

Sources and prices of selected medicines and diagnostics for people living with HIV/AIDS

JUNE 2004

A JOINT UNICEF – UNAIDS – WHO – MSF PROJECT



Inside cover

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UNAIDS: www.unaids.org

WHO/ Department of Essential Drugs
and Medicines Policy: www.who.int/medicines

WHO/ Department of HIV/AIDS:
www.who.int/HIV_AIDS

Médecins Sans Frontières (MSF):
www.accessmed-msf.org

Or by contacting:

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Information on HIV/AIDS diagnostic support, HIV test kit evaluations and bulk procurement are available on the WHO/ Department of Essential Health and Technologies website: www.who.int/eht

Information on HIV/AIDS and substance abuse dependence is available from www.who.int/substance_abuse

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Glossary

AIDS¹ Acquired Immune Deficiency Syndrome – the late stage of HIV disease. AIDS involves the loss of function of the immune system as CD4 cells are infected and destroyed, allowing the body to succumb to opportunistic infections (e.g., Pneumocystis carinii pneumonia, toxoplasmosis) that are generally not pathogenic in people with intact immune systems.

CIF² Cost Insurance and Freight – (...named port of destination) the seller delivers when the goods pass the ship's rail in the port of shipment. The seller must pay the cost of freight if necessary to bring the goods to the named port of destination but the risk of loss or damage to the goods, as well as any additional costs due to events occurring after the time of delivery, are transferred from the seller to the buyer. This term can be used only for sea or inland waterway transport.

COF Consejo General de Colegios Oficiales de Farmacéuticos (General Spanish Council of Pharmacists and Pharmaceutical Associations) – Spanish organization of Pharmaceutical Colleges, which represents all colleges in the national and international forum, develops norms, rules, and professional policy, and acts as the interlocutor with Spanish Ministries.

Diagnostics Laboratory tests used in the diagnosis of infection.

ELISA Enzyme-linked immunosorbent assay – first HIV antibody test which requires a machine to measure color change in test wells.

Endemic¹ The continuous presence of a disease in a geographic location, community or population.

Epidemic¹ An outbreak of a disease within a population. See also pandemic.

EXW² Ex-works – (... named place) the seller's only responsibility is to make the goods available at the seller's premises, i.e., the works or factory. The seller is not responsible for loading the goods on the vehicle provided by the buyer unless otherwise agreed. The buyer bears the full costs and risk involved in bringing the goods from there to the desired destination. Ex works represents the minimum obligation of the seller.

FCA (nearest port)² Free Carrier – (... named place) This term has been designed to meet the requirements of multimodal transport, such as container or roll-on, roll-off traffic by trailers and ferries. It is based on the same name principle as F.O.B. (free on board), except the seller fulfils its obligations when the goods are delivered to the custody of the carrier at the named place. If no precise place can be named at the time of the contract of sale, the parties should refer to the place where the carrier should take the goods into its charge. The risk of loss or damage to the goods is transferred from seller.

FOB² Free-on-board – (... named port of shipment) Under "F.O.B" the goods are placed on board the ship by the seller at a port of shipment named in the sales agreement. The risk of loss of or damage to the goods is transferred to the buyer when the goods pass the ship's rail (i.e., off the dock and placed on the ship). The seller pays the cost of loading the goods.

Generic medicine³ The term "generic product" has somewhat different meaning in different jurisdictions. In many technical documents, use of this term is avoided, and the term 'multisource pharmaceutical product' is used instead. In this document, where the term generic medicine is used, it means a pharmaceutical product usually intended to be interchangeable with the innovator product, which is usually manufactured without a license from the innovator company and marketed after expiry of patent or other exclusivity rights where these have previously existed. Generic products may be marketed either under the non-proprietary approved name or under a new brand (proprietary) name. They may sometimes be marketed in dosage forms and/or strengths different from those of the innovator products.

GMP Good Manufacturing Practice

HAART Highly Active Antiretroviral Therapy

HDI Human Development Index

HIV Human Immunodeficiency Virus – a slow-acting retrovirus of the lentivirus family, believed to be the sole or primary cause of AIDS. HIV is transmitted sexually, through blood or vertically (from mother to child). There are 2 known types: HIV-1 and HIV-2.

HIV Test kit There are 3 main types of test for detecting the presence of HIV antibodies: simple/rapid tests, ELISA tests, and confirmatory tests.

International Drug Price Indicator Guide 2003 A joint publication by the World Health Organization and Management Sciences for Health (MSH). Provides a spectrum of prices from non-profit drug suppliers, procurement agencies, and ministries of health, based on their current catalogs or price lists.

ITC International Trade Centre – technical cooperation agency of the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO) for operational, enterprise-oriented aspects of trade development.

¹ AIDS Education Global Information System

² International Chamber of Commerce

³ World Health Organization. *Quality Assurance of Pharmaceuticals. A compendium of guidelines and related materials.* Vol 1, 1997

Manufacturing license Granted by national licensing authorities and gives authorization to manufacture a specific product in a specified manufacturing plant.

MSF Médecins Sans Frontières is an international humanitarian aid organization that provides emergency medical assistance to populations in danger in more than 80 countries, since 1971.

MSH Management Sciences for Health is a private, non-profit educational and scientific organization. Since 1971, MSH has worked with its worldwide partners to improve the management of, and access to, public health services.

MTCT Mother-to-child transmission (of HIV)

Opportunistic infection¹ (OI) An illness caused by a micro-organism that usually does not cause disease in persons with healthy immune systems, but which may cause serious illness when the immune system is suppressed. Common OIs in HIV positive people include *Pneumocystis carinii* pneumonia (PCP), *Mycobacterium avium* complex (MAC) and cytomegalovirus (CMV) infection.

Originator [pharmaceutical manufacturers] Manufacturers that produce mainly innovative medicines

Palliative care⁴ Pain and symptom management, and psycho-social support for persons living with a terminal illness, as well as for their families and caregivers.

Pandemic¹ A widespread disease outbreak affecting the population of an extensive area of the world. See also epidemic.

Patents⁵ A title granted by the public authorities conferring a temporary monopoly for the exploitation of an invention upon the person who reveals it, furnishes a sufficiently clear and full description of it, and claims this monopoly.

PLWA People Living With HIV/AIDS

Protease inhibitor (PI) Type of antiretroviral medicine

Proprietary medicines Medicines that are under patent restrictions belonging to a company, institution, or government.

Reverse transcriptase inhibitor Type of ARV medicine. Can be divided into two classes: Nucleoside Reverse Transcriptase Inhibitor (NRTI) and Non Nucleoside Reverse Transcriptase Inhibitor (NNRTI)

Simple/rapid test Can generally be carried out in 15 minutes and results are read with the naked eye. They are easy to use and require limited training and little or no equipment, making them particularly suitable for use in Voluntary Counselling and Testing (VCT) centres.

The World Bank Group Established in 1944 it is one of the world's largest sources of development assistance.

In Fiscal Year 2003, the institution provided more than US\$18.5 billion in loans to its client countries.

TRIPS⁶ Agreement on Trade Related Aspects of Intellectual Property Rights

UNAIDS The Joint United Nations Programme on HIV/AIDS (UNAIDS) – by the mid-1990s, it became clear that the epidemic's devastating impact on all aspects of human development, were creating an emergency that would require a greatly expanded United Nations effort. UNAIDS created in 1995 was tasked to coordinate this effort.

UNCTAD United Nations Conference on Trade and Development, established in 1964, aims at the development-friendly integration of developing countries into the world economy. It is the focal point within the United Nations for the integrated treatment of trade and development and the interrelated issues in the areas of finance, technology, investment and sustainable development.

UNFPA United Nations Population Fund – began operations in 1969. It is the largest international source of population assistance. About a quarter of all population assistance from donor nations to developing countries is channelled through UNFPA.

UNICEF United Nations Children's Fund – Created by the United Nations General Assembly in 1946 to help children after World War II in Europe. Headquartered in New York, UNICEF carries out its work through eight regional offices and 126 country offices covering more than 160 countries, territories and areas.

WHO World Health Organization – Founded in 1948, the World Health Organization leads the world alliance for Health for All. WHO promotes technical cooperation for health among nations, carries out programmes to control and eradicate disease and strives to improve the quality of human life.

WIPO World Intellectual Property Organization – Founded in 1970, WIPO administers 23 international treaties dealing with different aspects of intellectual property protection.

WTO World Trade Organization – succeeded the General Agreement on Tariffs and Trade (GATT), first signed in 1947 by 23 countries and aimed at protecting and regulating international trade. WTO now has 147 members, three quarters of which are developing or least developed countries.

⁴ Council on palliative care, Canada

⁵ Globalization and access to drugs—perspectives on the WTO TRIPS Agreement. Health Economics and Drugs EDM Series 7. WHO, Geneva, 1999

⁶ <http://www.wto.org>

1. Introduction

1.1 Background

Antiretroviral therapy, prevention and treatment of opportunistic infections and cancers, as well as palliative care are important elements of HIV/AIDS care and support. HIV/AIDS care hence requires a wide range of essential medicines. If available, these effective and often relatively inexpensive medicines can prevent, treat, or help manage HIV/AIDS and most of the common HIV-related diseases.

Less than 8% of people who require antiretroviral (ARV) treatment can access these medicines in developing countries (see Figure 1).

The high price of many of the HIV-related medicines and diagnostics offered by common suppliers – especially antiretroviral and anti-cancer medicines – is one of the main barriers to their availability in developing countries.

There are several other important barriers, including a lack of the basic components required for care, treatment, and support of people living with HIV/AIDS (PLWA) such as: trained staff in health facilities, constant availability of laboratory equipment and supplies, sufficient funding, efficient pharmaceutical services, strong political will and government commitment. Wider availability of information on prices and reliable sources of medicines can help those responsible for procurement make better decisions.

Since 2000, prices of important first-line ARVs have fallen considerably. This trend is attributable to a cumulation of factors including advocacy, corporate responsiveness, competition from generic manufacturers, sustained public pressure, and the growing political attention paid to the AIDS epidemic. In addition, originator companies began announcing discount offers for the benefit of the poorest countries or those where HIV/AIDS prevalence is highest⁷.

Furthermore, the announcement of WHO's "3 by 5" initiative of providing ARV treatment to 3 million PLWA in developing countries by the end of 2005 has led to anticipation that increased volumes of medicine will be purchased. This may further reduce the prices of certain medicines.

Treating 3 million people by the end of 2005 will require concerted, sustained action by many partners. To chart the direction and to show what WHO itself will be doing to accelerate action, WHO has developed an initial strategic

framework. WHO's 3 by 5 team assembled and refined the framework in intensive consultation with partners. This consultation will continue, and the framework itself will continue to evolve.

WHO's strategic framework for emergency scaling up of antiretroviral therapy contains 14 key strategic elements. These elements fall into five categories – the pillars of the 3 by 5 campaign:

1. Global leadership, strong partnership and advocacy
2. Urgent, sustained country support
3. Simplified, standardized tools for delivering antiretroviral therapy
4. Effective, reliable supply of medicines and diagnostics
5. Rapidly identifying and reapplying new knowledge and successes

The full text of the WHO strategic framework can be found at: <http://webitpreview.who.int/entity/3by5/publications/documents/en/3by5StrategyMakingItHappen.pdf>

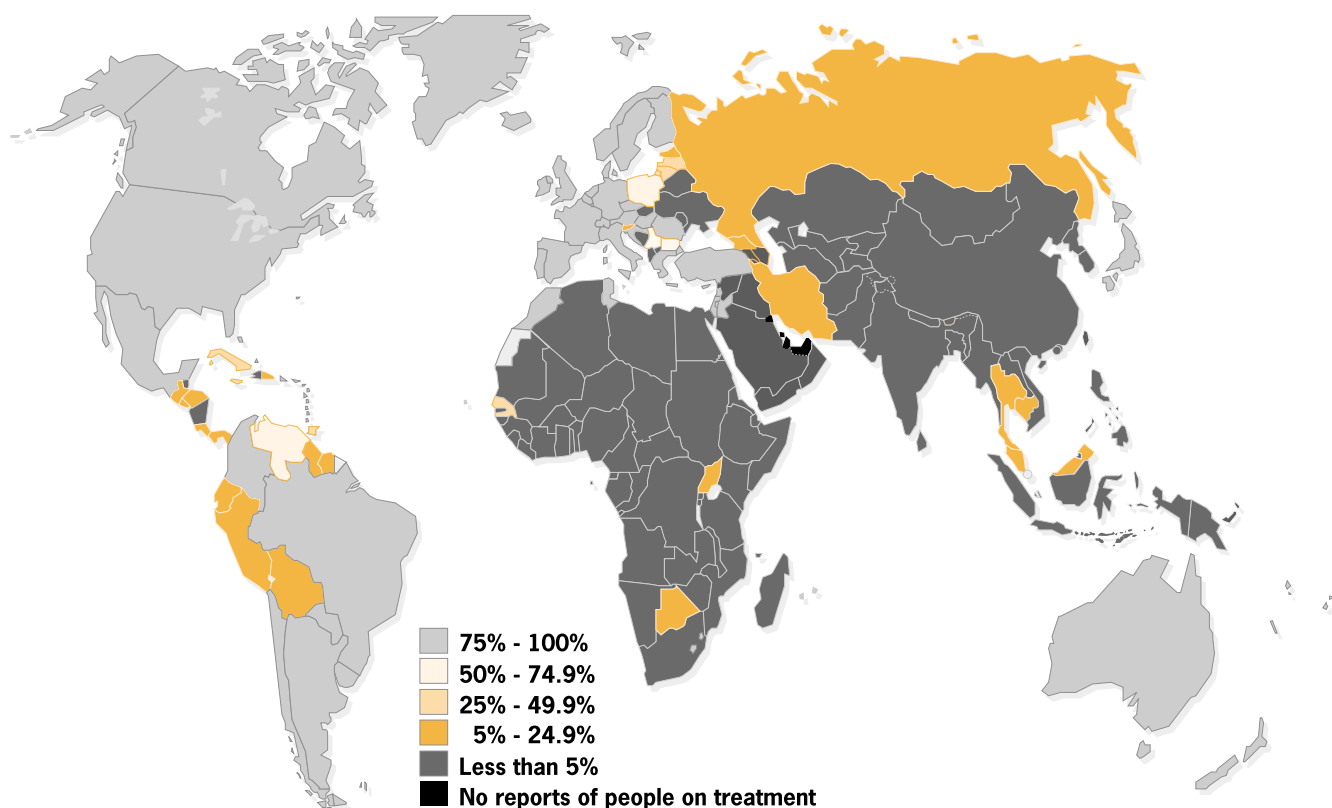
In addition, drug users, PLWA and their advocates from around the world have urged WHO to ensure the inclusion of injecting drug users in the scale-up of ARV therapy in its 3 by 5 initiative (Media Alert dated 19 February 2004).

The new simplified ARV therapy guidelines mentioned in the 3rd pillar also allow for cost savings and real scaling-up activities through the potential use of cheaper fixed-dose combinations (FDCs), where countries are favorable to import generics or where local production facilities exist⁸.

⁷ HIV prevalence status of countries see www.who.int/emc-hiv/fact_sheets/All_countries.html

⁸ More information on fixed dose combinations can be obtained from the MSF briefing note: *Two pills a day saving lives: Fixed-dose combinations (FDCs) of antiretroviral drugs*, MSF, Feb 2004 (see <http://www.accessmed-msf.org/documents/factsheetfdc.pdf>)

Figure 1. Estimated percentage of people covered among those in need of antiretroviral treatment, situation as of November 2003



Source: WHO/UNAIDS. Treating 3 million by 2005 – Making it happen. Geneva, WHO, 2003.

1.2 Aim

This report sets out to provide market information that can be used to help procurement agencies make informed decisions on the sources of medicines and diagnostics, and serve as the basis for negotiating affordable prices. The aim is to help increase access to treatment for PLWA in developing countries.

The data provided by the manufacturers serve to draw attention to the multiplicity of suppliers and the variation in price of some essential HIV/AIDS-related medicines on the international market. Without this information, there is a risk that low-income countries may be paying more than needed to obtain HIV/AIDS-related medicines. Price variations are highlighted through the tables and graphs included.

However, provision of price information addresses only one barrier to access to medicines in countries with limited resources. It should be noted that many other factors will affect the availability of medicines. Some of the other issues that must be considered are health infrastructure, human resources, funding and supply and distribution systems⁹.

1.3 Target audience

This report is intended for use primarily by national procurement agencies in resource-limited countries that lack easily accessible information on reliable sources and prices of medicines and diagnostics.

It may also be useful to others involved in the procurement of medicines and diagnostics, such as not-for-profit organizations, distributors, importers and wholesalers or public health professionals interested in current price levels of medicines and diagnostics for PLWA.

Those who will become involved in planning and implementing HIV/AIDS care and treatment interventions will find important regulatory information in this document.

⁹ Management Sciences for Health and the World Health Organization second edition of *Managing Drug Supply* provides a complete overview as well as step-by-step approaches on how to manage pharmaceutical systems effectively.

1.4 Generating the report

This is the fifth in a series of annual reports commenced in 1999, investigating sources and prices of medicines and diagnostics commonly required by PLWA, but difficult to obtain locally due to a small number of producers, the lack of distribution channels, or high prices. These surveys will be continued and the report will be regularly updated and made available when appropriate.

A survey was carried out from December 2003 through to January 2004. The responses of 84 manufacturers in 29 different countries as well as those participating in the WHO bulk procurement scheme (see Chapter 2) formed the basis of this report. The number of manufacturers reached has greatly increased since the first survey in 1999 as more resources are made available via industry websites and cooperation with other international organizations. Manufacturers that participated in previous surveys, those held in various databases, and those belonging to National Pharmaceutical Associations were contacted for voluntary participation and for completion of a questionnaire.

The UNAIDS Secretariat, UNICEF, MSF, and WHO have worked jointly to conduct a price survey and put together the results into a comprehensive publication, whilst respecting the manufacturers' requests for confidentiality with respect to their individual pricing information.

It must be pointed out that the companies included in this report have been screened only through the completeness of the requested documents they have provided, such as the questionnaire, a National GMP certificate, and associated documents relating to the company and their products. Inclusion in this report does not necessarily constitute prequalification or approval of any sort by UNICEF, WHO, UNAIDS or MSF. Only those products identified in Annex 2B in bold and with an asterisk (*) have (at the time of publication of this document) been approved through the ongoing Pre-qualification Project (see Chapter 3).

Additional companies are sought for future updates of this publication.

1.5 Theme of the report: Diagnostics

Increased access to ARV medicines has also highlighted the need for appropriate and cost-effective HIV/AIDS diagnostic support. Diagnostic technologies are important to monitor the progression of the safety and efficacy of treatment, and the development of resistance.

The existing systems for assessment and procurement of HIV test kits is being expanded to include technologies used to monitor ARV therapy (CD4+ counts and viral load) and drug resistance. An overview of types of CD4+ T-cell

enumeration technologies available are given in Annex 1A whilst information on HIV viral load technologies is given in Annex 1B.

1.6 How to use this report:

1.6.1 Information on prices

Detailed price information is provided in Chapter 4 and in the MSF document included in Annex 5.

Chapter 4 provides prices of medicines and diagnostic tests based on data obtained from the survey. Official UN exchange rates for the month of February 2004 were used to convert local currencies into US dollars. The prices you will find listed in section 4.1 are provided as statistical ranges explained below.

Price ranges and how these prices are distributed indicate what a purchaser should expect to pay when planning procurement. Section 4.2 provides negotiated prices of essential HIV test kits of the UN bulk procurement scheme 2004.

Annex 5 is a contribution from MSF and is the latest version of their bi-annual publication *Untangling the Web of Price Reductions: a pricing guide for the purchase of ARVs for developing countries*.

Most of the prices in this report are ex-works (EXW) or Free Carrier (FCA). They do not include added costs such as freight, insurance, import duties or taxes. For this reason the prices in this report cannot be compared with consumer prices. Many countries continue to impose considerable import duties, tariffs and taxes on the price of essential medicines¹⁰. In addition, wholesale and retail mark-ups vary from one country to another. As a result, the EXW price is often less than half end-price to the consumer.

¹⁰ See *Policy and programming options for reducing the procurement costs of essential medicines in developing countries*, Levinson, L, Boston University School of Public Health, 2003

The following structure is used for reporting the price information:

| (a) | (b) | (c) | | | | | (d) | | |
|----------------------|-------------------|-------------------------|------|-----|-----|--------|-------------------|--------|-------|
| Therapeutic category | Manufacturer | Indicative prices, US\$ | | | | | List prices, US\$ | | |
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |

(a) **Therapeutic category** (according to the WHO Model List of Essential Medicines)

(b) The number of **manufacturers** that provided an indicative price and the number of countries they represent

(c) The **indicative price**

unit

The price quoted relates to the unit described. For example, if the unit is “tablet” the price quoted is for one single tablet.

max

The maximum price listed represents the highest price among products in this category, with no differentiation between originator or generic products.

min

The minimum price listed represents the lowest price among products in this category, with no differentiation between originator or generic products.

median

The median price is the middle price, or where there is an even number of prices listed, it is the mean of the two middle numbers. This means that half the prices quoted are above this median price, and the other half are below it.

25th perc

The 25th percentile is the value point representing the first quartile of quoted prices in ascending order. It is used to give some indication of the dispersion of prices for a given product.

For example, if 4 suppliers were identified as manufacturing *cefixime paediatric oral suspension, 100 mg/5 ml*, and the 25th percentile is US\$ 0.023 per ml of suspension: 1 out of the 4 (a quarter) manufacturers surveyed offer a price equal to or less than US\$ 0.023.

(d) The **List prices** are used to indicate the difference in price, if any, between a developing and a developed country. Brazilian prices are selected as Brazil is a developing country with considerable manufacturing capacity; and Spanish prices because these are generally considered the lowest in Europe.

Brazilian list price

The Brazilian list price included in this report represents the minimum price payable by Brazilian health institutions, between 01/01/2003 and 01/01/2004, for the product and is taken from the Brazilian databank of health purchases (refer to <http://bpreco.saude.gov.br/pls/BPREFD/consulta.inicio>). Where the entry reads “none”, this indicates no purchase has been made for that product, therefore no minimum price payable is available.

Spanish list price

This EXW price has been calculated by applying the new margins (as stated in the Royal Decree 286/2001) to the consumer price as published by The General Spanish Council of Pharmacists and Pharmaceutical Associations. (www.portalfarma.com). It should be noted that Spanish list prices are generally considered the lowest in Europe. In most cases, the indicative prices listed in the report are a fraction of the comparative prices in the Spanish list.

1.6.2 Information on sources

Complete lists of manufacturers, their contact information, and the HIV/AIDS-related medicines and diagnostics they manufacture are given in Chapter 5. Annexes 2A and 2B provide a country by country list of the registration status and sources for each of these medicines.

1.6.3 Selection of medicines and diagnostics

This report includes antiretroviral medicines, medicines used to treat a range of opportunistic infections, medicines for use in palliative care, medicines for the treatment of HIV/AIDS-related cancers and medicines for the management of opioid dependence. It also provides information on a range of test kits available for diagnosis of HIV/AIDS.

The medicines included in the report were selected based on recommendations from available WHO treatment guidelines. The list is not intended to be exhaustive but to broadly cover the most commonly used medicines or medicine categories, in order to ensure that combined with their own resources, purchasing agencies can have at their disposal all medicines and diagnostics required for the comprehensive treatment of HIV/AIDS.

Additional medicines are often provided as they may be helpful due to:

- Greater cost offset by greater safety, e.g. fluconazole instead of ketoconazole;
- Fewer unwanted adverse effects, e.g. alternatives to amitriptyline.

Paediatric formulations have been included wherever possible.

Antiretroviral therapy

Since October 2000, this report has included information on the availability and price range of antiretroviral medicines for use in Highly Active Antiretroviral Therapy. In resource-poor settings, it is critical that these medicines are used in conjunction with WHO treatment guidelines which are intended to support and facilitate the proper management and scale-up of ART in the years to come, by proposing a public health approach to achieve these goals.

The topics addressed in the treatment guidelines include when to start ART, which antiretroviral regimens to start, reasons for changing ART, and what regimens to continue if treatment needs to be changed. They also address how treatment should be monitored, with specific reference to the side effects of ART, and make specific recommendations for certain patient subgroups.

The newly recommended first-line ARV regimens in adults and adolescents consist of a thymidine analog nucleoside reverse transcriptase inhibitor (NRTI) [stavudine (d4T) or zidovudine (ZDV)], a thiacytidine NRTI [lamivudine (3TC)] and a non-nucleoside reverse transcriptase inhibitor (NNRTI) [nevirapine (NVP) or efavirenz (EFV)].

The full text of the treatment guidelines can be found at: http://www.who.int/3by5/publications/documents/arv_guidelines/en/

Antituberculosis medicines

This report does not include data on sources and prices of medicines for first line treatment of tuberculosis (TB) as this information is available on the website of the International Price Indicator Guide 2003¹¹ or of the Global Drug Facility at <http://www.stoptb.org/GDF/drugsupply/drugs.available.html>.

Further resources for information on TB can be found in Annex 3, including links to the DOTS-plus for multidrug resistant TB website and the prequalification of TB medicines.

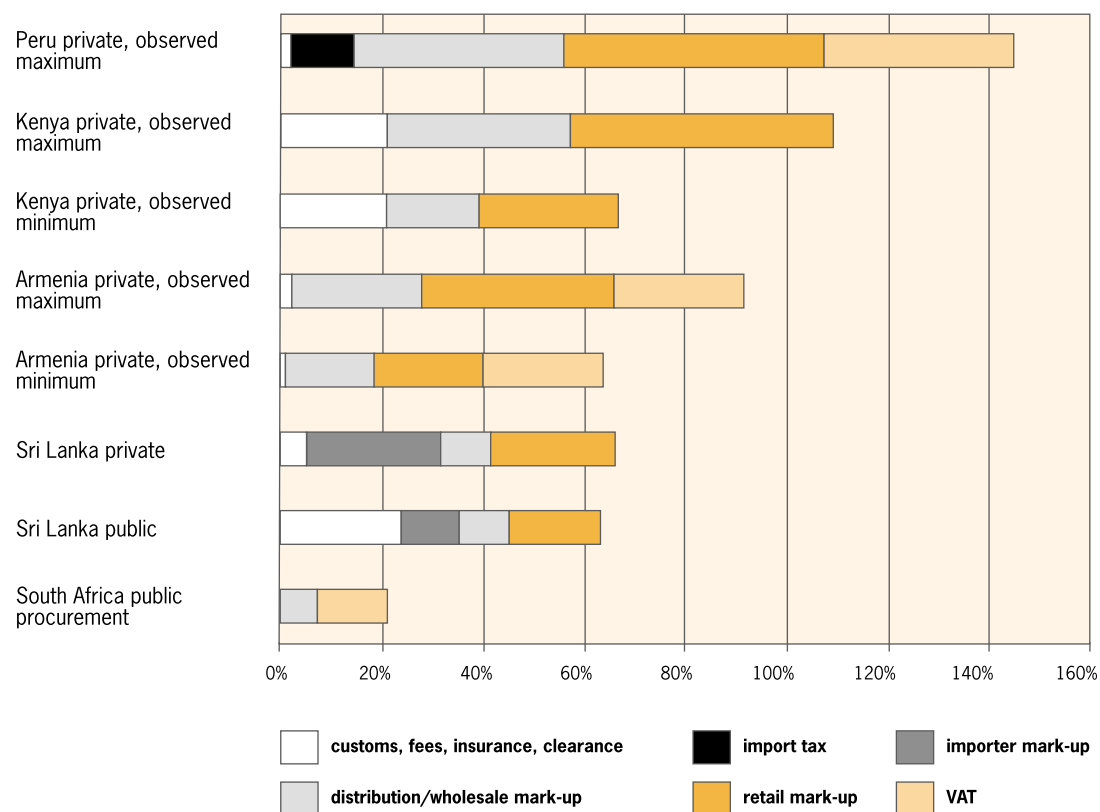
1.7 Offers of medicine donations and price reductions

Public pressure, advocacy, competition from generic manufacturers and initiatives from pharmaceutical companies have led to reduced prices of some medicines for developing countries. There is no systematic approach to this equitable pricing. Each company determines its own eligibility criteria for countries, sectors and institutions that may benefit from its reduced price. Some companies offer donations of medicines for specific indications such as to prevent mother-to-child transmission of HIV, or to treat certain opportunistic infections affecting PLWAs.

