

Evolution of prices for antiretroviral drugs in Senegal 1998 – 2006

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Objective

- Describe the evolution of prices for the different ARV molecules available in Senegal,
- Identify the main circumstances and causes for the price decrease, and
- Assess the impact of updating therapeutic recommendations (notably second-line regimens) on treatment costs.

Methods

- Prices for ARV drugs available in Senegal were gathered from drug delivery orders provided by the National Supply Pharmacy (NSP) since 1998.
- Prices have been compared to those on the international market, as indicated in the *Pricing Guide for the Purchase of ARVs for Developing Countries* (9th edition, MSF, 2006).

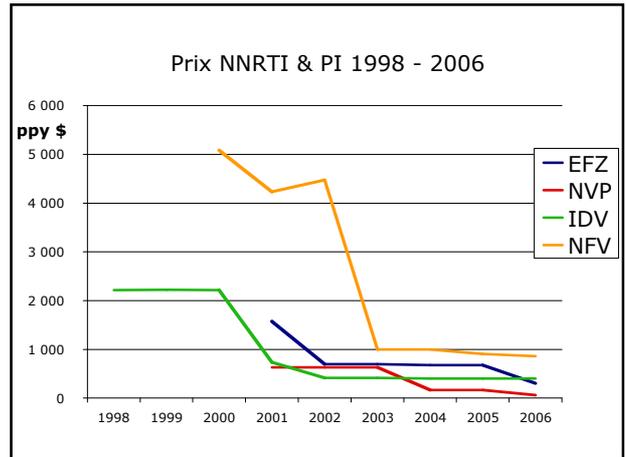
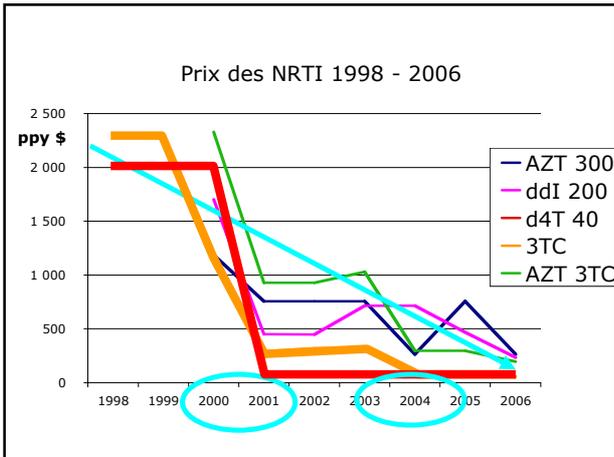
ARVs Available in Senegal (1)

- NRTI:
 - Didanosine (tab. 100 mg, 200 mg): 1998, 2000
 - *Emtricitabine (cap. 200 mg): 2004, clinical trial*
 - Lamivudine (syrup, tab. 150 mg): 1999, 1998
 - Stavudine (cap. 30 mg, 40 mg): 1998
 - Zidovudine (syrup, cap. 100 mg, tab. 300 mg): 1999, 1998, 2000
 - Zido.+Lami. (tab. 300 mg+150 mg): 2000
- NtRTI :
 - Tenofovir (tab. 300 mg): 2006

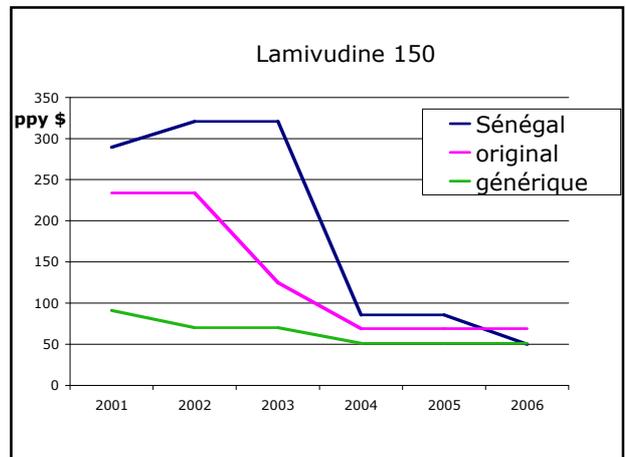
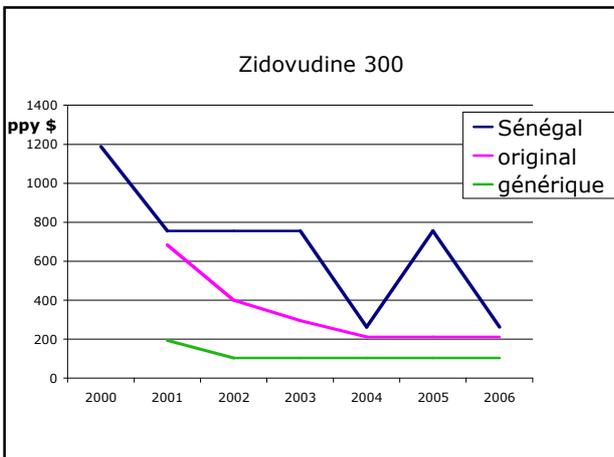
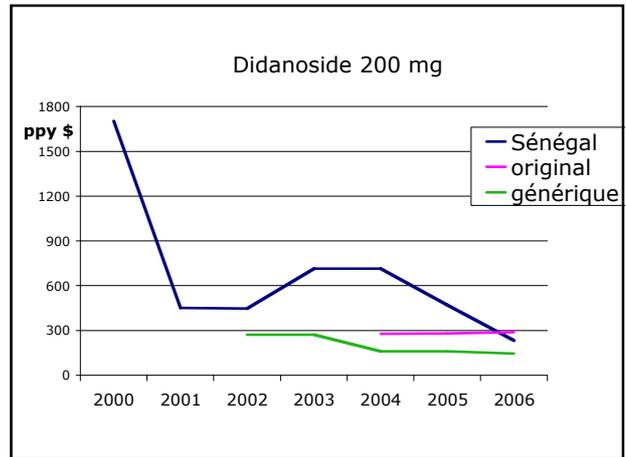
ARVs Available in Senegal (2)

