

## Life Sciences case study

# South Africa price benchmarking

### Background to the assignment

The Pharmaceutical Industry Association of South Africa, PIASA, along with three other trade bodies asked CRA to independently review the government's proposals for using international benchmarking to set medicine prices in the private market.\*

In the government's proposals, originator medicines were to be benchmarked against a basket of five countries (Australia, Canada, New Zealand, Spain and South Africa) under proposals set out by the government's pricing committee. The lowest price from the five countries was to be used to obtain the benchmarked price (if the South African price was the lowest, then the price would remain the same). In addition, the pricing committee had proposed that generic products would be at least 40% lower than the internationally benchmarked price of the originator medicine.

CRA was asked to assess whether the chosen comparator countries and the method for calculating benchmark prices are consistent with the government's objectives, make sense from an economic perspective, reflect international best practice and whether they would, if implemented as proposed, result in unintended consequences for the South African healthcare market.

### Value added

International reference pricing is an increasingly widely used policy instrument to determine the price of pharmaceutical products. The industry's concern was to ensure that the selected comparator countries were comparable to South Africa and to explore alternative comparator countries. The first question was therefore to define 'similar' from an economic perspective.

### Choosing the right comparator

The basket of countries was chosen based on their wealth. In particular, the average wealth of citizens in markets such as Australia and Canada was compared to those using the private market in South Africa. This is the appropriate starting point for choosing reference countries, but wider economic-based criteria is needed to meet the government's objectives. The economic criteria to do so included in addition to the wealth of the country, the method by which it rewards innovation (this encompassed aspects of the pricing and reimbursement regime, relative rewards to patented and generic medicines, the use of co-payments and R&D incentives), the presence of an evidence-based pricing system (this is an aspiration for South Africa) and the most important medicine registration standards in the country concerned. On this basis, we concluded that the choice of countries would introduce a downward bias when used as a comparator for prices in the private market

of South Africa. In particular, the inclusion of Canada and Australia would lead to a slight downward bias in prices in the South African private market due to the presence of patient co-payments and the use of R&D incentives in those markets. Spain and New Zealand would, however, exert an even more profound downward bias due to the lower levels of wealth in those countries and the design of the New Zealand pricing and reimbursement system.

### Summary of benchmark countries relative to South African private market

Country	Australia	Canada	Spain	NZ
<b>Wealth</b>	=	=	↓	↓
<b>Rewards</b>				
• P&R regime	=	=	=	↓
• Use of HTA	=	=	↓	↓
• Co-payments	↓	↓	=	↓
• Importance of generics	=	=	↓	↓
• Similar needs	Differences by disease category			
• R&D incentives	↓	↓	=	↓
<b>Overall assessment</b>	≈	≈	↓	↓

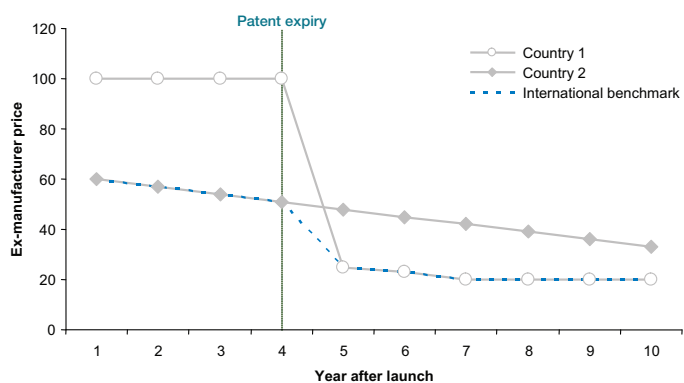
Source: CRA analysis

### A fair price?

However, even if the most comparable countries are chosen, the impact of reference pricing depends on the mechanism for calculating prices. There are a number of reasons why the proposed rules for deriving the prices in South Africa would result in the rewards for pharmaceutical companies being substantially below those in the reference countries. First, they benchmark on the basis of the largest ambulatory sector in each country, thus failing to incorporate the private markets in the benchmark countries where prices could be higher. Second, they take the price from the country with the minimum price for each product – thus giving overall rewards lower than in any of the reference countries. Different countries place higher value on different types of product – by taking the minimum across different countries, this will take the price only from markets where the product is least valued. Moreover, this can result in lifecycle prices that are lower than those in any of the countries considered as prices are constantly reset to the value in the lowest country, as shown below.

*Continued*

### Impact of the lifecycle on international reference pricing



Source: CRA analysis

Finally, in the absence of analogous formulations and dosages in the benchmark countries, they take the minimum of different formulations and dosages from different countries without taking into account whether they use linear or flat pricing. Again, this results in a systematically lower price.

In terms of the proposals to use a mandatory generic price reduction, we found that it would be better for South Africa to pursue its goals of lower generic prices and higher levels of post-patent competition through mechanisms other than mandatory price reductions – first and foremost by focusing on demand-side policies and encouraging competition.

### Unintended consequences

CRA was also asked to assess what would happen if the proposals were implemented without amendments. Clearly, as the South African private market was itself one of the proposed benchmark countries, the system would ensure that prices must either remain the same or decrease in the short term. However, it was also possible that the proposals would introduce unintended consequences, such as changes in physician's prescribing behaviour as seen in other international markets, preventing the assumed cost savings materialising. Of greater concern is the possibility that they will distort the private insurance market – resulting in greater profits for insurers or lower quality private health insurance – and therefore offsetting any potential cost savings.

### Conclusions to the study

Using the price from one market to set prices in another market is not unreasonable and is commonly used (although not usually for private markets) and can be an efficient mechanism to set prices if similar markets are chosen. Some elements of the proposals were consistent with this approach, in particular choosing candidate benchmark countries on the basis of wealth but other characteristics of the market also need to be taken into account, such as whether there is support for R&D activity, the role of co-payments and the intensity of off-patent competition.

The original government proposals had a number of attributes, most notably the use of minimum rather than average prices that we believed would place a significant downward bias on drug prices relative to the level that would be commensurate with the private market's fair contribution to pharmaceutical R&D. Using minimum prices exacerbates the problem of choosing similar markets and increases the possibility of undesirable unintended consequences that would harm the industry and the private healthcare market.

\* South African Department of Health (2006),  
 "International Benchmarking of Medicine Prices in South Africa".  
 Available here: <http://www.doh.gov.za/docs/presentation/inter.html>

## About CRA's Life Sciences Practice

We provide life sciences companies, law firms and regulatory agencies across the globe with the industry experience and analytical expertise needed to address the industry's toughest issues. Our reputation is for rigorous and innovative analysis, careful attention to detail and the ability to work effectively as part of a wider team of advisers. CRA has offices throughout the world including European offices in London, Brussels, Hamburg and Amsterdam, United States offices in Boston, New York and Washington DC and offices in Toronto, Melbourne, Bahrain and Hong Kong.

## Contact

For additional information, please contact

### Europe

**Tim Wilsdon**, Vice President

+44 (0)20 7664 3707

[twilsdon@crai.com](mailto:twilsdon@crai.com)

**Glyn Chambers**, Senior Associate

+44 (0)20 7959 1557

[gchambers@crai.com](mailto:gchambers@crai.com)

