

Supplementary Table 1 List of model scenarios

Description	
1	10-year time horizon To explore the impact of more fully accounting for health effects of ESG and costs over a longer-term time horizon than the 5-year base case, also of relevance to this specific population in a commercial setting.
2	Lifetime time horizon To explore the impact of more fully accounting for health effects and costs over a longer-term time horizon. Aligned with the Institute of Clinical and Economic Review (ICER) value assessment framework[1]. Duration 54 years based on 100 years minus the mean age of the model cohort at baseline (46 years)
3	6% annual discount rate for costs and health effects To explore the impact of using an alternative discount rate to the 3% rate used in the base-case analysis.
4	0% annual discount rate for costs and health effects. To explore the impact of using an alternative discount rate to the 3% rate used in the base-case analysis.

ESG: Endoscopic sleeve gastropasty.

Supplementary Table 2 Disaggregated base-case results: QALYs

	QALYs	QALYs	Increment	Absolute increment	Absolute increment
	ESG	LM alone	(ESG <i>vs</i> LM)	(ESG <i>vs</i> LM)	(ESG <i>vs</i> LM)
Healthy weight	0.239	0.000	0.239	0.239	72%
Overweight	1.187	0.120	1.067	1.067	321%
Obesity I	1.346	1.016	0.330	0.330	99%
Obesity II	0.674	1.278	-0.604	0.604	182%
Obesity III	0.216	0.916	-0.700	0.700	211%
Total	3.662	3.330	0.332	0.332	100%

Note: 3% annual discount rate applied to costs and health effects.

ESG: endoscopic sleeve gastropasty, LM: lifestyle modification, QALY: quality-adjusted life year.

Supplementary Table 3 Disaggregated base-case results: Costs

	Costs, ESG	Costs, LM alone	Increment, (ESG LM)	Increment, <i>vs</i> LM)	Absolute Increment (ESG <i>vs</i> LM)	Absolute increment (ESG <i>vs</i> LM)
Costs by health state, \$						
Healthy weight	1086	0	1086	1086		55%
Overweight	6661	440	6221	6221		317%
Obesity I	12462	6252	6210	6210		317%
Obesity II	9265	11884	-2619	2619		134%
Obesity III	5105	14043	-8939	8939		456%
Total	34579	32619	1960	1960		100%

Note: All costs are 2023 US\$ values; 3% annual discount rate applied to costs and health effects.

ESG: endoscopic sleeve gastropasty, LM: lifestyle modification.

1 **Atlas SJ**, Kim K, Nhan E, Touchette DR, Moradi A, Agboola F, Rind DM, Beaudoin FL, Pearson SD. Medications for obesity management: Effectiveness and value. *J Manag Care Spec Pharm* 2023; **29**: 569-575 [PMID: 37121254 DOI: 10.18553/jmcp.2023.29.5.569]