

# Research in Brief

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## Consumer Perception of Out-of-pocket Prescription Drug Costs and Consumer Willingness to Choose Inexpensive Drugs

**Sylvia Park**

Research Fellow, KIHASA

**Na-Gyeong Lee**

Senior Researcher, KIHASA

### Introduction

Inasmuch as raising the efficiency of pharmaceutical expenditures is an important policy goal toward keeping the National Health Insurance financially sustainable, off-patent drugs are regarded as a market with significant potential. Pharmaceutical expenditures have been growing more rapidly in Korea than in any other OECD country.<sup>1)</sup> It is crucial thus to add efficiency to Korea's pharmaceutical expenditures. In theory, using generics in place of off-patent brand-name drugs, as long as they have the same clinical effect, can be conducive to reducing pharmaceutical spending. The larger the range of drugs of the same active ingredients and pharmaceutical formulation, the more likely it is that the prices of these products will fall through competition.

Korea has a generic dispensing rate of 56 percent, while generics as a share of its total prescription drug expenditure account for 49 percent.<sup>2)</sup> The rather narrow difference between the two figures suggests that the effect of increases in the use of generics on drug expenditures haven been slender. OECD

1) OECD. (2015). Health at a Glance 2015; OECD. (2017). Health at a Glance 2017; OECD. (2019). Health at a Glance 2019.

2) Park, Sylvia et al. (2020). Ways to Improve the Efficiency of National Health Insurance Drug Expenditure. Korea Institute for Health and Social Affairs

countries as a whole have a generic dispensing rate of 52 percent, but with generic drugs taking up as little as 25 percent of their drug spending.<sup>3)</sup>

Confronted from early on with growing pharmaceutical expenditures, some countries with a national health care system have put in place incentives to motivate consumers to choose inexpensive prescription drugs, thereby promoting price competition for off-patent drugs. Germany and France instituted a reference pricing system in 1993 and 2003, respectively.<sup>4)</sup> France rolled out in 2011 a policy of advancing benefits to patients choosing to use generics.<sup>5)</sup> The US has been running, in both Medicare and private insurance programs, multi-tier copayment plans whereby the difference in copay is substantial between cheaper generics and costlier brand-name drugs.<sup>6)</sup>

Drawing on a survey of consumer perception of prescription drug prices, this study attempts to add to the understanding of consumer choice of drugs and to suggest ways to increase the efficiency of pharmaceutical spending.

The survey was conducted of two groups of people aged 19 to 69, sampled from population statistics of June 2020. One group (Group 1) consisted of 1008 people who in the 3 months preceding the survey had used in-person health care services and had been dispensed prescription medications. The other group (Group 2) consisted of individuals who at the time of the survey were on prescription medication for the treatment of their illness.

This study used as its sampling frame a panel designed by a professional survey firm. Group 1 was quota-sampled to represent the general population in terms of sex, region of residence, and age. Group 2 was quota-sampled for sex. The survey was conducted online with a structured questionnaire during the period between June 8 and June 23, 2020. The questions used for the survey can be summarized as shown in Table 1.

[Table 1] Survey questions

Sections	What's asked in the questions
<b>Perception of the price of one's prescription medication</b>	-Cost incurred on one's prescription medication -Perceived financial burden of prescription medication
<b>About one's preference for high-priced drugs</b>	-Whether or not one prefers high-priced prescription drugs
<b>Willingness to choose inexpensive drugs</b>	-Whether or not one is willing to use inexpensive bioequivalent prescription medications if recommended by the doctor -Whether or not one is willing of one's own accord to use inexpensive bioequivalent prescription drugs

3) OECD. (2019). Health at a Glance 2019: OECD Indicators. Paris: OECD Publishing

4) iGES. (2017). Reimbursement of Pharmaceuticals in Germany. Berlin: iGES; Goujard, A. (2018). France: Improving the Efficiency of the Healthcare system. OECD Economics Department Working Papers No. 1455.

5) Rottembourg, J. & Nasica-Labouze, J. (2015). The implementation of generics in France. GaBi Journal, 4(3), pp. 136-141.

6) Gilman, B. H. & Kautter, J. (2007). Impact of Multitiered Copayments on the Use and Cost of Prescription Drugs among Medicare Beneficiaries. Health Services Research, 43., 00. 478-495.

