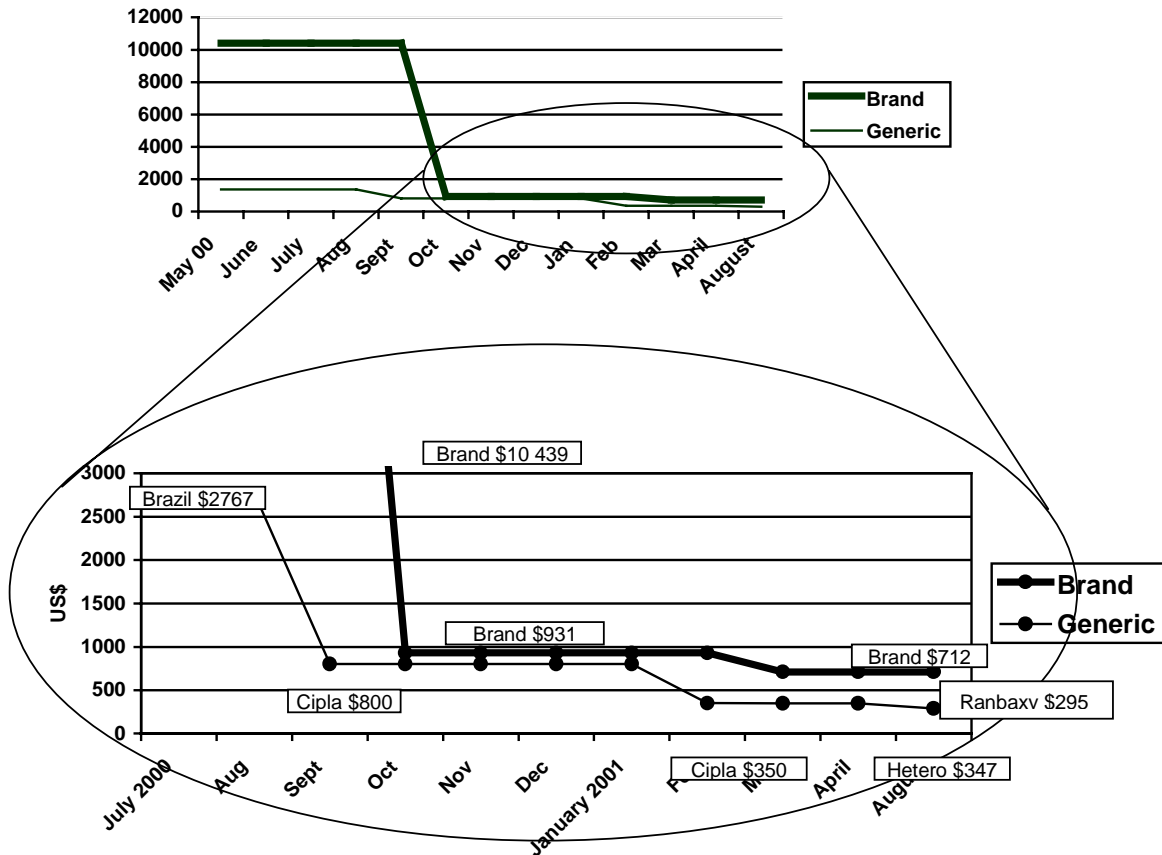
Table of contents

Introduction.....	3
Table 1: Comparison of best price offers for ARVs for developing countries by pharmaceutical companies.....	5
Table 2: Offers and restrictions for antiretroviral drugs by proprietary companies for developing countries	6
Graphs: Comparison of discounted prices offered by generic and proprietary companies (generated from Table 1) per year per patient in US dollars.....	11
Annex 1: Least Developed Countries.....	13
Annex 2: Human Development Index.....	14
Annex 3: Contacts.....	16

Only one year ago prices of antiretroviral drugs put them out-of-reach of the vast majority of people living in developing countries. But as a result of international pressure and generic competition, prices are being reduced considerably.

Below is a graph that illustrates the dramatic effects of generic competition on the prices of branded products in the period between July 2000 and August 2001.