The prices that are quoted in Chapter 4 of this report do not necessarily reflect all agreements that may have been negotiated with individual countries. Information on price offers for ARVs publicly announced by pharmaceutical manufacturers, including information on countries eligible for the offers and other conditions, can be found in the MSF report *Untangling the web of price reductions: a pricing guide for the purchase of ARVs for developing countries* (see Annex 4). Apart from providing prices of ARVs as offered by originator companies and selected generic companies, it highlights the lack of standardization among different companies on eligibility and terms and conditions of price offers. For example, some companies use UNCTAD classification (Least Developed Countries), or the World Bank classification (Low Income/Middle Income Countries) or a combination of UNDP classification (Human Development Index) and UNAIDS prevalence data.

¹¹ The International Price Indicator Guide 2003 is a joint publication of MSH and WHO. For more information refer to Annex 4, Websites: Drug Prices.

Figure 2. Some examples of taxes and mark-ups as a percentage of the import price.



Source: <http://www.haiweb.org/medicineprices>

1.8 Additional Methods of Cost reduction

In addition to generic competition and advocacy for the reduced pricing in line with the purchasing power of countries, important parallel avenues to be pursued by governments include the active use of compulsory licensing, government use of patents, and parallel importation¹².

As agreed by the Member States of the WTO in 2001, Least developed countries (LDCs) are not obliged to enforce pharmaceutical patents until at least 2016¹³. LDCs should make use or avail themselves of this provision to purchase lowest cost medicines on the world market. For valuable and concise information on this subject, please see the MSF report *Drug patents under the spotlight: Sharing practical knowledge about pharmaceutical patents and HIV/AIDS medicines and related supplies: Contemporary context and procurement*.¹² Alternatively, to obtain further guidance from the appropriate organisation, please fill in the feedback form in Annex 5.

The Global Fund to Fight AIDS, Malaria and Tuberculosis “encourages recipients to comply with national laws and applicable international obligations in the field of intellectual property including the flexibilities provided in the TRIPS

agreement and referred to in the Doha Declaration in a manner that achieves the lowest possible price for products of assured quality.”¹⁴

Other measures may include reducing or eliminating import duties and taxes. As data clearly demonstrate, these factors can severely distort the prices patients will pay for medicines compared with the price at which they were sold (see Figure 2). Increasing demand through pooled procurement may also be an option for purchasers to explore.

¹² For further details, refer to the practical guide “*HIV/AIDS Medicines and related supplies: Contemporary context and procurement*” Chapter 2: Intellectual Property Rights: a Concise Guide. The World Bank, Washington, February 2004.

¹³ Doha Declaration on the TRIPS agreement and Public Health, paragraphs 6 & 7

¹⁴ The Global Fund to Fight AIDS, Tuberculosis and Malaria, Report of the Third Board Meeting, GF/B4/2, page 25, para 10 (a).

1.9 Other price information projects

1.9.1 Medicine Prices: a new approach to measurement

Initiated at the WHO–NGO Round Table in 2000, this project has developed technical guidance for a standard approach to the measurement of the prices people pay for key medicines. Availability and retail prices are recorded for a core list of 30 widely used medicines in their originator brand, most-sold and lowest-priced generic versions. Supplementary lists with different medicines can be tailored to meet local needs using the same method.

Price information is collected at a sample set of pharmacies in public, private and one other sector which can be defined to fit local conditions (eg. NGO agencies, religious missions or other charity services, or other types of not-for-profit service providers). The method uses median prices provided by Management Sciences for Health (MSH) for the core medicines as a benchmark and the spreadsheet (CD-ROM included) calculates price ratios for each medicine to the MSH “reference” price.

The principal add-ons or “price components” between the manufacturer sales price and retail price are estimated for selected medicines, and treatment affordability is calculated for ten common conditions, relative to the daily wage of the lowest paid government worker. The concept of affordability is especially important, because it allows to evaluate “access” by referring to the actual income of the individual, according to a patient-focused approach.

A manual and accompanying spreadsheet on CD-ROM are freely available in English, French and Spanish on the web sites of both WHO: <http://www.who.int/medicines/library/prices.shtml> and Health Action International: <http://www.haiweb.org/medicineprices/>

Arabic and Russian versions will be produced in the course of 2004.

The HAI website also contains an open-access repository of data from studies undertaken so far, and a synthesis of results from the nine pilot studies.

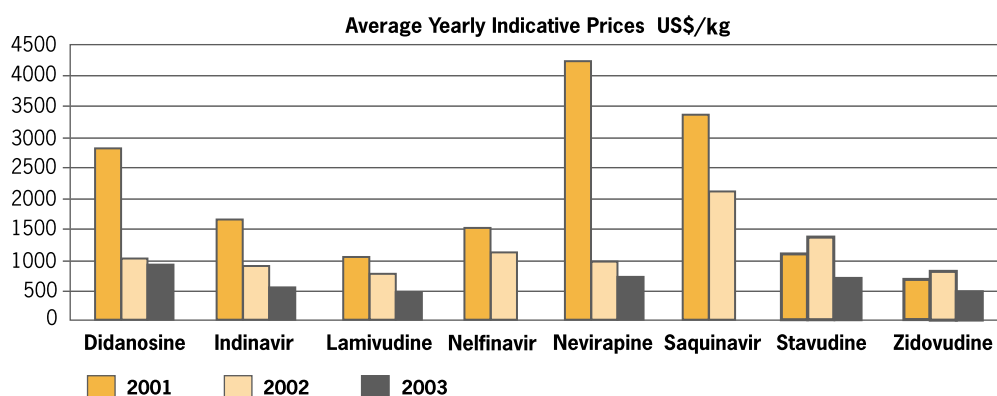
1.9.2 Price monitoring of pharmaceutical starting materials

With today's immense flow of information, finding the right source for unbiased, accurate and timely market intelligence can be difficult, costly and time-consuming. Identifying the right source of information is the first step toward maximizing international business opportunities. The Market News Service (MNS) of the UNCTAD/International Trade Centre (ITC) strives to fill this need by providing detailed price and market information on selected primary and semi-processed products of particular interest to developing countries and economies in transition, including a monthly report on Pharmaceutical Starting Materials of Essential Drugs.

The Market News Service (MNS) for Pharmaceutical Starting Materials was established in 1992 in collaboration with the Essential Drugs and Medicine Policy (EDM) of the World Health Organization (WHO) to issue a monthly report providing up-to-date prices and supporting commercial data on pharmaceutical starting materials used in the production of essential medicines. The report of December 2003 listed 303 active pharmaceutical ingredients. The report is an information source with the sole aim of improving market transparency and encouraging price and quality competition for the benefit of all market players. It covers the main trading centres in Europe and Asia and draws information from a network of price information providers.

The prices of active pharmaceutical ingredients used in manufacturing antiretrovirals have been significantly reduced during the last two years as shown in the graph below.

Figure 3. Price trends of various active pharmaceutical ingredients used in manufacturing antiretroviral medicines.



As part of its effort to provide information to improve market transparency, MNS reports are now directly available on-line through ITC's latest market analysis tool, Product Map, www.p-maps.org, a subscription based service. Subscribers from least developed countries and WHO Regional Offices receive printed copies free-of-charge. The

Product Map on Pharmaceuticals combines quantitative market information in relation to international trade statistics and macroeconomic indicators, qualitative market intelligence - such as market briefs and published market studies - and networking links to key market players in the pharmaceuticals industry.

2. Diagnostics

ARVs have to be used with appropriate and cost-effective diagnostics. Diagnostic technologies are important to monitor the progression of the disease, the safety and efficacy of the treatment and the development of resistance.

Since 1988, WHO has provided objective assessments of commercially available HIV test kits. This ongoing evaluation programme is coordinated by the WHO Department of Essential Health Technologies in collaboration with the UNAIDS Secretariat.

In 1989, WHO established a HIV test kit bulk-procurement scheme, which is now operated in collaboration with other UN agencies. The aim is to provide national AIDS programmes, blood transfusion services, large hospitals, non-governmental organizations, reference laboratories, UN agencies, donor-supported AIDS projects, and regulatory authorities in developing countries with high quality tests at reasonable cost. All HIV tests available through the scheme have been successfully evaluated by the WHO evaluation programme and meet specific, rigorous criteria. Manufacturers of test kits that have met the criteria are invited to make their quotations in a selective tender process. In addition to the assay performance other aspects such as production capacity, distribution and service networks, patent issues, shelf life and storage conditions, are considered. This process has enabled the UN agencies to offer high quality tests at reduced prices, resulting in considerable annual savings to countries.

The test kits listed in chapter 4 are reviewed annually and cover the three broad categories, including simple/rapid tests, ELISA tests and supplemental tests.

The demand for simple/rapid HIV tests has increased and a wide range of high quality simple/rapid tests are available. These are easy-to-use tests that require little or no equipment and limited training to perform and can provide accurate same-day results. This makes them particularly suitable for use in voluntary counselling and testing (VCT) centres and in antenatal clinics for prevention of mother to child transmission of HIV. When initial tests are reactive for HIV, confirmation of the test results is needed to rule out any false positive results.

The existing systems for assessment and procurement of HIV test kits are being expanded to include technologies used to monitor ARV therapy (CD4+ counts and viral load) and drug resistance.

An overview of types of CD4+ T-cell enumeration technologies available are given in Annex 1A, whilst information on HIV viral load technologies is given in Annex 1B. Please note that this information is regularly updated and available at: http://www.who.int/eh/areas_of_work/BTS/HIV_Diagnostics/HIV_Test_Kit_Evaluation.htm#Reports

Additional documents with relevant information related to diagnostics are listed in Annex 3.

3. Access to quality HIV/AIDS medicines

3.1 Prequalification project

The Procurement, Quality and Sourcing Project was initiated by WHO in collaboration with other United Nations Organizations (UNAIDS Secretariat, UNICEF, and UNFPA, supported by the World Bank) in March 2001, as part of a UN-wide strategy to improve access to HIV-related treatment.

This project evaluates pharmaceutical products according to WHO recommended standards of safety, efficacy and quality and compliance with good manufacturing practices (GMP). The prequalification process follows a standard procedure developed through WHO's Expert Committee on Specifications for Pharmaceutical Preparations. Assessment of product dossiers submitted by companies and GMP inspections are followed promptly by feedback to the companies concerned. A medicine is added to the list of prequalified products only when the products and manufacturing sites meet the required standards. A list of HIV-related products/manufacturers that have been found acceptable, in principle, for procurement by UN agencies is available on the web sites of collaborating UN agencies.

As of January 2004, 265 product dossiers for various products and dosage forms from over 40 manufacturers were received: 95 of these products, from 26 manufacturing sites have been fully reviewed and listed as prequalified products. The remaining products are currently under review. The products evaluated are ARVs (including fixed dose combinations), and medicines for the treatment of opportunistic infections and cancers. A list of products evaluated under this project is regularly updated through the websites of collaborating UN agencies. Interested readers are advised to consult these sites for the latest versions, or to access the list via the WHO website: <http://mednet3.who.int/prequal/>.

This report is a pricing service, not a prequalification service. Every effort has been made to ensure the accuracy of the price information presented here and screening of the products included in this survey has been carried out as indicated on page 3. However, this screening in no way constitutes an in depth review of product quality. Products that have been prequalified are marked in Annex 2B

of this report in bold and with an asterisk (*). Other products listed in this document should, in relation to purchase, be subject to prequalification review as indicated in the WHO General Procedure for Prequalification of Suppliers of Pharmaceutical Products. Manufacturers are encouraged to apply for WHO prequalification for their HIV-related products.

In scaling up access to ARVs, it is not only the quantity of medicines that is important, but also their quality. The Prequalification Project will guide potential buyers or procurement agencies by providing them with a current, reliable and standardised inventory to select from when purchasing these life-saving medicines.

3.2 Product registration

In order to guide procurement, governments must ensure they have strong national drug regulatory authorities (DRAs) with a clear mandate and legal authority, appropriate organizational structure, adequate number of qualified staff, sufficient resources and a sustainable financing mechanism.

The primary objective of DRAs is to safeguard public health by ensuring that all medicines circulating in the markets meet appropriate standards of safety, quality and efficacy. Safety aspects cover potential or actual harmful effects; quality relates to development and manufacture; and efficacy is a measure of the beneficial effect of the medicine on patients.

To assist procurement agencies with regulatory aspects of medicine importation and procurement, Annex 2A provides information on countries in which the majority of products listed in this report are currently registered. This information is provided by manufacturing companies and is subject to change.

To improve the accuracy of this publication, DRAs are strongly encouraged to submit any known changes or corrections to the data provided, either by email to supply@unicef.org; or by fax to UNICEF Supply Division in Copenhagen, Denmark +45 35269421.

4. Prices of medicines and diagnostics

4.1 Medicines

Table 1. Anti-infective medicines

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|--------|-------|--------|-----------|-------------------|-------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Anthelmintics | | | | | | | | | |
| albendazole | | | | | | | | | |
| chewable tablet, 400 mg | 10 | 5 | tab | 0.180 | 0.015 | 0.036 | 0.022 | 0.048 | 1.317 |
| Antibacterials, beta lactam medicines | | | | | | | | | |
| benzathine benzylpenicillin | | | | | | | | | |
| powder for injection, 1.44 g (=2.4 million IU) in 24-ml vial | 1 | 1 | vial | 0.257 | 0.257 | 0.257 | 0.257 | none | n/a |
| powder for injection, 1.44 g (=2.4 million IU) in 5-ml vial | 3 | 3 | vial | 1.660 | 0.150 | 0.170 | 0.160 | none | 2.871 |
| benzylpenicillin | | | | | | | | | |
| powder for injection, 3 g (=5 million IU) (as sodium or potassium salt) in vial | 3 | 3 | vial | 0.346 | 0.150 | 0.180 | 0.165 | 0.619 | 1.211 |
| powder for injection, 600 mg (=1 million IU) (as potassium salt) in vial | 1 | 1 | vial | 0.268 | 0.268 | 0.268 | 0.268 | none | n/a |
| cefixime | | | | | | | | | |
| paediatric oral suspension, 100 mg/5 ml | 3 | 3 | ml | 0.201 | 0.025 | 0.034 | 0.030 | none | 1.856 |
| paediatric oral suspension, 40 mg/5 ml | 1 | 1 | ml | 0.108 | 0.108 | 0.108 | 0.108 | none | n/a |
| powder for injection, 250 mg (as sodium salt) * | - | - | vial | - | - | - | - | none | n/a |
| tablet, 200 mg | 3 | 2 | tab | 1.213 | 0.315 | 0.375 | 0.345 | none | 0.935 |
| tablet, 400 mg | 2 | 2 | tab | 0.560 | 0.165 | 0.363 | 0.264 | none | 1.713 |
| ceftriaxone | | | | | | | | | |
| powder for injection, 1 g (as sodium salt) in vial | 18 | 12 | 1g vial | 12.680 | 0.600 | 1.086 | 0.852 | 0.687 | 8.247 |
| powder for injection, 250 mg (as sodium salt) in vial | 13 | 8 | vial | 2.809 | 0.230 | 0.775 | 0.650 | none | 2.684 |
| powder for injection, 500 mg (as sodium salt) in vial | 11 | 8 | vial | 8.140 | 0.320 | 0.825 | 0.756 | none | 4.322 |
| procaine benzylpenicillin | | | | | | | | | |
| powder for injection, 3 g (=3 million IU) in vial | 3 | 3 | vial | 0.237 | 0.144 | 0.170 | 0.157 | none | n/a |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Other antibacterials | | | | | | | | | |
| azithromycin | | | | | | | | | |
| oral suspension, 200 mg/5 ml (dihydrate) | 2 | 2 | ml | 0.200 | 0.040 | 0.120 | 0.080 | 0.078 | 0.310 |
| capsule/tablet, 250 mg (dihydrate) | 8 | 4 | caps/tab | 0.532 | 0.117 | 0.198 | 0.147 | none | 1.685 |
| capsule/tablet, 500 mg (dihydrate) | 8 | 5 | caps/tab | 1.500 | 0.250 | 0.470 | 0.308 | 0.447 | 4.120 |
| capreomycin | | | | | | | | | |
| powder for injection, 1 g in vial | 2 | 2 | 1g vial | 5.000 | 5.000 | 5.000 | 5.000 | none | 2.730 |
| chloramphenicol | | | | | | | | | |
| oily suspension for injection, 0.5 g/ml (as sodium succinate) in 2-ml ampoule | 1 | 1 | amp | 0.620 | 0.620 | 0.620 | 0.620 | none | n/a |
| oral suspension, 150 mg/5 ml (as palmitate) | 1 | 1 | ml | 0.006 | 0.006 | 0.006 | 0.006 | none | n/a |
| powder for injection, 1 g (sodium succinate) in vial | 5 | 4 | 1g vial | 0.680 | 0.175 | 0.231 | 0.200 | 0.371 | 1.055 |
| ciprofloxacin | | | | | | | | | |
| tablet, 250 mg (as hydrochloride) | 29 | 16 | tab | 0.605 | 0.011 | 0.041 | 0.018 | 0.048 | 0.227 |
| tablet, 500 mg (as hydrochloride) | 24 | 14 | tab | 1.186 | 0.022 | 0.054 | 0.027 | 0.058 | 0.421 |
| clarithromycin | | | | | | | | | |
| oral suspension, 125 mg/5 ml* | - | - | ml | - | - | - | - | none | n/a |
| powder for injection, 500 mg | 1 | 1 | vial | 0.700 | 0.700 | 0.700 | 0.700 | none | 23.346 |
| tablet, 250 mg | 15 | 10 | tab | 0.434 | 0.105 | 0.170 | 0.151 | 0.296 | 0.600 |
| clindamycin | | | | | | | | | |
| capsule, 150 mg | 2 | 2 | caps | 0.113 | 0.036 | 0.075 | 0.055 | 0.660 | 0.164 |
| injection, 150 mg/ml (as phosphate) in 2-ml ampoule | 1 | 1 | amp | 1.848 | 1.848 | 1.848 | 1.848 | 0.464 | 1.506 |
| cycloserine | | | | | | | | | |
| capsule, 250 mg | 2 | 2 | caps | 0.600 | 0.466 | 0.533 | 0.500 | none | n/a |
| doxycycline | | | | | | | | | |
| capsule/tablet, 100 mg (hydrochloride) | 15 | 10 | caps/tab | 0.114 | 0.007 | 0.015 | 0.011 | 0.052 | 0.112 |
| erythromycin | | | | | | | | | |
| powder for injection, 500 mg (as lactobionate) in vial* | - | - | vial | - | - | - | - | none | n/a |
| powder for oral suspension, 125 mg (as stearate or ethylsuccinate) | 10 | 9 | ml | 0.899 | 0.005 | 0.011 | 0.008 | 0.010 | n/a |
| capsule/tablet, 250 mg (as stearate or ethylsuccinate) | 19 | 10 | caps/tab | 0.068 | 0.020 | 0.031 | 0.026 | none | 0.099 |
| capsule/tablet, 500 mg (as stearate or ethylsuccinate) | 12 | 7 | caps/tab | 0.126 | 0.040 | 0.051 | 0.046 | 0.099 | 0.202 |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

4. PRICES OF MEDICINES AND DIAGNOSTICS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|--|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Other antibacterials | | | | | | | | | |
| gentamicin | | | | | | | | | |
| injection, 10 mg (as sulfate) in 2-ml vial | 4 | 4 | vial | 0.295 | 0.045 | 0.073 | 0.045 | 0.072 | n/a |
| injection, 40 mg (as sulfate) in 2-ml vial | 7 | 4 | vial | 0.319 | 0.047 | 0.058 | 0.056 | 0.065 | 0.615 |
| metronidazole | | | | | | | | | |
| injection, 500 mg in 100-ml vial | 6 | 6 | vial | 2.880 | 0.300 | 1.268 | 0.827 | 0.189 | 3.039 |
| Suppository, 1 g | 1 | 1 | sup | 0.450 | 0.450 | 0.450 | 0.450 | none | n/a |
| Suppository, 500 mg* | - | - | sup | - | - | - | - | none | n/a |
| ofloxacin | | | | | | | | | |
| IV infusion, 2 mg/ml (hydrochloride) | 1 | 1 | ml | 0.032 | 0.032 | 0.032 | 0.032 | none | 17.828 |
| tablet, 200 mg | 14 | 7 | tab | 1.620 | 0.021 | 0.042 | 0.029 | none | 0.800 |
| tablet, 400 mg | 5 | 4 | tab | 0.661 | 0.062 | 0.100 | 0.082 | 1.014 | n/a |
| rifabutin | | | | | | | | | |
| capsule, 150 mg | 1 | 1 | caps | 0.753 | 0.753 | 0.753 | 0.753 | none | 2.813 |
| silver nitrate | | | | | | | | | |
| solution (eye drops), 1% | 1 | 1 | ml | 0.070 | 0.070 | 0.070 | 0.070 | none | n/a |
| spectinomycin | | | | | | | | | |
| powder for injection, 2 g (as hydrochloride) in vial | 3 | 3 | vial | 4.000 | 2.747 | 3.750 | 3.249 | none | n/a |
| sulfadiazine | | | | | | | | | |
| injection, 250 mg (sodium salt) in 4-ml ampoule* | - | - | amp | - | - | - | - | none | n/a |
| tablet, 500 mg | 4 | 4 | tab | 0.298 | 0.037 | 0.060 | 0.037 | 0.018 | 0.075 |
| sulfamethoxazole+trimethoprim | | | | | | | | | |
| injection, 80+16 mg/ml in 5-ml ampoule* | - | - | amp | - | - | - | - | none | 0.789 |
| oral suspension, 200+40 mg/5 ml | 15 | 9 | ml | 0.137 | 0.003 | 0.006 | 0.005 | 0.002 | 0.022 |
| tablet, 100+20 mg | 9 | 7 | tab | 0.187 | 0.004 | 0.006 | 0.005 | none | 0.026 |
| tablet, 400+80 mg | 23 | 13 | tab | 0.187 | 0.005 | 0.010 | 0.008 | 0.016 | 0.049 |
| tablet, 800+160 mg | 11 | 9 | tab | 0.100 | 0.009 | 0.019 | 0.015 | 0.069 | 0.129 |
| tetracycline | | | | | | | | | |
| tablet, 500 mg | 3 | 3 | tab | 0.021 | 0.014 | 0.014 | 0.014 | 0.031 | n/a |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|---------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antifilarials | | | | | | | | | |
| crotamiton | | | | | | | | | |
| cream/lotion 10% | 1 | 1 | ml | 0.010 | 0.010 | 0.010 | 0.010 | none | 0.665 |
| ivermectin | | | | | | | | | |
| scored tablet, 3 mg* | - | - | tab | - | - | - | - | none | n/a |
| scored tablet, 6 mg* | - | - | tab | - | - | - | - | none | n/a |
| lindane | | | | | | | | | |
| cream, lotion or powder 0.3%* | - | - | tube | - | - | - | - | none | n/a |
| permethrin | | | | | | | | | |
| cream, 5%* | - | - | tube | - | - | - | - | none | 9.201 |
| lotion, 1% | - | - | tube | - | - | - | - | none | n/a |
| Antifungal medicines | | | | | | | | | |
| amphotericin B | | | | | | | | | |
| liposomal IV infusion, 5 mg/ml* | - | - | vial | - | - | - | - | none | 172.950 |
| liposomal IV infusion, powder for reconstitution 50 mg* | - | - | vial | - | - | - | - | none | 76.089 |
| powder for injection, 50 mg in vial | 2 | 2 | vial | 9.000 | 5.181 | 7.091 | 6.136 | 2.426 | 2.567 |
| clotrimazole | | | | | | | | | |
| cream, 1% | 11 | 10 | gram | 0.240 | 0.007 | 0.027 | 0.018 | 0.653 | 1.622 |
| pessary, 500 mg | 2 | 2 | pess | 0.600 | 0.026 | 0.313 | 0.170 | none | 2.196 |
| fluconazole | | | | | | | | | |
| capsule, 50 mg | 4 | 2 | caps | 0.744 | 0.069 | 0.242 | 0.100 | none | 1.432 |
| capsule, 150 mg | 9 | 4 | caps | 1.840 | 0.034 | 0.500 | 0.280 | 0.151 | 4.303 |
| capsule, 200 mg | 9 | 5 | caps | 1.518 | 0.071 | 0.350 | 0.156 | none | 5.730 |
| oral suspension, 50 mg/5 ml* | - | - | ml | - | - | - | - | none | n/a |
| solution for injection, 2 mg/ml in ampoule | 5 | 2 | ml | 0.042 | 0.029 | 0.033 | 0.029 | 0.014 | n/a |
| itraconazole | | | | | | | | | |
| capsule, 100 mg | 3 | 3 | caps | 0.640 | 0.128 | 0.500 | 0.314 | 0.292 | 1.539 |
| oral solution, 10 mg/ml* | - | - | ml | - | - | - | - | none | 2.126 |
| ketoconazole | | | | | | | | | |
| cream, 2% | 7 | 5 | gram | 0.227 | 0.014 | 0.044 | 0.022 | none | 3.831 |
| oral suspension, 100 mg/5 ml* | - | - | ml | - | - | - | - | none | 0.087 |
| tablet, 200 mg | 16 | 10 | tab | 0.122 | 0.006 | 0.042 | 0.038 | none | 0.352 |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

4. PRICES OF MEDICINES AND DIAGNOSTICS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|--------|-------|--------|-----------|-------------------|--------|
| | Nº of manuf | Nº of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antifungal medicines | | | | | | | | | |
| miconazole | | | | | | | | | |
| cream/ointment 2% (as nitrate) 15 g tube | 5 | 5 | tube | 1.176 | 0.350 | 0.418 | 0.400 | none | n/a |
| cream/ointment 2% (as nitrate) 30 g tube | 8 | 5 | tube | 0.980 | 0.130 | 0.435 | 0.394 | 0.618 | 2.395 |
| nystatin | | | | | | | | | |
| lozenge, 100,000 IU* | - | - | loz | - | - | - | - | none | n/a |
| pessary, 100,000 IU | 5 | 4 | pess | 0.030 | 0.017 | 0.024 | 0.021 | none | 0.071 |
| tablet, 100,000 IU | 2 | 2 | tab | 0.025 | 0.022 | 0.024 | 0.023 | none | 0.000 |
| tablet, 500,000 IU | 7 | 4 | tab | 0.069 | 0.022 | 0.036 | 0.030 | none | 0.081 |
| Antiprotozoal medicines | | | | | | | | | |
| pentamidine | | | | | | | | | |
| powder for injection, 200 mg (isetionate) in vial | 1 | 1 | vial | 9.000 | 9.000 | 9.000 | 9.000 | none | n/a |
| tablet, 200 mg* | - | - | tab | - | - | - | - | none | n/a |
| tablet, 300 mg* | - | - | tab | - | - | - | - | none | n/a |
| powder for injection, 300 mg (isetionate) in vial | 4 | 4 | vial | 48.400 | 9.980 | 18.350 | 11.495 | 36.948 | 10.739 |
| pyrimethamine | | | | | | | | | |
| tablet, 25 mg | 2 | 2 | tab | 0.050 | 0.045 | 0.048 | 0.046 | 0.017 | 0.079 |
| tinidazole | | | | | | | | | |
| tablet, 2 g* | - | - | tab | - | - | - | - | none | n/a |
| tablet, 500 mg | 3 | 2 | tab | 0.015 | 0.010 | 0.012 | 0.011 | none | 0.549 |
| Antiviral medicines | | | | | | | | | |
| aciclovir | | | | | | | | | |
| cream, 5% | 4 | 3 | gram | 0.986 | 0.037 | 0.450 | 0.039 | 0.409 | 1.424 |
| powder for injection, 250 mg (as sodium salt) in 10-ml vial | 3 | 3 | vial | 14.286 | 2.000 | 3.451 | 2.726 | 1.457 | 4.923 |
| tablet, 200 mg | 14 | 10 | tab | 0.540 | 0.030 | 0.054 | 0.039 | 0.086 | 0.699 |
| tablet, 400 mg | 12 | 8 | tab | 0.565 | 0.048 | 0.084 | 0.062 | none | n/a |
| tablet, 800 mg | 8 | 5 | tab | 1.020 | 0.098 | 0.259 | 0.155 | none | 2.115 |
| cidofovir | | | | | | | | | |
| IV infusion, 75 mg/ml in vial* | - | - | vial | - | - | - | - | none | n/a |
| famciclovir | | | | | | | | | |
| tablet, 125 mg* | - | - | tab | - | - | - | - | none | 3.095 |
| tablet, 250 mg* | - | - | tab | - | - | - | - | none | 5.524 |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|--|--------------|-----------------|-------------------------|--------|--------|--------|-----------|-------------------|--------|
| | Nº of manuf | Nº of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antiviral medicines | | | | | | | | | |
| foscarnet sodium | | | | | | | | | |
| IV infusion, 24 mg/ml | - | - | vial | - | - | - | - | none | 40.326 |
| ganciclovir | | | | | | | | | |
| capsule, 250 mg* | - | - | caps | - | - | - | - | none | 4.027 |
| capsule, 500 mg* | - | - | caps | - | - | - | - | none | n/a |
| powder for IV infusion, 500 mg in vial | 1 | 1 | vial | 42.520 | 42.520 | 42.520 | 42.520 | 17.337 | 24.874 |
| imiquimod | | | | | | | | | |
| cream, 5%* | - | - | tube | - | - | - | - | none | n/a |
| podofilox | | | | | | | | | |
| cream, 0.15%* | - | - | tube | - | - | - | - | none | 17.182 |
| solution or gel, 0.5%* | - | - | tube | - | - | - | - | none | 11.040 |
| podophyllum resin | | | | | | | | | |
| solution, 10-25%* | - | - | ml | - | - | - | - | none | n/a |
| valacyclovir | | | | | | | | | |
| tablet, 500 mg* | - | - | tab | - | - | - | - | none | 2.300 |
| valganciclovir | | | | | | | | | |
| tablet, 450 mg* | - | - | tab | - | - | - | - | none | 28.090 |