- NNRTI:
 - Efavirenz (cap. 200 mg, then tab. 600 mg): 2000, 2004
 - Nevirapine (syrup, tab. 200 mg): 2001
- PI:
 - Indinavir (cap. 400 mg): 1998
 - Nelfinavir (tab. 250 mg): 2000
 - Lopinavir/Ritonavir (cap. 133 mg+33 mg): 2005

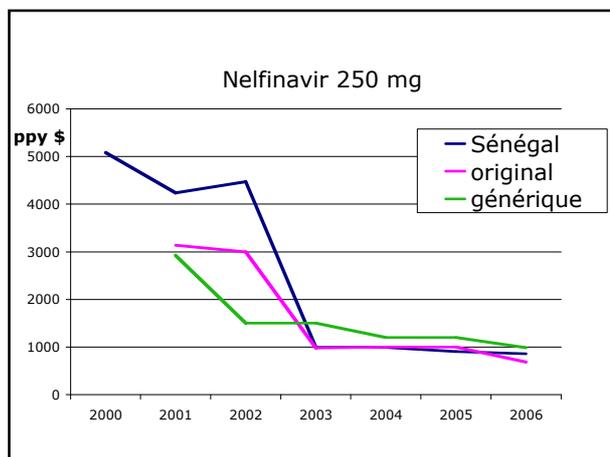
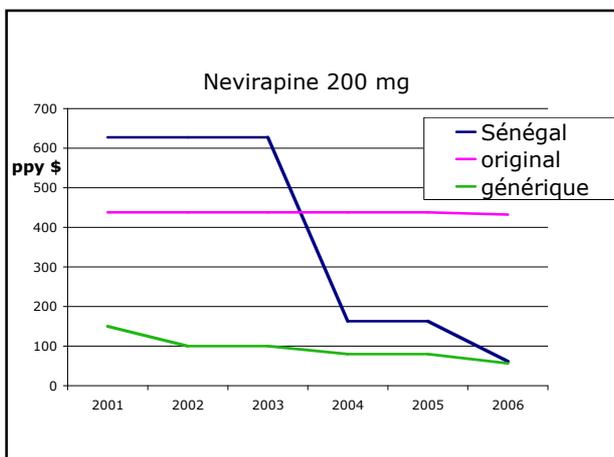
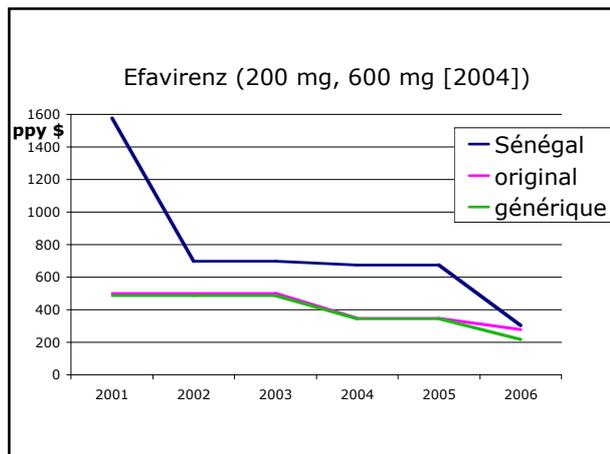
Price variation for different therapeutic families