The Effects of Generic Competition
Sample AIDS triple-combination: lowest world prices per patient per year
(stavudine (d4T) + lamivudine (3TC) + nevirapine)



The rapidly changing price of antiretroviral (ARV) drugs resulting from numerous discount offers made by the pharmaceutical companies vary in source and nature and are increasingly difficult to follow. Pharmaceutical companies have acted independently, within the framework of the Accelerated Access Initiative or through direct negotiations with governments or health care providers. Different restrictions apply to each of the producer's discounts.

Objective information on ARV prices worldwide is vital for governmental procurement agencies, as well as other potential users to make the best decision when dealing with ARV supply.

In response to these rapid changes and the resulting diverse range of discounts, the Médecins Sans Frontières Campaign for Access to Essential Medicines has produced a document collating information gathered by MSF on company discounts.

This information seeks to complement international efforts already in place, which aim to disseminate information on prices. One of these initiatives is the (third edition) of the UNICEF, UNAIDS Secretariat, WHO/HTP, MSF publication “Sources and prices of selected drugs and diagnostics for people living with HIV/AIDS.”

Table 1 shows the best price offers for ARVs for developing countries by both generic and proprietary companies. Other generic manufacturers exist for antiretrovirals, for example: Panalab (Argentina); Pharmaquick (Benin); Far Manguinhos, FURP, Lapefe, Laob, Iquego, IVB (Brazil); Apotex, Novopharm (Canada); Biogen (Colombia); Stein (Costa Rica); SunPharma, Zydus Cadila Healthcare (India); LG Chemicals, Samchully (Korea); Protein, Pisa (Mexico); Combinopharm, Andromaco (Spain); Gouvernemental Pharmaceutical Organization, T.O. Chemecal (Thailand); Filaxis (Uruguay).

Table 2 shows the restrictions applying (depending on the manufacturer) to antiretroviral price offers by proprietary companies.

Tables 1 and 2 include information available at the time of publication, collected from industry statements and direct communications with the pharmaceutical companies. All companies mentioned have been asked to verify the data included in the table. The prices listed are those offered by the manufacturers. The final price to patients will vary depending on mark-ups, etc... Manufacturers have not necessarily been pre-qualified, approval for use is the responsibility of national regulatory authorities. With regards to patent status, patents are not automatically granted in every country, but depend on national legislation. See "Patent Situation of HIV/AIDS related drugs in 80 countries", WHO/UNAIDS, 2000.

<http://who.int/medicines/library/par/hivrelateddocs/patentshivdrugs.pdf>

It is hoped that this initiative will stimulate exchange of information. In an attempt to relate offers with real experiences, MSF encourages international organisations, governments and other purchasers to share information. Please send your experiences attempting to access price reduction offers to access@geneva.msf.org or send to fax number +41 22 849 8404. Highlights of these experiences will be collated and communicated on www.accessmed-msf.org.

MSF continues to advocate for a global sustainable solutions for the battle against this epidemic, as well as for other infectious diseases devastating developing countries.

Please note that BMS has not verified its price offers

Table 1 Comparison of best price offers for ARVs for developing countries by pharmaceutical companies

The shaded boxes show the best offers by pharmaceutical companies. Prices are shown in USD per patient per year.

	Abacavir	Abacavir +3TC+ZDV	Amprenavir	Didanosine	Efavirenz	Indinavir	Lamivudine	Nelfinavir	Nevirapine	Ritonavir	Saquinavir	Stavudine	Zalcitabine	Zidovudine	ZDV +3TC	3TC+D4T+NVP
Dose in mg	300	300+150+300	150	100	200	400	150	250	200	100	200	40	0.75	300	300+150	150 +40+200
Patent holder	Glaxo Wellcome	Glaxo Wellcome	Glaxo Wellcome	Wellcome / US Gov	Merck	Merck	IAF Biochem	Agouron	Boehringer	Abbott	Roche	Yale Univ.	US Gov.	Glaxo W.	Glaxo W.	
Manufacturer	GSK	GSK	GSK	BMS	Merck	Merck	GSK	Roche	Boehringer	Abbott	Roche	BMS	Roche	GSK	GSK	
Trade name	Ziagen	Trizivir	Agenerase	Videx	Sustiva	Crixivan	Epivir	Viracept	Viramune	Norvir	Fortovase	Zerit	Hivid	Retrovir	Combivir	
Daily dose	2	2	8	4	3	6	2	9	2	12	9	2	3	2	2	
Ranbaxy (India)							248		412					318	548	295
Cipla (India)				584	668	876	120		201			44		193	285	354
Hetero (India)	2628			555	1040	986				3504					288	
Aurobindo (India)				190	485		91	2924	150			48			270	
Merck (US)					500	600										
BMS (US)				310								55				
Roche (US)								3139*			814**		675			
GSK (UK)	1387	2409	3176				234							584	730	
Abbott (US)										650						
Boehringer-Ingelheim (Germany)									438							