Antiviral medicines – Antiretrovirals

| | | | | | | | | | |
|--|---|---|------|-------|-------|-------|-------|-------|--------|
| abacavir (ABC) | | | | | | | | | |
| syrup, 20 mg/ml | 1 | 1 | ml | 0.131 | 0.131 | 0.131 | 0.131 | none | 0.333 |
| tablet, 300 mg | 3 | 2 | tab | 1.983 | 1.215 | 1.404 | 1.310 | none | 3.828 |
| didanosine (ddl) | | | | | | | | | |
| buffered chewable tablet, 100 mg | 8 | 6 | tab | 0.376 | 0.179 | 0.298 | 0.241 | 0.317 | 1.370 |
| buffered chewable tablet, 25 mg | 5 | 5 | tab | 0.286 | 0.083 | 0.108 | 0.083 | none | 0.342 |
| syrup, 2 g | 2 | 2 | ml | 0.171 | 0.125 | 0.148 | 0.137 | none | 27.402 |
| unbuffered enteric coated capsule, 125 mg* | - | - | caps | - | - | - | - | none | 2.139 |
| unbuffered enteric coated capsule, 250 mg | 2 | 1 | caps | 0.666 | 0.648 | 0.657 | 0.653 | none | 3.923 |
| unbuffered enteric coated capsule, 400 mg | 2 | 1 | caps | 1.008 | 0.928 | 0.968 | 0.948 | none | 5.596 |
| efavirenz (EFZ) | | | | | | | | | |
| capsule, 50 mg* | - | - | caps | - | - | - | - | none | n/a |
| capsule, 200 mg | 4 | 2 | caps | 2.001 | 0.490 | 0.540 | 0.518 | none | n/a |
| tablet, 600 mg | 3 | 1 | tab | 1.582 | 1.300 | 1.467 | 1.384 | 2.182 | n/a |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

4. PRICES OF MEDICINES AND DIAGNOSTICS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|--|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antiviral medicines-Antiretrovirals | | | | | | | | | |
| indinavir (IDV) | | | | | | | | | |
| capsule, 200 mg | 3 | 3 | caps | 0.600 | 0.166 | 0.312 | 0.239 | none | 0.966 |
| capsule, 400 mg | 6 | 3 | caps | 1.058 | 0.301 | 0.341 | 0.308 | 0.404 | 1.934 |
| lamivudine (3TC) | | | | | | | | | |
| syrup, 50 mg/5 ml | 3 | 3 | ml | 0.028 | 0.025 | 0.025 | 0.025 | 0.035 | 0.208 |
| tablet, 150 mg | 13 | 8 | tab | 1.531 | 0.086 | 0.150 | 0.124 | 0.237 | 3.129 |
| tablet, 300 mg | 1 | 1 | tab | 0.316 | 0.316 | 0.316 | 0.316 | none | n/a |
| nelfinavir (NFV) | | | | | | | | | |
| capsule, 250 mg | 6 | 4 | caps | 1.340 | 0.269 | 0.520 | 0.311 | 0.611 | 1.453 |
| powder for suspension, 50 mg/g* | - | - | g | - | - | - | - | none | 0.466 |
| nevirapine (NVP) | | | | | | | | | |
| syrup, 50 mg/5 ml | 3 | 2 | ml | 0.100 | 0.015 | 0.031 | 0.023 | 0.143 | 0.225 |
| tablet, 200 mg | 10 | 7 | tab | 1.984 | 0.133 | 0.257 | 0.173 | none | 4.426 |
| saquinavir (SQV) | | | | | | | | | |
| capsule, 200 mg | 2 | 1 | caps | 0.286 | 0.283 | 0.285 | 0.284 | none | 1.328 |
| stavudine (d4T) | | | | | | | | | |
| capsule, 15 mg | 2 | 2 | caps | 0.095 | 0.058 | 0.077 | 0.067 | none | 2.608 |
| capsule, 20 mg | 4 | 3 | caps | 0.101 | 0.051 | 0.082 | 0.065 | none | 2.705 |
| capsule, 30 mg | 11 | 7 | caps | 0.140 | 0.047 | 0.068 | 0.065 | 0.093 | 2.830 |
| capsule, 40 mg | 15 | 10 | caps | 2.101 | 0.058 | 0.101 | 0.079 | 0.182 | 2.925 |
| syrup, 1 mg/ml | 3 | 3 | ml | 0.050 | 0.011 | 0.048 | 0.049 | none | 0.596 |
| tenofovir (TDF) | | | | | | | | | |
| tablet, 300 mg* | - | - | tab | - | - | - | - | none | 12.797 |
| zalcitabine (ddC) | | | | | | | | | |
| tablet, 0.375 mg | 1 | 1 | tab | 0.402 | 0.402 | 0.402 | 0.402 | none | n/a |
| tablet, 0.75 mg | 2 | 2 | tab | 0.865 | 0.761 | 0.813 | 0.787 | none | 1.757 |
| zidovudine (AZT or ZDV) | | | | | | | | | |
| capsule, 100 mg | 14 | 10 | caps | 0.617 | 0.084 | 0.142 | 0.113 | 0.114 | 1.097 |
| capsule, 250 mg | 7 | 6 | caps | 1.450 | 0.307 | 0.450 | 0.346 | none | 2.051 |
| tablet, 300 mg | 9 | 6 | tab | 0.624 | 0.242 | 0.290 | 0.252 | none | 2.462 |
| injection, 10 mg/ml in 20-ml vial | 1 | 1 | vial | 5.000 | 5.000 | 5.000 | 5.000 | 1.443 | 8.532 |
| oral solution, 50 mg/5 ml | 3 | 3 | ml | 0.036 | 0.019 | 0.026 | 0.023 | 0.015 | 0.085 |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antiviral medicines - Antiretrovirals (combinations) | | | | | | | | | |
| 3TC/AZT | | | | | | | | | |
| tablet, 300/150 mg | 11 | 7 | tab | 2.951 | 0.278 | 0.384 | 0.328 | 0.471 | 8.036 |
| 3TC/D4T/NVP | | | | | | | | | |
| tablet, 150/30/200 mg | 1 | 1 | tab | 0.431 | 0.431 | 0.431 | 0.431 | none | n/a |
| tablet, 150/40/200 mg | 6 | 4 | tab | 0.496 | 0.275 | 0.402 | 0.346 | none | n/a |
| ABC/3TC/ZDV | | | | | | | | | |
| tablet, 300/150/300 mg | 2 | 2 | tab | 2.294 | 1.700 | 1.997 | 1.849 | none | 13.566 |
| AZT/3TC/NVP | | | | | | | | | |
| tablet, 300/150/200 mg | 2 | 1 | tab | 0.499 | 0.463 | 0.481 | 0.472 | none | n/a |
| lopinavir/ritonavir (LPV/r) | | | | | | | | | |
| oral solution, 20+80 mg/ml* | - | - | ml | - | - | - | - | none | 8.060 |
| capsule, 133.3+33.3 mg* | - | - | caps | - | - | - | - | none | 2.687 |

Table 2. Antineoplastic medicines

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|---------|--------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Cytotoxic medicines | | | | | | | | | |
| bleomycin | | | | | | | | | |
| powder for injection, 15 mg (as sulfate) in vial | 2 | 2 | vial | 21.000 | 18.000 | 19.500 | 18.750 | 22.515 | 13.930 |
| calcium folinate (leucovorin) | | | | | | | | | |
| tablet, 15 mg | 3 | 3 | tab | 3.496 | 0.012 | 2.561 | 1.287 | none | 0.767 |
| doxorubicine HCl | | | | | | | | | |
| powder for injection, 10 mg in 5-ml vial | 4 | 4 | vial | 23.720 | 3.000 | 7.660 | 5.063 | 3.196 | 7.286 |
| powder for injection, 50 mg in 25-ml vial | 4 | 4 | vial | 111.111 | 14.000 | 29.525 | 17.675 | 14.739 | 31.858 |
| etoposide | | | | | | | | | |
| capsule, 100 mg* | - | - | caps | - | - | - | - | none | 11.566 |
| injection, 20 mg/ml in 5-ml ampoule | 5 | 3 | amp | 31.211 | 1.723 | 9.850 | 5.000 | 2.921 | 2.492 |
| methotrexate | | | | | | | | | |
| injection, 25 mg/ml (as sodium salt) in 2-ml vial | 2 | 2 | vial | 18.100 | 1.400 | 9.750 | 5.575 | 2.062 | 3.603 |
| powder for injection, 50 mg (as sodium salt) in 2-ml vial | 3 | 3 | vial | 4.310 | 2.000 | 3.360 | 2.680 | none | 3.772 |
| tablet, 2.5 mg | 4 | 3 | tab | 0.188 | 0.031 | 0.068 | 0.057 | none | 0.056 |
| vinblastine | | | | | | | | | |
| powder for injection, 10 mg (sulfate) in 10-ml vial | 3 | 2 | vial | 14.260 | 1.400 | 2.347 | 1.874 | 11.684 | 6.815 |

4. PRICES OF MEDICINES AND DIAGNOSTICS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|--------|--------|--------|-----------|-------------------|--------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Cytotoxic medicines | | | | | | | | | |
| vincristine | | | | | | | | | |
| injection, 1 mg/ml (sulfate) in vial | 3 | 3 | vial | 4.500 | 0.674 | 3.080 | 1.877 | 2.405 | n/a |
| powder for injection, 1 mg (sulfate) in 1-ml vial | 1 | 1 | vial | 2.000 | 2.000 | 2.000 | 2.000 | 2.405 | 5.468 |
| vinorelbine | | | | | | | | | |
| injection concentrate 10 mg/ml in vial | 1 | 1 | ml | 16.480 | 16.480 | 16.480 | 16.480 | 143.086 | 21.352 |

Table 3. Medicines used for the treatment of mental and substance use disorders

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|-------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Medicines used in depressive disorders | | | | | | | | | |
| amitriptyline | | | | | | | | | |
| tablet, 25 mg (as hydrochloride) | 9 | 5 | tab | 0.065 | 0.004 | 0.008 | 0.007 | 0.010 | 0.03 |
| fluoxetine | | | | | | | | | |
| tablet, 20 mg | 10 | 7 | tab | 0.491 | 0.015 | 0.078 | 0.040 | 0.034 | 0.221 |

Medicines used in generalized anxiety and sleep disorders

| | | | | | | | | | |
|---|---|---|-----|-------|-------|-------|-------|-------|-------|
| lorazepam | | | | | | | | | |
| injection, 4 mg/ml in ampoule* | - | - | amp | - | - | - | - | none | n/a |
| tablet, 1 mg* | - | - | tab | - | - | - | - | none | 0.027 |
| methotrimipazine/levomepromazine | | | | | | | | | |
| injection, 25 mg/ml in ampoule | - | - | amp | - | - | - | - | none | 0.181 |
| tablet, 25 mg | 2 | 2 | tab | 0.108 | 0.033 | 0.071 | 0.052 | 0.038 | 0.059 |

Medicines used in the treatment of opioid dependence

| | | | | | | | | | |
|---|---|---|-----|-------|-------|-------|-------|------|-------|
| buprenorphine | | | | | | | | | |
| sublingual tablet, 200 mcg (hydrochloride)* | - | - | tab | - | - | - | - | none | 0.370 |
| sublingual tablet, 400 mcg (hydrochloride)* | - | - | tab | - | - | - | - | none | n/a |
| naltrexone HCl | | | | | | | | | |
| tablet, 50 mg | 2 | 2 | tab | 1.277 | 0.875 | 1.076 | 0.976 | none | 2.444 |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

Table 4. Analgesics

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|---|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|-------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Opioid analgesics | | | | | | | | | |
| codeine | | | | | | | | | |
| tablet, 30 mg (phosphate) | 5 | 5 | tab | 0.066 | 0.020 | 0.034 | 0.030 | 0.232 | 0.100 |
| methadone | | | | | | | | | |
| tablet, 5 mg | 1 | 1 | tab | 0.185 | 0.185 | 0.185 | 0.185 | none | 0.055 |
| morphine | | | | | | | | | |
| injection, 10 mg/ml (sulfate or HCl), in 1-ml ampoule | 6 | 4 | amp | 1.998 | 0.271 | 0.470 | 0.311 | 0.495 | 0.231 |
| oral solution, 10 mg/5 ml (sulfate or HCl) | 4 | 2 | ml | 1.000 | 0.055 | 0.058 | 0.056 | none | n/a |
| tablet, modified release, 10 mg (sulfate) | – | – | tab | – | – | – | – | none | 0.137 |
| pethidine | | | | | | | | | |
| injection, 50 mg/ml (hydrochloride) in 1-ml ampoule | 4 | 3 | amp | 0.450 | 0.284 | 0.370 | 0.334 | 0.344 | n/a |
| injection, 50 mg/ml (hydrochloride) in 2-ml ampoule | 7 | 6 | amp | 1.773 | 0.258 | 0.505 | 0.392 | none | 0.598 |
| tablet, 50 mg | 2 | 1 | tab | 0.130 | 0.125 | 0.128 | 0.129 | none | n/a |
| tablet, 100 mg | 1 | 1 | tab | 0.150 | 0.150 | 0.150 | 0.150 | none | n/a |

Table 5. Gastrointestinal medicines

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|--|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|-------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antacids and other antiulcer medicines | | | | | | | | | |
| omeprazole | | | | | | | | | |
| capsule, 10 mg | 8 | 6 | caps | 0.312 | 0.014 | 0.070 | 0.050 | 0.028 | n/a |
| capsule, 20 mg | 19 | 9 | caps | 1.046 | 0.011 | 0.093 | 0.030 | 0.034 | 0.210 |
| capsule, 40 mg | 10 | 6 | caps | 1.207 | 0.030 | 0.177 | 0.088 | none | 0.905 |
| powder for injection, 40 mg (as sodium salt) in vial | 1 | 1 | vial | 3.000 | 3.000 | 3.000 | 3.000 | 1.371 | 9.584 |
| powder for IV infusion, 40 mg (as sodium salt) in vial | 2 | 2 | vial | 3.000 | 1.950 | 2.475 | 2.213 | none | n/a |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

4. PRICES OF MEDICINES AND DIAGNOSTICS

| | Manufacturer | | Indicative prices, US\$ | | | | | List prices, US\$ | |
|-----------------------------------|--------------|-----------------|-------------------------|-------|-------|--------|-----------|-------------------|-------|
| | N° of manuf | N° of countries | unit | max | min | median | 25th perc | Brazil | Spain |
| Antiemetic medicines | | | | | | | | | |
| dimenhydrinate | | | | | | | | | |
| tablet, 50 mg | 4 | 4 | tab | 0.056 | 0.005 | 0.025 | 0.010 | none | 0.129 |
| metoclopramide | | | | | | | | | |
| injection 5 mg/ml in 2-ml ampoule | 5 | 5 | amp | 0.219 | 0.055 | 0.112 | 0.108 | 0.062 | 0.177 |
| tablet, 10 mg (as hydrochloride) | 9 | 7 | tab | 0.027 | 0.002 | 0.007 | 0.006 | 0.005 | 0.050 |
| prochlorperazine | | | | | | | | | |
| injection, 12.5 mg/ml | 2 | 2 | ml | 0.359 | 0.130 | 0.245 | 0.187 | none | n/a |
| tablet, 5 mg | 3 | 3 | tab | 0.009 | 0.004 | 0.008 | 0.006 | none | n/a |
| Laxatives | | | | | | | | | |
| docusate sodium | | | | | | | | | |
| capsule, 100 mg* | - | - | tab | - | - | - | - | none | n/a |

* No price information

none - no purchase has been made for this product, therefore no minimum price payable is available

n/a - not available

4.2 UN Bulk Procurement Scheme 2004: Specifications of HIV test kits - Simple/Rapid, Elisa and Supplemental Assays

SIMPLE/RAPID ASSAYS

| Assay name (Manufacturer) | Company's Order Code | No. of tests per kit | Guaranteed Shelf-life/ Storage temp (°C) | HIV type ¹ | Assay type Antigen | Sample type | Equipment requirements ² | Cost/test ³ € /¥ | Cost/test ³ US \$ |
|--|-------------------------|----------------------------|--|-----------------------|---|-----------------------------|--|--------------------------------|--|
| BIOLINE HIV 1/2 3.0 (Standard Diagnostics Inc.) | 03FK10 | 30 | 16 months/ 2° - 30° | HIV1 HIV 2 | lateral flow recombinant proteins | whole blood serum/plasma | D, G | | 0.47 |
| BIONOR HIV-1 & 2 (Bionor AS) | DN061 | 250 | 10 months/ 2° - 8° | HIV 1+2 | synthetic peptides | whole blood serum/plasma | E, G, Special Equipment | | 1.00 |
| CAPILLUS HIV-1/HIV-2 (Trinity Biotech) | 6048G | 100 | 9 months/ 2° - 8° | HIV 1+2 | agglutination recombinant proteins | whole blood serum/plasma | G | € 1.00 | |
| DETERMINE™ HIV-1/2 Abbott Diagnostics) | 7D23-13 | 100 | 6 - 9 months/ 2° - 30° | HIV 1+2 | lateral flow recombinant protein, synthetic peptide | whole blood serum/plasma | D, G | | Access countries: 0.80 Elsewhere: 1.00 |
| DIAGNOSTIC KIT for HIV (1+2) ANTIBODY (COLLOIDAL GOLD) (Shanghai Kehua) (SEAR & WR only) | KHR02 | 50 | 15 months/ 4° - 30° | HIV 1+2 | lateral flow | whole blood serum/plasma | D, G | | 0.60 |
| FIRST RESPONSE™ HIV 1-2-0 Card Test (Premier Medical Corp) | 105FRC30 | 30 | 15 months/ 2° - 30° | HIV 1+2 | lateral flow recombinant proteins | whole blood serum/plasma | D, G | | 0.67 |

Notes:¹ Assays denoted as HIV 1 HIV 2 are able to discriminate between HIV-1 and HIV-2, those denoted as HIV 1+2 are not capable to discrimination

²Equipment requirements: A: ELISA reader, B: ELISA washer, C: Consumables, D: Pipette,

E: Power supply, F: For large volume testing more than 40 samples daily, G:For small volume testing 1 to 40 samples daily, Special Equipment: Bionor testing station required approximate cost US \$950

³Please note that this price does not include freight nor other charges

4. PRICES OF MEDICINES AND DIAGNOSTICS

| Assay name (Manufacturer) | Company's Order Code | No. of tests per kit | Guaranteed Shelf-life/ Storage temp (°C) | HIV type ¹ | Assay type Antigen | Sample type | Equipment requirements ² | Cost/test ³ € /# | Cost/test ³ US \$ |
|---|--|----------------------------|--|-----------------------|--|-----------------------------|--|--------------------------------------|---------------------------------|
| GENEDIA HIV 1/2 Rapid 3.0 (Green Cross) (SEAR & WPR only) | F3302 | 30 | 18 months/ 2° - 30° | HIV 1 + 2 | lateral flow recombinant proteins | whole blood serum/plasma | D, G | | 0.70 |
| GENIE II HIV-1/HIV-2 (Bio-Rad Laboratories) | 72323 | 40 | 12 months/ 2° - 8° | HIV 1 + 2 | lateral flow recombinant proteins synthetic peptides | serum/plasma | D, G | € 2.00 | |
| HIV 1&2 DOUBLECHECK (Organics Ltd) | 60332000 | 40 | 15 months/ 4° - 8° | HIV 1+2 | lateral flow recombinant proteins synthetic peptides | serum/plasma | G | | 1.20 |
| HIV TRIDOT (J Mitra & Co., India) | IR130010 IR130050 IR130100 IR130200 | 10 50 100 200 | 10 months/ 4° - 8° | HIV 1 HIV 2 | flow through recombinant proteins | serum/plasma | G | € 1.10 € 1.00 € 0.90 € 0.80 | |
| IMMUNOCOMB II BISPOT HIV1 & 2 (Organics Ltd) | 60432002 | 36 | 15 months/ 4° - 8° | HIV 1 HIV 2 | dipstick synthetic peptides | serum/plasma | D, G | | 1.30 |
| INSTANTCHECK™ HIV 1+2 RAPID TEST (EY Laboratories) | 8-1003-40 8-1003-100 | 40 100 | 9 months/ 15° - 28° | HIV 1+2 | lateral flow | whole blood serum/plasma | G | | 1.09 0.95 |
| SERODIA HIV-1/2 (Fujirebio) | 220658 226063 | 100 220 | 12 months/ 2° - 10° | HIV 1+2 | agglutination recombinant proteins | serum/plasma | C, D, G | ¥130 ¥130 | (1.19) (1.19) |
| UNI-GOLD™ HIV-1/HIV-2 (Trinity Biotech) | 1206502 | 20 | 9 months/ 2° - 27° | HIV 1+2 | lateral flow recombinant proteins | whole blood serum/plasma | G | € 1.15 | |

Notes:¹ Assays denoted as HIV 1 HIV 2 are able to discriminate between HIV-1 and HIV-2, those denoted as HIV 1+2 are not capable to discrimination

²Equipment requirements: A: ELISA reader, B: ELISA washer, C: Consumables, D: Pipette,

E: Power supply, F: For large volume testing more than 40 samples daily, G: For small volume testing 1 to 40 samples daily, Special Equipment: Bionor testing station required approximate cost US \$950

³Please note that this price does not include freight nor other charges

ELISA ASSAYS

| Assay name (Manufacturer) | Company's Order Code | No. of tests per kit | Guaranteed Shelf-life/ Storage temp (°C) | HIV type ¹ | Assay type Antigen | Sample type | Equipment requirements ² | Cost/test ³ €/¥ | Cost/test ³ US \$ |
|--|-------------------------------|----------------------------|--|------------------------|--|-----------------|--|-------------------------------|---------------------------------|
| ANTHIV 1 + 2 ANTIBODIES ELISA DIAGNOSTICS KIT (Shanghai Kehua) (SEARO & WPRO only) | KHT-10 | 96 | 5 months/ 2°-8° | HIV 1+2 | recombinant proteins synthetic peptides | 4520/620nm | A, B, C, D, E, F | | 0.27 |
| ENZYGNOST ANTHIV 1/2 PLUS (Dade Behring AG) Enzygnost/TMB reagent kit | O0FK135 O0FK215 OUVP175 | 2 x 96 10 x 96 960 | 12 months/ 2°-8° | HIV 1+2 O | recombinant proteins | 450/650 nm | A, B, C, D, E, F | | 0.99 0.75 Gratis |
| GENEDIA HIV Ag-Ab (Green Cross) (SEARO & WPRO only) | D1305 | 480 | 12 months/ 2°-8° | HIV 1+2 O HIV Ag | recombinant proteins synthetic peptides | 450/620nm | A, B, C, D, E, F | | 0.40 |
| GENSCREEN HIV Ag-Ab (Bio-Rad Laboratories) | 72375 72376 | 96 480 | 12 months/ 2°-8° | HIV 1+2 O HIV Ag | recombinant proteins synthetic peptides | 450/620 nm | A, B, C, D, E, F | € 0.55 € 0.50 | |
| HIV EIA (AmiLabsystems Ltd Oy) | 6111011 6111012 6111013 | 96 480 960 | 12 months/ 4°-8° | HIV 1+2 | synthetic peptides | 450 nm | A, B, C, D, E, F | € 0.40 € 0.36 € 0.34 | |
| MUREX HIV Ag-Ab (Abbott Diagnostics) | L/N7G79-01 L/N7G79-02 | 96 480 | 6 months/ 2°-8° | HIV 1+2 O HIV Ag | recombinant proteins synthetic peptides | 450/620 – 650nm | A, B, C, D, E, F | | 1.20 0.80 |
| UBI HIV-1/2 EIA (United Biomedical) | 680328 | 192 | 14 months/ 2°-8° | HIV 1+2 | synthetic peptides | 492/620 nm | A, B, C, D, E, F | | 0.40 |

Notes:¹ Assays denoted as HIV 1 HIV 2 are able to discriminate between HIV-1 and HIV-2, those denoted as HIV 1+2 are not capable to discrimination

²Equipment requirements: A: ELISA reader, B: ELISA washer, C: Consumables, D: Pipette,

E: Power supply, F: For large volume testing more than 40 samples daily, G:For small volume testing 1 to 40 samples daily, Special Equipment: Bionor testing station required approximate cost US \$950

³Please note that this price does not include freight nor other charges

| Assay name (Manufacturer) | Company's Order Code | No. of tests per kit | Guaranteed Shelf-life/ Storage temp (°C) | HIV type ¹ | Assay type Antigen | Sample type | Equipment requirements ² | Cost/test ³ €/¥ | Cost/test ³ US \$ |
|---|-------------------------|----------------------------|--|-----------------------|--|-------------|--|-------------------------------|---------------------------------|
| VIRONOSTIKA HIV UNI- FORM II PLUS O (bioMérieux BV) | 284017 284018 | 192 576 | 12 months/ 2°-8° | HIV 1+2 O | recombinant proteins synthetic peptides | 450/620 nm | A, B, C, D, E, F | € 0.64 € 0.46 | |
| SUPPLEMENTAL ASSAYS | | | | | | | | | |
| Confirmatory assays | | | | | | | | | |
| HIV BLOT 2.2 (Genelabs Diagnostics) | 11031-036 | 36 | 15 months/ 2°-8° | HIV 1 HIV 2 | viral lysate + synthetic peptide | NA | C, D, E | | 10.97 |
| INNO-LIA™ HIV I/II SCORE (Inogenetics) | 80540 | 20 | 2°-8° | HIV 1 HIV 2 | recombinant proteins synthetic peptides | NA | D, E | € 15.50 | |
| PEPTH-LAV 1-2 (Bio-Rad Laboratories) | 72253 | 10 | 12 months/ 2°-8° | HIV 1 HIV 2 | synthetic peptides | NA | C, D, E | € 15.00 | |
| NEW LAV BLOT I (Bio-Rad Laboratories) | 72252 | 18 | 12 months/ 2°-8° | HIV 1 | viral lysate | NA | D, E | € 13.00 | |
| NEW LAV BLOT II (Bio-Rad Laboratories) | 72252 | 18 | 12 months/ 2°-8° | HIV 2 | viral lysate | NA | D, E | € 13.00 | |

Notes:¹ Assays denoted as HIV 1 HIV 2 are able to discriminate between HIV-1 and HIV-2, those denoted as HIV 1+2 are not capable to discrimination

²Equipment requirements: A: ELISA reader, B: ELISA washer, C: Consumables, D: Pipette,

E: Power supply, F: For large volume testing more than 40 samples daily, G:For small volume testing 1 to 40 samples daily, Special Equipment: Bionor testing station required approximate cost US \$950

