

## Appendices (as supplied by the author)

### Appendix 6. Sensitivity analysis results on the association between factors and shortage at the market level (defined by active ingredients, route and form)

Parameter	Parameter level	OR (95% CI)	Overall p-value*
Market Structure	B/G Multiple	0.12 (0.04, 0.37)	<0.001
	B only	1.57 (0.86, 2.89)	
	G single	2.64 (1.38, 5.05)	
	G multiple	0.51 (0.22, 1.18)	
	BIO	1.48 (0.70, 3.12)	
	B/G Single	1	
Route form	Injection	1.61 (0.99, 2.64)	0.002
	Oral non-Solid	2.35 (1.37, 4.03)	
	Oral solid special release	1.23 (0.49, 3.08)	
	Other	2.64 (1.58, 4.41)	
	Oral solid regular release	1	
Proportion of DINs on formulary (per 10% increase)		1.03 (1.00, 1.07)	0.090
Anatomical Therapeutic Chemical Classification (Level 1)	Alimentary tract and metabolism	0.27 (0.12, 0.60)	0.012
	Blood and blood forming organs	0.17 (0.05, 0.56)	
	Cardiovascular system	0.53 (0.24, 1.16)	
	Dermatologicals	0.44 (0.23, 0.83)	
	Genito-urinary system and sex hormones	0.63 (0.31, 1.28)	
	Systemic hormonal preparations, excluding sex hormones and insulins	0.46 (0.19, 1.12)	
	Anti-infectives for systemic use	0.54 (0.28, 1.06)	
	Antineoplastic and immunomodulating agents	0.29 (0.14, 0.62)	
	Musculoskeletal system	0.69 (0.27, 1.73)	
	Nervous system	0.35 (0.17, 0.69)	
	Antiparasitic products, insecticides and repellents	1.23 (0.21, 7.30)	
	Respiratory system	0.57 (0.30, 1.09)	
	Various	0.30 (0.12, 0.72)	
	Sensory organs	1	
	Model fit statistics	C-statistic	
AIC		1327.50	
Log likelihood		-639.75	

B: branded manufacturers; G: generic manufacturer; OR: Odds Ratio; CI: Confidence Interval; DIN: drug identification number; AIC: Akaike information criteria

\* Based on Type III Wald Test.