## General characteristics of respondents

In Group 1, those in their 50s accounted for the most number (23.5 percent) of individuals. The second most frequent age range was between 40 and 49 years. The largest age group in Group 2 was those in their 60s (39.9 percent). Group 1 and Group 2 displayed similar patterns of household income distribution, with those in the income range KRW3~5 million accounting for the highest proportion in both. Those with an educational level of college or above made up 82.5 percent of Group 1 and 76.1 percent of Group 2. For both Groups 1 and 2, the occupational type that made up the largest proportion was Type 1.

[Table 2] General characteristics of respondents

		Group 1		Group 2	
		Number	%	Number	%
All		1008	100.0	1018	100.0
Sex	Man	516	51.2	507	49.8
	Woman	492	48.8	511	50.2
Age	19-29	187	18.6	69	6.8
	30-39	187	18.6	92	9.0
	40-49	224	22.2	190	18.7
	50-59	237	23.5	261	25.6
	60-69	173	17.2	406	39.9
Monthly household income	Below KRW1 million	22	2.2	33	3.2
	KRW1~3 million	202	20.0	217	21.3
	KRW3~5 million	342	33.9	355	34.9
	KRW5~7 million	260	25.8	220	21.6
	Over KRW7 million	182	18.1	193	19.0
Educational attainment	High school diploma or less	176	17.5	243	23.9
	College diploma or more	832	82.5	775	76.1
Occupational type	Type 1	522	51.8	474	46.6
	Type 2	104	10.3	102	10.0
	Type 3	74	7.3	84	8.3
	Type 4	308	30.6	358	35.2

Note: Type 1: managers; professionals; paraprofessionals; office workers

Type 2: service workers; sales workers

Type 3: skilled agricultural, forestry and fishery workers; technicians; machine operators and assemblers; manual workers

Type 4: soldiers; homemakers; students, unemployed persons, etc.

Source: Authors' own research

## Consumer perception of the cost of prescription medication

The survey found that Group 2 respondents, who, as defined in this study, had been on continual medication, spent more out-of-pocket on prescription drugs, on monthly and annual averages, than did their Group 1 counterparts.

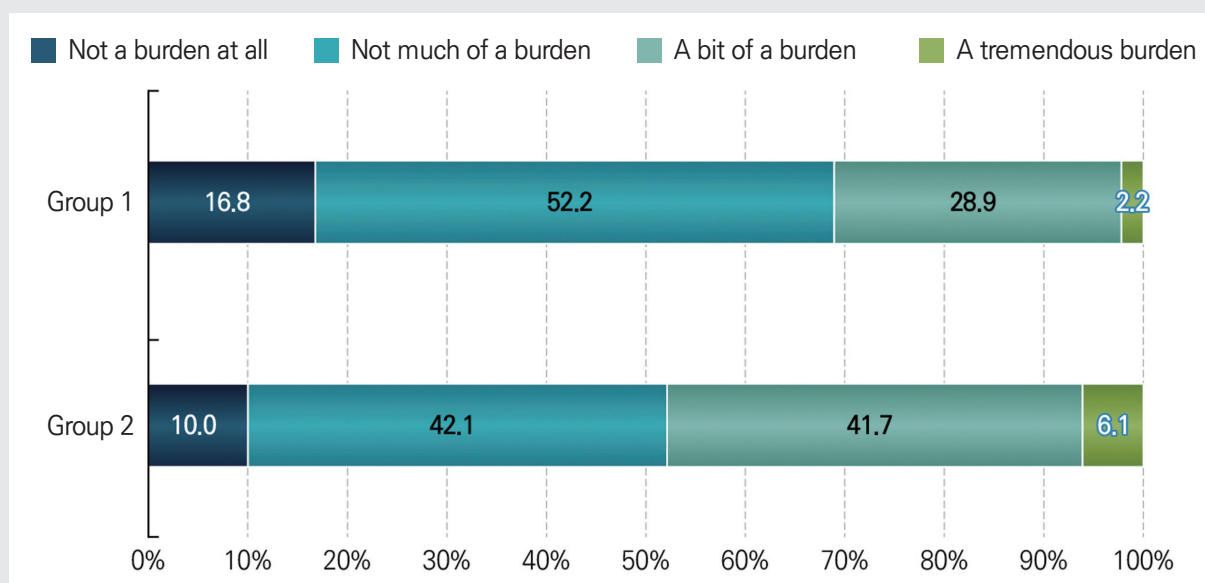
[Table 3] Out-of-pocket spending on prescription drugs

	Group 1 (n=1008)		Group 2 (n=1018)	
	Number of respondents	Average spending	Number of respondents	Average spending
Monthly average out-of-pocket spending	402	KRW23,315.4	703	KRW31,997.2
Annual average out-of-pocket spending	606	KRW113,717.8	315	KRW252,238.1

Source: Author's own research

There were more people who considered their out-of-pocket spending on prescription drugs not a burden than there were who considered it a burden. In Group 1, 69 percent did not see their out-of-pocket prescription drug cost as a burden. For Group 2, the figure was 52.1 percent.

