



Malaysia has a sound regulatory system in place (registration system for pharmaceuticals, traditional medicines, health supplements and cosmetics), and the National Pharmaceutical Control Bureau being the Secretariat to the Drug Control Authority ensures that medicines are of quality, safety, and efficacy. However, the issue of price although not one of the criteria of product registration, is gaining attention not only in Malaysia but also in other parts of the world due to its contribution to healthcare cost.

In Malaysia currently, there is no control on the price of medicines thus allowing prices to be determined by market forces. However, in the public sector, prices of medicines used by the Ministry of Health (MOH) are indirectly controlled through tender and price negotiations.

The MOH has embarked on a systematic monitoring of prices of medicines through its Pharmaceutical Services Division (PSD). The Medicine Price Monitoring System (MedPrice) is developed with a view to:

1. Collect data on the prices of medicines in Malaysia and analyse
 - a. the trends in price changes and
 - b. the differences in prices between the public and private sectors
2. Provide information for effective price negotiations in procurement
3. Determine and collect data on the pricing structure of medicines and explore opportunities for improvement and possibly, standardization
4. Promote transparency in the prices of medicine and healthy price competition in the pharmaceutical industry
5. Provide information for decision on the control of prices of medicines should the need arises

The PSD has started the MedPrice early in 2006 with an initial baseline survey that:

- a. Compares the gross retail prices of medicine between premises in the private sector in different geographical areas for the country
- b. Compares the procurement prices of medicines between premises in the public and private sectors in different geographical areas of the country
- c. Monitors the procurement and retail prices and the trend of price changes

The results generated from this baseline survey are tabulated in the accompanying tables. For more information, please refer to our website www.pharmacy.gov.my

The PSD plans to collect price data at least twice a year and with ongoing collection, a growing database will be created that can provide detailed price information on medicines for various uses such as decision making by policy makers, price checking by consumers and patients, and price negotiation.

Findings:

A total of 238 brands for 30 commonly used medicines were collected from 33 public premises and 35 private premises (**Refer to Table A**). The main findings of the baseline survey were:



(...data collection activity...)

Differences in prices of medicines between public and private sector:

1. Price variation between location and time interval

i. Medicine prices were slightly higher in East than West Malaysia. ([Refer to Table B](#))

a. Public sector

Prices of medicines were 1% higher in East than West Malaysia.

b. Private Sector

Prices of medicines were 8% higher in East than West Malaysia

2. Wholesale price variation between public and private sector

i. Selected commonly use medicines:

Prices in the public sector were generally 60% cheaper than in private sector.

(Median Price Ratio {MPR}: min 0.09; med 0.41; max 0.96)

([Refer to Table C](#))

a. Original brands were 47% cheaper in the public than private sector.

(MPR: min 0.18; med 0.53; max 0.96)

([Refer to Table D](#))

b. Generics were 60% cheaper in the public than private sector.

(MPR: min 0.09; med 0.40; max 0.86)

([Refer to Table E](#))

ii. Medicines bought from concession company (APPL) and by tender:

a. Prices in the public sector were generally 60% cheaper than private sector.

(MPR: min 0.09; med 0.40; max 0.96)

([Refer to Table F](#))

- Prices for original brands in the public sector were 82% cheaper than private sector.

(MPR: min 0.18; med 0.18; max 0.96)

([Refer to Table G](#))

- Prices for generics in the public sector were almost 60% cheaper than private sector.

(MPR: min 0.09; med 0.41, max 0.86)

([Refer to Table H](#))

iii. Medicine bought by local purchases:

a. Prices in the public sector were generally 48% cheaper than private sector.

(MPR: min 0.12; med 0.52; max 0.56)

([Refer to Table I](#))

- Prices for original brands in the public sector were almost half (46% cheaper than) of private sector.

(MPR: min 0.53; med 0.54; max 0.56)

([Refer to Table J](#))

- Prices for generic brands in the public sector were 80% cheaper than private sector.

(MPR: min 0.12; med 0.20; max 0.52)

([Refer to Table K](#))

3. Price Variation Between Original and Generic Brands (Brand Premium):

i. In the public sector, original brands were 33% more expensive than generics.

(MPR: min 0.45; med 1.33; max 1.50)

([Refer to Table L](#))

ii. In the private sector, original brands were about twice (114%) more expensive than generics.

(MPR: min 0.89; med 2.14; max 8.13)

([Refer to Table M](#))

4. Median Price Ratio (MPR) in relation to International Reference Pricing (IRP)

i. Selected commonly used medicines:

a. Wholesale prices in the public sector were 1.3 times higher than IRP.

(MPR: min 0.14; med 1.33; max 4.00)

([Refer to Table N](#))

b. Gross retail prices in the private sector were 4 times higher than IRP.

(MPR: min 0.41; med 4.29; max 17.50)

([Refer to Table O](#))

Conclusion

Gross retail prices of selected commonly used medicines in the private sector were found to be generally high at the median of 4 times higher than IRP¹¹ while in the public sector, medicine prices were reasonable at the median of 1.3 times higher than IRP.

There was minimal price variation between East and West Malaysia (i.e. median of 1% higher for public sector and 8% higher in private sector).

The survey confirmed the expectations of high availability (above 82%) of medicines in both public and private sector in Malaysia and the procurement of medicines were much cheaper (median of 59%) in the public sector as compared to private sector.

Acknowledgement

We would like to thank the State Health Deputy Directors (Pharmacy) and Hospital Chief Pharmacists, data collectors, advisory group members, and all premises that are involved in the phase 1 data collection in March 2006, for their contribution and cooperation in making the survey a success.

Editorial Board

Patron : Tan Sri Datuk Dr. Hj. Mohd. Ismail Merican
Advisor : Dato' Che Mohd Zin bin Che Awang
Chief Editor : Mr. Lai Lim Swee
Editors : Pn. Hasnah Ismail
Pn. Salmah Bahri
Dr. Nour Hanah Othman
Pn. Saimah Mat Noor
Cik Norhaliza Abdul Halim
Cik Jami Ali
Pn. Wan Noraimi Wan Ibrahim
Pn. Fatkhiah Khalil
Pn. Azizah Ab. Ghani
Pn. Siti Aisah Bahari

We welcome your feedback. Please send your suggestions and comments to eesal58@yahoo.com or saimah@moh.gov.my

Disclaimer: The Pharmaceutical Services Division (PSD) shall not be liable for any loss or damage caused by the use of any information obtained from this bulletin. The information shown are correct at the point of collection and companies referred to in this bulletin shall not be construed as agents nor as companies recommended by the PSD of Malaysia.

GLOSSARY OF TERMS

- 1 **Tender** : Medicines procured by the MOH centrally in bulk quantity through tender process
- 2 **APPL** : Medicines procured by the MOH from a concession company.
- 3 **LP** : Medicines procured by the MOH via local purchase.
- 4 **Original (O)** : Known also as Innovator brand. Generally, the product that was first authorized world wide for marketing (normally as patented product) on the basis of the documentation of its efficacy, safety, and quality according to requirements at the time of authorization. The original product always has a brand name; this may however vary between countries.
- 5 **Generic (G)** : A pharmaceutical product usually intended to be interchangeable with the innovator brand product, manufactured without a licence from the innovator manufacturer, and marketed after the expiry of patent or other exclusivity rights.
- 6 **Co-payment** : Payment made by patient towards subsidised cost of medicines.
- 7 **Out-of-pocket** : Cost of medicines that are borne solely by patient.
- 8 **Brand Premium** : The difference in price between the original brand and a generic equivalent.
- 9 **Median Unit Price (MUP)** : The MUP is the value that divides the distribution of the unit price data in half. If the observations of the unit price data are arranged in increasing order, the MUP is the middle observation. The median is a useful descriptive measure if there is an asymmetrical distribution of data or there are one or two extremely high or low values, which would make the mean unrepresentative of the majority of the data.
- 10 **Median Price (MP)** : The MP is the value that divides the distribution of the price data in half. If the observations of the price data are arranged in increasing order, the MP is the middle observation. The median is a useful descriptive measure if there is an asymmetrical distribution of data or there are one or two extremely high or low values, which would make the mean unrepresentative of the majority of the data.
- 11 **International Reference Pricing (IRP)** : International not-for profit supplier/tender prices and not retail prices. They are prices for products procured in generically equivalent form and do not include insurance and delivery charges.