* : including 15% rebate in kind

** : including 100% rebate in kind

NB Suppliers have not necessarily been pre-qualified. Procurement agencies should follow their own procedures in this respect.

For all company contacts see Annex 3

Table 2 Offers and restrictions for antiretroviral drugs by proprietary companies for developing countries

Product	Company	Eligibility (countries)	Eligibility (body)	Price (USD per year per day)	Additional Comments
abacavir (Ziagen®) NRTI	GlaxoSmithKline	Least Developed Countries plus Sub-Saharan Africa plus Accelerating Access Initiative. [For middle income developing countries public sector prices negotiated on a case-by-case basis wither unilaterally or through the AAI**]	Governments, aid organisations, charities, international and UN agencies and sales to any international purchase funds. In sub-Saharan Africa only offer available to employers who can deliver care and treatment directly to their staff. All organisations must supply the preferentially priced products on a not for profit basis.	US\$ 1387/year (3.80/day)	To find full list of Least Developed Countries see Annex 1. Sub-Saharan African countries include: Botswana, Cameroon, Congo, Cote d'Ivoire, Gabon, Ghana, Kenya, Mauritius, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Zimbabwe. Supply Agreement required.
abacavir + 3TC + ZDV (Trizivir™) NRTI	GlaxoSmithKline	"	"	US\$ 2409/year (6.60/day)	"
amprenavir (Agenerase®) PI	GlaxoSmithKline	"	"	US\$ 3175.5/year (8.70/day)	"
didanosine (Videx®) NRTI - this lowest price is available to:	BMS	Sub-Saharan Africa plus other developing countries on a case by case basis	Both private and public sectors are eligible	US\$ 310.25/year (0.85/day)	An example of a company that has been given this discount is De Beers in South Africa
didanosine (Videx®) NRTI - this intermediate price is available to:	BMS	All developing countries			

Product	Company	Eligibility (countries)	Eligibility (body)	Price (USD per year per day)	Additional Comments
efavirenz (Stocrin®) NNRTI - lowest price available to:	Merck	Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1 % or greater*.	Governments, international organisations, non-governmental organisations, private sector organisations (e.g. employers, hospitals and insurers). Merck does not rule out supplying antiretrovirals to patients through retail pharmacies.	US\$ 500/year (1.37/day)	To find list of Low HDI countries and Medium HDI countries see Annex 2 Although Romania does not fall under these categories it also benefits from these prices.
efavirenz (Stocrin®) NNRTI - this intermediate price is available to:	Merck	Medium HDI countries with HIV prevalence of less than 1%*	Governments, international organisations, non-governmental organisations, private sector organisations (e.g. employers, hospitals and insurers). Merck does not rule out supplying antiretrovirals to patients through retail pharmacies.	US\$ 920/year (2.52/day)	See Annex 2
indinavir (Crixivan®) PI -lowest price available to:	Merck	Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1 % or greater*.	Governments, international organisations, non-governmental organisations, private sector organisations (e.g. employers, hospitals and insurers). Merck does not rule out supplying antiretrovirals to patients through retail pharmacies.	US\$ 600/year (1.64/day)	To find list of Low HDI countries and Medium HDI countries see Annex 2 Although Romania does not fall under these categories it also benefits from these prices.
indinavir (Crixivan®) PI - this intermediate price is available to:	Merck	Medium HDI countries with HIV prevalence of less than 1%*	Governments, international organisations, non-governmental organisations, private sector organisations (e.g. employers, hospitals and insurers). Merck does not rule out supplying antiretrovirals to patients through retail pharmacies.	US\$ 1029/year (2.82/day)	See Annex 2

