Article title: Chinese Physicians' Preference for Prescribing Brand-Name vs. Generic: A Discrete Choice Experiment Journal name: International Journal of Health Policy and Management (IJHPM)

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Citation: Wang R, Wang Z, Li X, et al. Chinese physicians' preference for prescribing brand-name vs. generic: a discrete choice experiment. Int J Health Policy Manag. 2024;13:8392. doi:<u>10.34172/ijhpm.8392</u>

Supplementary file 1

Table S1. Selected 9 scenarios based	d on orthogonal main e	effect design
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Variable	High-quality generic drug prices vs. Originator drug prices	Hospital cost control constraint of originator drugs	Information on clinical s safety and efficacy of generic drugs	Reimbursement rates of originator drugs
Scenario 1	1:2	Not restricted by hospital cost controls	Sufficient information	50%
Scenario 2	3:10	Affected by hospital cost control	No information available	50%
Scenario 3	1:10	Affected by hospital cost control	Sufficient information	20%
Scenario 4	3:10	Affected by the NCDP policy	Sufficient information	80%
Scenario 5	3:10	Not restricted by hospital cost controls	Insufficient information	20%
Scenario 6	1:2	Affected by hospital cost control	Insufficient information	80%
Scenario 7	1:2	Affected by the NCDP policy	No information available	20%
Scenario 8	1:10	Not restricted by hospital cost controls	No information available	80%
Scenario 9	1:10	Affected by the NCDP policy	Insufficient information	50%

Subgroup analysis A	Odds Ratio	Р	Std. Err.	95% Conf.	Interval
Reimbursement rates of originator drugs*Health insurance	ce status				
Without health insurance	Reference	e			
80%	0.501	**	0.029	0.447	0.562
50%	0.520	***	0.030	0.465	0.581
20%	0.850	***	0.049	0.760	0.951
Price ratio of generics vs. originator drugs					
1:2	Reference	e			
3:10	1.180	***	0.058	1.071	1.299
1:10	1.138	**	0.056	1.033	1.254
Hospital cost control constraints targeting originator drug	gs				
Not restricted by hospital cost controls	Reference	e			
Affected by hospital cost control measures	1.205	***	0.060	1.093	1.328
Affected by the NCDP policy	1.252	***	0.062	1.136	1.379
Information about clinical safety and efficacy of generic	drugs				
No information available	Reference	e			
Insufficient information	1.182	***	0.057	1.074	1.300
Sufficient information	6.019	***	0.318	5.427	6.675
Years of clinical practice					
≤10	Reference	e			
(10, 20]	1.629	*	0.321	1.107	2.398
>20	2.646	***	0.703	1.572	4.445
Highest education attainment of physicians					
Undergraduate and below	Reference	e			
Master	0.672	*	0.125	0.466	0.969
PhD	0.663		0.146	0.431	1.022
Gender					
Female	Reference	e			
Male	1.406	*	0.230	1.021	1.937

S2. Subgroup analysis of health insurance status of physicians' preferences for prescribing originator and its generic drugs

Subgroup analysis B	Odds Ratio P	Std. Err.	95% Cont	f.Interval
Previous medication Status				
First-visit patients	Reference			
Patients who previously used originator drugs	0.279 ***	0.012	0.256	0.303
Patients who previously used generic drugs	4.836 ***	0.209	4.444	5.264
Price ratio of generics vs. originator drugs				
1:2	Reference			
3:10	1.238 ***	0.052	1.141	1.343
1:10	1.215 ***	0.051	1.119	1.319
Hospital cost control constraints targeting originator drug	ŞS			
Not restricted by hospital cost-controls	Reference			
Affected by hospital cost-control measures	1.260 ***	0.053	1.161	1.368
Affected by the NCDP policy	1.370 ***	0.057	1.262	1.487
Information about clinical safety and efficacy of generic	drugs			
No information available	Reference			
Insufficient information	1.168 ***	0.049	1.076	1.267
Sufficient information	4.197 ***	0.183	3.852	4.573
Reimbursement rates of originator drugs				
80%	Reference			
50%	0.997	0.042	0.918	1.082
20%	1.367 ***	0.058	1.259	1.485
Years of clinical practice				
≤10	Reference			
(10, 20]	1.536 *	0.311	1.032	2.285
>20	2.740 ***	0.743	1.610	4.663
Highest education attainment of physicians				
Undergraduate and below	Reference			
Master	0.620 *	0.118	0.426	0.902
PhD	0.545 **	0.123	0.350	0.849
Gender				
Female	Reference			
Male	1.363	0.229	0.981	1.893

S3. Subgroup analysis of previous medication status of physicians' preferences for prescribing originator and its generic drugs

S4. Subgroup analysis of illness severity of physicians' preferences for prescribing originator and its generic drugs