³Please note that this price does not include freight nor other charges

5. List of manufacturers - medicines and diagnostics

5.1 manufacturers of medicines

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---|--|------------------|------------------|--|---|
| Alembic Ltd. | Alembic Road, Vadodara, 390 003, Gujarat, India | +91 265 228 4074 | +91 265 228 0331 | navneetbattu@alembic.co.in www.alembic.com | azithromycin, benzathine benzylpenicillin, benzylpenicillin, ceftriaxone, ciprofloxacin, clarithromycin, erythromycin, omeprazole, procaine benzylpenicillin |
| Allepco Pharmaceutical Industries (Alpha) | PO Box 517 Aleppo, Syria | +96 3215 210 201 | +96 3215 210 203 | alphasyr@net.sy www.alpha-syria.com | azithromycin, ceftriaxone, ciprofloxacin |
| Alpharma | Jl. Raya Bogor km 28 P.O. Box 1044 JAT, 13710, Jakarta, Indonesia | +62 21 871 0311 | +62 21 871 0044 | herny.prasetya@alpharma.no www.alpharma.no | aciclovir, ciprofloxacin, clarithromycin, metoclopramide, sulfamethoxazole+trimethoprim |
| Apotex Mexico (Protein, S.A. de C.V.) | Damas 120, Col. San José Insurgentes, 8900, Mexico D.F., Mexico | +52 5554 829 000 | +52 5554 829 002 | rjimenez@apotex.com.mx www.apotex.com.mx | aciclovir, ciprofloxacin, didanosine (ddl), dimenhydrinate, fluoxetine, ketoconazole, metoclopramide, miconazole, nystatin, omeprazole, stavudine (d4T), sulfamethoxazole+trimethoprim, zalcitabine (ddC), zidovudine (AZT or ZDV), |
| Artesan Pharma GmbH & Co. | Osterbrookweg 15 Schenefeld 22869, Germany | +49 40 542270 | +49 4054 2283 | j.ahlers@pharma-aid.de www.pharma-aid.de | albendazole, erythromycin, ketoconazole, nystatin, sulfamethoxazole+trimethoprim |
| Aspen Pharmacare | Building nr.7, Healthcare Park, PO BOX 1587, 2052, Gallo Manor, South Africa | +27 112 396 767 | +27 112 396 018 | krugera@aspenpharma.com www.aspenpharma.com | aciclovir, amitriptyline, ciprofloxacin, clotrimazole, codeine, doxycycline, fluoxetine, gentamicin, ketoconazole, metoclopramide, metronidazole, morphine, ofloxacin, pethidine, prochlorperazine, stavudine (d4T), sulfamethoxazole+trimethoprim, zidovudine (AZT or ZDV) |
| Aurobindo Pharma Ltd. | SY.NO. 313-Bachupally (V) Quthbullapur Mandal, 500 072, R.R.District, Andhra Pradesh, India | +91 403 044 060 | +91 403 044 058 | info@aurobindo.com www.aurobindo.com | 3TC/AZT, AZT/3TC/NWP, ceftriaxone, ciprofloxacin, didanosine (ddl), efavirenz (EFZ), erythromycin, indinavir (IDV), lamivudine (3TC), nelfinavir (NFV), nevirapine (NVP), omeprazole, stavudine (d4T), sulfamethoxazole+trimethoprim, zidovudine (AZT or ZDV) |

5. LIST OF MANUFACTURERS - MEDICINES AND DIAGNOSTICS

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|--|--|----------------------------|------------------|--|---|
| Aventis Ltd. | 6/2/A, Segun Bagicha, 1000, Dhaka, Bangladesh | +880 2956 2893 ext. 135 | +880 2955 0009 | khan-md.tarique@aventis.com www.aventis.com | ceftriaxone, ciprofloxacin, erythromycin, metoclopramide, omeprazole, prochlorperazine, sulfamethoxazole+trimethoprim |
| Aventis Intercontinental | 20, Avenue Raymond Aron/Tri E1/360, Antony Cedex 92165, France | +33 155 717 637 | +33 155 717 447 | sandrine.girardot@aventis.com www.aventis.com | benzathine benzylpenicillin, bleomycin, cefixime, methotrexate, methotrimopazine / levomepromazine, metronidazole, ofloxacin, pentamidine |
| Bayer Healthcare AG | 51368 Leverkusen, Germany | +49 2143 0911 | +49 2143 0580 75 | michaela.oxfort @bayerhealthcare.com www.bayerhealthcare.com | ciprofloxacin |
| Beacons Pharmaceuticals Pte Ltd. | 53, Quality Road, 618 814, Singapore | +65 6265 2336 | +65 6261 5723 | beacons@singnet.com.sg www.beacons.com.sg | aciclovir, clotrimazole, codeine, dimenhydrinate, doxycycline, erythromycin, ketoconazole, miconazole, sulfamethoxazole+trimethoprim |
| Beltapharm SpA | Via Stelvio, 66, 20095, Cusano Milanino, Milan, Italy | +39 02 66401216 | +39 02 6196714 | f.pansera@beltapharm.com www.beltapharm.com | albendazole, erythromycin, ketoconazole, miconazole |
| Bilim Pharmaceutical Ind. | Ayazaga Koyu Yolu Nr.6, 34398, Maslak, Turkey | +90 2122 852 290 | +90 2122 869 472 | info@bilimpharma.com www.bilimpharma.com | cefixime, ceftriaxone, clarithromycin, clindamycin, fluconazole, ketoconazole |
| Boehringer Ingelheim GmbH | Binger Straße 173, 55216, Ingelheim am Rhein, Germany | +49 06132 77 0 | +49 6132 77 3000 | phillips@ing.boehringer- ingelheim.com www.boehringer-ingelheim.de | nevirapine |
| Bristol-Myers Squibb (France) | 3 Rue Joseph Monier BP 325, 92506, Rueil-Malmaison cedex, France | +33 158 836 000 | +33 158 836 565 | marie-astrid.mercier@bms.com www.bms.com | didanosine (ddl), stavudine (d4T) |
| Bristol-Myers Squibb (South Africa) | PO BOX 1408, 2008, Bedfordview, South Africa | +27 114 566 400 | +27 114 566 580 | tamany.geldenhuis@bms.com www.bms.com | didanosine (ddl), stavudine (d4T) |
| Cheil Jedang Corp | CJ Bldg. 500, 5-Ga, Namdadaemun-Ro, Jung-Gu 100 802, Seoul, Republic of Korea | +82 2726 8376 | +82 2726 8429 | cj1111@cj.net www.cj.net | 3TC/AZT, 3TC/d4T/NVP, capreomycin, ceftriaxone, ciprofloxacin, cycloserine, lamivudine (3TC), metronidazole, nevirapine (NVP), stavudine (d4T), zidovudine (AZT or ZDV) |

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---|---|------------------|------------------|---|--|
| Cipla Ltd. | 289, Bellasis Road Mumbai Central, 547649, India | +91 2223 021 397 | +91 2223 070 013 | ciplaexp@cipla.com www.cipla.com | 3TC/AZT, 3TC/d4T/NVP, abacavir (ABC), aciclovir, albendazole, azithromycin, AZT/3TC/NVP, cefixime, ceftriaxone, ciprofloxacin, clotrimazole, didanosine (ddl), doxycycline, efavirenz (EFZ), erythromycin, etoposide, fluconazole, indinavir (IDV), lamivudine (3TC), methotrexate, nelfinavir (NFV), nevirapine (NVP), nystatin, ofloxacin, omeprazole, stavudine (d4T), vinblastine, vincristine, zidovudine (AZT or ZDV). |
| CLARIS Lifesciences Ltd | Corporate Towers, Near Parimal Crossing, Ellisbridge, 555 015, Ahmedabad, India | +91 79 656 3331 | +91 79 6565 879 | claris@clarislifesciences.com www.clarislifesciences.com | metoclopramide |
| Combino Pharm, S.L. | Carrer Fructuos Gelabert, 6-8 Edificio Conata 2, 8970, Sant Joan Despi, Barcelona, Spain | +34 934 808 833 | +34 934 808 832 | info@combino-pharm.es www.combino-pharm.es | aciclovir, amphotericin B, ceftriaxone, clindamycin, fluoxetine, pentamidine, zidovudine (AZT or ZDV). |
| Demo S.A. Pharmaceutical Industry | 21st km National Road Athens – Lamia, 14568, Athens, Greece | +30 2108 161 802 | +30 2108 161 587 | lxenitos@demo.gr www.demo.gr | ceftriaxone, ciprofloxacin, metronidazole, omeprazole, spectinomycin |
| Donato y Zurlo S.A. | 2818 NW 79th Avenue, 33122, Miami, US | +1 305 591 9449 | +1 305 591 7773 | ama1@amapharma.com www.laboratoriodosa.com | 3TC/AZT, didanosine (ddl), indinavir (IDV), lamivudine (3TC), nelfinavir (NFV), stavudine (d4T), zidovudine (AZT or ZDV) |
| Ecobi Farmaceutici S.a.s. | Via Enrico Bazzano, 26, 16019, Ronco Scrivia, Italy | +39 010 935 280 | +39 010 935 0679 | ecobi@aleph.it www.ecobi.com | aciclovir, calcium folinate (leucovorin), miconazole, sulfadiazine, sulfamethoxazole+trimethoprim |
| F. Hoffmann-La Roche Ltd | Pharma International, CH-4070, Basel, Switzerland | +41 616 889 291 | +41 61 688 2778 | maria.vigneau@roche.com www.roche-hiv.com | nelfinavir (NFV), saquinavir (SQV) |
| Far Manguinhos | Rua Sizenando Nabuco, 100 Manguinhos, 21041-250, Rio de Janeiro, Brazil | +55 21 3977 2424 | +55 21 2290 1297 | diretoria@far.fiocruz.br www.far.fiocruz.br | 3TC/AZT, didanosine (ddl), indinavir (IDV), ketoconazole, lamivudine (3TC), nevirapine (NVP), stavudine (d4T), sulfadiazine, sulfamethoxazole+trimethoprim, zidovudine (AZT or ZDV) |
| Gene pharm SA | 18th Km. Marathon Ave. 15351, Pallini, Greece | +30 2106 039 336 | +30 2106 039 402 | info@gene pharm.gr www.gene pharm.gr | cefixime, ciprofloxacin, clarithromycin, fluconazole, fluoxetine, metoclopramide, ofloxacin, omeprazole |

5. LIST OF MANUFACTURERS - MEDICINES AND DIAGNOSTICS

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---|--|------------------|------------------|---|--|
| Glaxo SmithKline | GSK House, 980 Great West Road, TW8 9GS, Brentford, UK | +44 2080 475 000 | | isabelle.s.girault@gsk.com www.gsk.com | 3TC/AZT, ABC/3TC/ZDV, abacavir (ABC), lamivudine (3TC), zidovudine (AZT or ZDV) |
| Glenmark Pharmaceuticals Ltd | L-82 & L-83 Verna Industrial Estate, 403 722, Verna, India | +91 2226 571 060 | +91 2226 572 677 | glenmarklab@vsnl.net www.glenmarkindia.com | ciprofloxacin |
| Gracure Pharmaceuticals Ltd. | 107, Magnum House -1, Karampura Complex, Shivaji, 110 015, New Delhi, India | +91 1125 920 344 | +91 1125 920 747 | gracure@vsnl.com www.gracure.com | aciclovir, albendazole, amitriptyline, chloramphenicol, ciprofloxacin, clotrimazole, doxycycline, erythromycin, fluconazole, gentamicin, ketoconazole, miconazole, ofloxacin, omeprazole, pyrimethamine, silver nitrate, sulfamethoxazole+trimethoprim, tetracycline, tinidazole |
| Heyl Chem.-pharm. Fabrik GmbH & Co KG | Goerzallee 253, 14167, Berlin, Germany | +49 308 169 617 | +49 308 174 049 | info@hey-berlin.de www.hey-berlin.de | sulfadiazine |
| Hoffmann-La Roche | Bldg 71/304, CH-4070 Basel, Switzerland | +41 616 888 329 | +41-616 881 525 | hans-ruedi.wiedmer @roche.com www.roche.com | nelfinavir (NFV), saquinavir (SQV) |
| Hovid SDN. BHN. | 121 Jalan Kuala Kangsar, 30010, Ipoh, Malaysia | +605 506 0690 | +605 506 1215 | info@hovid.com www.hovid.com/ | aciclovir, doxycycline, erythromycin, ketoconazole, miconazole, ofloxacin, omeprazole, sulfamethoxazole+trimethoprim, tetracycline |
| Intas Pharmaceuticals Ltd | 2nd floor, Chinubhai Centre, Ashram Road, 380 009, Ahmedabad, India | +91 796 576 655 | +91 796 578 862 | alkesh_shah@intaspharma.com www.intaspharma.com | amitriptyline, ciprofloxacin, clarithromycin, doxycycline, etoposide, fluconazole, gentamicin, itraconazole, ketoconazole, lamivudine (3TC), naltrexone HCl, ofloxacin, omeprazole, sulfamethoxazole+trimethoprim, tinidazole |
| IPCA Laboratories Limited | 48, Kandivli Industrial Estate, 400067, Kandivli (West), India | +91 222 868 4241 | +91 222 868 6613 | ipca@ipca.co.in www.ipca.co.in | aciclovir, albendazole, azythromycin, ciprofloxacin, clarithromycin, erythromycin, fluconazole, lamivudine (3TC), metoclopramide, ofloxacin, sulfamethoxazole+trimethoprim, zidovudine (AZT or ZDV) |
| IVAX Pharmaceuticals Mexico, S.A. de C.V | Calz. De Tlalpan 3007 04650, Col. Santa Ursula Coapa, Mexico | +52 5555 990 000 | +52 5556 178 164 | ipeniche@ivaxpharma.com.mx www.ivaxpharma.com.mx | aciclovir, ceftriaxone, ciprofloxacin, clarithromycin, fluoxetine, itraconazole, ketoconazole, miconazole, omeprazole, sulfamethoxazole+trimethoprim |
| Laboratorio Farmacologico Milanese (L.F.M.) Srl. | Via Monterosso, 273, 21042, Caronno Pertusella, Varese, Italy | +39 0296 450 181 | +39 0296 450 967 | m.ceriani@lfm.it www.lfm.it | doxycycline, gentamicin, metoclopramide, |

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---------------------------------|---|------------------|------------------|--|--|
| Lab. Filaxis International S.A. | Panama 2121, B1640KC, Martinez, Buenos Aires, Argentina | +54 1145 138 009 | +54 1145 138 004 | liliana.b.mendez@filaxis.com www.filaxis.com | 3TC/AZT, aciclovir, calcium folinate (leucovorin), doxorubicine HCl, efavirenz (EFZ), etoposide, ganciclovir, indinavir (IDV), lamivudine (3TC), methotrexate, nelfinavir (NFV), nevirapine (NVP), pentamidine, stavudine (d4T), vinblastine, vincristine, vinorelbine, zalcitabine (ddC), zidovudine (AZT or ZDV) |
| Lab. Renaudin | 125, Bureaux de la Colline, 92213, Saint-Cloud Cedex, France | +33 141 120 382 | +33 141 120 377 | fpetit@labo-renaudin.com www.labo-renaudin.com | metoclopramide, morphine, pethidine |
| Laboratorio Reig Jofre S.A. | C/ Gran Capitan 10 08970, Sant Joan Despi Barcelona, Spain | +34 914 153 801 | +34 915 191 849 | rjexport@reigjofre.com www.reigjofre.com | azithromycin, ceftriaxone, fluconazole, sulfadiazine |
| Laboratorios Andromaco S.A. | Dr. Zamnehof 36, 28027, Madrid, Spain | +34 91 301 9300 | +34 91 301 9304 | pilar.anton-pacheco@andromaco.es www.andromaco.es | omeprazole |
| Laboratorios Cinfa S.A. | Olaz-Chipi, 10 Poligono Areta, 31620, Huarte-Pamplona, Spain | +34 948 335 102 | +34 948 330 367 | bsanado@cinfa.com www.cinfa.com | aciclovir, ciprofloxacin, dimenhydrinate, fluoxetine, omeprazole |
| Laborator Juventus S.A. | Julio Camarillo, 37, 28037, Madrid, Spain | +34 913 752 200 | +34 913 752 233 | export@juventus.es www.juventus.es | ciprofloxacin, clarithromycin |
| Lachifarma, SRL | S.S. 16 Zona Industriale Zollino, 73010, Zollino (LE), Italy | +39 0836 600 661 | +39 0836 600 662 | info@lachifarma.com www.lachifarma.com | albendazole, erythromycin, ketoconazole, miconazole, naltrexone HCl, sulfamethoxazole+trimethoprim |
| Lupin Ltd. | 159, C.S.T. Road, Kalina Santacruz (East), 400 098, Mumbai, India | +91 2226 528 257 | +91 2226 528 321 | rjeevpati@lupinpharma.com www.lupinworld.com | cefixime, ceftriaxone, ciprofloxacin, rifabutin |
| Lyka Labs Limited | 77, Nehru Road, Vile Parle (East), 400 099, Mumbai, India | +91 2226 106 754 | +91 2226 111 024 | lykaexports@rediffmail.com www.lykalabs.com | albendazole, azithromycin, cefixime, ceftriaxone, ciprofloxacin, clarithromycin, erythromycin, ofloxacin, omeprazole, sulfamethoxazole+trimethoprim |
| Martindale Pharmaceuticals Ltd. | Hubert Road CW14 4LZ, Brentwood, United Kingdom | +44 1277 266 600 | +44 1277 266 688 | matt.bartlett@martindalepharma.co.uk www.martindalepharma.co.uk | morphine, pethidine |

5. LIST OF MANUFACTURERS - MEDICINES AND DIAGNOSTICS

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---|---|------------------|------------------|---|---|
| Medac GmbH, International Operations | Theaterstraße 6 22880, Wedel, Germany | +49 410 380 060 | +49 410 380 061 | d.rehder@medac.de www.mepha.com | calcium folinate (leucovorin), doxorubicine HCl, etoposide |
| Mepha Ltd | Dornacherstrasse 114 CH-4147, Aesch, Switzerland | +41 617 054 343 | +41 617 054 338 | hanspeter.baumann@mepha.ch www.mepha.com | ceftriaxone, ciprofloxacin, omeprazole |
| Molteni Farmaceutici | S.S. 67, Loc. Granatieri, 50018, Scandicci, Firenze, Italy | +39 0557 3611 | +39 0557 2005 7 | c.castelli@moltenifarma.it www.moltenifarma.it | morphine, pethidine |
| Neon Antibiotics Pvt. Ltd. | 146A, Damji Shamji Industrial Complex, M. Caves Road, 28 Mahal Ind. Estate, Mahakali Caves Road, 400 093, Andheri (East), India | +91 2226 875 366 | +91 2226 873 502 | neon@bom1.vsnl.net.in www.neongroup.com | aciclovir, amphotericin B, bleomycin, capreomycin, doxorubicine HCl, etoposide, methotrexate, omeprazole, pentamidine, spectinomycin, vinblastine, vincristine |
| Neon Laboratories Ltd. | 146A, Damji Shamji Industrial Complex, M. Caves Road, 28 Mahal Ind. Estate, Mahakali Caves Road, 400 093, Andheri (East), India | +91 2226 875 366 | +91 2226 873 502 | neon@bom1.vsnl.net.in www.neongroup.com | ceftriaxone, chloramphenicol, gentamicin, pethidine |
| New GPC Inc | A1 Farm, East Bank Demerara, Guyana | +59 2265 4261 | +59 2265 2229 | limacol@newgpc.com www.newgpc.com | 3TC/AZT, 3TC/d4T/NVP, indinavir (IDV), lamivudine (3TC), nevirapine (NVP), stavudine (d4T), zidovudine (AZT or ZDV) |
| Panpharma | Z.I. du Clairay 35133, Luitre, France | +33 299 979 127 | +33 299 979 983 | mlebellego@panpharma.fr www.panpharma.fr | ceftriaxone |
| Pharmadrug | Saseler Chausee 191a 22393, Hamburg, Germany | +49 406 017 937 | +49 406 016 358 | info@pharmadrug.de www.pharmadrug.de | aciclovir, cycloserine, doxycycline, erythromycin, ketoconazole, methotrimopazine / levomepromazine, miconazole, nystatin, pethidine, prochlorperazine |

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|----------------------------------|--|------------------|---------------------------|---|---|
| Pharmchem International Ltd. | Pharmchem House Unit B1, Neptune Industrial Estate, Neptune Road, HA1 4YF, Harrow, Middlesex, U.K. | +44 2084 274 261 | +44 2084 274 262 | info@pharmchem.co.uk www.pharmchem.co.uk | amitriptyline, azithromycin, benzathine benzylpenicillin, benzylpenicillin, ceftriaxone, chloramphenicol, ciprofloxacin, clotrimazole, codeine, doxorubicine HC, doxycycline, erythromycin, fluoxetine, gentamicin, ketoconazole, methadone, metronidazole, miconazole, morphine, pethidine, procaine benzylpenicillin, spectinomycin, sulfamethoxazole+trimethoprim, tetracycline, vincristine |
| Phyto-Riker Pharmaceuticals Ltd. | P.O. Box 5266 Accra-North, Ghana | +233 21 760 316 | +233 21 760 316 | info@phyto-riker.com www.phyto-riker.com | ciprofloxacin, erythromycin, tetracycline |
| Pliva d.d. | Ulica grada Vukorava 49, 36800, Zagreb, Croatia | +38 516 120 999 | +38 516 120 994 | cecile.miles@pliva.hr www.pliva.hr | benzylpenicillin, ceftriaxone, ciprofloxacin, fluconazole |
| Purna Pharmaceuticals NV | K.M.O. Zone "Pullaar" Rijksweg 17, 2870, Puurs, Belgium | +32 3886 0085 | +32 3886 2538 | info@purna.be www.purna.be | clotrimazole, erythromycin, ketoconazole, miconazole |
| Ranbaxy Laboratories Ltd | 13th Floor, 6 Devika Towers 110 019, New Delhi, India | +91 1126 002 021 | +91 1112 423 312 31 24 | sandeep.juneja@ranbaxy.com www.ranbaxy.com | 3TC/AZT, 3TC/d4T/NVP, abacavir (ABC), ABC/3TC/ZDV, aciclovir, ceftriaxone, ciprofloxacin, clarithromycin, didanosine (ddl), efavirenz (EFZ), fluconazole, fluoxetine, indinavir (IDV), lamivudine (3TC), nevirapine (NVP), ofloxacin, stavudine (d4T), zidovudine (AZT or ZDV) |
| Rekah Pharmaceutical Group | 30 Hamelacha Street Holon 58859, Israel | +97 235 581 233 | +97 235 565 919 | rite@rekah.co.il www.rekah.co.il | ceftriaxone, codeine, doxycycline, sulfamethoxazole+trimethoprim |
| Remedica Ltd. | Acharmon Street, Ypsonas Industrial Estate, PO Box 51706, 3508, Limassol, Cyprus | +35 725 393 444 | +35 725 390 192 | remedica@cytanet.com.cy www.cyprus-services.com/ remedica | aciclovir, albendazole, amitriptyline, ciprofloxacin, clarithromycin, clotrimazole, codeine, doxycycline, erythromycin, fluconazole, fluoxetine, ketoconazole, methotrexate, metoclopramide, ofloxacin, omeprazole, prochlorperazine, sulfamethoxazole+trimethoprim, tinidazole |
| Rotexmedica | Bunsenstrasse 4 Postfach 1266, -22946, Trittau, Germany | +49 4154 8620 | +49 4154 8621 55 | orange@rotexmedica.com www.rotexmedica.com | gentamicin, metronidazole |

5. LIST OF MANUFACTURERS - MEDICINES AND DIAGNOSTICS

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|--|---|------------------|------------------|--|--|
| Samchully Pharm. Co., Ltd. | 94-7-7, Daechi-Dong, Gangnam-Gu, 135-735, Seoul, Republic of Korea, Korea | +82 2527 6300 | +82 2561 6006 | shkim@samchullypharm.com www.samchullypharm.com | aciclovir, stavudine (d4T), zidovudine (AZT or ZDV) |
| Sanavita Aktiengesellschaft & Co. | Am Bahnhof 1-3 59368, Werne, Germany | +49 238 979 720 | +49 238 979 7259 | oliver.nigge@sanavita.net www.sanavita.com | benzathine benzylpenicillin, benzylpenicillin, chloramphenicol, doxycycline, erythromycin, gentamicin, nystatin, procaine benzylpenicillin, sulfamethoxazole+trimethoprim |
| Scanpharm A/S | Topstykke 12, 3460, Birkerød, Denmark | +45 4582 2022 | +45 4582 3033 | sh@scanpharm.dk www.scanpharm.dk | sulfamethoxazole+trimethoprim |
| Shiba Pharmaceuticals & Chemicals Ltd. | P.O. Box 4265, Seif Street, 9th Branch Bldg. No. 7, Sana'a, Republic of Yemen | +96 7121 8451 | +96 7121 8454 | ahiba@y.net.ye | albendazole, azithromycin, ciprofloxacin, clindamycin, doxycycline, erythromycin, fluconazole, ofloxacin, omeprazole, pyrimethamine, sulfamethoxazole+trimethoprim |
| SM Pharmaceuticals Sdn Bhd | Lot 88, Sungai Petani Industrial Estate, 08000, Sungai Petani, Malaysia | +60 4441 1801 | +60 4441 1341 | smformu@po.jaring.my | aciclovir, chloramphenicol, ciprofloxacin, clarithromycin, clotrimazole, cotrimon, erythromycin, itraconazole, ketoconazole, nystatin, omeprazole, sulfamethoxazole+trimethoprim |
| Strides Arcolab Limited | Strides House, Bilekahalli Opp. IIMB, Banerghatta Rd., 560 076, Bangalore, India | +91 8026 581 343 | +91 8026 584 330 | aloka@stridesarco.com www.stridesarco.com | Albendazole, ceftriaxone, procaine benzylpenicillin, azithromycin, chloramphenicol, ciprofloxacin, clarithromycin, clindamycin, erythromycin, ofloxacin, sulfamethoxazole+trimethoprim, ketoconazole, indinavir, lamivudine (3TC), nevirapine (NVP), stavudine (d4T), zidovudine (AZT or ZDV), 3TC/AZT, 3TC/d4T/NVP, ABC/3TC/ZDV, omeprazole |
| The Acme Laboratories Ltd. | 46, Satmasjid Road, 1209, Dhanmondi, Bangladesh | +88 028 118 692 | +88 028 113 188 | acmeexpo@acmeglobal.com www.acmeglobal.com/ laboratories.htm | azithromycin, ciprofloxacin, clarithromycin, clotrimazole, doxycycline, metoclopramide, nystatin, omeprazole, sulfamethoxazole+trimethoprim |
| The Government Pharmaceutical Organization | 75/1 Rama VI Rd., Ratchathewi, 547588, Bangkok, stavudine | +66 2248 1482 | +66 2248 1488 | sukhum@health.moph.go.th www.gpo.org.th | 3TC/AZT, 3TC/d4T/NVP, amitritypyline, clarithromycin, clotrimazole, dimenhydrinate, fluconazole, ketoconazole, lamivudine (3TC), metoclopramide, nevirapine (NVP), |

5.2 Index of Manufacturers of Diagnostics

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|-------------------------------|---|--------------------|-------------------|---|---|
| Abbott GmbH Diagnostika | Max-Planck-Ring 2, 65205 Wiesbaden, Germany | +49 6122 58 16 23 | +49 6122 58 16 12 | www.abbott.com | Determine HIV-1/2, Abbott HIV-1/HIV-2 g ^o EIA, IMx HIV-1/ HIV-2 3 rd generation Plus, Murex HIV Ag-Ab, LcX HIV RNA quantitative |
| Bayer (diagnostics) | Werk Leverkusen, D-51368, Leverkusen, Germany | +49 641400 3448 | | www.bayer.com | Versant HIV-1 RNA 3.0 Assay |
| Beckman Coulter | 22, Rue Juste Olivier, CH-1260, Nyon, Switzerland | +41 22 994 08 33 | +41 22 994 34 67 | wkaufman@beckman.com | Cyto-Spheres; CD4 reagents, EPICS XL Flow Cytometer |
| Becton Dickinson | 86, Erembodegem-Dorp, B-9320 Erembodegem, Belgium | +32 53 720 211 | +3253 720 450 | www.bd.com | FacsCalibur, FacsCount, CD4 reagents |
| BioMérieux S.A., | 69280 Marcy-l'Étoile, France | +33 78 87 20 00 | +33 78 87 20 90 | jacqueslemius@ eu.biomerieux.com | Vironostika HIV Uni-Form II plus O; Vironostika HIV Uniform II Ag/Ab, Vidas Duo Quick, Vidas Duo Ultra, Nuclisens EasyQ HIV , Nuclisens HIV-1 QT |
| Bionor A/S | P.O. Box 1868, N-3705 Skien, Norway | +47 35 53 84 88 | +47 35 53 71 30 | Gunnar.flaten@bionor.no | Bionor HIV-1&2 |
| Bio-Rad Laboratories | 3, boulevard Raymond Poincaré, 92430 Marnes-la-Coquette, France | +33 1 47 95 60 00 | +33 1 47 41 91 33 | christine_heinen@bio-rad.com | GENSCREEN HIV __, Genscreen Plus HIV Ag/Ab, GENIE II HIV-1/HIV-2, Pepti-LAV 1-2, New LAV BLOT II |
| Cavidi Tech AB | 32 A, Dag Hammarskjöldsv, Uppsala Science Park, SE-751 83 Sweden | +461855 20 40 | +46 18 55 20 41 | info@cavidi.se www.cavidi.com | Exta Vir Load Quantitative HIV-RT |
| Dade Behring Marburg GmbH, | Postfach 1149, 35001 Marburg, Germany | +49 6421 39 4478 | +49 6421 66064 | helmut-peters@ dadebehring.com | Enzygnost Anti-HIV _ Plus |
| Dynal Biotech AS | 66, Avenue de Landshut (Centre de transfert de L.U.T.C.), F-60200 Compiègne, France | + 33 3 44 23 45 95 | +33 3 44 23 16 24 | frcustserv@dynalbiotech.com www.dynalbiotech.com | Dynabeads T4-T8 quantification |