Table A

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
1	ACICLOVIR TAB 200 MG		
a)	Apo-Acyclovir (Apotex)	2.50	2.50
b)	Avorax (Xepa-Soul Pattinson)	2.40	3.11
c)	Hepirax (UPHA)	2.35	2.70
d)	Lovir (Ranbaxy)	1.45	2.37
e)	Virax (SM Pharma)	1.20	1.20
f)	Virless (YSP)	2.00	2.80
g)	Zevin (Biolab)	2.91	3.60
h)	Zoral (Drug House Austr.)	1.58	1.86
i)	Zovirax (GSK) [O]	4.60	5.40
2	AMITRIPTYLINE TAB 25 MG		
a)	Apo-Amitriptyline (Apotex)	0.30	0.30
3	AMLODIPINE TABLET 10MG		
a)	Norvasc (Pfizer) [O]	4.00	4.90
4	AMOXICILLIN CAPS/TAB 250 MG		
a)	Amoxicap (Hovid)	0.30	0.70
b)	Amoxicillin (Y.S.P. Industries)	0.40	0.50
c)	Amoxilin 250 (Malayan Pharm)	0.30	0.30
d)	Amoxycillin (Dynapharm)	0.40	0.50
e)	Beamoxyl (UPHA)	0.30	0.40
f)	Betamox (Duopharma)	0.33	0.33
g)	Moxilen (Komedic)	0.40	0.50
h)	Moxipen (Xepa-Soul Pattinson)	0.30	0.45
i)	Ospamox (Med &Reg Affairs)	0.50	1.00
j)	Pharmaniaga Amoxycillin (Pharmaniaga)	0.30	0.33
k)	Ranoxyl (Ranbaxy)	0.60	0.60
l)	Synamox (Idaman)	0.24	0.33
m)	Zamoxil Therapeutic Sdn Bhd	0.30	0.30
5	ATENOLOL TAB 100 MG		
a)	Apo-Atenolol (Pharmaforte/ Apotex)	0.54	0.83
b)	Atehexal (Imeks)	0.50	0.50
c)	Atenolol (F.C. Winwa)	0.25	0.25
d)	Atenolol (Milrin)	0.64	0.64
e)	Normaten (Xepa-Soul Pattinson)	0.50	0.71
f)	Noten (Alphapharm)	0.40	0.40
g)	Oraday (Biolab)	0.63	0.75
h)	Pharmaniaga Atenolol (Pharmaniaga)	0.46	0.50
i)	Tenormin (AstraZeneca) [O]	1.86	2.76
j)	Ternolol (Hovid)	0.48	0.60
k)	Vascoten (Komedic/ Medochemie)	0.60	1.00
6	BECLOMETASONE INHALER 100MCG/ DOSE		
a)	Qvar 100 3M Malaysia	0.32	0.35
7	BUDESONIDE 200MCG/DOSE INHALER		
a)	Inflammide (Boehringer Ingelheim)	0.71	0.74
b)	Pulmicort (Astrazeneca) [O]	0.63	1.05

Table A (Cont.)

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
8	CAPTOPRIL TAB 25 MG		
a)	Apo-Capto (Apotex)	1.00	1.20
b)	Apuzin (Y.S.P. Industries)	0.80	1.30
c)	Capoten (Bristol Myers Squibb) [O]	1.23	1.72
d)	Captopril (Stada Stadapharm)	0.82	0.82
9	CARBAMAZEPINE TAB 200 MG		
a)	Apo-Carbamazepine (Pharmaforte)	0.50	0.60
b)	Carbamazepine (UPHA)	0.40	0.40
c)	Carzepin (Hovid)	0.30	0.50
d)	Tegretol (Novartis) [O]	1.30	1.40
10	CEFUROXIME 250MG TABLET		
a)	Efurox (CCM/Upha)	2.50	2.50
b)	Zinnat (GSK) [O]	5.35	7.50
11	CIPROFLOXACIN TAB 500 MG		
a)	C-Flox (Jetpharm)	1.50	1.80
b)	Cifran (Ranbaxy)	1.50	2.00
c)	Cipricin (Steriline)	1.55	1.60
d)	Ciprobay (Bayer) [O]	12.20	14.50
e)	Ciprodac (Pahang)	1.90	2.00
f)	Cycin (Pharmaforte)	1.50	2.00
g)	Enoxin (CCM Pharm)	1.50	2.60
12	DICLOFENAC 50 MG		
a)	Almiral (Lomedic)	0.30	0.50
b)	Cataflam (Novartis)	1.50	2.00
c)	Clofenac (Hovid)	0.30	0.40
d)	Diclo 50 (Camden)	0.19	0.30
e)	Diclogesic (Wellmex)	0.30	0.30
f)	Difnal (Ranbaxy)	0.40	0.50
g)	Dyfenac (Dynapharm)	0.28	0.30
h)	Fenadium F (Sunward Pharm.)	0.30	0.40
i)	Inac (Zyfos)	0.21	0.30
j)	Inflanac (Medispec/Biolab)	0.29	0.40
k)	Olfen (Mepharm)	0.45	0.60
l)	Remafen (Xepa_soul Pattinson)	0.32	0.50
m)	Remethan 50 (Remidica Cyprus)	0.33	0.40
n)	Renofen (Xepa_soul Pattinson)	0.35	0.35
o)	Rhemofenax (Duopharma)	0.35	0.50
p)	Voltaren (Novartis) [O]	1.10	2.50
q)	Voren (Y.S.P. Industries)	0.30	0.50
r)	Youfenac (Youshindo Co Ltd)	0.20	0.20
s)	Zolteral (Upha)	0.65	1.00
13	ERYTHROMYCIN SUSP. 400 MG/5ML		
a)	Eryped Gran. (Abbott) [O]	0.16	0.23
b)	Eryson Gran. (Upha)	0.10	0.17
c)	Pharmaniaga Erythromycin (Pharmaniaga)	0.07	0.08
d)	Retorin (SM Pharm)	0.10	0.10
e)	Sathrocin ES (Safire Pharm.)	0.09	0.10

Table A (Cont.)