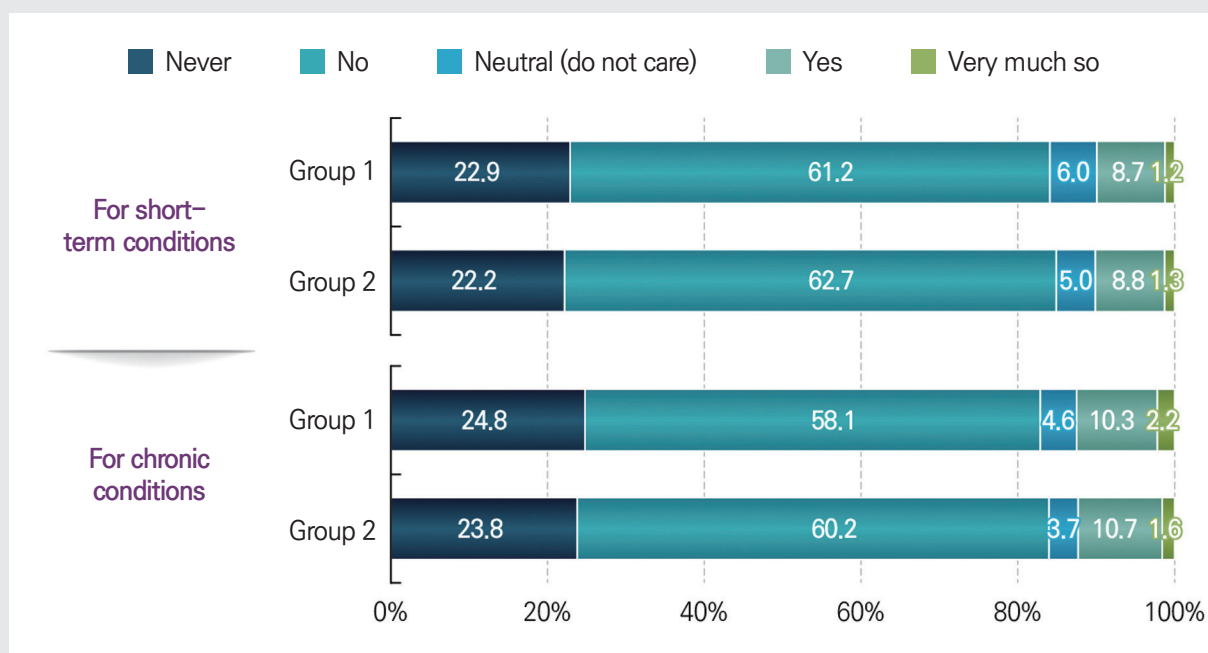
[Figure 1] Perceived burden of out-of-pocket spending on prescription drugs



Source: Authors' own research

When asked if they preferred to have their doctor prescribe them the more expensive one of two or more drugs of the same ingredients and efficacy, more than 80 percent of the respondents in both Group 1 and Group 2 said they didn't.

[Figure 2] Do you prefer higher-priced ones among prescription drugs of the same ingredients and efficacy?



Source: Authors' own research

Most participants—91.5 percent of Group 1 and 85 percent of Group 2—said they were willing to substitute their current prescribed medicine with a less expensive product with the same ingredient and efficacy if their doctor recommended so.

[Table 4] Would you be willing to use a cheaper alternative with the same ingredients and efficacy if your doctor recommended so?

	Group 1 (n=1008)		Group 2 (n=1018)	
	Number	%	Number	%
Yes	922	91.5	865	85.0
No	86	8.5	153	15.0

Source: Authors' own research

In those who said they would be willing to switch to a cheaper alternative if recommended so by the doctor, more than 60 percent cited “doctor’s recommendation” as the reason for their such willingness.