5. LIST OF MANUFACTURERS - MEDICINES AND DIAGNOSTICS

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|---|--|---|-------------------------------------|---|---|
| EY Laboratories, Inc. | P.O. Box 1787, 107 N. Amphlett Blvd., San Mateo, CA 94401, USA | +1 650 342 3296 | +1 650 342 2648 | sales@eylabs.com | Instant Chek TM HIV 1+2 Rapid |
| Fujirebio Inc., | 19th floor, Shinjuku Daiichi Seimei Building, 7-1 Nishi-Shinjuku 2-Chome, Shinjuku-Ku, Tokyo 163-07, Japan | +81 3 3348 0947 | | | Serodia HIV-1/2 |
| Fujirebio Europe BV, | Takkebijsters 69c, 4817 BL Breda, The Netherlands | +31 76 571 0440 | +31 76 587 2181 | febv@xs4all.nl | Serodia HIV-1/2 |
| Genelabs Diagnostics, | Halle de Frêt, P. O. Box 1015, 1215 Geneva 15 Airport, Switzerland | +41 22 788 1908 | +41 22 788 1986 | mmore@genelabs.ch | HIV-Blot 2.2 |
| Green Cross Life Science Corporation, | 227-3, Gugah-ri, Giheung-eup, Yongin-shi, Kyonggi-do, Korea | +82 31 260 9300 | (82-31) 260 9491 | suji@greencross.com | Genedia HIV Ag-Ab; Genedia HIV _ rapid 3.0 |
| Guava Technologies | 25801, Industrial Blvd., Hayward, CA 94545, USA | +1 510 576 1441 | +1 510 576 1500 | tbaumgartner @guavatechnologies.com www.guavatechnologies.com | CD4 technology |
| Innogenetics S.A., | Technologiepark 6, 9052 Ghent, Belgium | +32 9 329 1329 | +32 9 329 1911 | Roland_geers@innogenetics.be | Inno-Lia HIV Confirmation, Innotest |
| J. Mitra & Co. Ltd, | A-180, Okhla Industrial Area, Phase-1, New Delhi-110 020, India | +91 11 681 8971, +91 11 681 8973, +91 11 681 3995, +91 11 681 3989 | +91 11 681 0945, +91 11 681 8970 | jmitra@del2.vsnl.com.in | HIV TRI-DOT |
| KHB Shanghai Kehua Bio- engineering Co. Ltd., | 1189 N Qinzhou Road, Shanghai, 200233, People's Republic of China | +86 21 64851188, +86 21 64853370, +86 21 8203370 | +86 21 64854051 | cskhk@online.cn | Anti-HIV 1+2 antibodies ELISA diagnostic Kit; Diagnostic kit for HIV (1+2) Antibody (colloidal gold) |

| Manufacturer | Address | Telephone | Fax | E-mail/ Website | Products |
|-----------------------------|--|-------------------|-------------------|-----------------------------|---|
| Labsystems Oy, | Pullittie 8, P. O. Box 8, 00881 Helsinki, Finland | +358 0 7557610 | +358 0 75821 | lari.Tuominen@thermobio.com | HIV EIA |
| OraSure Technologies, Inc. | 150 Webster Street, Bethlehem, PA 18015, USA | +1 610 882 1820 | + 1 610 882 1830 | www.orasure.com | OraQuick HIV test |
| Ortho Diagnostic Systems | 19/21 Antwerpsesteenweg, B-2340 Beerse, Belgium | +32 14 60 0211 | +32 14 600 309 | | HIVCHEK System 3 Test kit |
| Organics Ltd., | P.O. Box 360, Yavne 70650, Israel | +972 8 9429212 | +972 8 9438758 | baruch@organics.co.il | Immunocomb II Bispot HIV1&2 |
| Partec GmbH | 32, Otto Hahn strasse, D-48161, Münster, Germany | +49 2534 80080 | +49 2534 8008-90 | info@partec.dewww.partec.de | CyFlow Green, Cyflow Counter |
| Perkin Elmer Life Sciences | 8, Imperiastraat, B 1930 Zaventem, Belgium | +39 335 8031579 | +39 0331 376702 | www.perkinelmer.com | HIV-1p24 Ultra ELISA , ELAST ELISA amplification system |
| Premier Medical Corporation | 259, Amherst Avenue, Colonia, NJ, 07067 USA | +1 732 815 0462 | +1 530 869 7966 | nileshmeta@verizon.net | First Response HIV-1/HIV-2 WB |
| Primagen | 59, Meibergdreef, N-1105 BA Amsterdam, The Netherlands | +31 20 566 85 69 | +31 20 566 9081 | www.primagen.com | Retina Rainbow |
| Roche Diagnostics | 116, Sandhofer strasse, D-68305 Mannheim, Germany | +49 621 759 87 85 | +49 621 759 40 68 | www.roche-diagnostics.com | Amplicor HIV-1 DNA assay version 1.5, Amplicor HIV-1 Monitor Test version 1.5 |
| Standard Diagnostics, Inc. | 575-34 Pajang-dong, Jangan-ku, Suwon-si, Kyonggi-do, Korea 440-290 | +82 31 258 2994 | +82 31 258 2995 | http://www.standardia.com | SD BIOLINE HIV _ 3.0 |
| Trinity Biotech plc, | IDA Business Park, Bray, Co. Wicklow, Ireland | +353 1276 9800 | +353 1276) 9888 | TomLindsay@compuserve.com | Capillus HIV-1/HIV-2, Uni-Gold HIV, Western Blot |
| United Biomedical Inc | 25, Davids Drive, Hauppauge, NY, 11788, USA | +1 516 273 2828 | +1 516 273 1717 | | UBI HIV-1/2 EIA |

ANNEX 1A

CD4+ T-cell enumeration technologies

Dedicated and manual assays

| | Dedicated Technology | | Manual Assays | |
|--|--|---|--|---|
| | FACSCount | CyFlow Counter | Cyto-Spheres | Dynabeads |
| Manufacturer | Becton Dickinson (CA, USA) | Partec GmbH (Munster, Germany) | Coulter Corporation (FL, USA) | Dynal AS (Oslo, Norway) |
| Instrumentation | Dedicated CD4 counter | Dedicated CD4 counter | HaemocytometerLight microscope | MagnetHaemocytometerLight or fluorescence microscope |
| Assay principle | Flow cytometry | Flow cytometry | Direct observation of bead-rosetted cells | Direct observation of immunocaptured cells |
| Detection system | Fluorochrome labelled anti-CD3, CD4 and CD8 MAb | Fluorochrome labelled anti-CD4 MAb | Latex beads conjugated to anti-CD4 MAb | Magnetic beads conjugated to anti-CD4 and CD8 MAb |
| Specimen | Whole blood | Whole blood | Whole blood | Whole blood |
| Results | Absolute CD4 count Absolute CD8 count CD4/CD8 ratio CD4% and CD8% among T cells | Absolute CD4 count | Absolute CD4 count | Absolute CD4 count Absolute CD8 count CD4/CD8 ratio |
| Correlation with flow cytometry ^a (r value) | 0.93 – 0.98 (several international studies) | not available | 0.67 – 0.93 (several international studies) | 0.94 and 0.96 (several international studies) |
| Cost of instrument (US\$) | 8 000 | 20 000 | 2 000 | 2 000 – 10 000 ^b |
| Cost of reagents/test (US\$) ^c | 6 – 20 | 2 | 4 – 8 | 3 – 5 |
| Advantages | Automated, fewer steps, less human error, low bio-hazard risk, Absolute CD4 and CD8 counts, Quick results, EQA available | Reagents available at low cost, Quick results, EQA available | Simple and rapid | Simple and rapid Absolute CD4 and CD8 counts |
| Disadvantages | Expensive reagents, 1.2 samples processed at a time, CD4% among lymphocytes not reported | CD4% among lymphocytes not reported, Instrument not proven in an independent multi-centre study | 10 samples processed at a time, Subjectivity in visual counting, CD4% among lymphocytes or CD8 counts not reported. No EQA available | 6 samples processed at a time, Subjectivity in visual counting, CD4% among lymphocytes not reported. No EQA available |

MAb – monoclonal antibody; EQA – external quality assessment

^a The analysis of correlation using linear regression is not appropriate to study method comparison. Instead, the analysis of agreement should be performed. Unfortunately, none of the published studies has used this analysis to compare these methods with flow cytometry. Therefore, here the r values are still reported. ^b Depending on if a light or fluorescence microscope is used.

^c Reagent cost may decrease substantially in the near future.

Flow cytometry

| Parameter | Double-platform ^a | Single-platform | Bead-based ^c |
|-------------------------------------|--|--|---|
| Instruments, Manufacturers | Flow cytometer Partec GmbH (Munster, Germany) ^d Becton Dickinson (CA, USA) Coulter Corporation (FL, USA) | Flow cytometer Partec GmbH (Munster, Germany) ^d Guava Technologies (CA, USA) | Flow cytometer Becton Dickinson (CA, USA) Coulter Corporation (FL, USA) |
| Cost of instrument (US\$) | 20 000 – 95 000 | 20 000 – 70 000 | 20 000 – 95 000 |
| Cost of reagents/test (US\$) | 3 – 11 | 2 – 10 | 8 – 25 |
| Specimen | Whole blood | Whole blood | Whole blood |
| Results | Absolute CD4 count Absolute CD8 count CD4% and CD8% among lymphocytes CD4/CD8 ratio B and NK cells are possible | Absolute CD4 count Absolute CD8 count CD4% and CD8% among lymphocytes CD4/CD8 ratio B and NK cells are possible | Absolute CD4 count Absolute CD8 count CD4% and CD8% among lymphocytes CD4/CD8 ratio B and NK cells are possible |
| Throughput (samples/day) | Up to 200 | Up to 50 | Up to 200 |
| Advantages | Accurate pipetting less crucial One tube assay possible without QC problems EQA available | No need for extra beads or haematology analyser or haematology analyser EQA available | No need for haematology analyser Protocols for aged samples available EQA available |
| Disadvantages | Requires the use of a haematology analyser More prone to clerical errors Fresh samples needed in order to obtain absolute counts | Requires accurate pipetting technique Internal QC for pipetting requires two tubes assay Instruments not yet proven in an independent multi centre study | Requires accurate pipetting technique Internal QC for pipetting requires two tubes assay Beads are expensive and require careful handling |

B and NK cells – subsets of lymphocytes; QC – quality control; EQA – external quality assessment

^a Any flow cytometer from any of the three manufacturers can operate with this method to provide absolute counts. The results of flow cytometry are combined with those from haematology to calculate absolute counts.

^b Volumetric instruments have the inherent hardware property of measuring the volume of the sample, providing direct absolute counts without the use of haematology analysers or beads.

^c Any flow cytometer from any of the three manufacturers can operate with this method to provide absolute counts.

^d Instruments from this manufacturer, including the CyFlow, remain to be validated as volumetric absolute CD4 T cell counters by independent investigators in multicentric studies.

ANNEX 1B

Summary of main characteristics of Viral Load Technologies

(nucleic acid based)

| Company | Abbott | Roche | Bayer | bioMérieux | bioMérieux | Primigen |
|---------------------------------------|--|--|---|---|-----------------------------------|--|
| Assay Name | LcX® HIV RNA Quantitative | Amplacor HIV-1 Monitor® Test | Versant® HIV-1 RNA 3.0 Assay | NucliSens® HIV-1-QT | NucliSens EasyQ® HIV-1 | Retina™ Rainbow |
| Type of assay | RT-PCR | RT-PCR | bDNA | NASBA | NASBA | NASBA |
| Dynamic Range (copies/ml) | 50 – 1 000 000 | 50 – 750 000 | 75 – 500 000 | 50 – 1 000 000 | 50 – 3 000 000 | 500 – 50 000 000 |
| Specimen Type | Plasma | Plasma, dried blood spots | Plasma | Plasma, serum, dried blood spots | Plasma, serum, dried blood spots | Plasma, serum, whole blood, dried blood spots |
| Specimen volume | 200 – 1 000 µl | 100 – 500 µl | 1 000 – 2 000 µl | 10 – 2 000 µl | 10 – 2 000 µl | 200 µl |
| Area of HIV genome amplified | Pol | Gag | Pol | Gag | Gag | LTR |
| HIV-1 subtypes amplified | Group M (subtypes A-G) and Group O | All, plus some HIV-2 | Group M (subtypes A-G) | All | All | All |
| Time for result | 5 hours | 6 – 7 hours | 22 hours | 2 hours | 2 hours | 1.5 hours |
| Cost/test (US\$)¹ | 20 – 70 | 28 – 90 | 125 | 40 – 96 | (US\$) 40 – 60 | (US\$) 17 – 23 |
| Number of samples/run | 21 (+3 controls) | 9 – 48 | 12 – 168 | 50 | 48 | 96 |
| Equipment required² | Vacuum pump Centrifuge (x2) Heat block LCx Analyser Thermal cycler | COBAS Ampliprep Dead-air box Computer/printer Safety hood Heat block (x2) Centrifuge (x2) | Bayer System 340 (bDNA Analyzer, Data Management Software, and computer system) Centrifuge Heatblock Waterbath Vacuum system | EasyQ Extractor Fume hood Waterbath Heat block (x4) EasyQ Reader Centrifuge (x3) Shaker | EasyQ Extractor EasyQ Analyser | RetinAnalyser Heatblock Computer Centrifuge |

¹Prices vary considerable with quantities and special negotiations

²All assays require pipettes, vortex mixers (& refrigerator for all but Primigen)

| Company | Abbott | Roche | Bayer | bioMérieux | bioMérieux | Primagen |
|---|---|---|--|------------|------------|----------|
| Equipment Cost (\$US) | 8 500 + LCx Analyser 25 000 | 10 000 + COBAS Ampliprep 30 000 | 10 000 + Bayer System Analyzer | 140 000 | 130 000 | 23 000 |
| (non-nucleic acid based) | | | | | | |
| Company | Cavidi | Perkin Elmer | Innogenetics | | | |
| Assay Name | ExaVir™Load Quantitative HIV-RT Load Kit | HIV-1 p24 Ultra ELISA ELAST ELISA amplification system | Innotest™ | | | |
| Type of Assay | Enzyme immunoassay for quantitation of RT activity | Enzyme immunoassay for quantitation of p24 antigen | Enzyme immunoassay for quantitation of p24 antigen | | | |
| Dynamic Range | 750 – over 50 000 copies/ml | 400 copies/ml | 7 pg/ml – 250 (50 – 200 000 copies/ml) | | | |
| Specimen Type | Plasma | Plasma, serum or cell culture supernatant | Plasma, serum or cell culture supernatant | | | |
| Specimen Volume | 1 000 µl | 100 µl | 100 µl | | | |
| Area of HIV Genome Selected for Amplification | RT activity | p24 antigen | p24 antigen | | | |
| HIV-1 Subtypes Amplified | All, plus HIV-2 | HIV-1 | All, plus HIV-2 | | | |
| Time for Result | 24 hours | 2.30 hours | 2 hours | | | |
| Cost/Test (US\$) | 13 – 15 | 10 | 10 | | | |
| Number of Samples/Run | 30 | 96 | 96 | | | |
| Equipment Required ² | Incubator (33deg), Freezer, ELISA reader, computer | Incubator, ELISA reader Refrigerator | Incubator (37deg), ELISA reader, refrigerator | | | |
| Equipment Cost (\$US) | 9 000 – 10 000 (start up pack includes other necessary equipment and 3 kits) | 7 000 – 9 000 | 7 000 – 9 000 | | | |

² All tests require pipettes, vortex mixers

ANNEX 2B

Sources of medicines

Prequalified¹⁶ sources of specific products are marked in bold with an asterisk

Table 1. Anti-infective medicines

| Anthelmintics | Manufacturer |
|---|--|
| albendazole | |
| chewable tablet, 400 mg | Artesan Pharma GmbH & Co. KG, Beltapharm SpA, Cipla Ltd., Gracure Pharmaceuticals Ltd., IPCA Laboratories Ltd., Lachifarma SRL, Lyka Labs Ltd., Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd. |
| Antibacterials, beta lactam medicines | |
| benzathine benzylpenicillin | |
| powder for injection, 1.44 g (=2.4 million IU) in 24–ml vial | Sanavita Aktiengesellschaft & Co. |
| powder for injection, 1.44 g (=2.4 million IU) in 5–ml vial | Alembic Ltd., Aventis Intercontinental, Pharmchem International Ltd. |
| benzylpenicillin | |
| powder for injection, 3 g (=5 million IU) (as sodium or potassium salt) in vial | Alembic Ltd., Pharmchem International Ltd., Sanavita Aktiengesellschaft & Co. |
| powder for injection, 600 mg (=1 million IU) (as potassium salt) in vial | Pliva d.d. |
| cefixime | |
| paediatric oral suspension, 100 mg/5 ml | Aventis Intercontinental, Bilim Pharmaceutical Ind., Lyka Labs Ltd. |
| paediatric oral suspension, 40 mg/5 ml | Aventis Intercontinental |
| tablet, 200 mg | Aventis Intercontinental, Cipla Ltd., Lyka Labs Ltd. |
| tablet, 400 mg | Bilim Pharmaceutical Ind., Genepharma SA |
| ceftriaxone | |
| powder for injection, 1 g (as sodium salt) in vial | Alembic Ltd., Aurobindo Pharma Ltd., Aventis Ltd., Bilim Pharmaceutical Ind., Cheil Jedang Corp., Cipla Ltd., Demo S.A., Pharmaceutical Industry, IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Laboratorio Reig Jofre S.A., Lyka Labs Ltd., Mepha Ltd., Neon Laboratories Ltd., Panpharma, Pharmchem International Ltd., Pliva d.d., Ranbaxy Laboratories Ltd., Rekah Pharmaceutical Group, Strides Arcolab Ltd. |
| powder for injection, 250 mg (as sodium salt) in vial | Aleppo Pharmaceutical Industries (Alpha), Aurobindo Pharma Ltd., Aventis Ltd., Cheil Jedang Corp., Cipla Ltd., Combino Pharm, S.L., Demo S.A., *Hoffman-La Roche Ltd. , Pharmaceutical Industry, Lupin Ltd., Mepha Ltd., Neon Laboratories Ltd., Pharmchem International Ltd., Ranbaxy Laboratories Ltd., Strides Arcolab Ltd. |

¹⁶ Procurement Quality and Sourcing Project, list of manufacturers and suppliers <http://mednet3.who.int/prequal/hiv/hiv-suppliers.doc>

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| Antibacterials, beta lactam medicines | Manufacturer |
|---|--|
| ceftriaxone | |
| powder for injection, 500 mg (as sodium salt) in vial | Aurobindo Pharma Ltd., Aventis Ltd., Bilim Pharmaceutical Ind., Cheil Jedang Corp., Cipla Ltd., Demo S.A., *Hoffman-La Roche Ltd. , Pharmaceutical Industry, IVAX Pharmaceuticals Mexico (S.A. de C.V.), Lyka Labs Ltd., Mepha Ltd., Pharmchem International Ltd., Strides Arcolab Ltd. |
| procaine benzylpenicillin | |
| powder for injection, 3 g (=3 million IU) in vial | Alembic Ltd., Pharmchem International Ltd., Sanavita Aktiengesellschaft & Co., Strides Arcolab Ltd. |
| Antibacterials, others | |
| azithromycin | |
| oral suspension, 200 mg/5 ml (dihydrate) | Alembic Ltd., Shiba Pharmaceuticals & Chemicals Ltd. |
| capsule/tablet, 250 mg (dihydrate) | Alembic Ltd., Aleppo Pharmaceutical Industries (Alpha), Cipla Ltd., IPCA Laboratories Ltd., Lyka Labs Ltd., Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd., The Acme Laboratories Ltd. |
| capreomycin | |
| powder for injection, 1 g in vial | Cheil Jedang Corp., Neon Antibiotics PVT. Ltd. |
| chloramphenicol | |
| oily suspension for injection, 0.5 g/ml (as sodium succinate) in 2-ml ampoule | Pharmchem International Ltd. |
| oral suspension, 150 mg/5 ml (as palmitate) | Pharmchem International Ltd. |
| powder for injection, 1 g (sodium succinate) in vial | Neon Laboratories Ltd., Pharmchem International Ltd., Sanavita Aktiengesellschaft & Co., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd. |
| ciprofloxacin | |
| tablet, 250 mg (as hydrochloride) tablet, 500 mg (as hydrochloride) tablet, 750 mg (as hydrochloride) | Alembic Ltd., Alparma, Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmcare, Aurobindo Pharma Ltd., Aventis Ltd., Bayer Healthcare AG, Cheil Jedang Corp., *Cipla Ltd. , Genepharma SA, Glenmark Pharmaceuticals Ltd., Gracure Pharmaceuticals Ltd., Intas Pharmaceuticals Ltd., IPCA Laboratories Ltd., IVAX Pharmaceuticals Mexico (S.A. de C.V.), *Laboratorios Cinfa S.A. , Lupin Ltd., Lyka Labs Ltd., Mepha Ltd., Orios Juventus S.A., Pharmchem International Ltd., Phyto-Riker Pharmaceuticals Ltd., Pliva d.d., *Ranbaxy Laboratories Ltd. , Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd., The Acme Laboratories Ltd. |
| clarithromycin | |
| powder for injection, 500 mg | Strides Arcolab Ltd. |
| tablet, 250 mg | Alembic Ltd., Alparma, Bilim Pharmaceutical Ind., Genepharma SA, Intas Pharmaceuticals Ltd., IPCA Laboratories Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Lyka Labs Ltd., Orios Juventus S.A., *Ranbaxy Laboratories Ltd. , Remedica Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd., The Acme Laboratories Ltd., The Government Pharmaceutical Organization |

ANNEX 2B. SOURCES OF MEDICINES

| Antibacterials, others | Manufacturer |
|---|--|
| clindamycin | |
| capsule, 150 mg | Bilim Pharmaceutical Ind., Shiba Pharmaceuticals & Chemicals Ltd. |
| injection, 150 mg/ml (as phosphate) in 2–ml ampoule | Combino Pharm, S.L. |
| injection, 150 mg/ml (as phosphate) in 4–ml ampoule | Strides Arcolab Ltd. |
| cycloserine | |
| capsule, 250 mg | Cheil Jedang Corp., Pharmadrug |
| doxycycline | |
| capsule/tablet, 100 mg (hydrochloride) | Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., Cipla Ltd., Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., Intas Pharmaceuticals Ltd., Pharmadrug, Pharmchem International Ltd., Rekah Pharmaceutical Group, Remedica Ltd., Sanavita Aktiengesellschaft & Co., Shiba Pharmaceuticals & Chemicals Ltd., The Acme Laboratories Ltd. |
| erythromycin | |
| powder for oral suspension, 125mg (as stearate or ethylsuccinate) | Aventis Ltd., Beacons Pharmaceuticals Pte Ltd., Beltapharm SpA, Gracure Pharmaceuticals Ltd., Lachifarma SRL, Pharmadrug, Pharmchem International Ltd., Purna Pharmaceuticals NV, Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd. |
| capsule/tablet, 250 mg (as stearate or ethylsuccinate) | Alembic Ltd., Artesan Pharma GmbH & Co. KG, Aurobindo Pharma Ltd., Aventis Ltd., Beacons Pharmaceuticals Pte Ltd., Beltapharm SpA, Cipla Ltd., Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., IPCA Laboratories Ltd., Lachifarma SRL, Lyka Labs Ltd., Pharmchem International Ltd., Phyto-Riker Pharmaceuticals Ltd., Remedica Ltd., Sanavita Aktiengesellschaft & Co., Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd. |
| capsule/tablet, 500 mg (as stearate or ethylsuccinate) | Alembic Ltd., Artesan Pharma GmbH & Co. KG, Aventis Ltd., Cipla Ltd., Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., IPCA Laboratories Ltd., Pharmchem International Ltd., Remedica Ltd., Sanavita Aktiengesellschaft & Co., Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd. |
| gentamicin | |
| injection, 10 mg (as sulfate) in 2–ml vial | Aspen Pharmacare, Intas Pharmaceuticals Ltd., Pharmchem International Ltd., Rotexmedica |
| injection, 40 mg (as sulfate) in 2–ml vial | Aspen Pharmacare, Gracure Pharmaceuticals Ltd., Intas Pharmaceuticals Ltd., Neon Laboratories Ltd., Pharmchem International Ltd., Rotexmedica, Sanavita Aktiengesellschaft & Co. |
| metronidazole | |
| injection, 500 mg in 100–ml vial | Aspen Pharmacare, Aventis Intercontinental, Cheil Jedang Corp., Demo S.A., Pharmaceutical Industry, Pharmchem International Ltd., Rotexmedica |
| suppository, 1 g | Aventis Intercontinental |

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| Antibacterials, others | Manufacturer |
|--|---|
| ofloxacin | |
| IV infusion, 2 mg/ml (hydrochloride) | Genepharm SA |
| IV infusion, 5 mg/ml (hydrochloride) | Aventis Intercontinental |
| tablet, 200 mg | Aspen Pharmacare, Aventis Intercontinental, Cipla Ltd., Genepharm SA, Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., Intas Pharmaceuticals Ltd., IPCA Laboratories Ltd., Lyka Labs Ltd., Ranbaxy Laboratories Ltd., Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd. |
| tablet, 400 mg | Aspen Pharmacare, Cipla Ltd., Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd. |
| rifabutin | |
| capsule, 150 mg | Lupin Ltd. |
| silver nitrate | |
| solution (eye drops), 1% | Gracure Pharmaceuticals Ltd. |
| spectinomycin | |
| powder for injection, 2 g (as hydrochloride) in vial | Demo S.A., Pharmaceutical Industry, Neon Antibiotics PVT. Ltd., Pharmchem International Ltd. |
| sulfadiazine | |
| tablet, 500 mg | *Doms Recordati^{NPI} , Ecobi Farmaceutici S.a.s., Far Manguinhos, Heyl Chemisch.-pharmazeutische Fabrik GmbH & Co KG, Laboratorio Reig Jofre S.A., Strides Arcolab Ltd. |
| sulfamethoxazole+trimethoprim | |
| oral suspension, 200+40 mg/5 ml | Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Aventis Ltd., Beacons Pharmaceuticals Pte Ltd., Ecobi Farmaceutici S.a.s., *Hoffman-La Roche Ltd , Hovid SDN. BHN., Lachifarma SRL, Pharmchem International Ltd., Remedica Ltd., Scanpharm A/S, Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd, The Acme Laboratories Ltd. |
| tablet, 100+20 mg | Artesan Pharma GmbH & Co. KG, Ecobi Farmaceutici S.a.s., Gracure Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Lachifarma SRL, Lyka Labs Ltd., Pharmchem International Ltd., Rekah Pharmaceutical Group, Shiba Pharmaceuticals & Chemicals Ltd. |
| tablet, 400+80 mg | Alpharma, Apotex Mexico Protein, (S.A. de C.V.), Artesan Pharma GmbH & Co. KG, Aspen Pharmacare, Aurobindo Pharma Ltd., Aventis Ltd., Beacons Pharmaceuticals Pte Ltd., Ecobi Farmaceutici S.a.s., Far Manguinhos, Gracure Pharmaceuticals Ltd., *Hoffman-La Roche Ltd , Hovid SDN. BHN., Intas Pharmaceuticals Ltd., IPCA Laboratories Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Pharmchem International Ltd., Remedica Ltd., Sanavita Aktiengesellschaft & Co., Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd. The Acme Laboratories Ltd., The Government Pharmaceutical Organization |
| tablet, 800+160 mg | Alpharma, Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Aurobindo Pharma Ltd., Aventis Ltd., *Hoffman-La Roche Ltd , Hovid SDN. BHN., Intas Pharmaceuticals Ltd., Pharmchem International Ltd., Rekah Pharmaceutical Group, Shiba Pharmaceuticals & Chemicals Ltd., Strides Arcolab Ltd. |