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
14	GLIBENCLAMIDE 5MG TABLET		
a)	Axcel Glibenclamide (Kotra)	0.30	0.30
b)	Benil (Sunward Pharm.)	0.10	0.20
c)	Claben (Pharmaniaga)	0.10	0.20
d)	Clamide (Hovid Pharm.)	0.12	0.30
e)	Daonil (Aventis) [O]	0.55	0.75
f)	Debtan (Y.S.P. Industries)	0.12	0.20
g)	Dibelet (Atlantic Lab.)	0.20	0.20
h)	Dyanil (Dynapharm)	0.10	0.20
i)	Euglucon (Roche)	0.50	0.60
j)	Glibemid (Malayan Pharm.)	0.14	0.18
k)	Gliben (Medispec/Biolab)	0.11	0.30
l)	Glibenclamide (Camden)	0.12	0.15
m)	Glibenclamide (Asia Pharm)	0.10	0.10
n)	Glibesyn (Komedic)	0.15	0.20
o)	Glimide (Upha)	0.15	0.20
p)	Oralben (Scanlab)	0.10	0.10
q)	Pharmaniaga Glibenclamide (Pharmaniaga)	0.13	0.20
15	GLICLAZIDE 80MG TABLET		
a)	Diamicon (Servier) [O]	0.92	1.33
b)	Diamitex (Duopharma)	0.93	1.40
c)	Dianid (Medispec)	0.65	0.80
d)	Diatica (Cortex Pharm.)	0.70	0.70
e)	Gliclazide BP (Milrin Pharm.)	0.51	0.51
f)	Glidiet (Kyowa Hakko)	0.50	0.50
g)	Glimicon (Hovid)	0.50	0.60
h)	Glucodex (Pharmaforte)	0.50	0.50
i)	Glucozide (Pahang Pharm.)	0.50	0.50
j)	Glyade 80 (Merck SDN/ Alphapharm)	0.50	0.75
k)	Glygard (Healol Pharm/Cipla)	0.45	0.45
l)	Medoclazide (Komedic)	0.40	0.40
m)	Melicron (Xepa_soul Pattinson)	0.60	0.60
n)	Mexan (Imeks Pharma)	0.38	0.38
o)	Pharmaniaga Gliclazide (Pharmaniaga)	0.50	0.50
p)	Sam Chun Dang Glyclazide (The Zyfas)	0.50	0.50
16	HYOSCINE BUTYLBROMIDE TAB 10MG		
a)	Buscopan (Boehringer Ingelheim) [O]	0.30	0.40
b)	Buspan (Zontron)	0.20	0.20
c)	Colospan (Hovid)	0.20	0.30
d)	Copan (Duopharma)	0.20	0.20
e)	Dhacopan (Drug Houses Aust.)	0.20	0.20
f)	Fucon (Y.S.P. Industries)	0.25	0.50
g)	Hyomide (CCM Pharm.)	0.20	0.25

Table A (Cont.)

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
i)	Hyoscine (BBIdaman)	0.20	0.20
j)	Hyoscine (Sunward Pharm.)	0.25	0.25
k)	Hyoscine (Dynapharm)	0.30	0.50
l)	Hyoscine (Pharmmalaysia)	0.20	0.30
m)	Pharmaniaga Hyoscine (Pharmaniaga)	0.15	0.20
n)	Spasmoliv (Xepa_soul Pattinson)	0.20	0.30
o)	Vascopan (Pharmaniaga)	0.20	0.20
17	LACTULOSE 0.67 MG/ML		
a)	Dhactulose (Drug House Austr.)	0.06	0.06
b)	Duphalac (Solvey Pharma) [O]	0.09	0.13
c)	Lactul (YSP Industries)	0.08	0.11
d)	Lactulose (StadaStadapharm)	0.48	0.48
e)	Lactumed (Komedic)	0.09	0.09
18	LORATIDINE 10MG TABLET		
a)	Anpro-Loratadine (Malaysian Pharm Ind.)	0.60	1.00
b)	Apo-Loratadine (Apotex)	0.67	0.67
c)	Carin (CCM Pharm.)	0.60	0.90
d)	Carinox (CCM Pharm.)	0.88	1.00
e)	Clarityne (Schering-Plough) [O]	1.20	1.50
f)	Dyna Loratadine (Dynapharm)	0.50	0.50
g)	Ezedel (Xepa_soul Pattinson)	0.60	0.80
h)	Loradine (Y.S.P. Industries)	0.60	0.80
i)	Loratidine (Pharmaniaga)	0.45	0.50
j)	Loratyn-10 (Hovid)	0.60	0.70
k)	Rhinitin (Sterilin)	0.50	0.50
l)	Roletra (Ranbaxy)	0.50	0.63
m)	Rotifar (Duopharma)	0.60	0.70
19	LOSARTAN TAB 50MG		
a)	Cozaar (MSD) [O]	3.30	5.00
20	LOVASTATIN TAB 20MG		
a)	Apo-Lovastatin (Apotex)	1.00	1.50
b)	Ellanco Tablet (Duopharma)	0.90	1.12
c)	Lestric (Ranbaxy)	1.00	1.62
d)	Loactin Tablet (SM Pharm.)	1.00	1.00
e)	Lovadac-20 (The Zyfas)	0.80	0.80
f)	Lovastin (Y.S.P. Industries)	1.00	1.40
g)	Mevacor (MSD) [O]	4.76	4.76
21	MEFENAMIC ACID TAB/CAP 250MG		
a)	Axcel Mefenamic Acid (Kotra)	0.20	0.20
b)	Beafemic Cap (Upha)	0.20	0.25
c)	Beafemic Tab (Upha)	0.20	0.20
d)	Dyfenamic Cap (Dynapharm)	0.20	0.20
e)	Dyfenamic Tab (Dynapharm)	0.20	0.25

Table A (Cont.)

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
f)	Fenagesic Cap (Sunward Pharm.)	0.25	0.25
g)	Fenagesic Tab (Sunward Pharm.)	0.20	0.25
h)	Hostan Cap (Hovid)	0.15	0.20
i)	Hostan Tab (Hovid Pharm.)	0.20	0.20
j)	Medicap (blue/blue) (Xepa_soul Pattinson)	0.20	0.25
k)	Mefacap Cap (Malayan Pharm.)	0.20	0.20
l)	Mefemic Cap (Camden)	0.20	0.20
m)	Mefen Capsule (Pharmaniaga Lifesc.)	0.20	0.20
n)	Mefenix Cap (Ranbaxy)	0.20	0.30
o)	Pharmaniaga Mefenamic Cap (Pharmaniaga)	0.15	0.25
p)	Pharmaniaga Mefenamic Tab (Pharmaniaga)	0.27	0.33
q)	Ponstan Cap (Pfizer) [O]	0.30	0.30
r)	Pontacid Cap (Duopharma)	0.20	0.25
s)	Pontacid Tab (Duopharma)	0.40	0.40
t)	Pontalon Cap (Y.S.P. Industries)	0.25	0.30
u)	Pontalon Tab (Y.S.P. Industries)	0.30	0.40
v)	Triopon Cap (Zontron)	0.25	0.25
w)	Zcet Cap (Pharmmalaysia)	0.25	0.25
22	METFORMIN TAB 500 MG		
a)	Diabemet (Y.S.P. Industries)	0.10	0.10
b)	Diabetmin (Hovid)	0.10	0.20
c)	Glucophage (Merck SDN) [O]	0.34	1.15
d)	Glumet f/c (Pharmaniaga)	0.15	0.15
e)	Metabet (Camden)	0.10	0.10
f)	Metformin (Upha)	0.15	0.20
g)	Metformin (Dynapharm)	0.20	0.20
h)	Metformin (Sunward Pharm.)	0.10	0.10
i)	Metformin tablet 500 (Ahli kumpulan Syarikat CCM)	0.15	0.15
j)	Oralmet (Scanlab)	0.20	0.20
k)	Pharmaniaga Metformin (Pharmaniaga)	0.18	0.35
23	METOPROLOL TAB 100MG		
a)	Apo-Metoprolol (Apotex)	0.40	0.60
b)	Beatrolol (Upha)	0.45	1.00
c)	Betaloc (Astrazeneca) [O]	1.30	1.80
d)	Denex (Komedic)	0.40	0.40
e)	Pharmaniaga Metoprolol (Pharmaniaga)	0.50	0.50
24	NIFEDIPINE TAB 10MG		
a)	Adalat Capsule (Zuellig Pharma) [O]	0.45	0.45
b)	Comprime (Adalat Bayer)	1.60	1.60
c)	Fenamom (Komedics/Medochemie)	0.30	0.50
d)	Nifedipine (Medidata)	0.30	0.50
e)	Nifehexal (Imeks Pharma)	0.50	0.50
f)	Nifelat (JDH Pharm)	0.25	0.30
25	OMEPRAZOLE TAB 20MG		
a)	Gasec-20 (Medpharm)	3.71	3.86
b)	Losec (MUPSAstrazeneca) [O]	7.14	10.00

[O] = Original Brand

Table A (Cont.)