**[Table 5] Why (pick one reason) would you be willing to switch to a cheaper bioequivalent drug-with doctor’s recommendation**

	Group 1 (n=1008)		Group 2 (n=1018)	
	Number	%	Number	%
<b>Because of doctor’s recommendation</b>	561	60.8	576	66.6
<b>Because of its cheaper price</b>	352	38.2	282	32.6
<b>Other</b>	9	1.0	7	0.8

Source: Authors’ own research

When those who were not willing to use a cheaper bioequivalent drug were asked to choose up to two reasons for their such reluctance, more than 50 percent said it was because they preferred to stay on with the product they had grown accustomed to using. Some others pointed out that a cheaper bioequivalent drug would not be exactly the same as the brand-name drug they had been using. Still others said they would not switch to cheaper bioequivalent drugs as they did not think they would work as well as their brand-name counterparts.

**[Table 6] Why would you not be willing to use a cheaper bioequivalent option—with doctor’s recommendation**

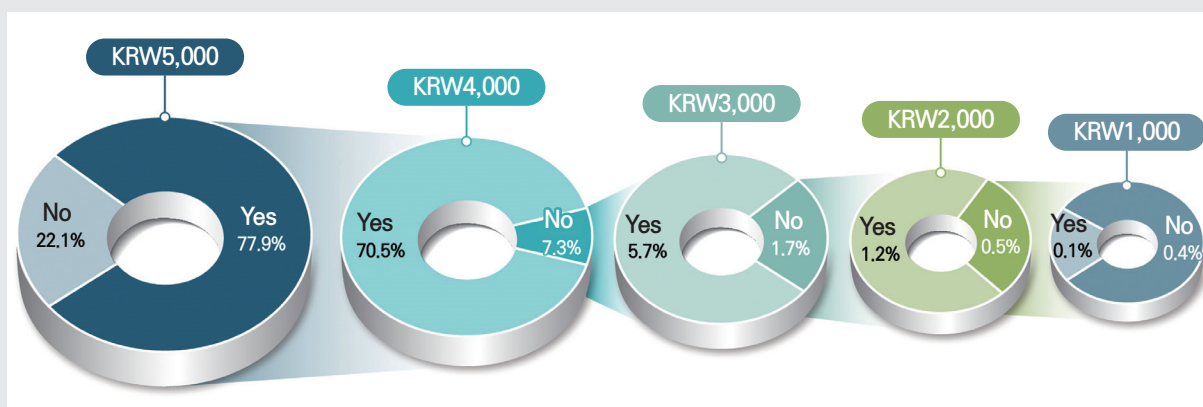
	Group 1 (n=86)		Group 2 (n=153)	
	Number	%	Number	%
<b>It’s better to keep using the drug I’m used to.</b>	45	52.3	78	51.0
<b>I think cheaper drugs are not exactly the same as the one I’ve been using.</b>	28	32.6	50	32.7
<b>I think cheaper drugs are not quite as effective as the one I’ve been using.</b>	22	25.6	48	31.4
<b>I think cheaper drugs have more negative side effects.</b>	16	18.6	37	24.2
<b>I think if doctors recommend cheaper drugs, it is for their interests.</b>	19	22.1	26	17.0
<b>I think cheaper drugs are produced in a low-quality environment.</b>	12	14.0	17	11.1
<b>Other</b>	0	0.0	2	1.3

Source: Authors’ own research

## One's own willingness to switch to cheaper bioequivalents

When participants in Group 1 were asked if they, assuming they were paying KRW5,000 out-of-pocket on average for 5 days of medication for such short-term conditions as common cold and minor pain, would be willing, if given a choice, to use cheaper products from other manufacturers, 77.9 percent (785 individuals) said yes; of whom 70.5 percentage points said they would switch to a bioequivalent drug if doing so could reduce their out-of-pocket payments to KRW4,000.