ANNEX 2B. SOURCES OF MEDICINES

| Antibacterials, others | Manufacturer |
|---|--|
| tetracycline | |
| tablet, 500 mg | Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., Pharmchem International Ltd. |
| Antifilarials | |
| crotamiton | |
| cream/lotion 10% | SM Pharmaceuticals Sdn Bhd |
| Antifungal medicines | |
| amphotericin B | |
| powder for injection, 50 mg in vial | Combino Pharm, S.L., Neon Antibiotics PVT. Ltd. |
| clotrimazole | |
| cream, 1% | Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., Cipla Ltd., Gracure Pharmaceuticals Ltd., Pharmadrug, Pharmchem International Ltd., Purna Pharmaceuticals NV, Remedica Ltd., SM Pharmaceuticals Sdn Bhd, The Acme Laboratories Ltd., The Government Pharmaceutical Organization, |
| pessary, 500 mg | Gracure Pharmaceuticals Ltd., Remedica Ltd. |
| fluconazole | |
| capsule, 50 mg | Cipla Ltd., Pliva d.d., *Ranbaxy Laboratories Ltd. |
| capsule, 150 mg | Bilim Pharmaceutical Ind., Cipla Ltd., Gracure Pharmaceuticals Ltd., Intas Pharmaceuticals Ltd., Pliva d.d., *Ranbaxy Laboratories Ltd. , Shiba Pharmaceuticals & Chemicals Ltd. |
| capsule, 200 mg | Cipla Ltd., IPCA Laboratories Ltd., Pliva d.d., *Ranbaxy Laboratories Ltd. , Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., The Government Pharmaceutical Organization |
| solution for injection, 2mg/ml in ampoule | Genepharm SA, Laboratorio Reig Jofre S.A. |
| itraconazole | |
| capsule, 100 mg | Intas Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), SM Pharmaceuticals Sdn Bhd |
| ketoconazole | |
| cream, 2% | Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., Gracure Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Purna Pharmaceuticals NV |
| tablet, 200 mg | Artesan Pharma GmbH & Co. KG, Aspen Pharmacare, Beltapharm SpA, Bilim Pharmaceutical Ind., Far Manguinhos, Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., Intas Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Lachifarma SRL, Pharmadrug, Pharmchem International Ltd., Remedica Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd., The Government Pharmaceutical Organization |

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| Antifungal medicines | Manufacturer |
|---|---|
| miconazole | |
| cream/ointment 2% (as nitrate) 15 g tube | Beacons Pharmaceuticals Pte Ltd., Hovid SDN. BHN., Lachifarma SRL, Pharmchem International Ltd., Purna Pharmaceuticals NV |
| cream/ointment 2% (as nitrate) 20 g tube | Apotex Mexico Protein, (S.A. de C.V.) |
| cream/ointment 2% (as nitrate) 30 g tube | Beltapharm SpA, Ecobi Farmaceutici S.a.s., Gracure Pharmaceuticals Ltd., Lachifarma SRL, Pharmdrug, Pharmchem International Ltd., Purna Pharmaceuticals NV |
| cream/ointment 2% (as nitrate) 40 g tube | IVAX Pharmaceuticals Mexico, (S.A. de C.V.) |
| nystatin | |
| pessary, 100,000 IU | Artesan Pharma GmbH & Co. KG, Cipla Ltd., Pharmdrug, SM Pharmaceuticals Sdn Bhd, The Acme Laboratories Ltd. |
| tablet, 100,000 IU | Artesan Pharma GmbH & Co. KG, Cipla Ltd. |
| tablet, 500,000 IU | Apotex Mexico Protein, (S.A. de C.V.), Artesan Apotex Mexico Protein, (S.A. de C.V.), Artesan Pharma GmbH & Co. KG, Cipla Ltd., Pharmdrug, Sanavita Aktiengesellschaft & Co., The Acme Laboratories Ltd. |
| Antiprotozoal medicines | |
| pentamidine | |
| powder for injection, 200 mg (isetionate) in vial | Neon Antibiotics PVT. Ltd. |
| powder for injection, 300 mg (isetionate) in vial | Aventis Intercontinental, Combino Pharm, S.L., Lab. Filaxis International S.A., Neon Antibiotics PVT. Ltd. |
| pyrimethamine | |
| tablet, 25 mg | Gracure Pharmaceuticals Ltd., Shiba |
| tinidazole | |
| tablet, 500 mg | Gracure Pharmaceuticals Ltd., Intas Pharmaceuticals Ltd., Remedica Ltd. |
| Antiviral medicines | |
| aciclovir | |
| cream, 5% | *Cipla Ltd. , Ecobi Farmaceutici S.a.s., Gracure Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.) |
| powder for injection, 250 mg (as sodium salt) in 10-ml vial | Combino Pharm, S.L., Lab. Filaxis International S.A., Neon Antibiotics PVT. Ltd. |
| tablet, 200 mg | Alpharma, Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., *Cipla Ltd. , Hovid SDN. BHN., IPCA Laboratories Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Lab. Filaxis International S.A., Pharmdrug, *Ranbaxy Laboratories Ltd. , Remedica Ltd., Samchully Pharm. Co., Ltd., SM Pharmaceuticals Sdn Bhd |
| tablet, 400 mg | Alpharma, Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., *Cipla Ltd. , Ecobi Farmaceutici S.a.s., Hovid SDN. BHN., IPCA Laboratories Ltd., *Ranbaxy Laboratories Ltd. , Remedica Ltd., Samchully Pharm. Co., Ltd., SM Pharmaceuticals Sdn Bhd |
| tablet, 800 mg | *Cipla Ltd. , Combino Pharm, S.L., Ecobi Farmaceutici S.a.s., IPCA Laboratories Ltd., Lab. Filaxis International S.A., Laboratorios Cinfa S.A., *Ranbaxy Laboratories Ltd. , Remedica Ltd. |

ANNEX 2B. SOURCES OF MEDICINES

| Antiviral medicines | Manufacturer |
|--|--|
| ganciclovir | |
| powder for IV infusion, 500 mg in vial | *Hoffmann-La Roche Ltd. , Lab. Filaxis International S.A. |
| Antiviral medicines – Antiretrovirals | |
| abacavir (ABC) | |
| syrup, 20 mg/ml | *Glaxo SmithKline |
| tablet, 300 mg | Cipla Ltd., *Glaxo SmithKline |
| didanosine (ddl) | |
| buffered chewable tablet, 100 mg | Apotex Mexico Protein, (S.A. de C.V.), Aurobindo Pharma Ltd., *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA), Cipla Ltd., Donato y Zurlo S.A., Far Manguinhos, Ranbaxy Laboratories Ltd., Strides Arcolab Ltd. |
| buffered chewable tablet, 25 mg | Apotex Mexico Protein, (S.A. de C.V.), *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA), Cipla Ltd., Far Manguinhos, Strides Arcolab Ltd. |
| syrup, 2 g | *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA) |
| unbuffered enteric coated capsule, 250 mg | Bristol-Myers Squibb (FR), Cipla Ltd., Ranbaxy Laboratories Ltd. |
| unbuffered enteric coated capsule, 400 mg | Bristol-Myers Squibb (FR), Cipla Ltd., Ranbaxy Laboratories Ltd. |
| efavirenz (EFZ) | |
| capsule, 200 mg | Aurobindo Pharma Ltd., Cipla Ltd., Lab. Filaxis International S.A., Ranbaxy Laboratories Ltd. |
| tablet, 600 mg | Aurobindo Pharma Ltd., Cipla Ltd., Ranbaxy Laboratories Ltd. |
| indinavir (IDV) | |
| capsule, 200 mg | Cipla Ltd., Donato y Zurlo S.A., *Hetero Drugs Ltd.^{NPI} , New GPC Inc. |
| capsule, 400 mg | Aurobindo Pharma Ltd., Cipla Ltd., Far Manguinhos, Lab. Filaxis International S.A., Strides Arcolab Ltd., *Ranbaxy Laboratories Ltd. |
| lamivudine (3TC) | |
| syrup, 50 mg/5 ml | *Cipla Ltd. , *Glaxo SmithKline , The Government Pharmaceutical Organization |
| tablet, 150 mg | Aurobindo Pharma Ltd., Cheil Jedang Corp., *Cipla Ltd. , Donato y Zurlo S.A., Far Manguinhos, *Glaxo SmithKline , *Hetero Drugs Ltd.^{NPI} , Intas Pharmaceuticals Ltd., IPCA Laboratories Ltd., Lab. Filaxis International S.A., New GPC Inc, *Ranbaxy Laboratories Ltd. , Strides Arcolab Ltd. , The Government Pharmaceutical Organization |
| tablet, 300 mg | Ranbaxy Laboratories Ltd. |
| nelfinavir (NFV) | |
| capsule, 250 mg | Aurobindo Pharma Ltd., Cipla Ltd., Donato y Zurlo S.A., F. *Hoffmann-La Roche Ltd. , Lab. Filaxis International S.A. |
| powder for oral solution, 50 mg/g | *Hoffmann-La Roche Ltd |
| nevirapine (NVP) | |
| syrup, 50 mg/5 ml | *Boehringer Ingelheim GmbH , Cipla Ltd., The Government Pharmaceutical Organization |

^{NPI} No price information

SOURCES AND PRICES OF SELECTED DRUGS AND DIAGNOSTICS FOR PEOPLE LIVING WITH HIV/AIDS

| Antiviral medicines – Antiretrovirals | Manufacturer |
|---|--|
| tablet, 200 mg | Aurobindo Pharma Ltd., *Boehringer Ingelheim Gmbh , Cheil Jedang Corp., *Cipla Ltd. , Far Manguinhos, *Hetero Drugs Ltd^{NPI} , Lab. Filaxis International S.A., New GPC Inc, *Ranbaxy Labora *Ranbaxy Laboratories Ltd. , Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| saquinavir (SQV) | |
| (hard gel and soft gel) capsule, 200 mg | *F. Hoffmann-La Roche Ltd. |
| stavudine (d4T) | |
| capsule, 15 mg | *Bristol-Myers Squibb (FR) , The Government Pharmaceutical Organization |
| capsule, 20 mg | Aspen Pharmacare, *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA), The Government Pharmaceutical Organization |
| capsule, 30 mg | Aspen Pharmacare, Aurobindo Pharma Ltd., *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA), Cipla Ltd., Donato y Zurlo S.A., Far Manguinhos, *Hetero Drugs Ltd^S , New GPC Inc, *Ranbaxy Laboratories Ltd. , Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| capsule, 40 mg | Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Aurobindo Pharma Ltd., *Bristol-Myers Squibb (FR) , Bristol-Myers Squibb (SA), Cheil Jedang Corp., Cipla Ltd., Donato y Zurlo S.A., Far Manguinhos, *Hetero Drugs Ltd^{NPI} , Lab. Filaxis International S.A., New GPC Inc, Ranbaxy Laboratories Ltd., Samchully Pharm. Co., Ltd., Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| syrup, 1 mg/ml | Bristol-Myers Squibb (FR), Bristol-Myers Squibb (SA), The Government Pharmaceutical Organization |
| zalcitabine (ddC) | |
| tablet, 0.375 mg | Apotex Mexico Protein, (S.A. de C.V.), *Hoffman-La Roche Ltd |
| tablet, 0.75 mg | Apotex Mexico Protein, (S.A. de C.V.), *Hoffman-La Roche Ltd , Lab. Filaxis International S.A. |
| zidovudine (AZT or ZDV) | |
| capsule, 100 mg | Apotex Mexico Protein, (S.A. de C.V.), Aurobindo Pharma Ltd., Cheil Jedang Corp., *Cipla Ltd. , *Combino Pharm , S.L., Donato y Zurlo S.A., Far Manguinhos, *Glaxo SmithKline , IPCA Laboratories Ltd., Lab. Filaxis International S.A., New GPC Inc, Ranbaxy Laboratories Ltd., Samchully Pharm. Co., Ltd., Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| capsule, 250 mg | Apotex Mexico Protein, (S.A. de C.V.), Cheil Jedang Corp., *Combino Pharm , S.L., Donato y Zurlo S.A., *Glaxo Smith Kline , Lab. Filaxis International S.A., Samchully Pharm. Co., Ltd. |
| injection, 10 mg/ml in 20–ml vial | *Glaxo SmithKline |
| oral solution, 50 mg/5 ml | *Cipla Ltd. , *Combino Pharm , S.L., *Glaxo SmithKline |
| tablet, 300 mg | Aurobindo Pharma Ltd., *Cipla Ltd. , *Combino Pharm , S.L., *Glaxo SmithKline , *Hetero Drugs Ltd^{NPI} , New GPC Inc, *Ranbaxy Laboratories Ltd. , Samchully Pharm. Co., Ltd., Strides Arcolab Ltd., The Government Pharmaceutical Organization |

^{NPI} No price information

ANNEX 2B. SOURCES OF MEDICINES

| Antiviral medicines - Antiretrovirals (combinations) | Manufacturer |
|--|---|
| 3TC/AZT | |
| tablet, 300/150 mg | Aurobindo Pharma Ltd., Cheil Jedang Corp., *Cipla Ltd., Donato y Zurlo S.A., Far Manguinhos, *Glaxo SmithKline, *Hetero Drugs Ltd ^{NPI} Lab. Filaxis International S.A., New GPC Inc, *Ranbaxy Laboratories Ltd., Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| 3TC/d4T/NVP | |
| tablet, 150/30/200 mg | *Ranbaxy Laboratories Ltd. |
| tablet, 150/40/200 mg | Cheil Jedang Corp., *Cipla Ltd., New GPC Inc, *Ranbaxy Laboratories Ltd., Strides Arcolab Ltd., The Government Pharmaceutical Organization |
| ABC/3TC/ZDV | |
| tablet, 300/150/300 mg | *Glaxo SmithKline, Ranbaxy Laboratories Ltd. |
| AZT/3TC/NVP | |
| tablet, 300/150/200 mg | Aurobindo Pharma Ltd., Cipla Ltd. |

Table 2. Antineoplastic medicines

| Cytotoxic medicines | Manufacturer |
|---|---|
| bleomycin | |
| powder for injection, 15 mg 15 mg (as sulfate) in vial | Aventis Intercontinental, Neon Antibiotics PVT. Ltd. |
| calcium folinate (leucovorin) | |
| tablet, 15 mg | Ecobi Farmaceutici S.a.s., Lab. Filaxis International S.A., Medac GmbH, International Operations |
| doxorubicine HCl | |
| powder for injection, 10 mg in 5–ml vial | Lab. Filaxis International S.A., Medac GmbH, International Operations, Neon Antibiotics PVT. Ltd., Pharmchem International Ltd. |
| powder for injection, 50 mg in 25–ml vial | Lab. Filaxis International S.A., Medac GmbH, International Operations, Neon Antibiotics PVT. Ltd., Pharmchem International Ltd. |
| etoposide | |
| injection, 20 mg/ ml in 5–ml ampoule | Cipla Ltd., Intas Pharmaceuticals Ltd., Lab. Filaxis International S.A., Medac GmbH, International Operations, Neon Antibiotics PVT. Ltd. |
| methotrexate | |
| injection, 25 mg/ml (as sodium salt) in 2–ml vial | Aventis Intercontinental, Neon Antibiotics PVT. Ltd. |
| powder for injection, 50 mg (as sodium salt) in 2–ml vial | Aventis Intercontinental, Lab. Filaxis International S.A., Neon Antibiotics PVT. Ltd. |
| tablet, 2.5 mg | Aventis Intercontinental, Cipla Ltd., Neon Antibiotics PVT. Ltd., Remedica Ltd. |
| vinblastine | |
| powder for injection, 10 mg (sulfate) in 10–ml vial | *Cipla Ltd., Lab. Filaxis International S.A., Neon Antibiotics PVT.Ltd. |

| Cytotoxic medicines | Manufacturer |
|---|--|
| vincristine | |
| injection, 1 mg/ml (sulfate) in vial | *Cipla Ltd., Lab. Filaxis International S.A., Pharmchem International Ltd. |
| powder for injection, 1 mg (sulfate) in 1-ml vial | Neon Antibiotics PVT. Ltd. |
| vinorelbine | |
| injection concentrate 10 mg/ml in vial | |

Table 3. Medicines used for the treatment of mental and substance abuse disorders

| Medicines used in depressive disorders | Manufacturer |
|--|---|
| amitriptyline | |
| tablet, 25 mg (as hydrochloride) | Aspen Pharmacare, Gracure Pharmaceuticals Ltd., Intas Pharmaceuticals Ltd., Pharmchem International Ltd., Remedica Ltd., The Government Pharmaceutical Organization |
| fluoxetine | |
| tablet, 20 mg | Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Combino Pharm, S.L., Geneparm SA, IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Laboratorios Cinfa S.A., Pharmchem International Ltd., Ranbaxy Laboratories Ltd., Remedica Ltd. |
| Medicines used in generalized anxiety and sleep disorders | |
| methotrimepazine/levomepromazine | |
| tablet, 25 mg | Aventis Intercontinental, Pharmadrug |
| Medicines used in treatment of opioid dependence | |
| naltrexone HCl | |
| tablet, 50 mg | Intas Pharmaceuticals Ltd., Lachifarma SRL |

Table 4. Analgesics

| Opioid analgesics | Manufacturer |
|---|---|
| codeine | |
| tablet, 30 mg (phosphate) | Aspen Pharmacare, Beacons Pharmaceuticals Pte Ltd., Pharmchem International Ltd., Rekah Pharmaceutical Group, Remedica Ltd. |
| methadone | |
| tablet, 5 mg | Pharmchem International Ltd. |
| morphine | |
| injection, 10 mg/ml (sulfate or HCl), in 1-ml ampoule | Aspen Pharmacare, Lab. Renaudin, Martindale Pharmaceuticals Ltd., Molteni Farmaceutici, Pharmchem International Ltd. |
| oral solution, 10 mg/5 ml (sulfate or HCl) | Molteni Farmaceutici, Pharmchem International Ltd. |

| Opioid analgesics | Manufacturer |
|---|--|
| pethidine | |
| injection, 50 mg/ml (hydrochloride) in 1–ml ampoule | Aspen Pharmacare, Martindale Pharmaceuticals Ltd., Neon Laboratories Ltd., Pharmchem International Ltd. |
| injection, 50 mg/ml (hydrochloride) in 2–ml ampoule | Aspen Pharmacare, Lab. Renaudin, Martindale Pharmaceuticals Ltd., Molteni Farmaceutici, Neon Laboratories Ltd., Pharmadrug, Pharmchem International Ltd. |
| tablet, 50 mg | Martindale Pharmaceuticals Ltd., Pharmchem International Ltd. |
| tablet, 100 mg | Pharmchem International Ltd. |

Table 5. Gastrointestinal medicines

| Antacids and other antiulcer medicines | Manufacturer |
|--|--|
| omeprazole | |
| capsule, 10 mg | Aventis Ltd., Cipla Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Lyka Labs Ltd., Mepha Ltd., Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd |
| capsule, 20 mg | Alembic Ltd., Apotex Mexico Protein, (S.A. de C.V.), Aurobindo Pharma Ltd., Aventis Ltd., Cipla Ltd., Demo S.A., Pharmaceutical Industry, Genepharm SA, Gracure Pharmaceuticals Ltd., Hovid SDN. BHN., Intas Pharmaceuticals Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Laboratorios Andr—maco S.A., Laboratorios Cinfa S.A., Mepha Ltd., Remedica Ltd., Shiba Pharmaceuticals & Chemicals Ltd., SM Pharmaceuticals Sdn Bhd, Strides Arcolab Ltd. , The Acme Laboratories Ltd. |
| capsule, 40 mg | Aurobindo Pharma Ltd., Aventis Ltd., IVAX Pharmaceuticals Mexico, (S.A. de C.V.), Laboratorios Andr—maco S.A., Mepha Ltd., Shiba Pharmaceuticals & Chemicals Ltd., The Acme Laboratories Ltd. |
| powder for injection, 40 mg (as sodium salt) in vial | Neon Antibiotics PVT. Ltd., |
| powder for IV infusion, 40 mg (as sodium salt) in vial | Genepharm SA, Neon Antibiotics PVT. Ltd. |
| Antiemetic medicines | |
| dimenhydrinate | |
| tablet, 50 mg | Apotex Mexico Protein, (S.A. de C.V.), Beacons Pharmaceuticals Pte Ltd., Laboratorios Cinfa S.A., The Government Pharmaceutical Organization |
| metoclopramide | |
| injection 5 mg/ml in 2–ml ampoule | Aspen Pharmacare, Aventis Ltd., CLARIS Lifesciences Ltd., Lab. Renaudin, The Government Pharmaceutical Organization |
| tablet, 10 mg (as hydrochloride) | Alpharma, Apotex Mexico Protein, (S.A. de C.V.), Aspen Pharmacare, Aventis Ltd., Genepharm SA, IPCA Laboratories Ltd., Remedica Ltd., The Acme Laboratories Ltd. |
| prochlorperazine | |
| injection, 12.5 mg/ml | Aventis Ltd., Pharmadrug |
| tablet, 5 mg | Aspen Pharmacare, Aventis Ltd., Remedica Ltd. |
| tablet, 10 mg | Pharmadrug |

ANNEX 3

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- *Globalization, TRIPS and access to pharmaceuticals.* WHO Policy Perspectives on Medicines number 3. WHO, Geneva, 2001.
<http://www.who.int/medicines/organization/ood/ood6papers.shtml>
- *Patent situation of HIV/AIDS-related drugs in 80 countries.* UNAIDS/WHO, Geneva, 2000.
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- *Globalization and access to drugs: Perspectives on the WTO/TRIPS Agreement.* Health Economics and Drugs Series number 7 (revised). WHO, Geneva, 1998 (WHO/DAP/98.9).
<http://www.who.int/medicines/library/dap/who-dap-98-9-rev/who-dap-98-9.shtml>

Pricing strategies

- *Drug Price Information Services: What is WHO doing to improve drug price information?* WHO Information Sheet.
<http://www.who.int/medicines/organization/par/ipc/drugpriceinfo.shtml>
- *The Consumer Project on Technology.* Fact sheet.
<http://cptech.org/ip/health/econ/pricingstudies.html>
- *Medicine prices: a new approach to measurement.* WHO and Health Action International, Geneva, 2003 (WHO/EDM/PAR/2003.2).
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- *Cost-containment mechanisms for essential medicines, including antiretrovirals, in China.* WHO, Geneva, 2003 (WHO/EDM/PAR/2003.6).
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- *Policies on pricing and reimbursement of medicines in Europe: Networking for information exchange among policy makers.* Annex: Comparative Review of Drug Prices. WHO Regional Office for Europe, Copenhagen, 2000.

- *Public-private roles in the pharmaceutical sector. Implications for equitable access and rational drug use.* WHO, Geneva, 1997 (WHO/DAP/99.12).
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- *Alternative drug pricing policies in the Americas.* WHO, Geneva, 1995 (WHO/DAP/95.6).
<http://www.who.int/medicines/library/dap/who-dap-95-6/who-dap-95-6.shtml>

Websites

Partner sites

UNAIDS: www.unaids.org

UNICEF: www.unicef.org

WHO: www.who.int

MSF: www.msf.org

Others websites for information related to HIV/AIDS

AIDS Education Global Information System:

<http://www.aegis.com>

AVERT (an international HIV/AIDS charity):

<http://www.avert.org>

DOTS-plus for multidrug resistant TB:

<http://www.who.int/gtb/policyrd/DOTsplus.htm>

Health Action International. <http://www.haiweb.org>:

International HIV/AIDS Alliance. <http://www.aidsalliance.org/>

John Snow Inc/DELIVER:

<http://deliver.jsi.com>

Management Sciences for Health:

<http://www.msh.org/>

Sexually Transmitted Infections:

<http://www.who.int/hiv/pub/sti/en/>

Stop TB Partnership:

<http://www.stoptb.org>

The Global Fund to Fight AIDS, Tuberculosis and Malaria:

<http://www.theglobalfund.org/en/>

The Global TB Drug Facility:

<http://www.stoptb.org/GDF/>

Contacts

• For further information about suppliers or products, please contact:

Sources of Medicines for HIV/AIDS Survey
Pharmaceutical and Micronutrients Team
UNICEF Supply Division
Fax: +45 35 269421 E-mail: supply@unicef.org

• For further information on HIV test kit evaluation or the bulk procurement scheme, contact:

Essential Health and Technologies (EHT)
World Health Organization
Fax +41 22 791 4836

• For any comments on this document, or additional information that could be useful to this project, please complete the feedback form, Annex 5, and return it to:

Sources of medicines for HIV/AIDS Survey
Pharmaceutical and Micronutrient Team
UNICEF Supply Division
Unicef plads Freeport DK-2100 Copenhagen
Denmark
Fax: +45 35 269421
Email: supply@unicef.org

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ANNEX 4

Untangling the web of price reductions: a pricing guide for the purchase of ARVs for developing countries.

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RVS SIDE ANNEX 4
INTRODUCTION PAGE

Feedback and enquiry form

Please fill out this form and fax it to UNICEF Supply Division +45 35 26 94 21, e-mail: supply@unicef.org, or post it to: UNICEF SD, Pharmaceutical and Micronutrient Group – HIV/AIDS Survey, Freeport DK-2100 Copenhagen Ø, Denmark

1. GENERAL INFORMATION

Your name

Occupation

Company name/Organization name

Address

Telephone

Fax

Email (required)

Internet address

2. FEEDBACK

What did you think of the publication in general?

- Excellent, very useful Good, quite useful Satisfactory, reasonably useful
 Poor, not useful—please indicate why: _____

What did you think of the medicines included in the publication?

- Good selection of medicines
 More medicines required, for example: _____
 Fewer medicines required, remove: _____

What did you think of the pricing information?

- Good, enough information on the prices of drugs of interest
 Poor, not enough information

Have you contacted any of the manufacturers listed?

- Yes No

Other comments:

3. ENQUIRY

- I would like to participate in the next Survey (Manufacturing companies only)
 I would like to receive more copies of the Publication

Other enquiry: _____



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Untangling the web of price reductions:

a pricing guide for the purchase of ARVs for developing countries

6th Edition

19th April 2004



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General background and objectives

This is the sixth edition of “*Untangling the web of price reductions: a pricing guide for the purchase of ARVs for developing countries*”. The first edition was published in October 2001⁽¹⁾.

The lack of clear information on pharmaceutical prices on the international market is a significant barrier to improving access to essential medicines in developing countries. The situation is particularly complex in the case of antiretrovirals (ARVs).

The data in this guide on ARV prices offered by originator companies and some generic companies in low- and middle-income countries are meant to provide potential buyers with clear and verified data. This information is intended for use by government and non-profit procurement agencies, as well as other bulk purchasers of ARVs, including health facilities and non-governmental organisations (NGOs).

This document includes pricing information on both adult and paediatric formulations, and is meant to be used in tandem with

the pre-qualification report called “*Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS Drugs and Diagnostics of Acceptable Quality*”, a project initiated by WHO and developed in collaboration with other United Nations Organisations (UNAIDS, UNICEF, UNFPA). This pre-qualification project evaluates pharmaceutical manufacturers and products according to WHO recommended standards of quality and compliance with Good Manufacturing Practices. WHO pre-qualification is given to specific products produced by specific companies at specific manufacturing sites. It is part of an ongoing process that will expand as the participation of suppliers increases.

An updated list of products is regularly posted on the websites of WHO and other UN-collaborating agencies⁽²⁾; products on this list are commonly referred to as “*WHO pre-qualified*”. This list of “*pre-qualified*” drugs is an important tool for NGOs and Governments to assist them with drug procurement.

In all the tables in this report, pre-qualified products are indicated in bold and with an asterisk.

This sixth edition provides:

- **updated information** on prices for eligible countries, including both price per unit and price per patient per year for adult and paediatric formulations
- **updated information and clarifications** on the conditions and restrictions applying to these offers
- **practical examples**

Not all the products in this document have been pre-qualified by WHO or approved by MSF. Therefore, procurement agencies should follow their own procedures in this respect. Ultimately it is national regulatory authorities that are responsible for approving the use of a given drug from a given manufacturer.

Pricing information on other essential drugs and diagnostics used for HIV/AIDS can be found in the last version of “*Sources and Prices of Selected Medicines and Diagnostics for People Living with HIV/AIDS*”⁽³⁾.

We have indicated fixed-dose combinations (FDCs) in this report since MSF has found that using these products facilitates program implementation and patient

compliance. For further information see MSF Briefing Note on FDCs⁽⁴⁾. The new edition of WHO Treatment Guidelines specially mentions the usefulness of FDCs in resource-poor settings. Not only are FDCs advantageous from a medical point of view, but they are also the most affordable option in most cases. The triple FDC d4T/3TC/NVP from two generic manufacturers has recently been pre-qualified by WHO.

