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# Comparing Drug Prices in Australia and the USA The implications of the US-Australia Free Trade Agreement

# Background

Boston University Professor Richard Laing has described the Australian Pharmaceutical Benefits Scheme (PBS) as 'the best drug pricing system in the world ... [and Australia as] the one country which seems to have got it right, that what you want to do in controlling costs is to pay what the drug is therapeutically worth' (Laing 2001). At a time when many countries are struggling with rising pharmaceutical costs, the ability of the PBS to control the price Australia pays for new medicines helps to manage expenditures and thus ensures the sustainability of the scheme.

The selection and pricing process relies heavily on economic evaluations and reference pricing mechanisms used by the Pharmaceutical Benefits Advisory Committee. Reference pricing refers to the process by which the maximum amount that is reimbursed by the PBS for a therapeutically equivalent class of drug is set, typically based on the price of the cheapest product in the group (PC 2001). This process protects the universality of the scheme ensuring that all Australians have timely access to the medicines at a cost the community and individuals can afford.

Medicines Australia, the lobby group representing the pharmaceutical companies, has expressed strong opposition to the PBS's reference pricing system, describing its impact on the pricing of pharmaceuticals as 'insidious' (Medicines Australia 2002, p. 25). The drug companies would prefer a system in which they have the freedom to market their products and set prices according to what the market will bear. In an earlier paper by The Australia Institute, it was concluded that prices of medicines could rise by 90 per cent for non-concession card holders and 104 per cent for concession card holders if the pharmaceutical industry gets its way in the current free trade negotiations between Australia and the USA (Denniss 2003).

## The free trade agreement

The PBS ensures value for money for Australian taxpayers, but this could change if the views of the pharmaceutical corporations prevail in the negotiations for a free trade agreement between Australia and the US. The third round of negotiations is currently underway.

Contrary to denials by the Australian Government, PBS pricing mechanisms are still very much part of negotiations. When asked to rule out changes to the PBS, Australia's Minister for Trade Mark Vaile has repeatedly deflected the question and refuses to state

that the PBS is off limits. In particular, he has not declared that the reference pricing system targeted by US pharmaceutical companies is off the negotiating table (Davis 2003). The Government's slippery language should be contrasted with recent comments by the US pharmaceutical industry and US trade representatives indicating ongoing interest in forcing PBS pricing controls into the FTA negotiations.

On the first day of public hearings into the FTA in the United States,

pharmaceutical industry lobbyist Joe Damond formally targeted PBS pricing mechanisms, arguing that companies should be allowed to charge higher prices for medicines in Australia (Allard 2003).

During the first round of negotiations in Australia in March 2003,

when asked whether or not the PBS was a target, US Chief trade negotiator Ralph Ives replied 'It is not a black or white issue. We are still examining it.' (DFAT 2003a)

During the second round of negotiations in May 2003,

when asked what interest the US had in going forward on the PBS, US Chief trade negotiator Ralph Ives replied 'What we're interested in is receiving information on how the system values innovative medicines and whether the system is transparent' (DFAT 2003b).

This process of valuing new medicines is precisely what is most valuable and vital to the success and viability of the PBS.

In light of these comments it is important that Australians understand the possible consequences of relaxing pharmaceutical-pricing regulations, in particular reference pricing. Given the lack of Government-commissioned research into the impact that such changes may have on prices and total costs in Australia, this paper compares prices for commonly prescribed medicines paid in the USA, where price controls are minimal, with those paid by Australia under the PBS.

Before doing so, it is worth noting that the Productivity Commission examined the list prices for a large basket of medicines commonly used in Australia compared to those in several countries including the USA (PC 2001). It found that on average retail prices were between 160 and 250 per cent higher in the USA than in Australia and at least 84 per cent higher when discounts available to large institutional buyers are considered (PC 2001, p. 49).

The Productivity Commission went on to analyse the reasonsbehind the low prices in Australia when compared to the USA. The Commission concluded that 'Australia's cost-containment arrangements may have contributed to keeping [pharmaceutical] prices relatively low. The application of reference pricing in particular may have been significant' (PC 2001 p. xxx). More generally the Commission noted that the largest price

differences (highest prices compared to Australia) were observed in those countries that do not have systematic price setting mechanisms (PC 2001).