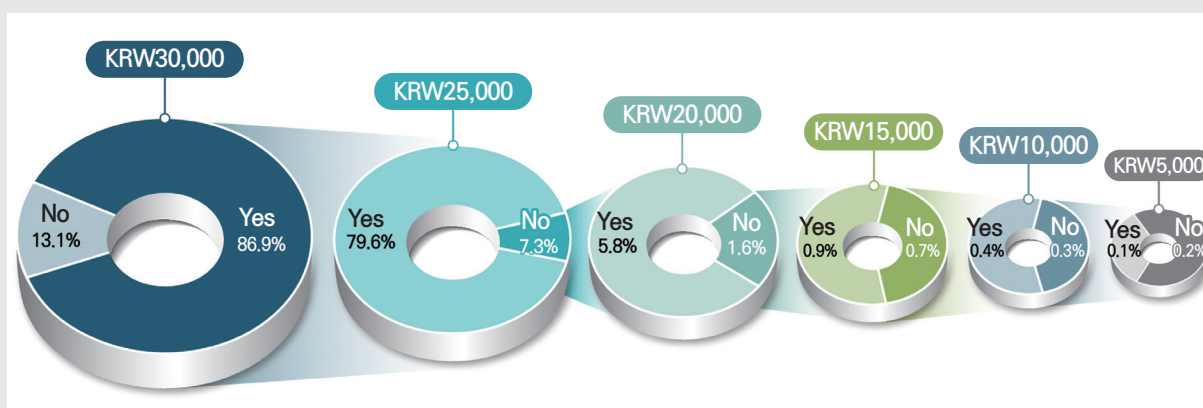
[Figure 3] Are you willing on your own to switch to a cheaper bioequivalent drug for the treatment of short-term conditions? (Group 1)



Source: Authors' own research

When participants in Group 1 were asked if they, this time assuming they were paying a monthly sum of KRW30,000 out-of-pocket all year round for prescription medication for some chronic conditions, would be willing to choose cheaper products from other manufacturers, 86.9 percent (876 individuals) said they would.

[Figure 4] Are you willing on your own to switch to a cheaper bioequivalent drug for the treatment of chronic conditions that require medication all year round? (Group 1)

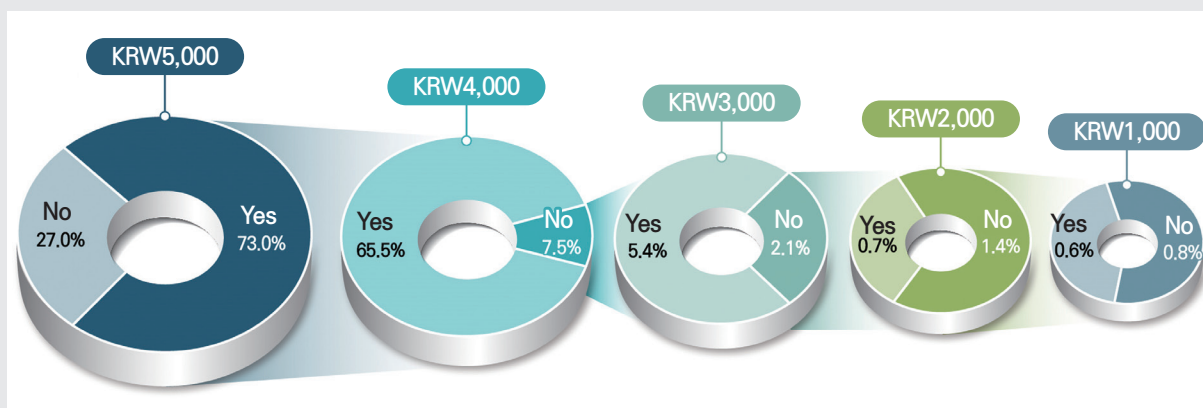


Source: Authors' own research



For Group 2 participants, assuming that they were paying KRW5,000 out-of-pocket on average for 5 days of medication for the treatment of short-term conditions, 73 percent said they would choose to use a cheaper bioequivalent drug produced by another manufacturer.

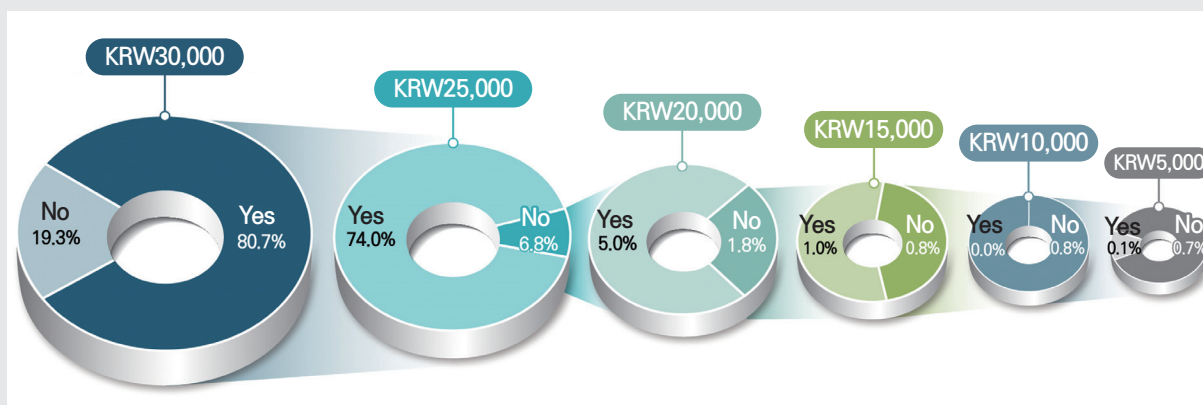
[Figure 5] Are you willing on your own to switch to a cheaper bioequivalent drug for the treatment of short-term conditions? (Group 2)