Private Premises : Median and Maximum Price (RM)

NO.	GENERIC NAME & STRENGTH OF MEDICINE BRAND NAME (COMPANY NAME)	MEDIAN PRICE (RM)	MAXIMUM PRICE (RM)
c)	Omelon (Y.S.P. Industries)	2.07	2.86
d)	Omesec (CCM Pharma)	1.71	3.00
e)	Ometac (Pahang Pharm.)	1.64	2.86
f)	Omezole (Hovid)	2.00	3.00
g)	Omilock (SM Pharm.)	2.00	2.00
h)	Romesec (Ranbaxy)	1.04	2.75
i)	Zenpro (Xepa_soul Pattinson)	2.14	2.92
j)	Zimor (The Zyfas)	2.50	3.21
26	PERINDOPRIL TAB 4MG		
a)	Coversyl (Servier) [O]	2.00	2.77
b)	Perinace (CCM Pharma)	1.66	1.66
c)	Provinace (Xepa_soul Pattinson)	1.17	1.17
27	PHENYTOIN 100MG		
a)	Dilantin (Pfizer) [O]	0.63	1.20
b)	Ditoin (Atlantic Lab.)	0.23	0.30
c)	Phenytoin (Upha)	0.32	0.50
28	RANITIDINE TAB 150MG		
a)	Apo-Ranitidine (Apotex)	1.00	1.50
b)	Gastril (Duopharma)	0.70	0.90
c)	Histac (Idaman Pharma)	0.75	1.50
d)	Histac (Ranbaxy)	0.65	0.70
e)	Hyzan (Xepa_soul Pattinson)	1.11	1.40
f)	Pharmaniaga Ranitidine (Pharmaniaga)	0.80	0.80
g)	Ranitic (Imex Sdn Bhd) (Hexal)	0.95	1.20
h)	Ranitidine (Biolab Company Ltd)	1.15	1.50
i)	Rantac (Unique Pharm Labs)	0.77	1.00
j)	Vesyca (Upha)	1.29	1.50
k)	X'tac (Upha)	1.00	1.00
l)	Zantac (GSK) [O]	2.00	3.30
29	SALBUTAMOL INHALER 100 MCG/ DOSE		
a)	Asthalin (Cipla)	0.06	0.08
b)	Asthalin hfa (Cipla)	0.07	0.20
c)	Butahale (DR Reddy's Lab) (Pahang Pharm.)	0.06	0.08
d)	Ventolin GSK [O]	0.10	0.13
30	SIMVASTATIN TAB 20MG		
a)	Covastin (Xepa_soul Pattinson)	1.74	1.80
b)	Lipaco (Duopharma)	0.85	1.40
c)	Pharmaniaga Simvastatin (Pharmaniaga)	1.00	2.00
d)	Simcard-20 (Cipla Ltd)	1.20	1.40
e)	Simvacor Film Coated (Y.S.P. Industries)	1.80	2.00
f)	Simvor (Ranbaxy)	1.20	2.50
g)	Stavid (Hovid Bhd)	1.20	1.20
h)	Zimmex (Silom Medical)	1.00	1.20
i)	Zocor (MSD) [O]	3.53	4.74

Table B
Price Variation between East and West Malaysia
Median Price Ratio (MPR) between East and West Malaysia

No.	Name of Medicine	Public	Private
		Ratio of MUP (East/West Malaysia)	Ratio of MUP (East/West Malaysia)
1	Aciclovir tab 200 mg	1.01	1.50
2	Amitriptyline tab 25 mg	0.83	1.00
3	Amlodipine tab 10mg	1.00	1.63
4	Amoxicillin caps/tab 250 mg	0.95	1.67
5	Atenolol tab 100 mg	1.01	1.16
6	Beclometasone inhaler 100mcg/ dose	1.01	1.00
7	Budesonide inhaler 200mcg/dose (100 doses)	1.14	1.28
8	Captopril tab 25 mg	1.01	1.00
9	Carbamazepine tab 200 mg	1.01	1.00
10	Cefuroxime tab 250mg	1.01	1.00
11	Ciprofloxacin tab 500 mg	0.82	1.07
12	Diclofenac tab 50 mg	0.96	1.00
13	Erythromycin susp. 400 mg/ 5ml	1.35	1.00
14	Glibenclamide tab 5mg	1.00	1.00
15	Gliclazide tab 80mg	1.01	1.13
16	Hyoscine butylbromide tab 10mg	1.01	1.18
17	Lactulose liquid 0.67 g/ml	1.03	1.27
18	Loratidine tab 10mg	1.01	0.99
19	Losartan tab 50mg	1.00	1.00
20	Lovastatin tab 20mg	1.00	1.20
21	Mefenamic acid tab/cap 250mg	1.01	1.50
22	Metformin tab 500 mg	1.01	1.00
23	Metoprolol tab 100mg	1.01	1.27
24	Nifedipine tab 10mg	1.01	5.85
25	Omeprazole tab 20mg	1.01	1.09
26	Perindopril tab 4mg	1.00	2.92
27	Phenytoin cap 100mg	1.01	1.00
28	Ranitidine tab 150mg	1.01	1.17
29	Salbutamol inhaler 100 mcg/ dose	1.01	1.02
30	Simvastatin tab 20mg	1.01	0.93
Median		1.01	1.08
Min		0.82	0.93
Max		1.35	5.85