# Comparing Drug Prices in the USA and Australia

More insight into the potential effects of the free trade agreement can be had through a case-by-case comparison of the prices of Australia's most popular brand-named medicines with those charged by manufacturers in the USA. Table 1 compares the wholesale prices paid for ten of the most prescribed brands in Australia with those paid for the same products in the USA. Table 2 compares wholesale prices in the two countries for popular brands in five important therapeutic groups. Only exact matches in terms of brand, dose, type and pack size are compared. Detailed discussion of the method used follows this section.

US prices reported in the table are based on prices in the Federal Supply Schedule (FSS) as they represent prices paid by an American purchasing entity most comparable to the Australian PBS. The FSS is a catalogue of manufacturer prices administered by the US Department of Veterans Affairs. Comparisons of wholesale prices in Australia and US prices listed in the FSS are most useful to isolate the effect of pricing control regulation in Australia on price differentials. This is because both entities are comparable in many regards except for the fact that Australia uses economic evaluations or reference pricing in determining the prices of pharmaceuticals while the FSS does not (PC 2001, p.79).

While differences in health systems, demand conditions, patent laws and production costs make it difficult to exactly predict prices in Australia in a deregulated environment, it is clear that prices will rise significantly as comparisons with the US indicate.

It is apparent from Table 1 that the wholesale prices of ten of the most prescribed drugs in Australia are at least 79 per cent to 306 per cent more expensive in the USA. The average (unweighted) price increase is 147 per cent. If the pharmaceutical companies are successful in eliminating or undermining the reference pricing system of the PBS, Australia could expect to see price increases of this order. The price differences are even more pronounced when we compare the prices of popular brand names in important therapeutic groups (Table 2). Some diuretics and contraceptives are four times more expensive in the USA and the anxiety medicine Valium and the antibiotic Keflex are more than ten times more expensive.

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<sup>&</sup>lt;sup>1</sup> Due to difficulties in making exact matches the drugs reported in Table 1 are 10 of the top 15 prescribed drugs.

Table 1 Wholesale prices of ten of the most prescribed brands in Australia and the USA<sup>a</sup>

Drug	Use	Prescriptions in Australia (millions)	Wholesale price in the USA b,c \$A	Wholesale price in Australia <sup>d,c</sup> \$A	Excess of US price over Australian
LIPITOR atorvastatin 20mg	Cholesterol	5.20	\$89.50	\$49.95	79%
CELEBREX celecoxib 200mg ZOCOR simvastatin 20mg (PRI)LOSEC omeprazole 20mg	Arthritis	3.55	\$101.48	\$24.97	306%
	Cholesterol	2.90	\$103.45	\$48.89	112%
	Stomach ulcers	2.55	\$102.66	\$39.12	162%
VIOXX rofecoxib 25mg	Arthritis	2.34	\$74.95	\$34.70	116%
ZOLOFT sertraline 50mg	Antidepressant	2.22	\$62.57	\$29.28	114%
NORVASC amlodipine 5mg	Blood pressure	2.12	\$35.69	\$18.52	93%
VENTOLIN salbutamol inhl AVAPRO irbesartan 75mg PRAVACHOL pravastatin 20mg	Asthma	1.72	\$42.90	\$11.47	274%
	Blood pressure	1.67	\$40.01	\$16.30	145%
	Cholesterol	1.61	\$75.96	\$43.55	74%

Source: DoHA 2003; FSS 2003

#### Notes

a) Top ten list based on the most prescribed brand names in Australia for year ending June 2002, with which an exact match could be found in the FSS catalogue in the US. Of the 15 most prescribed products an exact match was not found for panamax, panadeine forte, coversyl, somac and noten, giving the above list of ten.

b) Average exchange rate for 6 months from January to June 2003.

c) Wholesale price = dispensed price – a mark-up of 10% on the price to pharmacist up to \$180, or \$18.00 on the price to pharmacist above \$180 up to \$450, or 4% on the price to pharmacist above \$450, plus a dispensing fee of \$4.62 for ready prepared items.

d) All prices are calculated for a standard pack size which usually represents a month's supply or a course of treatment in the case of antibiotics.