Methodology

In order to obtain accurate information on discounted price offers by both originator and generic companies, firms were contacted and asked to provide information about drug, dosage and pharmaceutical form, price per unit (or daily dose), restrictions that apply to the offers (eligibility), and

additional comments. The list of generic companies included in this report is by no means exhaustive^[6]. All generic drugs included in this pricing guide have at least been cleared for marketing in their countries of origin.

- All prices are quoted in US dollars and conversions were made on the day the price was received.
- All prices were checked and verified by companies.
- In table 1, prices are rounded. The exact prices including decimals are in table 2.

The annual cost of therapy was calculated according to WHO^[6] and Centres for Disease Control and Prevention (CDC)^[7] dosing schedules (for those products not recommended in the WHO Guidelines).

Prices

Since 2000, the international prices of some first-line ARVs have tumbled, due to competition from generic companies, sustained public pressure, discount offers from originator companies, and the

growing political attention paid to the AIDS epidemic. Several major events have played a key role, beginning with a precedent set by Brazil which made a triple drug combination possible at less than US\$3000 per patient per year (ppy) in the 90s.

Public pressure on the pharmaceutical companies built up over the following years, and in May 2000, five originator companies announced a new partnership, the Accelerating Access Initiative (AAI). It was the first time that these companies had initiated differential pricing policies for ARVs. In February 2001, the Indian generics firm Cipla shattered the price barrier when it publicly announced that it would sell a triple combination for US\$350 ppy. Due to this type of competition, prices continue to fall. Today, the cheapest triple combination (FDC) prequalified by WHO costs US\$244/year.

The graph on page 6 shows the evolution of prices since August 2001 for WHO recommended first line regimens.

Other initiatives, like the Andean initiative or more recently the Clinton Foundation announcement, are also bringing down prices. The Andean initiative, through regional negotiations with pharmaceutical companies, has fixed a reference price for all the countries in the region. The Clinton Foundation has brokered a deal with generic makers which brings fixed dose triple combinations down to US\$140 per year. These initiatives although not widely available will affect some specific countries.

Prices cited in this document are the best international offers made by companies, but delivery conditions must be taken into account. Both generics and originator companies impose restrictions on their offers, but only originator companies apply geographical limits (a differential pricing policy).

Barriers to accessing price offers

Information is presented in a table format to facilitate the comparison of price offers. This format highlights the lack of standardisation among

different companies on eligibility and terms and conditions. For instance, some companies use UNCTAD (Least Developed Countries) criteria, others UNDP, some others World Bank classification (Human Development Index).

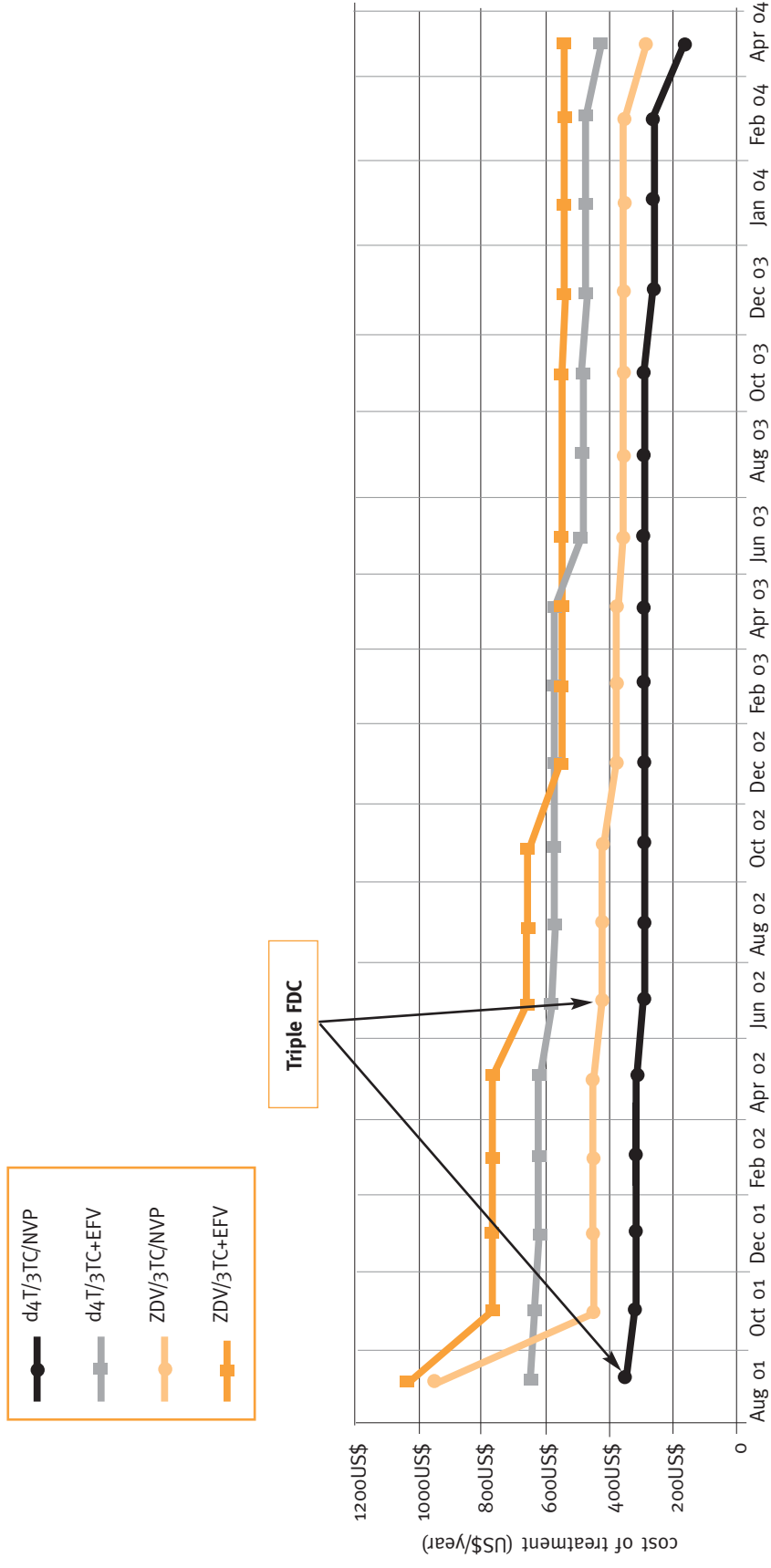
It should be noted that some developing countries have been excluded by some or all companies. It means that some countries cannot benefit from any differential price. In regions like Eastern Europe, only 24% of the countries can benefit from the best price and in Latin America and Caribbean, only 31%.*

It is important to mention that geographical limitations do not concern FDCs, since most FDCs are produced by generic companies.

Even when a specific country is eligible, all purchasers within the country may not be eligible for reduced prices. The conditions of some offers can be restrictive and sometimes only NGOs, Governments and national and international institutions are eligible.

* We refer to best possible prices (those in Table 1), but we note that some companies (Roche and Merck & Co. Inc.) offer also a second differential price. The conditions for these second prices are less restrictive and can be found in Table 2.

Evolution of prices since August 2001 of WHO recommended first line regimens



The chart above shows that efavirenz containing regimens are more expensive. In addition there is no EFV containing triple FDC available on the market yet.

Delivery conditions also affect prices. In many cases clearance fees, importation taxes (when they exist) and transport are not included. Another barrier to accessing the best price is drug availability in a country. Since ARVs are not always registered and/or available in “selected countries”, many offers from pharmaceutical companies may remain “theoretical”.

In addition, prices cited in this report may not correspond to end-user prices (prices to patients), since other factors may increase prices such as national distribution and handling charges, mark-up rates, and national and/or import and sales taxes.

Patents and use of flexibilities existing in TRIPS and reinforced by the Doha Declaration on TRIPS and Public Health (such as compulsory licence, government use) can also influence the availability of medicines in a country. Patent information is not included in the

present analysis. Some information about the patent status of ARVs in some countries can be found in “*Patent Situation of HIV/AIDS related drugs in 80 countries*”, WHO/UNAIDS, 2000^[8] and the MSF report “*Drug patents under the spotlight: sharing practical knowledge about pharmaceutical patents*”, May 2003^[9]. For further details, refer to the practical guide “*HIV/AIDS medicines and related supplies: contemporary context and procurement*”, in particular Chapter 4 and Annex B (The World Bank, Washington, February 2004).

The challenge of paediatric formulations

There is an urgent need to develop fixed-dose combinations for use in children. Protocols for paediatric patients are complicated and expensive. The prices of paediatric formulations remain higher than those for adults, especially for second line treatments. For example, a paediatric patient would

have to pay USD 284 per year for a d4T+3TC+NVP regimen using three different syrups while an adult will take the same regimen in a FDC for USD 244. For a second line (ZDV+ddl+NfV), the cost of treatment for a child would be USD 3150/year while for the adult it would be USD 1096 per year. In this case, none of them would be able to use a FDC.**

Research and development (R&D) for HIV/AIDS

Paediatric formulations are not the only area where there is a need for R&D. For both adults and children, new drugs, diagnostic tools, and vaccines are needed for HIV/AIDS. Pharmaceutical investment in research and development largely responds to market potential in the industrialised world. We need to ensure that R&D also responds to the needs of patients in developing and least developed countries.

** For these examples we used the case of a 10 kg, 3 year old patient in an MSF project, following the protocols of this project. When comparing prices we used the best possible price for every molecule.

How to use these tables

Prices: table 1 shows the best price offers of some generic and originator producers for each antiretroviral drug, (including fixed-dose combinations), regardless of eligibility conditions. Figures within brackets indicate price in US\$ per unit (capsules, tablets etc.). Prices per patient per year have been calculated according to daily doses given either in WHO guidelines or in CDC guidelines (for those products not recommended in WHO guidelines). Prices can be used as a reference with suppliers. Originator companies set different prices depending on the country. Which country is eligible and the conditions to benefit from these differential prices are specified in Table 2.

Restrictions: table 2 shows restrictions imposed by generic (2f) and originator (2a to 2e) companies and provides indications about the availability of offers in individual countries. There is no uniform differential pricing system and each originator company sets geographical limits to their programmes. Generic companies have no geographical limits but may have quantity related conditions.

Please refer to Annexes 1, 2 and 4 for updated country classification by UNCTAD (Least Developed Countries), UNDP (Human Development Index) and World Bank (Low income Countries). Annex 3 lists sub-Saharan countries.

This document is also available in French and Spanish on www.accessmed-msf.org

The following table (pages 9 and 10) summarises prices and eligibility conditions of three products from three different companies in four countries.

Practical examples: Price and eligibility of three products from three different companies in four countries

| COMPANIES and OFFERS | Merck Stocrin® (efavirenz) 600 mg | Ranbaxy Triviro LNS® (d4T/3TC/NVP) 40 mg+150 mg+200 mg | Roche Viracept® (nelfinavir) 250 mg |
|--|--|---|--|
| <p>MALAWI It is a LDC¹ Low HDI² Low Income Economy³ It is a Sub-Saharan country⁴ Adult HIV prevalence 15%⁵</p> | <p>Prices and eligibility (countries): – US\$ 346.75/year for Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1% or greater⁽¹⁰⁾ – US\$ 767/year for medium HDI countries with adult HIV prevalence less than 1%⁽¹¹⁾</p> <p>Delivery of goods: CIF⁽¹⁰⁾</p> <p>Eligibility (bodies): Governments, international organizations, NGOs, private sector organizations (e.g. employers, hospitals and insurers). Merck and Co., Inc. does not rule out supplying ARVs to patients through retail pharmacies.</p> | <p>Prices and eligibility (countries): US\$ 292/year. All countries are eligible</p> <p>Delivery of goods: FOB Delhi/Mumbai (India)⁽¹⁰⁾ Prices apply to orders for a minimum of 1.5 million units. Different prices are offered for smaller quantities (500 000 or 1 million units).</p> <p>Eligibility (bodies): NGOs and Governments or Programs supported by them.</p> | <p>Is Malawi an eligible country? Yes, for the first price</p> <p>Am I an eligible purchaser? Yes, if Government, Non Profit Institutional Providers of HIV care or NGO</p> <p>How much will Viracept cost in my country? US\$ 942/year</p> <p>Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> |
| <p>CAMBODIA It is a LDC¹ Medium HDI² Low Income Economy³ It is not a Sub-Saharan country⁴</p> | <p>Is Cambodia an eligible country? Yes, for the first price</p> <p>Am I an eligible purchaser? Yes, if Government, international organization, NGO, private sector organization</p> | <p>Is Cambodia an eligible country? Yes</p> <p>Am I an eligible purchaser? Yes, if an NGO, Government or a program supported by them</p> | <p>Is Cambodia an eligible country? Yes, for the first price</p> <p>Am I an eligible purchaser? Yes, if Government, Non Profit Institutional Providers of HIV care or NGO</p> |

| | | | |
|---|---|---|--|
| <p>Adult HIV prevalence 2.7%⁵</p> | <p>How much will Stocrin 600 cost in my country? US\$ 346.75/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local transport</p> | <p>How much will Triviro LNS cost in my country? US\$ 292/year if I order more than 1.5 million units Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> | <p>How much will Viracept cost in my country? US\$ 942/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> |
| <p>UKRAINE It is not a LDC¹ Medium HDI² Lower-Middle Income Economy³ It is not a Sub-Saharan country⁴ Adult HIV prevalence 1%⁵</p> | <p>Is the Ukraine an eligible country? Yes, for the first price Am I an eligible purchaser? Yes, if Government, international organization, NGO or private sector organization How much will Stocrin 600 cost in my country? US\$ 346.75/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local transport</p> | <p>Is the Ukraine an eligible country? Yes Am I an eligible purchaser? Yes, if an NGO, Government or a program supported by them How much will Triviro LNS cost in my country? US\$ 292/year if I order more than 1.5 million units Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> | <p>Is the Ukraine an eligible country? Yes, for the second price Am I an eligible purchaser? Yes, if Government, Non Profit Institutional Providers of HIV care or NGO How much will Viracept cost in my country? US\$ 3201/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> |
| <p>COLOMBIA It is not a LDC¹ Medium HDI² Lower-Middle Income Economy³ It is not a Sub-Saharan country⁴ Adult HIV prevalence 0.4%⁵</p> | <p>Is Colombia an eligible country? Yes, for the second price Am I an eligible purchaser? Yes, if Government, international organization, NGO or private sector organization How much will Stocrin 600 cost in my country? US\$ 767/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local transport</p> | <p>Is Colombia an eligible country? Yes Am I an eligible purchaser? Yes, if an NGO, Government or a program supported by them How much will Triviro LNS cost in my country? US\$ 292/year if I order more than 1.5 million units Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> | <p>Is Colombia an eligible country? Yes, for the second price Am I an eligible purchaser? Yes, if Government, Non Profit Institutional Providers of HIV care or NGO How much will Viracept cost in my country? US\$ 3201/year Will delivery conditions increase this price? Yes, I have to add clearance fees + importation taxes (when existing) + local and international transport</p> |

¹ LDC: Least Developed Country according to UNCTAD classification. See annex 1 of this document for full list of LDCs. ² HDI: Human Development Index according to UNDP classification. Countries are classified on Low HDI, Medium HDI and High HDI (this last one does not concern differential prices). Low and Middle HDI lists of countries are in the Annex 2 of this document. ³ World Bank classification depends on income. Countries are classified as Low Income Economies, Middle-Low Income Economies and Upper. Middle Income Economies (these last two do not concern differential prices). Low Income Economy and Lower-Middle Income Economy countries are listed in the Annex 4 of this document. ⁴ See annex 3 of this document for full list of sub-Saharan African countries published by the World Bank. ⁵ Merck prices depend on Adult HIV prevalence, which is periodically reviewed by UNAIDS (www.who.int/emc-hiv/fact_sheets/ALL_countries.html).

Table 1: Summary of best ARV price offers by selected pharmaceutical companies for eligible developing countries

Table 1a – Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

All prices are in US\$. Prices are given both for a yearly adult dose and by unit.

For details on eligibility and offer restrictions for countries and institutions, please refer to table 2a and 2f.

Products on the WHO list of “Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality” (14th edition, 28 January 2004)^[2] are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.^[10]

Annual cost is calculated according to the daily doses given in the WHO “Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach” (June 2002)^[6] and/or the “Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents”^[7], by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

(*\$*) BMS sells ddi (didanosine) in other doses (per mg price remains the same)

| NRTI (Abbreviation) | abacavir (ABC) | didanosine (ddi) | didanosine (ddi) | didanosine (ddi) | lamivudine (3TC) | lamivudine (3TC) | stavudine (d4T) | stavudine (d4T) | stavudine (d4T) | zidovudine (ZDV or AZT) |
|----------------------|--------------------------|--------------------------|-------------------------|--------------------------|-------------------------|------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Strength (mg) | 300 | 100 (\$) | EC 400 | 150 | 300 | 300 | 40 | 30 | 40 | 300 |
| Daily dose | 2 | 4 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Aurobindo (India) | | 197 (0.135/unit) | | 66 (0.090/unit) | | | 31 (0.043/unit) | | | 140 (0.192/unit) |
| BMS (US) | | 310* (0.212/unit) | Not applicable | | | | 55* (0.075/unit) | 48* (0.066/unit) | 55* (0.075/unit) | |
| Cipla (India) | 821 (1.125/unit) | 292 (0.200/unit) | 270 (0.741/unit) | 88* (0.120/unit) | 102 (0.280/unit) | | 53 (0.072/unit) | 47 (0.065/unit) | | 161* (0.220/unit) |
| Combinopharm (Spain) | | | | | | | | | | 292* (0.400/unit) |
| GPO (Thailand) | | | | 171 (0.234/unit) | | | 77 (0.105/unit) | 60 (0.082/unit) | | 290 (0.397/unit) |
| GSK (UK) | 887* (1.215/unit) | | | 69* (0.095/unit) | Not applicable | | | | | 212* (0.290/unit) |
| Hetero (India) | 803 (1.100/unit) | 146 (0.100/unit) | 168 (0.460/unit) | 55* (0.075/unit) | | | 26* (0.035/unit) | 21* (0.029/unit) | | 140* (0.192/unit) |
| Ranbaxy (India) | 1314 (1.800/unit) | 415 (0.284/unit) | 335 (0.917/unit) | 100* (0.137/unit) | 100 (0.274/unit) | | 47 (0.064/unit) | 36* (0.049/unit) | | 180* (0.246/unit) |
| Strides (India) | | | | 97 (0.133/unit) | | | 46 (0.063/unit) | 35 (0.048/unit) | | |

Table 1b – Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)

All prices are in US\$. Prices are given both for a yearly adult dose and by unit.

For details on eligibility and offer restrictions for countries and institutions, please refer to table 2b and 2f.

Products on the WHO list of “Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality” (14th edition, 28 January 2004)^[2] are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.^[10]

Annual cost is calculated according to the daily doses given in the WHO “Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach” (June 2002)^[6] and/or the “Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents”^[7], by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

| NNRTI (Abbreviation) | efavirenz (EFV) | efavirenz (EFV) | efavirenz (EFV) | nevirapine (NVP) |
|--------------------------------|-------------------------|-----------------------------|--------------------------|------------------|
| Strength (mg) | 200 | 600 | 200 | 200 |
| Daily dose | 3 | 1 | 2 | 2 |
| Aurobindo (India) | 438 (0.400/unit) | | 112 (0.153/unit) | |
| Boehringer-Ingelheim (Germany) | | | 438* (0.600/unit) | |
| Cipla (India) | 462 (0.422/unit) | 462 (1.267/unit) | 124* (0.170/unit) | |
| GPO (Thailand) | | | 256 (0.350/unit) | |
| Hetero (India) | 329 (0.300/unit) | 347 (0.950/unit) | 80* (0.110/unit) | |
| Merck (US) | 500 (0.457/unit) (†) | 347 (0.950/unit) (†) | | |
| Ranbaxy (India) | 427 (0.390/unit) | 427 (1.170/unit) | 166* (0.228/unit) | |
| Strides (India) | | | 162 (0.222/unit) | |

(†) Prices given in this table are for Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1% or greater. Table 2b gives prices for medium HDI countries with adult HIV prevalence of less than 1%^[10]

Table 1c - Nucleotide Reverse Transcriptase Inhibitors (NRTIs)

The price is in US\$. Price is given both for a yearly adult dose and by unit.

For details on eligibility and offer restrictions for countries and institutions, please refer to table 2c.

Products on the WHO list of “*Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality*” (14th edition, 28 January 2004)^[6] are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.^[10]

Annual cost is calculated according to the daily doses given in the WHO “*Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach*” (June 2002)^[6] and/or the “*Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents*”^[7], by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

| NRTI (Abbreviation) | tenofovir (TDF) |
|---------------------|-----------------------------------|
| Strength (mg) | 300 mg |
| Daily dose | 1 |
| Gilead (US) | 475 (1.300/unit) |

Table 1d - Protease Inhibitors (PIs)

All prices are in US\$. Prices are given both for a yearly adult dose and by unit.

For details on eligibility and offer restrictions for countries and institutions, please refer to table 2d and 2f.

Products on the WHO list of “Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality” (14th edition, 28 January 2004)⁽¹⁾ are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.⁽¹⁰⁾

Annual cost is calculated according to the daily doses given in the WHO “Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach” (June 2002)⁽⁶⁾ and/or the “Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents”⁽⁷⁾, by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

For Roche, prices were provided in Swiss Francs and were converted into US\$ (1 US\$ = 1.26720 CHF on 1 April 2004)

| PI (Abbreviation) | indinavir (IDV) | nelfinavir (NFV) | ritonavir (r) | saquinavir hard gel capsules (SQV hgc) |
|---------------------|------------------------------------|-------------------------------------|-----------------------------------|--|
| Strength (mg) | 400 | 250 | 100 | 200 |
| Daily dose | 4 (**) | 10 (***) | 2 (§) | 10 (#) |
| Abbott (US) | | | 83* (0.114/unit) | |
| Aurobindo (India) | 393 (0.269/unit) | 1533 (0.420/unit) | 336 (0.460/unit) | |
| Cipla (India) | 365 (0.250/unit) | 1789 (0.490/unit) | 394 (0.540/unit) | |
| GPO (Thailand) | | 1621 (0.444/unit) | | |
| Hetero (India) | 321* (0.220/unit) | 1132 (0.310/unit) | 204 (0.280/unit) | 1022 (0.280/unit) |
| Merck (US) | 400 (0.274/unit) | | | |
| Ranbaxy (India) | 467* (0.320/unit) | | | |
| Roche (Switzerland) | | 942* 0.258/unit(t) | | 956* 0.262/unit(t) |
| Strides (India) | 463 (0.317/unit) | | | |

(**) The daily dose referred to is 800mg IDV twice daily with ritonavir 100mg twice daily as booster. The prescribing information given by the manufacturer is 800mg three times daily

(***) The daily dose referred to is 1250 mg twice daily although the dosage of 9 tablets (3 tablets three times a day) can also be used.

(§) The daily dose referred to is 100mg twice daily, for use as a booster medication. This dose is not indicated in the manufacturer's label.

(#) Saquinavir hgc should be used in combination with low-dose ritonavir as saquinavir/ritonavir 1000mg/100mg twice daily

(t) Prices given in this table are for sub-Saharan Africa and Least Developed Countries as UN defined. See table 2d for prices for Low Income and Lower Middle Income Countries, as classified by the World Bank.

Table 1e – Fixed Dose Combinations (FDCs)

All prices are in US\$. Prices are given both for a yearly adult dose and by unit. For details on eligibility and offer restrictions for countries and institutions, please refer to tables 2.

| Combination | lopinavir+ritonavir (LPV/r) | 3TC+d4T | 3TC+d4T | ZDV+3TC | ZDV+3TC+NVP | ABC+3TC+ZDV | 3TC+d4T+NVP | 3TC+d4T+NVP |
|-----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|--------------------------------------|
| Strength (mg) | 133.3 + 33.3 | 150 + 30 | 150 + 40 | 300 + 150 | 300 + 150 + 200 | 300 + 150 + 200 | 150 + 30 + 200 | 150 + 40 + 200 |
| Therapeutic class(es) | PI | NRTI | NRTI | NRTI | 2NRTI + NNRTI | 3NRTI | 2NRTI + NNRTI | 2NRTI + NNRTI |
| Daily dose | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Abbott (US) | 500* (0.228/unit) | | | | | | | |
| Aurobindo (India) | | | | 204 (0.280/unit) | | | | |
| Cipla (India) | | 131 (0.180/unit) | 146 (0.200/unit) | 197* (0.270/unit) | 365 (0.500/unit) | | 234 (0.320/unit) | 244* (0.334/unit) |
| GPO (Thailand) | | | | 426 (0.584/unit) | | | 341 (0.467/unit) | 375 (0.514/unit) |
| GSK (US) | | | | 237* (0.325/unit) | | 1241* (1.700/unit) | | |
| Hetero (India) | 1971 (0.900/unit) | 73 (0.100/unit) | 80 (0.110/unit) | 197* (0.270/unit) | 277 (0.380/unit) | 1029 (1.410/unit) | 153 (0.210/unit) | 168 (0.230/unit) |
| Ranbaxy (India) | | 125* (0.171/unit) | 135* (0.185/unit) | 265* (0.363/unit) | 416 (0.570/unit) | 1579 (2.163/unit) | 285* (0.390/unit) | 292* (0.400/unit) |
| Strides (India) | | 122 (0.167/unit) | 133 (0.182/unit) | 261 (0.358/unit) | | | | |

Products on the WHO list of “Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality” (14th edition, 28 January 2004)^[a] are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.^[a]

Annual cost is calculated according to the daily doses given in the WHO “Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach” (June 2002)^[a] and/or the “Guidelines for the Use of Antiretroviral Agents in HIV-1-infected Adults and Adolescents”^[17], by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

Table 1f – Combined blisters

The three drugs are presented in the same blister. Drugs must be taken once a day.

Price is in US\$. Price is given both for a yearly adult dose and by unit.

For details on eligibility, offer restrictions for countries and institutions, Incoterm and ways to apply, please refer to table 2f.

| NNRTI | EFV+3TC+ddl (EC) | EFV+3TC+ddl (EC) |
|---------------|-----------------------------------|-----------------------------------|
| Strength (mg) | 600 + 300 + 250 | 600 + 300 + 400 |
| Daily dose | 1 + 1 + 1 | 1 + 1 + 1 |
| Cipla | 931 (2.550/unit) | 949 (2.600/unit) |

Products on the WHO list of “Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality” (14th edition, 28 January 2004)^[2] are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Best prices are in **bold & underlined**. Incoterms vary according to manufacturers.^[10]

Annual cost is calculated according to the daily doses given in the WHO “Scaling-up Antiretroviral Therapy in Resource Limited Settings: Guidelines for a Public Health Approach” (June 2002)^[6] and/or the “Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents^[7]”, by the Panel on Clinical Practices for the Treatment of HIV, July 2003.