Subgroup analysis C	Odds Ratio P	Std. Err.	95% Co	nf.Interval
Severity of illness				
Mild and moderate disease	Reference			
Severe disease	0.070 ***	0.004	0.063	0.078
Price ratio of generics vs. originator drugs				
1:2	Reference			
3:10	1.220 ***	0.070	1.090	1.364
1:10	1.177 **	0.067	1.052	1.316
Hospital cost control constraints targeting originate	or drugs			
Not restricted by hospital cost-controls Re cost-control measures 1.150 *	ference Affected by hospital	0.066	1.028	1.287
Affected by the NCDP policy	1.444 ***	0.083	1.291	1.616
Information about clinical safety and efficacy of generation available	eneric drugs Reference			
Insufficient information	1.139 *	0.066	1.017	1.275
Sufficient information	4.955 ***	0.300	4.400	5.579
Reimbursement rates of originator drugs				
80%	Reference			
50%	0.977	0.056	0.873	1.093
20%	1.271 ***	0.073	1.136	1.422
Years of clinical practice				
≤10	Reference			
(10, 20]	1.764 *	0.465	1.052	2.956
>20	4.003 ***	1.417	2.001	8.010
Highest education attainment of physicians Under and below	graduate Reference			
Master	0.315 ***	0.078	0.194	0.510
PhD	1.035	0.310	0.576	1.860
Gender Female				
	Reference			
Male	0.962	0.211	0.635	1.488

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Interact effect	Odds Ratio	Р	Std. Err.	95% Cont	f.Interval
Hospital cost control constraints targeting originator drugs Price ratio of generics vs. originator drugs	* 1.039		0.025	0.991	1.089
Hospital cost control constraints targeting originator drugs Reimbursement rates of originator drugs	* 1.064	***	0.006	1.052	1.077
Hospital cost control constraints targeting originator drugs Years of clinical practice	* 1.014		0.018	0.980	1.050
Hospital cost control constraints targeting originator drugs Highest education attainment of physicians	* 1.066	***	0.017	1.033	1.100
Information about clinical safety and efficacy of generic drugs * Price ratio of generics vs. originator drugs	1.283	***	0.031	1.224	1.346
Information about clinical safety and efficacy of generic drugs * Reimbursement rates of originator drugs	1.064	***	0.006	1.052	1.077
Information about clinical safety and efficacy of generic drugs * Years of clinical practice	0.889	***	0.016	0.859	0.922
Information about clinical safety and efficacy of generic drugs * Highest education attainment of physicians	1.131	***	0.019	1.094	1.168

Table S5 Analysis of interact effect of physicians' preferences for prescribing originator and its generic

drugs

Primary analysis	Odds Ratio (95% CI)
Price ratio of generics vs. originator drugs	Reference group: 1:2
3:10	→ 1.15 (1.10, 1.21)
1:10	→ 1.13 (1.08, 1.19)
Hospital cost control measures targeting originator drugs	Reference group: Not restricted by bosnital cost controls
Affected by hospital cost control measures	← 116(110.121)
Affected by the NCDP policy	▲ 1.25 (1.19, 1.31)
Information about clinical safety and efficacy of generic drugs	Reference group: No information available
Insufficient information	→ 1.12 (1.07, 1.17)
Sufficient information	➡ 3.25 (3.10, 3.41)
Paimburgement rates of originator drugs	Beference group: 80%
20%	
Years of clinical practice	Reference group: ≤10
(10, 20]	▲ 1.37 (0.99, 1.88)
>20	2.17 (1.41, 3.35)
Highest educational attainment of physicians	Peteronee group: Undergraduate and below
PhD	0.69 (0.48, 0.98)
Gender	Reference group: Female
Male	• 1.22 (0.94, 1.59)
(Note) "<" represents $OP < 0.5$ "> " represents	$1 \qquad 2 \qquad 3 \qquad 4$
(1000) < 10 represents OK < 0.3, > 10 represents	O O V > 4

S1 Primary analysis of physicians' preferences for prescribing originator and its generic drugs



S2 Subgroup analysis of physicians' preferences for prescribing originator and its generic drugs

(Note) "<" represents OR < 0.5, ">" represents OR > 4

S3 Subgroup analysis of health insurance status of physicians' preferences for prescribing originator and its generic drugs