Table C

Price Variation between Public (Wholesale) and Private (Wholesale) Sector

Overall : Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale) Sector

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in Wholesale MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	ACICLOVIR TAB 200 MG Virest (Hovid)	APPL	0.59	2.10	1.51	0.28 :1	0.28 :1
2	AMOXICILLIN CAPS/TAB 250 MG Amoxicillin (Dynapharm) Pharmaniaga (Amoxicillin)	APPL	0.08 0.08	0.11 0.11	0.03 0.03	0.24 :1 0.24 :1	0.73 :1
3	ATENOLOL TAB 100 MG Atenolol (Milrin) Oraday (Biolab) Pharmaniaga Atenolol (Pharmaniaga)	APPL	0.12 0.12 0.12	0.50 0.50 0.50	0.38 0.38 0.38	0.24 :1 0.24 :1 0.24 :1	0.24 :1
4	BECLOMETASONE INHALER 100MCG/ DOSE Qvar 100 (3M Malaysia)	APPL	0.20	0.30	0.10	0.67 :1	0.67 :1
5	GLIBENCLAMIDE TAB 5MG Claben (Pharmaniaga) Pharmaniaga Glibenclamide (Pharmaniaga)	APPL	0.01 0.01	0.11 0.11	0.10 0.10	0.09 :1 0.09 :1	0.09 :1
6	GLICLAZIDE 80MG TABLET Mexan (Imeks Pharma) Pharmaniaga Gliclazide (Pharmaniaga)	APPL	0.14 0.14	0.35 0.35	0.21 0.21	0.40 :1 0.40 :1	0.40 :1
7	HYOSCINE BUTYLBROMIDE TAB 10MG Fucon (Y.S.P. Industries) Hyoscine (Dynapharm) Pharmaniaga Hyoscine (Pharmaniaga) Vasopan (Pharmaniaga)	APPL	0.06 0.06 0.06 0.06	0.07 0.07 0.07 0.07	0.01 0.01 0.01 0.01	0.86 :1 0.86 :1 0.86 :1 0.86 :1	0.86 :1
8	LOVASTATIN TAB 20MG Lestric (Ranbaxy)	TENDER	0.04	0.40	0.36	0.10 :1	0.10 :1
9	MEFENAMIC ACID TAB/CAP 250MG Pharmaniaga Mefenamic Cap (Pharmaniaga) Pharmaniaga Mefenamic Tab (Pharmaniaga)	APPL	0.03 0.03	0.04 0.04	0.01 0.01	0.75 :1 0.75 :1	0.75 :1
10	METFORMIN TAB 500 MG Diabemet (Y.S.P. Industries) Metformin (Sunward Pharm.) Pharmaniaga (Metformin)	APPL	0.03 0.03 0.03	0.06 0.06 0.06	0.03 0.03 0.03	0.50 :1 0.50 :1 0.50 :1	0.50 :1
11	OMEPRAZOLE TAB 20MG Omesecc (CCM Pharma) Romesec (Ranbaxy)	APPL	0.36 0.36	1.50 1.50	1.14 1.14	0.24 :1 0.24 :1	0.24 :1
12	RANITIDINE TAB 150MG Histac (Idaman Pharma) Histac (Ranbaxy) Pharmaniaga Ranitidine (Pharmaniaga) Ranitidine (Biolab Company Ltd.) X'tac (Upha)	APPL	0.29 0.29 0.29 0.29 0.29	0.70 0.70 0.70 0.70 0.70	0.41 0.41 0.41 0.41 0.41	0.41 :1 0.41 :1 0.41 :1 0.41 :1 0.41 :1	0.41 :1
13	CAPTOPRIL TAB 25 MG Capoten (Bristol Myers Squibb)	APPL	0.25	1.39	1.14	0.18 :1	0.18 :1
14	CEFUROXIME 250MG TABLET Zinnat (GSK)	APPL	3.75	3.90	0.15	0.96 :1	0.96 :1
15	GLICLAZIDE 80MG TABLET Diamicron (Servier)	APPL	0.19	1.08	0.89	0.18 :1	0.18 :1
16	BUDESONIDE 200MCG/DOSE INHALER Inflammid (Boehringer Ingelheim)	LP	0.24	0.46	0.22	0.52 :1	0.52 :1
17	CIPROFLOXACIN TAB 500 MG Cifran (Ranbaxy)	LP	0.44	3.56	3.12	0.12 :1	0.12 :1
18	DICLOFENAC TAB 50 MG Difnal (Ranbaxy) Dyfenac (Dynapharm) Fenadium F (Sunward Pharm.) Voren (Y.S.P. Industries) Zolteral (Upha)	LP	0.02 0.02 0.02 0.03 0.03	0.11 0.10 0.11 0.11 0.11	0.09 0.08 0.09 0.08 0.08	0.18 :1 0.20 :1 0.18 :1 0.27 :1 0.27 :1	0.20 :1
19	AMLODIPINE TAB 10MG Norvasc (Pfizer)	LP	1.96	3.50	1.54	0.56 :1	0.56 :1
20	BUDESONIDE INHALER 200MCG/DOSE Pulmicort (Astra Zeneca)	LP	0.28	0.53	0.25	0.53 :1	0.53 :1
Median							0.41 :1
Min							0.09 :1
Max							0.96 :1

Table D

Price Variation between Public (Wholesale) and Private (Wholesale) Sector

Original Brand : Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale) Sector

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	CAPTOPRIL TAB 25 MG Capoten (Bristol Myers Squibb)	APPL	0.25	1.39	1.14	0.18 :1	0.18 :1
2	CEFUROXIME 250MG TABLET Zinnat (GSK)	APPL	3.75	3.90	0.15	0.96 :1	0.96 :1
3	GLICLAZIDE 80MG TABLET Diamicron (Servier)	APPL	0.19	1.08	0.89	0.18 :1	0.18 :1
4	AMLODIPINE TABLET 10MG Norvasc (Pfizer)	LP	1.96	3.50	1.54	0.56 :1	0.56 :1
5	BUDESONIDE 200MCG/DOSE INHALER Pulmicort (Astra Zeneca)	LP	0.28	0.53	0.25	0.53 :1	0.53 :1
Median							0.53 :1
Min							0.18 :1
Max							0.96 :1

Table E

Price Variation between Public (Wholesale) and Private (Wholesale) Sector

Generic Brand : Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale) Sector

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	ACICLOVIR TAB 200 MG Virest (Hovid)	APPL	0.59	2.10	1.51	0.28 :1	0.28 :1
2	AMOXICILLIN CAPS/TAB 250 MG Amoxycillin (Dynapharm) Pharmaniaga (Amoxycillin)	APPL	0.08	0.11	0.03	0.73 :1	0.73 :1
			0.08	0.11	0.03	0.73 :1	
3	ATENOLOL TAB 100 MG Atenolol (Milrin) Oraday (Biolab) Pharmaniaga Atenolol (Pharmaniaga)	APPL	0.12	0.50	0.38	0.24 :1	0.24 :1
			0.12	0.50	0.38	0.24 :1	
			0.12	0.50	0.38	0.24 :1	
4	BECLOMETASONE INHALER 100MCG/ DOSE Qvar 100 (3M Malaysia)	APPL	0.20	0.30	0.10	0.67 :1	0.67 :1
5	GLIBENCLAMIDE 5MG TABLET Claben (Pharmaniaga) Pharmaniaga Glibenclamide (Pharmaniaga)	APPL	0.01	0.11	0.10	0.09 :1	0.09 :1
			0.01	0.11	0.10	0.09 :1	
6	GLICLAZIDE TAB 80MG Mexan (Imeks Pharma) Pharmaniaga Gliclazide (Pharmaniaga)	APPL	0.14	0.35	0.21	0.40 :1	0.40 :1
			0.14	0.35	0.21	0.40 :1	
7	HYOSCINE BUTYLBROMIDE TAB 10MG Fucon (Y.S.P. Industries) Hyoscine (Dynapharm) Pharmaniaga Hyoscine (Pharmaniaga) Vasopan (Pharmaniaga)	APPL	0.06	0.07	0.01	0.86 :1	0.86 :1
			0.06	0.07	0.01	0.86 :1	
			0.06	0.07	0.01	0.86 :1	
			0.06	0.07	0.01	0.86 :1	
8	LOVASTATIN TAB 20MG Lestric (Ranbaxy)	TENDER	0.04	0.40	0.36	0.10 :1	0.10 :1
9	MEFENAMIC ACID TAB/CAP 250MG Pharmaniaga Mefenamic Cap (Pharmaniaga) Pharmaniaga Mefenamic Tab (Pharmaniaga)	APPL	0.03	0.04	0.01	0.75 :1	0.75 :1
			0.03	0.04	0.01	0.75 :1	
10	METFORMIN TAB 500 MG Diabemet (Y.S.P. Industries) Metformin (Sunward Pharm.) Pharmaniaga (Metformin)	APPL	0.03	0.06	0.03	0.50 :1	0.50 :1
			0.03	0.06	0.03	0.50 :1	
			0.03	0.06	0.03	0.50 :1	
11	OMEPRAZOLE TAB 20MG Omesecc (CCM Pharma) Romesecc (Ranbaxy)	APPL	0.36	1.50	1.14	0.24 :1	0.24 :1
			0.36	1.50	1.14	0.24 :1	
12	RANITIDINE TAB 150MG Histac (Idaman Pharma) Histac (Ranbaxy) Pharmaniaga Ranitidine (Pharmaniaga) Ranitidine (Biolab Company Ltd.) X'tac (Upha)	APPL	0.29	0.70	0.41	0.41 :1	0.41 :1
			0.29	0.70	0.41	0.41 :1	
			0.29	0.70	0.41	0.41 :1	
			0.29	0.70	0.41	0.41 :1	
			0.29	0.70	0.41	0.41 :1	
13	BUDESONIDE INHALER 200MCG/DOSE Inflammide (Boehringer Ingelheim)	LP	0.24	0.46	0.22	0.52 :1	0.52 :1
14	CIPROFLOXACIN TAB 500 MG Cifran (Ranbaxy)	LP	0.44	3.56	3.12	0.12 :1	0.12 :1
15	DICLOFENAC TAB 50 MG Difnal (Ranbaxy) Dyfenac (Dynapharm) Fenadium F (Sunward Pharm.) Voren (Y.S.P. Industries) Zolteral (Upha)	LP	0.02	0.11	0.09	0.18 :1	0.20 :1
			0.02	0.10	0.08	0.20 :1	
			0.02	0.11	0.09	0.18 :1	
			0.03	0.11	0.08	0.27 :1	
			0.03	0.11	0.08	0.27 :1	
Median							0.40 :1
Min							0.09 :1
Max							0.86 :1

