

The Value-Based Price for a Bivalent COVID-19 Booster Vaccine in the United Kingdom

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SUPPLEMENTARY MATERIAL

Supplemental Table. Detailed Clinical Outcomes: Sensitivity Analyses

Scenario	Symptomatic Infections		Hospitalizations		Deaths	
	Total number in the no booster run	Reduction with the fall booster	Total number in the no booster run	Reduction with the fall booster	Total number in the no booster run	Reduction with the fall booster
No long COVID costs	40,785,990	-5,935,345	362,730	-50,753	44,941	-10,338
Hospitalization rates (-25%)	40,785,990	-5,935,345	272,047	-38,065	33,706	-7,754
Hospitalization rates (+25%)	40,785,990	-5,935,345	453,412	-63,441	56,177	-12,923
Hospitalization unit costs (+24%)	40,785,990	-5,935,345	362,730	-50,753	44,941	-10,338
Hospitalization unit costs (-23%)	40,785,990	-5,935,345	362,730	-50,753	44,941	-10,338
Waning rate of effectiveness against severe disease ^a	40,785,990	-5,935,345	522,159	-160,134	71,174	-31,118
Natural immunity (50% of base case) starting September 2023	22,131,708	-3,874,345	205,733	-40,712	27,047	-8,252
Natural immunity (33% of base case) starting September 2023	16,360,183	-3,247,643	155,998	-36,343	21,060	-7,202
VE waning: infection & hospitalization (lower 95% CI)	40,785,990	-7,695,318	362,730	-86,512	44,941	-16,795
VE waning: infection & hospitalization (upper 95% CI)	40,785,990	-4,013,453	362,730	-9,152	44,941	-2,554

CI, confidence interval; VE, vaccine effectiveness.

^aDoubled waning rate for omicron period (affects all boosters in 2022/2023).

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