Product	Company	Eligibility (countries)	Eligibility (body)	Price (USD per year per day)	Additional Comments
lamivudine (EpiVir®/3TC) NRTI	GlaxoSmithKline	Least Developed Countries plus Sub-Saharan Africa plus Accelerating Access Initiative. [For middle income developing countries public sector prices negotiated on a case-by-case basis wither unilaterally or through the AAI**]	Governments, aid organisations, charities, international and UN agencies and sales to any international purchase funds. In sub-Saharan Africa only offer available to employers who can deliver care and treatment directly to their staff. All organisations must supply the preferentially priced products on a not for profit basis.	US\$ 233.60/year (0.64/day)	To find full list of Least Developed Countries see Annex 1. Sub-Saharan African countries include: Botswana, Cameroon, Congo, Cote d'Ivoire, Gabon, Ghana, Kenya, Mauritius, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Zimbabwe. Supply Agreement required.
nelfinavir (Viracept®) PI	Roche	Africa plus LDCs plus AAI countries**	Governments, NGOs, private sector employers	US\$ 3139/year (including 15 % rebate in kind)	To find full list of Least Developed Countries see Annex 1. This discounted price is achieved through a rebate offered by Roche
nevirapine (Viramune®) NNRTI	Boehringer-Ingelheim	Sub-Saharan Africa plus other countries on a case by case basis	Governments, NGOs, private sector employers	US\$ 438/year (1.20/day)	Price may vary in view of possible import taxes.
nevirapine (Viramune®) NNRTI	Boehringer-Ingelheim	Developing countries as defined by the World Bank Classification of Economies (Low-income and Lower-middle-income economies)	Governments, NGOs and other partners who can guarantee that the programme is run in responsible manner	For the duration of 5 years a donation for use in preventing mother-to-child transmission only.	
lopinavir/ritonavir (Kaletra™)	Abbott	Africa plus Afghanistan, Bangladesh, Bhutan, Cambodia, Cape Verde, Haiti, Kiribati, Lao People's Dem. Rep., Maldives, Myanmar, Nepal, Samoa, Solomon Islands, Tuvalu, Vanuatu, Yemen	Governments, Non governmental organizations, UN system organizations, and other national and international health institutions	US\$ 650/year (1.78/day)	

Product	Company	Eligibility (countries)	Eligibility (body)	Price (USD per year per day)	Additional Comments
ritonavir (Norvir®) PI	Abbott	Africa plus Afghanistan, Bangladesh, Bhutan, Cambodia, Cape Verde, Haiti, Kiribati, Lao People's Dem. Rep., Maldives, Myanmar, Nepal, Samoa, Solomon Islands, Tuvalu, Vanuatu, Yemen	Governments, Non governmental organizations, UN system organizations, and other national and international health institutions	US\$ 650/year (1.78/day)	
saquinavir (Fortovase™) PI	Roche	Africa plus LDCs plus AAI countries**	governments, NGOs, private sector employers	US\$ 814/year (including 100% rebate in kind)	To find full list of Least Developed Countries see Annex 1. This discounted price is achieved through a rebate offered by Roche
stavudine (Zerit®) NRTI - this lowest price is available to:	BMS	Sub-Saharan Africa plus other developing countries on a case by case basis	Both private and public sectors are eligible	US\$ 54.72/year (0.15/day)	An example of a company that has been given this discount is De Beers in South Africa
stavudine (Zerit®) NRTI - this intermediate price is available to:	BMS	All developing countries			
zalcitabine (Hivid®) NRTI	Roche	Africa plus LDCs plus AAI countries**	governments, NGOs, private sector employers	US \$ 675/year (1.85/day)	To find full list of Least Developed Countries see Annex 1. This discounted price is achieved through a rebate offered by Roche
zidovudine (Retrovir®) NRTI	GlaxoSmithKline	Least Developed Countries plus Sub-Saharan Africa plus Accelerating Access Initiative. [For middle income developing countries public sector prices negotiated on a case-by-case basis with unilaterally or through the AAI**]	Governments, aid organisations, charities, international and UN agencies and sales to any international purchase funds. In sub-Saharan Africa only offer available to employers who can deliver care and treatment directly to their staff. All organisations must supply the preferentially priced products on a not for profit basis.	US\$ 584/year (1.60/day)	To find full list of Least Developed Countries see Annex 1. Sub-Saharan African countries include: Botswana, Cameroon, Congo, Cote d'Ivoire, Gabon, Ghana, Kenya, Mauritius, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Zimbabwe. Supply Agreement required.