Table 1g – Paediatric Formulations

For details on eligibility and offer restrictions for countries and institutions, please refer to table 2.

| ARV | Company | Strength/Dosage form | Presentation | Price per pack | Additional information |
|------------------------------|------------------|--|------------------------|-------------------------------|---|
| abacavir | GSK | 20mg/ml oral solution | 240ml | US\$ 31.32* | Cost per day as indicated by the manufacturer: US\$ 2.61 |
| didanosine | BMS | powder: 2g of active principle sold as a bottle for re-constitution with water and with antacids | | US\$ 14.74 | Sold in local currency in Southern Africa – Rand and East Africa - shillings. Sold in Euro to West African countries. |
| lamivudine | GSK | 10mg/ml oral solution | 240ml | US\$ 6.73* | Cost per day as indicated by manufacturer. (average paediatric dosage based on 25kg average weight): US\$ 0.56 |
| stavudine | Cipla | 10mg/ml oral solution | 100ml | US\$ 2.00* | |
| | GPO | 10mg/ml syrup | 60ml | US\$ 1.54 | |
| | BMS | 1mg/ml powder for syrup | 200ml | US\$ 9.50 | Sold in local currency in Southern Africa - Rand and East Africa - shillings. Sold in Euro to West African countries. |
| | BMS | 15mg capsules | Blister pack of 56 | Not available* | |
| zidovudine | BMS | 20mg capsules | Blister pack of 56 | US\$ 5.25* | |
| | GPO | 15mg capsules | Box of 60 | US\$ 3.50 | US\$ 0.058/capsule. |
| | GPO | 20mg capsules | Box of 60 | US\$ 4.20 | US\$ 0.070/capsule. |
| | GPO | 1mg/ml dry syrup | 60ml | US\$ 0.65 | |
| | GPO | 5mg/ml dry syrup | 60ml | US\$ 0.97 | |
| | GSK | 10mg/ml syrup | 200ml | US\$ 7.10* | Cost per day as indicated by manufacturer. (average paediatric dosage based on 25kg average weight): US\$ 1.42. |
| | efavirenz | Cipla | 50mg/5ml oral solution | 100ml | US\$ 1.53* |
| GPO | | 10mg/ml syrup | 60ml/200ml | US\$ 1.28/3.85 | |
| Combinopharm | | 50mg/5ml oral solution | 200ml | US\$ 4.20 | |
| Merck | | 50mg capsules | Bottle of 30 | US\$ 3.47 | US\$0.116/unit |
| BI | | 10mg/ml suspension | 240ml | US\$ 17.50* | |
| nevirapine | Cipla | 50mg/5ml suspension | 100ml & 25ml (PMTCT) | US\$ 2.45 & US\$ 2.00 (PMTCT) | PMTCT dose: 25ml. |
| | GPO | 10mg/ml oral suspension | 60ml | US\$ 0.92 | |
| nelfinavir | Roche | 50mg/g, powder for suspension | 144g | US\$ 31.17* (**) (I) | |
| ritonavir | Abbott | 80mg/ml oral solution | 450ml(5x90ml) | US\$ 41.67* | |
| ritonavir + lopinavir | Abbott | 20mg + 80mg/ml oral solution | 300ml(5x60ml) | US\$ 41.67* | |

(**) On 1 April 2004, 1 US\$ = 1.2672 CHF. (I) All prices of Roche products are in Swiss francs (CHF). Prices given in this table are for sub-Saharan Africa and Least Developed Countries as UN defined. See table 2c for prices for Low Income and Lower Middle Income Countries, as classified by the World Bank.
 Products on the WHO list of "Pilot Procurement, Quality and Sourcing Project: Access to HIV/AIDS drugs and diagnostics of acceptable quality" (4th edition, 28 January 2004)⁽¹⁾ are in **bold** and have an **asterisk *** next to the price. Always check website for most recently updated list. Incoterms vary according to manufacturers.⁽²⁾

Table 2 Company ARV offers and restrictions for developing countries, adult and paediatric formulations

Table 2a Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|---|-----------------|---|---|---------------------------------|--|----------------------------------|
| abacavir 300mg tablets (Ziagen®) | GlaxoSmithKline | Least Developed Countries (LDCs) plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI).</i> | Governments, aid organizations, charities, UN agencies, other not-for-profit organizations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organizations must supply the preferentially priced products on a not for profit basis. | US\$ 887/year (US\$ 1.215/unit) | Supply Agreement required (For NGOs requiring less than 10 patient packs per month, this requirement may be waived). The manufacturer recommends that prescribers must ensure that patients are fully informed regarding hypersensitivity reaction to abacavir. Patients developing signs or symptoms must contact their doctor immediately for advice. | CIP |
| abacavir 20mg/ml oral solution 240ml (Ziagen®) | GlaxoSmithKline | Least Developed Countries (LDCs) plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI).</i> | Governments, aid organizations, charities, UN agencies, other not-for-profit organizations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organizations must supply the preferentially priced products on a not for profit basis. | US\$ 31.32 per bottle | Supply Agreement required (For NGOs requiring less than 10 patient packs per month, this requirement may be waived). The manufacturer recommends that prescribers must ensure that patients are fully informed regarding hypersensitivity reaction to abacavir. Patients developing signs or symptoms must contact their doctor immediately for advice. | CIP |

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ⁽¹⁶⁾ |
|--|--------------------------|---|---|--|--|--|
| didanosine 100mg (Videx®) | Bristol-Myers Squibb Co. | Sub-Saharan Africa. <i>(For other developing countries, prices negotiated on a case by case basis through the AAI.)</i> | Both private and public sector organisations that are able to provide effective, sustainable and medically sound care and treatment of HIV/AIDS are eligible. | US\$ 3.10/year (US\$ 0.212/unit) Lower tablet dosages prices in line with this offer | | DDU to government purchasing entities. |
| didanosine powder for oral solution 2g+anti-acid (Videx®) | Bristol Myers Squibb Co, | Sub-Saharan Africa <i>(For other developing countries, prices negotiated on a case by case basis through the AAI.)</i> | Both private and public sector organisations that are able to provide effective, sustainable and medically sound care and treatment of HIV/AIDS are eligible. | US\$ 14.74 per bottle | | DDU to government purchasing entities. |
| lamivudine 150mg tablet (Epivir®) | GlaxoSmithKline | Least Developed Countries (LDCs) plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.)</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 69/year (US\$ 0.095/unit) | Supply Agreement required (For NGOs requiring less than 10 patient packs per month, this requirement may be waived). | CIP |

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|---|--------------------------|---|---|---|--|---------------------------------------|
| lamivudine 10mg/ml oral solution 240ml (Epivir®) | GlaxoSmithKline | LDCs plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.)</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 6.73 per bottle | Supply Agreement required (For NGOs requiring less than 10 patient packs per month, this requirement may be waived). | CIP |
| stavudine 20mg, 30mg and 40mg caps (Zerit®) | Bristol-Myers Squibb Co. | Sub-Saharan Africa. <i>(For other developing countries, prices negotiated on a case by case basis through the AAI.)</i> | Both private and public sector organisations that are able to provide effective, sustainable and medically sound care and treatment of HIV/AIDS are eligible. | 20mg: US\$ 5.25 per 56 caps (US\$ 0.094/unit) 30mg: US\$ 48.18/year (US\$ 0.066/unit) 40mg: US\$ 54.75/year (US\$ 0.075/unit) | | DDU to government purchasing entities |
| stavudine 1mg/ml powder for syrup 200ml (Zerit®) | Bristol-Myers Squibb Co. | Sub-Saharan Africa. <i>(For other developing countries, prices negotiated on a case by case basis through the AAI.)</i> | Both private and public sector organisations that are able to provide effective, sustainable and medically sound care and treatment of HIV/AIDS are eligible. | US\$ 9.50 per bottle | | DDU to government purchasing entities |

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|---|-----------------|---|--|------------------------------------|--|----------------------------------|
| zidovudine 300mg tablets (Retrovir®) | GlaxoSmithKline | LDCs plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.)</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa, employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 212/year (US\$ 0.290/unit) | Supply Agreement required. (For NGOs requiring less than 10 patient packs per month, this requirement may be waived.) | CIP |
| zidovudine 10mg/ml syrup 200ml (Retrovir®) | GlaxoSmithKline | LDCs plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.)</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB and Malaria. In sub-Saharan Africa, employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 7.10 per bottle | Supply Agreement required. (For NGOs requiring less than 10 patient packs per month, this requirement may be waived.) | CIP |

Table 2b Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|--|----------------------|---|--|--|---|----------------------------------|
| efavirenz (Stocrin®) | Merck & Co., Inc. | Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1% or greater ^(a) . | Governments, international organisations, NGOs, private sector hospitals and insurers). Merck & Co., Inc. does not rule out supplying ARVs to patients through retail pharmacies. | 600mg tablet: US\$ 346.75/year (US\$ 0.950/unit) 200mg capsule: US\$ 500/year (US\$ 0.457/unit) 50mg capsule: US\$ 0.116/unit US\$ 3.47 per bottle of 30 | Although Romania does not fall under these categories it also benefits from these prices due to a government commitment to a programme of universal access. | CIP |
| efavirenz (Stocrin®) | Merck & Co., Inc. | Medium HDI countries with adult HIV prevalence less than 1% ^(a) . | Governments, international organisations (e.g. employers, hospitals and insurers). Merck & Co., Inc. does not rule out supplying ARVs to patients through retail pharmacies. | 600mg tablet: US\$ 767/year (US\$ 2.100/unit) 200mg capsule: US\$ 920/year (US\$ 0.840/unit) 50mg capsule US\$ 0.213 per unit US\$ 6.39 per bottle of 30 | | CIP |
| nevirapine 200mg tablets (Viramune®) | Boehringer Ingelheim | All World Bank low-income countries and sub-Saharan Africa. <i>(Other countries on a case-by-case basis.)</i> | Governments, NGOs and other partners who can guarantee that the programme is run in a responsible manner. | US\$ 438/year (US\$ 0.600/unit) | | CIF |
| nevirapine 10mg/ml suspension 240ml (Viramune®) | Boehringer Ingelheim | All World Bank low-income countries and sub-Saharan Africa. <i>(Other countries on a case-by-case basis.)</i> | Governments, NGOs and other partners who can guarantee that the programme is run in a responsible manner. | US\$ 17.50 per unit | | CIF |

Table 2c Nucleotide Reverse Transcriptase Inhibitors (NtRTIs)

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^[a] |
|----------------------------------|---------|--|--|------------------------------------|---|----------------------------------|
| tenofovir 300mg (Viread®) | Gilead | 53 nations in Africa and 15 other UN-designated 'least developed' countries. | Organisations that provide HIV treatment in the 68 countries covered by the Viread Access programme will be able to receive Viread at the access price. Applications will go through a review process. | US\$ 474.50/year (US\$ 1.300/unit) | The programmes will be managed through Axios. | FOB |

Table 2d Protease Inhibitors (PIs)

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^[a] |
|---|-------------------|---|---|--|---|--|
| indinavir (400mg caps) (Crixivan®) | Merck & Co., Inc. | Low Human Development Index (HDI) countries plus medium HDI countries with adult HIV prevalence of 1% or greater ^[a] . | Governments, international organisations, NGOs, private sector organisations (e.g. employers, hospitals and insurers). Merck & Co., Inc. does not rule out supplying ARVs to patients through retail pharmacies. | 800mg* (plus ritonavir 100mg) twice daily US\$ 400/year (US\$ 0.274/unit) 800mg 3 times daily not boosted US\$600/year (US\$0.274/unit) | Although Romania does not fall under these categories it also benefits from these prices due to a government commitment to a programme of universal access. | CIP |
| indinavir (400mg caps) (Crixivan®) | Merck & Co., Inc. | Medium HDI countries with adult HIV prevalence less than 1% ^[a] . | Governments, international organisations, NGOs, private sector organisations (e.g. employers, hospitals and insurers). Merck & Co., Inc. does not rule out supplying ARVs to patients through retail pharmacies. | 800mg* (plus ritonavir 100mg) twice daily US\$ 686/year (US\$ 0.470/unit) 800mg 3 times daily not boosted US\$1029 (US\$0.470/unit) | | CIP |
| nelfinavir 250mg tablets (Viracept®) | Roche | Least Developed Countries (LDCs) plus sub-Saharan Africa. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | Bottle of 270 tablets CHF 88.40 (US\$ 69.76) US\$ 942/year (US\$ 0.258/unit) | | Terms and conditions: Effective date 1st March 2003. FCA Basel (CH), CAD (Cash Against Documents) 30 days at sight. Minimum order and delivery amount per shipment is CHF 10,000 (US\$ 7891) |

* The yearly and unit price is for indinavir only. See price of booster on page 26.

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|--|---------|---|--|--|---------------------|---|
| nelfinavir 250mg tablets (Viracept®) | Roche | Low income countries and lower middle income countries - as classified by the World Bank. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | Bottle of 270 tablets: CHF 300.00 US\$ 236.74 US\$ 3201/year (US\$ 0.877/unit) | | Terms and conditions: Effective date 1st March 2003. FCA Basel (CH), CAD (Cash Against Documents) 30 days at sight. Minimum order and delivery amount per shipment is CHF 10,000 (US\$ 7891) |
| nelfinavir powder for oral solution 144g 50mg/g (Viracept®) | Roche | Least Developed Countries (LDCs) plus sub-Saharan Africa. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | CHF 39.50 per bottle (US\$ 31.17) | | Terms and conditions: Effective date 1st March 2003. FCA Basel (CH), CAD (Cash Against Documents) 30 days at sight. Minimum order and delivery amount per shipment is CHF 10,000 (US\$ 7891) |
| nelfinavir powder for oral solution 144g 50mg/g (Viracept®) | Roche | Low income countries and lower middle income countries - as classified by the World Bank. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | CHF 55.00 per bottle (US\$ 43.40) | | |

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|---|---------|---|--|---|---------------------|--|
| ritonavir 100mg caps (Norvir®) | Abbott | All African countries and the LDCs outside of Africa. | Governments, NGOs, UN system organisations and other national and international health institutions. | “Booster dose”: US\$ 83/year (US\$ 0.114/unit) | | FOB |
| ritonavir oral solution 450ml (Norvir®) | Abbott | All African countries and the LDCs outside of Africa. | Governments, NGOs, UN system organisations and other national and international health institutions. | US\$ 41.67 per bottle | | FOB |
| saquinavir 200mg hard gel capsules (Invirase®) | Roche | Low income countries and lower middle income countries - as classified by the World Bank. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | Bottle of 270 capsules: CHF 300.00 (US\$ 236.74) US\$ 3201/year (US\$ 0.877/unit) | | Terms and conditions: Effective date 1st March 2003. FCA Basel (CH), CAD (Cash Against Documents) 30 days at sight. Minimum order and delivery amount per shipment is CHF 10,000 (US\$ 7891) |
| saquinavir 200mg hard gel capsules (Invirase®) | Roche | Least Developed Countries (LDCs) plus sub-Saharan Africa. | Governments, Non Profit Institutional Providers of HIV care, NGOs. | Bottle of 270 capsules: CHF 89.60 (US\$ 70.71) US\$ 956/year (US\$ 0.262/unit) | | Terms and conditions: Effective date 1st March 2003. FCA Basel (CH), CAD (Cash Against Documents) 30 days at sight. Minimum order and delivery amount per shipment is CHF 10,000 (US\$ 7891) |

Table 2e Fixed Dose Combinations

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ⁽⁶⁾ |
|--|-----------------|---|--|------------------------------------|--|----------------------------------|
| lopinavir/ ritonavir 133.33 + 33.3 mg capsules (Kaletra®) | Abbott | All African countries and the Least Developed Countries (LDCs) outside of Africa. | Governments, NGOs, UN system organisations, and other national and international health institutions. | US\$ 500/year (US\$ 0.228/unit) | | FOB |
| lopinavir/ ritonavir oral solution 300ml (Kaletra®) | Abbott | All African countries and the Least Developed Countries (LDCs) outside of Africa. | Governments, NGOs, UN system organisations, and other national and international health institutions. | US\$ 41.67 per bottle | | FOB |
| lamivudine + zidovudine 300mg + 150mg tablets (Combivir®) | GlaxoSmithKline | LDCs plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.)</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB & Malaria. In sub-Saharan Africa, employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 237/year (US\$ 0.325/unit) | Supply Agreement required. (For NGOs requiring less than 10 patient packs per month, this requirement may be waived.) | CIP |

| Product | Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods ^(a) |
|---|-----------------|--|--|-------------------------------------|--|----------------------------------|
| abacavir + lamivudine + zidovudine 300 + 150 + 300mg tablets (Trizivir®) | GlaxoSmithKline | LDCs plus sub-Saharan Africa. All projects fully financed by the Global Fund to fight AIDS, TB and Malaria. <i>(For middle income developing countries public sector prices negotiated on a case-by-case basis or bilaterally through the AAI.</i> | Governments, aid organisations, charities, UN agencies, other not-for-profit organisations and international purchase funds such as the Global Fund to fight AIDS, TB & Malaria. In sub-Saharan Africa, employers there who offer HIV/AIDS care and treatment directly to their staff through workplace clinics or similar arrangements are also eligible. All organisations must supply the preferentially priced products on a not for profit basis. | US\$ 1241/year (US\$ 1.700/unit) | Supply Agreement required. (For NGOs requiring less than 10 patients pack per month, this requirement may be waived.) | CIP |

Table 2f Selected generic companies' ARV offers and restrictions for developing countries

| Company | Eligibility (countries) | Eligibility (body) | Price in US\$ | Additional comments | Delivery of goods^(a) |
|---------------------|--------------------------------|--|---|---|---|
| Aurobindo | No restriction | NGOs and Governmental Organizations. | See Table 1. | Prices available for at least 1,000,000 units for each product per single shipment. Payment by letter of credit. | FOB Hyderabad (India) |
| Cipla | No restriction | No restriction | See Table 1. For bulk purchases prices are negotiable. | No quantity related conditions. Prices are as per table 1 however for larger quantities the prices are negotiable. | FOB Mumbai (India) or CIF. Freight charges separately on actual. |
| Combinopharm | No restriction | No restriction. | See Table 1. | Delivery terms 120 days. No minimum order required unless any special labelling is required (standard labelling is in Spanish): order of a complete batch. Pack of 60 or 300 capsules available for ZDV. | FOB Barcelona (Spain) |
| GPO | No restriction | Not-for-profit organizations and governments. | See Table 1. | Payment by signed letter of credit. | FOB Bangkok (Thailand) |
| Hetero | No restriction | Private sector, Public sector and NGO's. | See Table 1. | Prices could be negotiated on individual basis according commercial terms. | FOB Mumbai (India) |
| Ranbaxy | No restriction | NGO's and Governments or Programs supported by them. | Prices given in Table 1 apply to orders for a minimum of 1.5 million units. Different prices are offered for smaller quantities (500 000 or 1 million units). | Signed letter of credit. | FOB Delhi/Mumbai (India) |
| Strides | No restriction | Governments, non profit institutional providers of HIV treatment, NGO's. | US\$ per pack unit as given in price list. | Payment by signed letter of credit. | FOB Bangalore (India) |

Other generic manufacturers producing ARVs exist but are not included in this summary of offers

Annex 1: Least Developed Countries (LDCs)

Source: UNCTAD
<http://www.unctad.org/Templates/WebFlyer.asp?intItemID=2161&lang=1>
 Forty-nine countries are currently designated least developed countries (LDCs). The list is reviewed every three years.

Afghanistan; Angola; Bangladesh; Benin; Bhutan; 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.

Annex 2: Human Development Index (HDI)

Source: Human Development Report 2002, Making new technologies work for human development UNDP. For full list of Human Development Index ranking see
http://www.undp.org/hdr2003/pdf/pre_sskit/HDR03_PKE_HDI.pdf

Low human development

Angola; Benin; Burkina Faso; Burundi; Cameroon; Central African Republic; Chad; Congo (Dem. Rep. of the); Côte d'Ivoire; Djibouti; Eritrea; Ethiopia; Gambia; Guinea; Guinea-Bissau; Haiti; Kenya; Madagascar; Malawi; Mali; Mauritania; Mozambique; Nepal; Niger; Nigeria; Pakistan; Rwanda; Senegal; Sierra Leone; Tanzania (U. Rep. of); Uganda; Yemen; Zambia; Zimbabwe.

Medium human development

Albania; Algeria; Antigua and Barbuda; Armenia; Azerbaijan; Bangladesh;; Belize; Bhutan; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Cambodia;; Cape Verde; China; Colombia; Comoros; Congo;; Dominica; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Fiji; Gabon; Georgia; Ghana; Grenada; Guatemala; Guyana; Honduras; India; Indonesia; Iran (Islamic Rep. of);

Jamaica; Jordan; Kazakhstan; Kyrgyzstan; Lao People's Dem. Rep.; Lebanon; Lesotho; Libyan Arab Jamahiriya; Macedonia (TFYR); Malaysia; Maldives; Mauritius; Moldova (Rep. of.); Mongolia; Morocco; Myanmar; Namibia; Nicaragua; Oman; Occupied Palestinian Territories; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Romania; Russian Federation; Saint Lucia; Samoa (Western); São Tomé & Príncipe; Saudi Arabia; Solomon Islands; South Africa; Sri Lanka; St.Vincent and the Grenadines; Sudan; Suriname; Swaziland; Syrian Arab Republic; Tajikistan; Thailand; Togo; Tunisia; Turkey; Turkmenistan; Ukraine; Uzbekistan; Vanuatu; Venezuela; Viet Nam.

Annex 3: Sub-Saharan countries

Source: World Bank
(April 2003)

<http://www.worldbank.org/data/countryclass/classgroups.htm>

Angola; Benin; Botswana; Burkina Faso; Burundi; Cameroon; Cape Verde; Central African Republic; Chad; Comoros; Congo (Dem. Rep.); Congo (Rep.); Côte d'Ivoire; Equatorial Guinea; Eritrea; Ethiopia; Gabon; Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mozambique; Namibia; Niger; Nigeria; Rwanda; São Tomé and Príncipe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; Sudan; Swaziland; Tanzania; Togo; Uganda; Zambia; Zimbabwe.

Annex 4: World Bank low-income countries

Source: World Bank
(September 2003)

<http://www.worldbank.org/data/countryclass/classgroups.htm>

Low-income economies

Afghanistan; Angola; Azerbaijan; Bangladesh; Benin; Bhutan; Burkina Faso; Burundi; Cambodia; Cameroon; Central African Republic; Chad; Comoros; Congo (Dem. Rep.); Congo (Rep.); Côte d'Ivoire; Equatorial Guinea; Eritrea; Ethiopia; Gambia; Georgia; Ghana; Guinea; Guinea-Bissau; Haiti; India; Indonesia; Kenya; Korea, Dem. Rep.; Kyrgyz Republic; Lao PDR; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Moldova; Mongolia; Mozambique; Myanmar; Nepal; Nicaragua; Niger; Nigeria; Pakistan; Papua New Guinea; Rwanda; São Tomé and Príncipe; Senegal; Sierra Leone; Solomon Islands; Somalia; Sudan; Tajikistan; Tanzania; Timor-Leste; Togo; Uganda; Uzbekistan; Vietnam; Yemen (Rep.); Zambia; Zimbabwe.

Lower-middle-income economies

Albania; Algeria; Armenia; Belarus; Bolivia; Bosnia and Herzegovina; Brazil; Bulgaria; Cape Verde; China; Colombia; Cuba; Djibouti; Dominican Republic; Ecuador; Egypt, Arab Rep.; El Salvador; Fiji; Guatemala; Guyana; Honduras; Iran, Islamic Rep.; Iraq; Jamaica; Jordan; Kazakhstan; Kiribati; Macedonia, FYR; Maldives; Marshall Islands; Micronesia, Fed. Sts.; Morocco; Namibia; Paraguay; Peru; Philippines; Romania; Russian Federation; Samoa; Serbia and Montenegro ;South Africa; Sri Lanka; St. Vincent and the Grenadines; Suriname; Swaziland; Syrian Arab Republic; Thailand; Tonga; Tunisia; Turkey; Turkmenistan; Ukraine; Vanuatu; West Bank and Gaza.

Upper-middle-income economies

American Samoa; Antigua and Barbuda; Argentina; Barbados; Belize; Botswana; Chile; Costa Rica; Croatia; Czech Republic; Dominica; Estonia; Gabon; Grenada; Hungary; Isle of Man; Latvia; Lebanon; Libya; Lithuania; Malaysia; Malta; Mauritius; Mayotte; Mexico; Oman; Palau; Panama; Poland; Puerto Rico; Saudi Arabia; Seychelles; Slovak Republic; St. Kitts and Nevis; St. Lucia; Trinidad and Tobago; Uruguay; Venezuela, RB.

Annex 5: Company contacts

Abbott:

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AXIOS International manages the application process and serves as the central contact:
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Bristol-Myers Squibb Co:

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information can be obtained from
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Coordinator in BMS Paris office
(marie-astrid.mercier@bms.com)

East Africa:

information can be obtained from BMS main distributor in East Africa - M. Mukesh Mehta at Phillips Pharmaceuticals in Nairobi (pp1@phillipspharma.com).

Southern Africa:

information can be obtained from Ms Tamany Geldenhuys in BMS offices in Johannesburg (tamany.geldenhuys@bms.com).

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Strides Arcolab Ltd:

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3TC lamivudine; nucleoside analogue reverse transcriptase Inhibitor

AAI United Nations Accelerating Access Initiative; Accelerated Access emerged out of the partnership initiated in May 2000 between the UN (UNFPA, UNICEF, WHO, the World Bank and UNAIDS Secretariat) and five pharmaceutical companies (Boehringer-Ingelheim GmbH, Bristol-Myers Squibb, GlaxoSmithKline, Merck & Co., Inc., and F. Hoffmann-La Roche Ltd (Roche); Abbott Laboratories Ltd. joined the initiative later) to increase access to HIV/AIDS care, treatment and support. AAI plays a role in facilitating price negotiations between developing country governments and ‘originator’ drug companies that are participating in the AAI.

ABC abacavir; nucleoside analogue reverse transcriptase inhibitor

AIDS Acquired Immune Deficiency Syndrome

ARVs Antiretroviral drugs

BMS Bristol-Myers Squibb

CDC Centres for Disease Control and Prevention

CIF^[10] ‘Cost Insurance and Freight’ means that the seller delivers when the goods pass the ship’s rail in the port of shipment. The seller must pay the costs and freight necessary to bring the goods to the named port of destination BUT the risk of loss or damage to the goods, as well as any additional costs due to events occurring after the time of delivery, are transferred from the seller to the buyer.

CIP^[10] ‘Carriage and Insurance paid to...’ means that the seller delivers the goods to the carrier nominated by him but the seller must in addition pay the cost of carriage necessary to bring the goods to the named destination. This means that the buyer bears all the risks and any additional costs occurring after the goods have been so delivered.

However, in CIP the seller also has to procure insurance against the buyer’s risk of loss of or damage to the goods during the carriage. Consequently, the seller contracts for insurance and pays the insurance premium.

d4T stavudine; nucleoside analogue reverse transcriptase inhibitor

ddI didanosine; nucleoside analogue reverse transcriptase inhibitor

DDU^[10] ‘Delivered duty unpaid’ means that the seller delivers the goods to the buyer, not cleared for import, and not unloaded from any arriving means of transport at the named place of destination. The seller has to bear the costs and risks involved in bringing the goods thereto, other than, where applicable, any ‘duty’ (which term includes the responsibility for the risks of the carrying out of the customs formalities, and the payment of formalities, customs duties, taxes and other charges) for import in the country of destination. Such ‘duty’ has to be borne by the buyer as well as any costs and risks caused by his failure to clear the goods for the import time.

EML Essential Medicines List. First published by WHO in 1977, it is meant to identify a list of medicines, which provide safe and effective treatment for the infectious and chronic diseases, which affect the vast majority of the world’s population. The 12th Updated List was published in April 2002 and includes 12 antiretrovirals.

EFV or EFZ efavirenz; non-nucleoside analogue reverse transcriptase inhibitor

EXW^[10] ‘Ex-works’ means that the

seller delivers when he places the goods at the disposal of the buyer at the seller's premises or another named place (i.e. works, factory, warehouse etc.) not cleared for export and not loaded on any collecting vehicle.

FOB⁽¹⁰⁾ 'Free on board' means that the seller delivers when the goods pass the ship's rail at the named port of shipment. This means that the buyer has to bear all costs and risks of loss or damage to the goods from that point. The FOB term requires the seller to clear the goods for export.

Generic drug According to WHO, a pharmaceutical product usually intended to be interchangeable with the innovator product, which is usually manufactured without a license from the innovator company. Generic products may be marketed either under a non-proprietary or approved name rather than a proprietary name.

GPO Governmental Pharmaceutical Organization (Thailand)

GSK GlaxoSmithKline

HIV Human Immunodeficiency Virus

IDV indinavir; protease inhibitor

LDCs Least Developed Countries, according to United Nations classification

MSD Merck Sharp & Dome (Merck & Co., Inc.)

MSF Médecins Sans Frontières

NGO Non Governmental Organization

NFV nelfinavir; protease inhibitor

NNRTI Non-Nucleoside Reverse Transcriptase Inhibitor

NRTI Nucleoside Analogue Reverse Transcriptase Inhibitor

NRTI Nucleotide Reverse Transcriptase Inhibitor

NVP nevirapine; non-nucleoside analogue reverse transcriptase inhibitor

PMTCT Prevention of Mother-To-Child Transmission

r ritonavir, low dose ritonavir used as a booster; protease inhibitor

SQV hgc saquinavir hard gel capsules; protease inhibitor

SQV sgc saquinavir soft gel capsules; protease inhibitor

TDF tenofovir; nucleotide reverse transcriptase inhibitor

UNAIDS United Nations Joint Co-sponsored Programme on HIV/AIDS, created in 1996, to lead, strengthen and support an expanded response to the HIV/AIDS epidemic. The six original Cosponsors are UNICEF, UNDP, UNFPA, UNESCO, WHO and the World Bank. UNDCP joined in April 1999

UNDP United Nations Development Programme

WHO World Health Organization

ZDV zidovudine; nucleoside analogue reverse transcriptase inhibitor

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This list is not exhaustive.
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