Subgroup analysis A	Odds Ratio (95% CI)
Reimbursement rates of originator drugs*Health insurance	Reference group: Without health insurance
80% 🗲	0.50 (0.45, 0.56)
50%	0.52 (0.47, 0.58)
20%	0.85 (0.76, 0.95)
Price ratio of generics vs. originator drugs	Reference group: 1:2
3:10	 1.18 (1.07, 1.30)
1:10	••• 1.14 (1.03, 1.25)
Hospital cost control measures targeting originator drugs	Reference group: Not restricted by hospital cost controls
Affected by hospital cost control measures	1.21 (1.09, 1.33)
Affected by the NCDP policy	•• 1.25 (1.14, 1.38)
Information about clinical safety and efficacy of generic drugs	Reference group: No information available
Insufficient information	 1.18 (1.07, 1.30)
Sufficient information	> 6.02 (5.43, 6.67)
Years of clinical practice	Reference group: ≤10
(10, 20]	• 1.63 (1.11, 2.40)
>20	◆ ◆ 2.65 (1.57, 4.45)
Highest educational attainment of physicians	Reference group: Undergraduate and below
Master	0.67 (0.47, 0.97)
PhD <	0.66 (0.43, 1.02)
Gender	Reference group: Female
Male	• 1.41 (1.02, 1.94)
<u> </u>	i i i i 1 2 3 4

(Note) "<" represents OR < 0.5, ">" represents OR > 4

S4 Subgroup analysis of previous medication status of physicians' preferences for prescribing originator and its generic drugs

Subgroup analysis B	Odds Ratio (95% CI)
Previous medication status	Reference group: First-visit patients
Patients who previously used originator dru g s	0.28 (0.26, 0.30)
Patients who previously used generic drugs	> 4.84 (4.44, 5.26)
Price ratio of generics vs. originator drugs 3:10 1:10	Reference group: 1:2 1.24 (1.14, 1.34) 1.22 (1.12, 1.32)
Hospital cost control measures targeting originator drugs Affected by hospital cost control measures Affected by the NCDP policy	Reference group: Not restricted by hospital cost controls 1.26 (1.16, 1.37) 1.37 (1.26, 1.49)
Information about clinical safety and efficacy of generic drugs Insufficient information Sufficient information	Reference group: No information available ▲ 1.17 (1.08, 1.27) ▶ 4.20 (3.85, 4.57)
Reimbursement rates of originator drugs	Reference group: 80%
50%	1.00 (0.92, 1.08)
20%	1.37 (1.26, 1.49)
Years of clinical practice (10, 20] >20	Reference group: ≤10
Highest educational attainment of physicians	Reference group: Undergraduate and below
Master	0.62 (0.43, 0.90)
PhD	0.55 (0.35, 0.85)
Gender	Reference group: Female
Male	1.36 (0.98, 1.89)
LI	I I I
.5	1 2 3 4

(Note) "<" represents OR < 0.5, ">" represents OR > 4

S5 Subgroup analysis of illness severity of physicians' preferences for prescribing originator and its generic drugs

Subgroup analysis C	Odds Ratio (95% CI)
Severity of illness	Reference group: Mild and moderate disease
Severe disease <	0.07 (0.06, 0.08)
Price ratio of generics vs. originator drugs	Reference group: 1:2
3:10	
1:10	— 1.18 (1.05, 1.32)
Hospital cost control measures targeting originator drugs	Reference group: Not restricted by hospital cost controls
Affected by hospital cost control measures	— 1.15 (1.03, 1.29)
Affected by the NCDP policy	— 1.44 (1.29, 1.62)
Information about clinical safety and efficacy of generic drugs	Reference group: No information available
Insufficient information	•• 1.14 (1.02, 1.27)
Sufficient information	> 4.95 (4.40, 5.58)
Reimbursement rates of originator drugs	Reference group: 80%
50%	0.98 (0.87, 1.09)
20%	— 1.27 (1.14, 1.42)
Years of clinical practice	Reference group: ≤10
(10, 20]	• 1.76 (1.05, 2.96)
>20	4.00 (2.00, 8.01)
Highest educational attainment of physicians	Reference group: Undergraduate and below
Master <	0.32 (0.19, 0.51)
PhD	 1.03 (0.58, 1.86)
Gender	Reference group: Female
Male	0.96 (0.63, 1.49)
1	
.5	1 2 3 4

(Note) "<" represents OR < 0.5, ">" represents OR > 4

Interact effect			Odds Ratio (95% CI)
Hospital cost control constraints targeting originator drugs			
* Price ratio of generics vs. originator drugs	*		1.04 (0.99, 1.09)
* Reimbursement rates of originator drugs	•		1.06 (1.05, 1.08)
* Years of clinical practice	+		1.01 (0.98, 1.05)
* Highest education attainment of physicians	+		1.07 (1.03, 1.10)
Information about clinical safety and efficacy of generic drugs * Price ratio of generics vs. originator drugs * Reimbursement rates of originator drugs * Years of clinical practice * Highest education attainment of physicians	* *		1.28 (1.22, 1.35) 1.06 (1.05, 1.08) 0.89 (0.86, 0.92) 1.13 (1.09, 1.17)
.5	1 I 1 2	3 4	I 4

S6 Analysis of interact effect of physicians' preferences for prescribing originator and its generic drugs