Product	Company	Eligibility (countries)	Eligibility (body)	Price (USD per year per day)	Additional Comments
zidovudine + lamivudine (Combivir®) NRTI	GlaxoSmithKline	Least Developed Countries plus Sub-Saharan Africa plus Accelerating Access Initiative. [For middle income developing countries public sector prices negotiated on a case-by-case basis with unilaterally or through the AAI**]	Governments, aid organisations, charities, international and UN agencies and sales to any international purchase funds. In sub-Saharan Africa only offer available to employers who can deliver care and treatment directly to their staff. All organisations must supply the preferentially priced products on a not for profit basis.	US\$ 730/year (2.00/day)	To find full list of Least Developed Countries see Annex 1. Sub-Saharan African countries include: Botswana, Cameroon, Congo, Cote d'Ivoire, Gabon, Ghana, Kenya, Mauritius, Namibia, Nigeria, Seychelles, South Africa, Swaziland, Zimbabwe. Supply Agreement required.

* To find the HIV prevalence status of countries see http://www.unaids.org/epidemic_update/

** For more information on the Accelerated Access Initiative and participating countries see http://www.unaids.org/acc_access/

Abbreviations:

NNRTI - non-nucleoside reverse transcriptase inhibitors

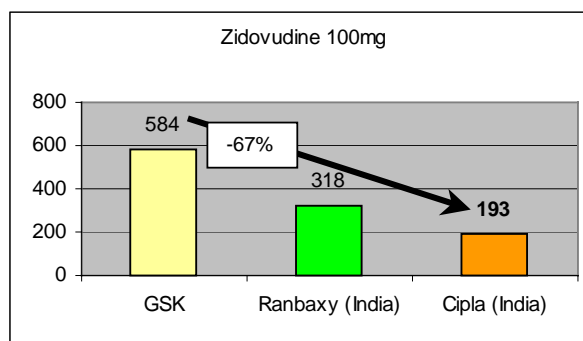
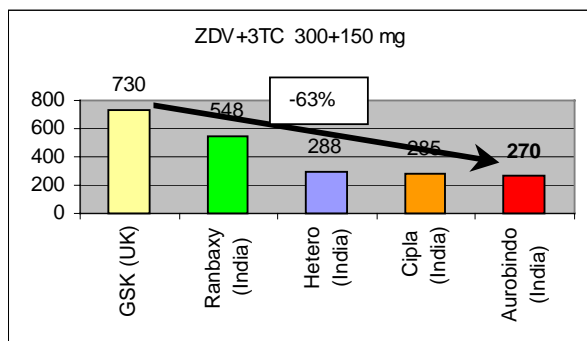
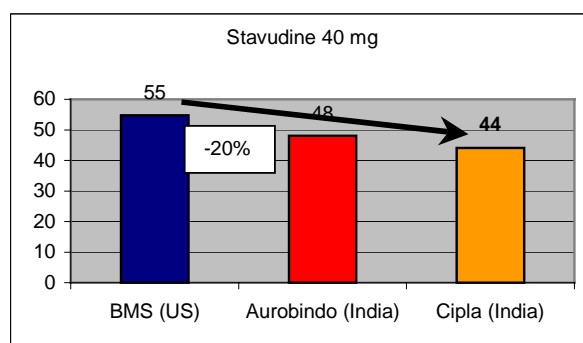
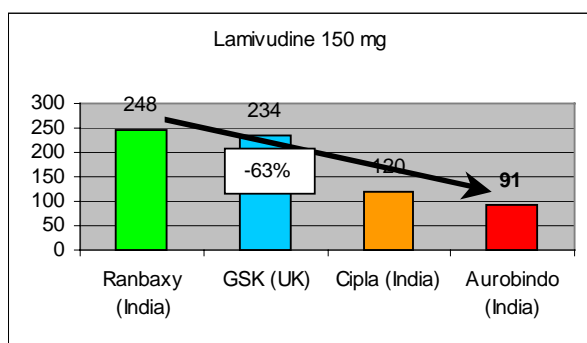
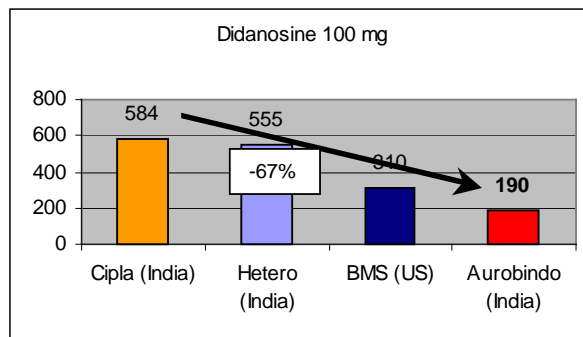
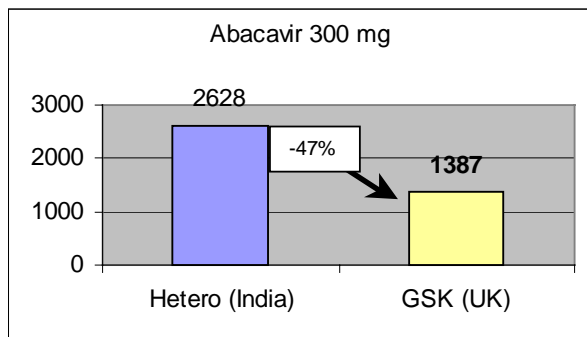
NRTI - reverse transcriptase inhibitor

