

Adverse event analyses

Table 1 Base case analysis, pairwise compared to histopathology

	Costs	Incremental Costs	QALYs	Incremental QALY	ICER (£ per QALY)
Histopathology	£988.95		11.2703		
NBI	£915.85	-£73.10	11.2708	0.0005	Dominates
FICE	£901.25	-£87.70	11.2701	-0.0001	£671,383 *
i-scan	£909.74	-£79.21	11.2709	0.0007	Dominates

* Incremental cost saving per QALY lost.

An analysis was conducted that included adverse events for colonoscopy (without polypectomy). According to Rutter et al. (2014), polypectomy increased bleeding risk 11.14 fold and perforation risk 2.97 fold. The adverse event rate for colonoscopy was calculated from the rates used for polypectomy adjusted with these ratios. The results obtained are similar to the base case results (Table 2).

Table 2 Analysis with adverse events for colonoscopy, pairwise compared to histopathology

	Costs	Incremental Costs	QALYs	Incremental QALY	ICER (£ per QALY)
Histopathology	£988.95		11.2703		
NBI	£915.89	-£73.06	11.2707	0.0004	Dominates
FICE	£901.30	-£87.65	11.2700	-0.0003	£342,438
i-scan	£909.79	-£79.16	11.2708	0.0006	Dominates

We also ran the analysis using the adverse event rates for perforation from Rutter et al. The results are shown in Table 4. We have only changed the perforation rate as the definition for bleeding used in the model was bleeding that led to hospitalisation which is different to the definition in Rutter et al.

Table 1 Rutter 2014 Adverse events in English Bowel Cancer Screening Program

Adverse Event	N	(n)	%
Polypectomy	69028	63	0.0913
No Polypectomy	61803	19	0.0307
Polypectomy	69028	784	1.14
No Polypectomy	61803	63	0.10

*Bleeding not well defined, we have bleeding requiring hospitalisation in the model.

Table 4 Analysis with adverse events for colonoscopy from Rutter et al., pairwise compared to histopathology

	Costs	Incremental Costs	QALYs	Incremental QALY	ICER (£ per QALY)
Histopathology	£985.83		11.2715		
NBI	£913.36	-£72.47	11.2716	0.0001	Dominates
FICE	£898.91	-£86.92	11.2708	-0.0007	£126,229
i-scan	£907.23	-£78.60	11.2717	0.0002	Dominates