Table 2 Wholesale prices for brands in important therapeutic groups in Australia and the USA

Use	Drug	Wholesale price in the USA b,c	Wholesale price in Australia d,c	Excess of US price over
		\$A	\$A	Australia %
Antibiotic	KEFLEX	\$89.83	\$7.21	1146%
	cephalexin 500mg			
Diuretic	LASIX	\$18.69	\$4.15	351%
	frusemide 20mg			
Anxiety	VALIUM	\$36.37	\$3.27	1011%
•	diazepam 5mg			
Breast cancer	NOLVADEX	\$208.33	\$71.00	193%
	tamoxifen 20mg			
Contraceptive	LEVLEN ED	\$39.15	\$9.49	312%
pill	estradiol/			
•	levonorgestrel			

Source: DoHA 2003; FSS 2003

#### Notes

b) Average exchange rate for 6 months from January to June 2003.

# Methodology

To compare prices we adopt the methodology used by the Productivity Commission in its 2001 study of international pharmaceutical prices (PC 2001). To do so we considered the selection of pharmaceuticals, how to match them with US equivalents, the appropriate prices for comparison and the conversion of exchange rates.

# Selecting pharmaceuticals

For the purpose of this study, we used a sample of commonly used brand-name medicines prescribed in Australia in the year to June 2002. Table 1 lists ten of the most popular brands for which a direct match was found in the USA. Table 2 lists popular brands in five important therapeutic groups.

## Matching pharmaceuticals

Price comparisons considered the form in which the pharmaceutical was marketed including dosage type (e.g. tablets, syrups and injections), strength and pack size. This study set out to find direct matches for the most popular brand named medicines used in Australia. Quoted US Federal Supply Schedule prices (described below) are typically for

c) Wholesale price = dispensed price – a mark-up of 10% on the price to pharmacist up to \$180, or \$18.00 on the price to pharmacist above \$180 up to \$450, or 4% on the price to pharmacist above \$450, plus a dispensing fee of \$4.62 for ready prepared items.

d) All prices are calculated for a standard pack size which usually represents a month's supply or a course of treatment in the case of antibiotics.

100 tablets. This was adjusted to obtain an equivalent price for a standard pack in Australia, which usually reflects a month's supply or a standard course of treatment in the case of antibiotics. This is likely to consistently underestimate FSS prices in the US, as the unit price of a tablet usually decreases as the size of packs increase.

#### Prices used

Wholesale prices in Australia and US FSS prices are most useful to isolate the effect of pricing control regulation in Australia on price differentials, as both are comparable except that Australian prices reflect a system that incorporates economic evaluations and reference pricing while the US FSS does not (PC, 2001 p79).

The Australian price used in comparisons with the US is the wholesale price of pharmaceutical products in Australia. The wholesale price for sales in Australia is calculated from the standard dispensed price for maximum quantity published in the current Schedule of Pharmaceutical Benefits effective from 1 May 2003, minus the pharmacist standard dispensing fee and pharmacists' 10% markup (DoHA 2003).

Prices quoted in the Federal Supply Schedule (FSS) are used as the comparable wholesale price available to the US Government. The FSS, administered by the US Department of Veterans Affairs, is a catalogue of manufacturer prices containing over 16,500 pharmaceutical products available to federal agencies and institutions (FSS 2003). The prices are valid until the end of 2003. The prices negotiated under the FSS are intended to equal or better the prices manufacturers charge their 'most-favoured' non-federal institutional buyers (PC, 2001 p. 45).

# Converting prices to a common currency

Official exchange rates were used to convert US prices for pharmaceuticals into Australian dollars. Current exchange rates provide the most relevant information for examining the cost implications for the Commonwealth Government. We used the average exchange rate for the period January to June 2003, the period over which the prices used in the comparisons applied. The exchange rate for the period was A\$1 = US\$0.6168 (RBA 2003).

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