PI - Protease Inhibitor

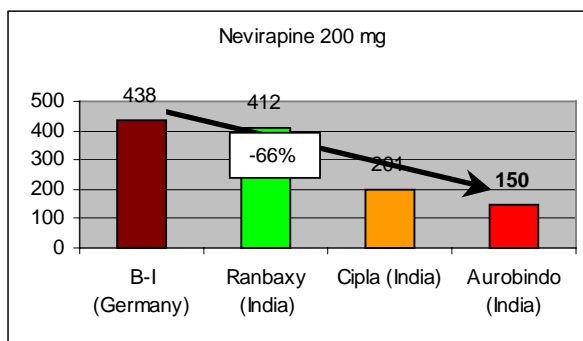
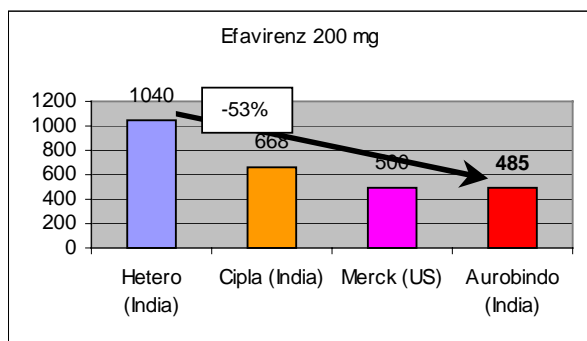
For all company contacts see Annex 3

**Comparison of discounted prices offered by generic and proprietary companies
(generated from Table 1) per year per patient in US dollars**