Table F

Price Variation between Public and Private Sector: LP, APPL and Tender

Overall: Medicines bought through APPL & TENDER: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	ACICLOVIR TAB 200 MG Virest (Hovid)	APPL	0.59	2.10	1.51	0.28 :1	0.28 :1
2	AMOXICILLIN CAPS/TAB 250 MG Amoxicillin (Dynapharm)	APPL	0.08	0.11	0.03	0.73 :1	0.73 :1
	Pharmaniaga (Amoxycillin)		0.08	0.11	0.03	0.73 :1	
3	ATENOLOL TAB 100 MG Atenolol (Milrin)	APPL	0.12	0.50	0.38	0.24 :1	0.24 :1
	Oraday (Biolab)		0.12	0.50	0.38	0.24 :1	
	Pharmaniaga Atenolol (Pharmaniaga)		0.12	0.50	0.38	0.24 :1	
4	BECLOMETASONE INHALER 100MCG/ DOSE Qvar 100 (3M Malaysia)	APPL	0.20	0.30	0.10	0.67 :1	0.67 :1
5	GLIBENCLAMIDE TAB 5MG Claben (Pharmaniaga)	APPL	0.01	0.11	0.10	0.09 :1	0.09 :1
	Pharmaniaga Glibenclamide (Pharmaniaga)		0.01	0.11	0.10	0.09 :1	
6	GLICLAZIDE TAB 80MG Mexan (Imeks Pharma)	APPL	0.14	0.35	0.21	0.40 :1	0.40 :1
	Pharmaniaga Gliclazide (Pharmaniaga)		0.14	0.35	0.21	0.40 :1	
7	HYOSCINE BUTYLBROMIDE TAB 10MG Fucon (Y.S.P. Industries)	APPL	0.06	0.07	0.01	0.86 :1	0.86 :1
	Hyoscine (Dynapharm)		0.06	0.07	0.01	0.86 :1	
	Pharmaniaga Hyoscine (Pharmaniaga)		0.06	0.07	0.01	0.86 :1	
	Vasopan (Pharmaniaga)		0.06	0.07	0.01	0.86 :1	
8	LOVASTATIN TAB 20MG Lestric (Ranbaxy)	TENDER	0.04	0.40	0.36	0.10 :1	0.10 :1
9	MEFENAMIC ACID TAB/CAP 250MG Pharmaniaga Mefenamic Cap (Pharmaniaga)	APPL	0.03	0.04	0.01	0.75 :1	0.75 :1
	Pharmaniaga Mefenamic Tab (Pharmaniaga)		0.03	0.04	0.01	0.75 :1	
10	METFORMIN TAB 500 MG Diabemet (Y.S.P. Industries)	APPL	0.03	0.06	0.03	0.50 :1	0.50 :1
	Metformin (Sunward Pharm.)		0.03	0.06	0.03	0.50 :1	
	Pharmaniaga (Metformin)		0.03	0.06	0.03	0.50 :1	
11	OMEPRAZOLE TAB 20MG Omesecc (CCM Pharma)	APPL	0.36	1.50	1.14	0.24 :1	0.24 :1
	Romesecc (Ranbaxy)		0.36	1.50	1.14	0.24 :1	
12	RANITIDINE TAB 150MG Histac (Idaman Pharma)	APPL	0.29	0.70	0.41	0.41 :1	0.41 :1
	Histac (Ranbaxy)		0.29	0.70	0.41	0.41 :1	
	Pharmaniaga Ranitidine (Pharmaniaga)		0.29	0.70	0.41	0.41 :1	
	Ranitidine (Biolab Company Ltd.)		0.29	0.70	0.41	0.41 :1	
	X'tac (Upha)		0.29	0.70	0.41	0.41 :1	
13	CAPTOPRIL TAB 25 MG Capoten (Bristol Myers Squibb)	APPL	0.25	1.39	1.14	0.18 :1	0.18 :1
14	CEFUROXIME TAB 250MG Zinnat (GSK)	APPL	3.75	3.90	0.15	0.96 :1	0.96 :1
15	GLICLAZIDE TAB 80MG Diamicon (Servier)	APPL	0.19	1.08	0.89	0.18 :1	0.18 :1
Median							0.40 :1
Min							0.09 :1
Max							0.96 :1

Table G

Price Variation between Public and Private Sector: LP, APPL and Tender

Original Brand: Medicines bought through APPL & TENDER: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) for Public Sector as compared to Private Sector (e)=b/c	Median of MPR for Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	CAPTOPRIL TAB 25 MG Capoten (Bristol Myers Squibb)	APPL	0.25	1.39	1.14	0.18 :1	0.18 :1
2	CEFUROXIME TAB 250MG Zinnat (GSK)	APPL	3.75	3.90	0.15	0.96 :1	0.96 :1
3	GLICLAZIDE TAB 80MG Diamicon (Servier)	APPL	0.19	1.08	0.89	0.18 :1	0.18 :1
Median							0.18 :1
Min							0.18 :1
Max							0.96 :1