Price variation for Nucleoside Reverse Transcriptase Inhibitors



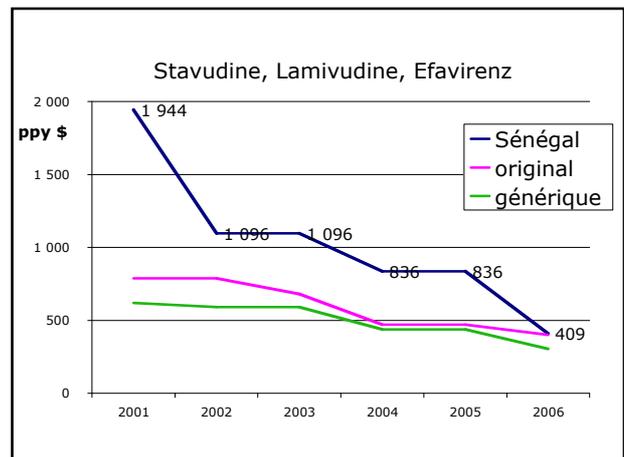
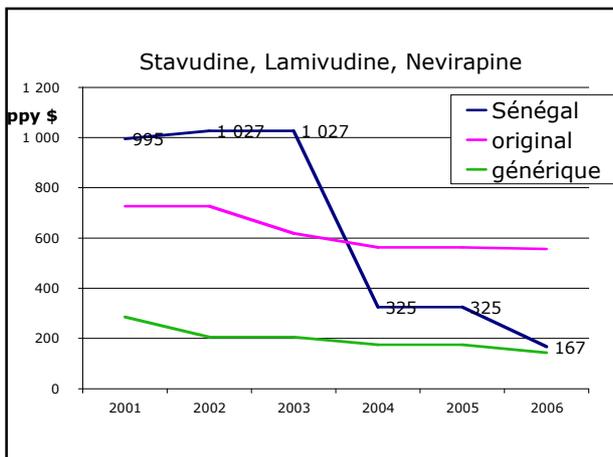
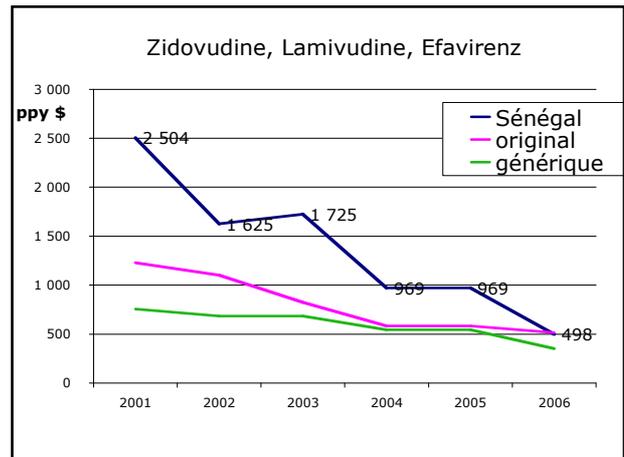
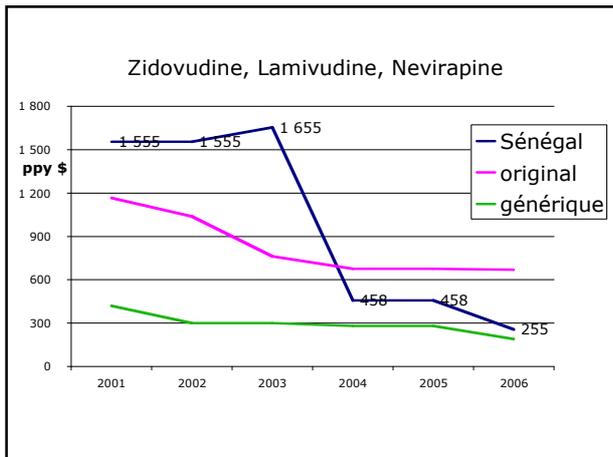
Price Variation of Non-Nucleoside Reverse Transcriptase Inhibitors and Protease Inhibitors



Price Variation for Therapeutic Regimens

First-Line Costs, Senegal, 2006

Therapeutic Regimen	Cost (ppy \$)
AZT, 3TC, NVP	255
AZT, 3TC, EFZ	498
d4T, 3TC, NVP	167
d4T, 3TC, EFZ	409



Second-Line Costs

Therapeutic Regimen	Cost - Generic 2006 (ppy \$)	Cost - Senegal 2006 (ppy \$)
TDF, ddl, L/r	853	1885

- Tenofovir (TDF): \$258 /yr [Gilead access price: \$207/yr]
- Lopinavir+rito (L/r): \$1394 /yr [Abbot access price: \$500/yr]
- **Second line ≈ 6 times more expensive than first line.**

Conclusion (1)

1/ Price evolution:

- Has followed world-wide evolution of decreases: large drop in 2000–2001, then slower decrease since:
- Decreases are linked to generic supply,
- Current prices are close to the lowest prices existing on the generic market
- Price of second-line therapies: ≈ \$1800 /yr, **6 times more expensive / first line**

Conclusion (2)

2/ Constraints influencing ARV drug supply:

Changing therapeutic regimens
Product availability
Best prices

-> Drug supply cannot be solely based on pricing