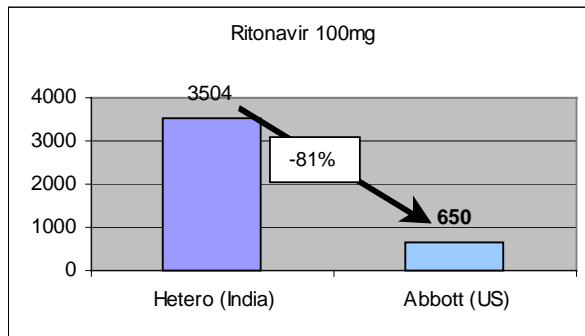
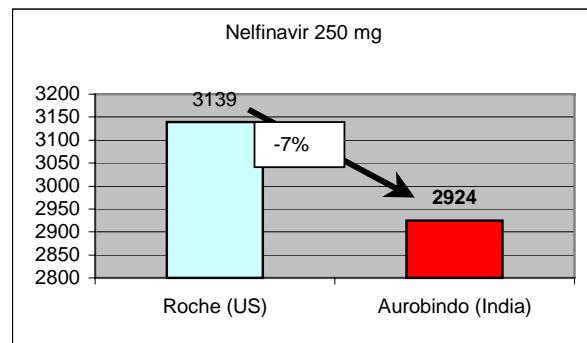
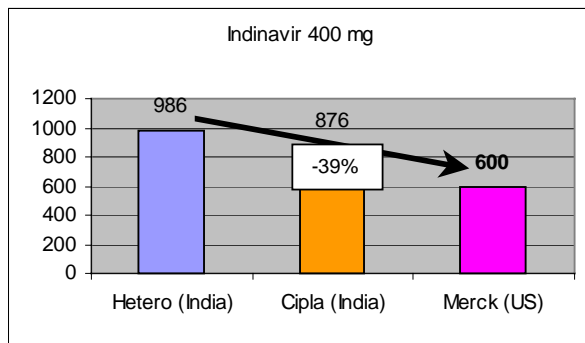
Nucleoside reverse transcriptase inhibitors



Non-nucleoside reverse transcriptase inhibitors



Protease Inhibitors



Annex 1

Least Developed Countries (LDCs)

Source: <http://www.unctad.org/en/pub/ldcprofiles2001.en.htm>

Afghanistan
Angola
Bangladesh
Benin
Burkina Faso
Burundi
Cambodia
Cape Verde
Central African Republic
Chad
Comoros
Democratic Republic of Congo
Djibouti
Equatorial Guinea
Eritrea
Ethiopia
Gambia
Guinea
Guinea Bissau
Haiti
Kiribati
Lao People's Democratic Republic
Lesotho
Liberia
Madagascar
Malawi
Maldives
Mali
Mauritania
Mozambique
Myanmar
Nepal
Niger
Rwanda
Samoa
Sao Tome and Principe
Senegal (*)
Sierra Leone
Solomon Islands
Somalia
Sudan
Togo
Tuvalu
Uganda
United Republic of Tanzania
Vanuatu
Yemen
Zambia

(*) In early 2001, following the triennial review of the list of LDCs, Senegal was placed in the category, bringing the total to 49.

Annex 2

Human Development Index

Source: Human Development Report 2001, Making new technologies work for human development UNDP

For full list of Human Development Index ranking see <http://www.undp.org/hdr2001/back.pdf>

Medium human development

49 Trinidad and Tobago	94 South Africa
50 Latvia	95 El Salvador
51 Mexico	96 Samoa (Western)
52 Panama	97 Syrian Arab Republic
53 Belarus	98 Moldova, Rep. of
54 Belize	99 Uzbekistan
55 Russian Federation	100 Algeria
56 Malaysia	101 Viet Nam
57 Bulgaria	102 Indonesia
58 Romania	103 Tajikistan
59 Libyan Arab Jamahiriya	104 Bolivia
60 Macedonia, FYR	105 Egypt
61 Venezuela	106 Nicaragua
62 Colombia	107 Honduras
63 Mauritius	108 Guatemala
64 Suriname	109 Gabon
65 Lebanon	110 Equatorial Guinea
66 Thailand	111 Namibia
67 Fiji	112 Morocco
68 Saudi Arabia	113 Swaziland
69 Brazil	114 Botswana
70 Philippines	115 India
71 Oman	116 Mongolia
72 Armenia	117 Zimbabwe
73 Peru	118 Myanmar
74 Ukraine	119 Ghana
75 Kazakhstan	120 Lesotho
76 Georgia	121 Cambodia
77 Maldives	122 Papua New Guinea
78 Jamaica	123 Kenya
79 Azerbaijan	124 Comoros
80 Paraguay	125 Cameroon
81 Sri Lanka	126 Congo
82 Turkey	
83 Turkmenistan	
84 Ecuador	
85 Albania	
86 Dominican Republic	
87 China	
88 Jordan	
89 Tunisia	
90 Iran, Islamic Rep. of	
91 Cape Verde	
92 Kyrgyzstan	
93 Guyana	