Table H

Price Variation between Public and Private Sector: LP, APPL and Tender

Generics Brand: Medicines bought through APPL & TENDER: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	ACICLOVIR TAB 200 MG Virest (Hovid)	APPL	0.59	2.10	1.51	0.28 :1	0.28 :1
2	AMOXICILLIN CAPS/TAB 250 MG Amoxicillin (Dynapharm)	APPL	0.08	0.11	0.03	0.73 :1	0.73 :1
	Pharmaniaga (Amoxicillin)		0.08	0.11	0.03	0.73 :1	
3	ATENOLOL TAB 100 MG Atenolol (Milrin)	APPL	0.12	0.50	0.38	0.24 :1	0.24 :1
	Oraday (Biolab)		0.12	0.50	0.38	0.24 :1	
	Pharmaniaga Atenolol (Pharmaniaga)		0.12	0.50	0.38	0.24 :1	
4	BECLOMETASONE INHALER 100MCG/ DOSE Qvar 100 (3M Malaysia)	APPL	0.20	0.30	0.10	0.67 :1	0.67 :1
5	GLIBENCLAMIDE TAB 5MG Claben (Pharmaniaga)	APPL	0.01	0.11	0.10	0.09 :1	0.09 :1
	Pharmaniaga Glibenclamide (Pharmaniaga)		0.01	0.11	0.10	0.09 :1	
6	GLICLAZIDE TAB 80MG Mexan (Imeks Pharma)	APPL	0.14	0.35	0.21	0.40 :1	0.40 :1
	Pharmaniaga Gliclazide (Pharmaniaga)		0.14	0.35	0.21	0.40 :1	
7	HYOSCINE BUTYLBROMIDE TAB 10MG Fucon (Y.S.P. Industries)	APPL	0.06	0.07	0.01	0.86 :1	0.86 :1
	Hyoscine (Dynapharm)		0.06	0.07	0.01	0.86 :1	
	Pharmaniaga Hyoscine (Pharmaniaga)		0.06	0.07	0.01	0.86 :1	
	Vasopan (Pharmaniaga)		0.06	0.07	0.01	0.86 :1	
8	LOVASTATIN TAB 20MG Lestric (Ranbaxy)	TENDER	0.04	0.40	0.36	0.10 :1	0.10 :1
9	MEFENAMIC ACID TAB/CAP 250MG Pharmaniaga Mefenamic Cap (Pharmaniaga)	APPL	0.03	0.04	0.01	0.75 :1	0.75 :1
	Pharmaniaga Mefenamic Tab (Pharmaniaga)		0.03	0.04	0.01	0.75 :1	
10	METFORMIN TAB 500 MG Diabemet (Y.S.P. Industries)	APPL	0.03	0.06	0.03	0.50 :1	0.50 :1
	Metformin (Sunward Pharm.)		0.03	0.06	0.03	0.50 :1	
	Pharmaniaga (Metformin)		0.03	0.06	0.03	0.50 :1	
11	OMEPRAZOLE TAB 20MG Omesecc (CCM Pharma)	APPL	0.36	1.50	1.14	0.24 :1	0.24 :1
	Romesecc (Ranbaxy)		0.36	1.50	1.14	0.24 :1	
12	RANITIDINE TAB 150MG Histac (Idaman Pharma)	APPL	0.29	0.70	0.41	0.41 :1	0.41 :1
	Histac (Ranbaxy)		0.29	0.70	0.41	0.41 :1	
	Pharmaniaga Ranitidine (Pharmaniaga)		0.29	0.70	0.41	0.41 :1	
	Ranitidine (Biolab Company Ltd.)		0.29	0.70	0.41	0.41 :1	
	X'tac (Upha)		0.29	0.70	0.41	0.41 :1	
Median							0.41
Min							0.09
Max							0.86

Table I

Price Variation between Public and Private Sector: LP, APPL and Tender

Overall: Medicines bought through LP: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR in Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	BUDESONIDE INHALER 200MCG/DOSE Inflammiide (Boehringer Ingelheim)	LP	0.24	0.46	0.22	0.52 :1	0.52 :1
2	CIPROFLOXACIN TAB 500 MG Cifran (Ranbaxy)	LP	0.44	3.56	3.12	0.12 :1	0.12 :1
3	DICLOFENAC TAB 50 MG Difnal (Ranbaxy)	LP	0.02	0.11	0.09	0.18 :1	0.20 :1
	Dyfenac (Dynapharm)		0.02	0.10	0.08	0.20 :1	
	Fenadium F (Sunward Pharm.)		0.02	0.11	0.09	0.18 :1	
	Voren (Y.S.P. Industries)		0.03	0.11	0.08	0.27 :1	
	Zolteral (Upha)		0.03	0.11	0.08	0.27 :1	
4	AMLODIPINE TAB 10MG Norvasc (Pfizer)	LP	1.96	3.50	1.54	0.56 :1	0.56 :1
5	BUDESONIDE INHALER 200MCG/DOSE Pulmicort (Astra Zeneca)	LP	0.28	0.53	0.25	0.53 :1	0.53 :1
Median							0.52 :1
Min							0.12 :1
Max							0.56 :1

Table J

Price Variation between Public and Private Sector: LP, APPL and Tender

Original Brand: Medicines bought through LP: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) for Public Sector as compared to Private Sector (f)=b/c	Median of MPR for Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	AMLODIPINE TAB 10MG Norvasc (Pfizer)	LP	1.96	3.50	1.54	0.56 :1	0.56 :1
2	BUDESONIDE INHALER 200MCG/DOSE Pulmicort (Astra Zeneca)	LP	0.28	0.53	0.25	0.53 :1	0.53 :1
Median							0.54 :1
Min							0.53 :1
Max							0.56 :1

Table K

Price Variation between Public and Private Sector: LP, APPL and Tender

Generic Brand: Medicines bought through LP: Median Price Ratio (MPR) between Public (Wholesale) and Private (Wholesale)

No.	Generic Name & Strength of Medicine Brand Name (Company Name) (a)	Types of Procurement in Public Sector	Wholesale Median Price (RM)		Differences in MP for Private Sector as compared to Public Sector (d)=c-b	Ratio of MP (MPR) in Public Sector as compared to Private Sector (e)=b/c	Median of MPR for Public Sector as compared to Private Sector
			Public Sector, MoH (b)	Private Sector (c)			
1	BUDESONIDE INHALER 200MCG/DOSE Inflamidae (Boehringer Ingelheim)	LP	0.24	0.46	0.22	0.52 :1	0.52 :1
2	CIPROFLOXACIN TAB 500 MG Cifran (Ranbaxy)	LP	0.44	3.56	3.12	0.12 :1	0.12 :1
3	DICLOFENAC TAB 50 MG Difnal (Ranbaxy)	LP	0.02	0.11	0.09	0.18 :1	0.20 :1
	Dyfenac (Dynapharm)		0.02	0.10	0.08	0.20 :1	
	Fenadium F (Sunward Pharm.)		0.02	0.11	0.09	0.18 :1	
	Voren (Y.S.P. Industries)		0.03	0.11	0.08	0.27 :1	
	Zolteral (Upha)		0.03	0.11	0.08	0.27 :1	
Median							0.20 :1
Min							0.12 :1
Max							0.52 :1

Table L

Price Variation between Original and Generic Brand

Median Price Ratio(MPR) between Original and Generic Brand

No.	OVERALL PUBLIC SECTOR				
	Generic Name & Strength of Medicine (a)	Brand MUP (b)	Generic MUP (c)	Brand Premium (d)=[(b-c)/c]*100	MPR (e)=(b/c)
1	Beclometasone Inhaler 100mcg/ dose	0.09	0.20	-55.00%	0.45
2	Budesonide Inhaler 200mcg/dose	0.28	0.24	16.67%	1.17
3	Captopril Tab 25 mg	0.25	0.25	0.00%	1.00
4	Cefuroxime Tab 250mg	3.75	2.76	35.87%	1.36
5	Erythromycin Susp. 400 mg/ 5ml	0.12	0.08	50.00%	1.50
6	Gliclazide Tab 80mg	0.19	0.14	35.71%	1.36
7	Lactulose Liquid 0.67 mg/ml	0.04	0.03	33.33%	1.33
Min				-55.00%	0.45
Max				50.00%	1.50
Med				33.33%	1.33