Source: Authors' own research

When an average monthly out-of-pocket payment of KRW30,000 was assumed for all year round for the treatment of chronic conditions, 80.7 percent said they would be willing to switch to a bioequivalent drug; of whom 74.0 percentage points said they would switch to a bioequivalent drug if in doing so they could cut down their out-of-pocket drugs expenses to KRW25,000.

[Figure 6] Are you willing on your own to switch to a cheaper bioequivalent drug for the treatment of chronic conditions that require medication all year round? (Group 2)



Source: Authors' own research





## Concluding remarks

To most of the survey respondents, their out-of-pocket expenditure on their prescription medication was not much of a burden, but a general tendency across participants in both Groups 1 and 2 was that they would choose, if they could, cheaper drugs to reduce their prescription medication expenditure. The prevalence of willingness to choose cheaper products among the drugs of the same ingredients as a way to reduce out-of-pocket drugs costs was higher in people with chronic conditions than in those with short-term conditions (77.9 percent of those with short-term conditions and 86 percent of those with chronic conditions in Group 1; 73 percent of those with short-term conditions and 80.7 percent of those with chronic conditions in Group 2).

Despite the fact that out-of-pocket prescription drug costs were larger for Group 2 than for Group 1, the proportion of those with a willingness to switch to a cheaper bioequivalent product was lower in Group 2 than in Group 1. This suggests that the tendency to continue using the current medication is stronger among people with chronic conditions that require continuous, long-term medications. For Group 2, composed as it was of patients on continuous medication, it could have been that the question of switching to a cheaper bioequivalent product carried a different weight of meaning than it did for Group 1.

The survey found that significantly more patients would be willing to use cheaper medications if they were recommended by their doctor, which suggests that making a choice of medication based on the cost factor becomes easier in the presence of expert suggestions.

Most of the respondents were interested in reducing their out-of-pocket spending by choosing a cheaper generic drug with the same ingredients and the same efficacy as the originator product. Most patients do not get informed enough about if there are bioequivalent alternatives to the drugs they are prescribed. Also, patients have little motivation to be interested in knowing price differences between medicines of the same ingredients and efficacy, as in the current system they are supposed to pay out-of-pocket for their prescription medications at a fixed rate (30 percent in the case of outpatient prescription drugs). The survey findings point to the need for institutional arrangements that can help patients translate their willingness to switch to cheaper generics into actual purchase decisions so that they can enjoy the same therapeutic benefits with greater financial benefits. This brief suggests that price-competition should be bolstered and the efficiency of drug expenditures raised, especially for off-patent drugs, by so revising the out-of-pocket payment system as to significantly motivate patients to choose inexpensive prescription drug options. Policymakers may consider revising the current out-of-pocket payment system with a view to helping patients cut back on their drug costs to an appreciable extent if they choose, from a range of drugs with the same ingredients and efficacy, a product below a certain price level. This approach can be useful especially for drugs for which there are a sufficient number of bioequivalent substitutions which have been in use for long enough to have their effects proven so that switching from one to another can come about with ease based on price difference alone, drugs with a market large enough to bring about, by people choosing cheaper bioequivalents, a sizable cost reduction. In order for consumers to see their willingness transpire into an actual switching to cheaper generics,

the extent of cost reduction they can expect from their decision should be appreciably substantial. Consumers in this process also need to be supported with expert advice. The reimbursement system needs to change to ensure that doctors and pharmacists too benefit from prescribing and dispensing lower-cost generic drugs. Also, in order for more consumers to choose bioequivalent generics for the cost-saving purpose, extra efforts should be taken, by means of pharmaceutical control administration, to build consumer confidence that generic drug products are of the same quality and efficacy as the originator drug.