Low human development

127 Pakistan
128 Togo
129 Nepal
130 Bhutan
131 Lao People 's Dem. Rep.
132 Bangladesh
133 Yemen
134 Haiti
135 Madagascar
136 Nigeria
137 Djibouti

138 Sudan
139 Mauritania
140 Tanzania,U.Rep.of
141 Uganda
142 Congo, Dem.Rep.of the
143 Zambia
144 Côte d'Ivoire
145 Senegal
146 Angola
147 Benin
148 Eritrea
149 Gambia
150 Guinea

151 Malawi
152 Rwanda
153 Mali
154 Central African Republic
155 Chad
156 Guinea-Bissau
157 Mozambique
158 Ethiopia
159 Burkina Faso
160 Burundi
161 Niger
162 Sierra Leone

Annex 3

Contacts

Abbott:

AXIOS International manages the application process and serves as the central contact:

The Program Manager

Access to HIV Care Program

AXIOS International

P.O. Box 6924

Kampala

Uganda.

Tel: +256 75 693 756

Fax: +256 41 543 021

Email: AccesstoHIVCare@axiosint.com

Aurobindo Pharma Ltd.:

Venkat Kamalakar

Tel: +91 40 662 78 37

Fax: +91 40 374 68 33 / 374 10 80 / 374 05 91

Email: venkatk@aurobindo.com

BMS:

Bob Lefebvre

Tel: +1 609 252 45 92

Email: robert.lefebvre@bms.com

Boehringer-Ingelheim:

John Wecker

Tel: +49 61 32 277 0

Fax: +49 61 32 272 3000

Email: webmaster@boehringer-ingelheim.com

OR

AXIOS International

Email: axios@axiosint.com

Fax: +353 1 820 84 04

Cipla Ltd. :

Sanjeev Gupte

General Manager-Exports

Cipla Limited

AND

Shailesh Pednekar

Executive-Exports

Cipla Limited

Tel: +91 22 3095521 3092891

Fax: +91 22 3070013 3070393

Email: exports@cipla.com and ciplaexp@bom8.vsnl.net.in

GlaxoSmithKline:

Kathleen Laya

Tel: +44 208 975 6796

Email: Kathleen.m.laya@gsk.com

Hetero:

Dharmesh Shah
Director International Business Development
Hetero International
408 Sharda Chambers
15 New Marine Lines
Mumbai 400 020
India
Tel: +91 22 233 18 68/72
Tel (direct): +91 22 233 18 61
Fax: +91 22 206 60 99
Email: hint@bom5.vsnl.net.in

Merck:

Dr Jeffrey L. Sturchio
Executive Director
Public Affairs, Human Health - Europe, Middle East & Africa.
Merck & Co., Inc/WS2A-55
One Merck Drive
Whitehouse Station
NJ 08889-0100 USA.
Tel: +1 908 423 39 81
GSM: +32 475 666 779
Fax: +1 908 735 1839
Email: jeffrey_sturchio@merck.com

Ranbaxy:

Cecile H Miles
Ranbaxy Europe Limited
Tel: +44 207 4090075
Fax: +44 207 4091469
Mobile: +44 7711 507760
Email: cmiles@ranbaxy.co.uk

Roche:

For Sub-Saharan African countries contact
Maturin Tchoumi
Tel: +27 11 928 88 73
Fax: +27 11 94 63 54
Email: maturin.tchoumi@roche.com

For Least Developed Countries outside Sub-Saharan Africa contact:

Hans-Ruedi Wiedmer
Tel: +41 61 688 83 29
Fax: +41 61 688 15 25
Email: hans-ruedi.wiedmer@roche.com