Table M

Price Variation between Original and Generic Brand

Median Price Ratio(MPR) between Original and Generic Brand

No.	OVERALL PRIVATE SECTOR				
	Generic Name & Strength of Medicine (a)	Brand MUP (b)	Generic MUP (c)	Brand Premium (d)=[(b-c)/c]*100	MPR (e)=(b/c)
1	Aciclovir Tab 200 mg	4.60	2.16	112.96%	2.13
2	Atenolol Tab 100 mg	1.86	0.50	272.00%	3.72
3	Budesonide Inhaler 200mcg/ dose	0.63	0.71	-11.27%	0.89
4	Captopril Tab 25 mg	1.23	0.82	50.00%	1.50
5	Carbamazepine Tab 200 mg	1.30	0.40	225.00%	3.25
6	Cefuroxime Tab 250mg	5.35	2.50	114.00%	2.14
7	Ciprofloxacin Tab 500 mg	12.20	1.50	713.33%	8.13
8	Diclofenac Tab 50 mg	1.10	0.35	214.29%	3.14
9	Erythromycin Susp. 400 mg/ 5ml	0.16	0.09	77.78%	1.78
10	Glibenclamide Tab 5mg	0.59	0.15	293.33%	3.93
11	Gliclazide Tab 80mg	0.92	0.50	84.00%	1.84
12	Hyoscine butylbromide Tab 10mg	0.30	0.20	50.00%	1.50
13	Lactulose Liquid 0.67 g/ml	0.09	0.09	0.00%	1.00
14	Loratidine Tab 10mg	1.20	0.60	100.00%	2.00
15	Lovastatin Tab 20mg	4.76	1.00	376.00%	4.76
16	Mefenamic Acid Tab/Cap 250mg	0.30	0.20	50.00%	1.50
17	Metformin Tab 500 mg	0.34	0.14	142.86%	2.43
18	Metoprolol Tab 100mg	1.30	0.40	225.00%	3.25
19	Nifedipine Tab 10mg	0.45	0.30	50.00%	1.50
20	Omeprazole Tab 20mg	7.14	1.86	283.87%	3.84
21	Perindopril Tab 4mg	2.00	1.42	40.85%	1.41
22	Phenytoin Cap 100mg	0.63	0.23	173.91%	2.74
23	Ranitidine Tab 150mg	2.00	0.90	122.22%	2.22
24	Salbutamol Inhaler 100 mcg/ dose	0.10	0.06	66.67%	1.67
25	Simvastatin Tab 20mg	3.53	1.20	194.17%	2.94
Min				-11.27%	0.89
Max				713.33%	8.13
Med				114.00%	2.14

Table N

**Median Price Ratio (MPR) in Relation to International Reference Pricing (IRP) for common use medicines
Public (Wholesale): MPR of Common Use Medicines**

No.	MEDICINE NAME (a)	IRP (RM) (b)	Public MUP (RM) (c)	Public MUP/IRP (d) = (c/b)
1	Acyclovir Tab 200mg (G)	0.35	0.59	1.69
2	Amitriptyline Tab 25 mg(G)	0.03	0.04	1.33
3	Amoxicillin Caps/Tab 250 mg(G)	0.08	0.08	1.00
4	Atenolol Tab 100mg(G)	0.08	0.12	1.50
5	Beclometasone Inhaler 100mcg/ dose(G)	0.10	0.20	2.00
6	Captopril Tab 25 mg(G)	0.10	0.25	2.50
7	Cefuroxime Tab 250mg (G)-(A/04)	1.74	2.76	1.59
8	Ciprofloxacin Tab 500 mg(G)	0.11	0.44	4.00
9	Diclofenac Tab 50 mg(G)	0.02	0.02	1.00
10	Erythromycin Susp. 400 mg/ 5ml (G)-(A/04)	0.06	0.08	1.33
11	Glbenclamide Tab 5mg(G)	0.02	0.01	0.50
12	Gliclazide Tab 80mg (G)-(A/04)	0.18	0.14	0.78
13	Hyoscine butylbromide Tab 10mg(G)	0.07	0.06	0.86
14	Lactulose Liquid 0.67 g/ml (G)-(A/04)	0.22	0.03	0.14
15	Lovastatin Tab 20mg (G)-(A/04)	0.24	0.04	0.17
16	Metformin Tab 500 mg (G)	0.07	0.03	0.43
17	Nifedipine Tab 10mg(G)	0.05	0.03	0.60
18	Omeprazole Tab 20mg(G)	0.21	0.36	1.71
19	Phenytoin Cap 100mg(G)	0.02	0.03	1.50
20	Ranitidine Tab 150mg(G)	0.13	0.29	2.23
21	Salbutamol Inhaler 100 mcg/ dose(G)	0.07	0.03	0.43
Median				1.33
Min				0.14
Max				4.00

IRP=Supplier price 2004+15%

(A/04)=IRP Agency price 2004+30%

1 USD= RM 3.7

Table O

**Median Price Ratio (MPR) in Relation to International Reference Pricing (IRP) for common use medicines
Private (Retail): MPR of Common Use Medicines**

No.	MEDICINE NAME (a)	IRP (RM) (b)	Private MUP (RM) (c)	Private MUP/IRP (d)=(c/b)
1	Acyclovir Tab 200mg (G)	0.35	2.16	6.17
2	Amitriptyline Tab 25 mg(G)	0.03	0.30	10.00
3	Amoxicillin Caps/Tab 250 mg(G)	0.08	0.32	4.00
4	Atenolol Tab 100mg(G)	0.08	0.50	6.25
5	Beclometasone Inhaler 100mcg/ dose(G)	0.10	0.32	3.20
6	Captopril Tab 25 mg(G)	0.10	0.82	8.20
7	Carbamazepine Tab 200 mg(G)	0.09	0.40	4.44
8	Cefuroxime Tab 250mg (G)-(A/04)	1.74	2.50	1.44
9	Ciprofloxacin Tab 500 mg(G)	0.11	1.50	13.64
10	Diclofenac Tab 50 mg(G)	0.02	0.35	17.50
11	Erythromycin Susp. 400 mg/ 5ml (G)-(A/04)	0.06	0.09	1.50
12	Glbenclamide Tab 5mg (G)	0.02	0.15	7.50
13	Gliclazide Tab 80mg (G)-(A/04)	0.18	0.50	2.78
14	Hyoscine butylbromide Tab 10mg(G)	0.07	0.20	2.86
15	Lactulose Liquid 0.67g/ml-(A/04)	0.22	0.09	0.41
16	Loratidine Tab 10mg (G)-(A/04)	0.14	0.60	4.29
17	Lovastatin Tab 20mg (G)-(A/04)	0.24	1.00	4.17
18	Metformin Tab 500 mg (G)	0.07	0.14	2.00
19	Nifedipine Tab 10mg(G)	0.05	0.30	6.00
20	Omeprazole Tab 20mg(G)	0.21	1.86	8.86
21	Perindopril Tab 4mg (G)-(A/04)	1.34	1.42	1.06
22	Phenytoin Cap 100mg(G)	0.02	0.23	11.50
23	Ranitidine Tab 150mg(G)	0.13	1.00	7.69
24	Salbutamol Inhaler 100 mcg/ dose(G)	0.07	0.06	0.86
25	Simvastatin Tab 20mg(G)-(A/04)	2.09	1.20	0.57
Median				4.29
Max				17.50
Min				0.41

IRP=Supplier price 2004 +15%

(A/04)= Agency price 2004 +30%

1USD= RM 3.7

MUP=Median unit price

(G) = Generic brand