Appendix 2: Results of cost-effectiveness analysis of testing strategies used to determine HER2 status

Testing strategy*	Median (95% credible interval)				
	% of patients undergoing FISH	Annual cost of screening 1000 patients, $ thousand	% of patients with accurately determined HER2 status	Incremental cost-effectiveness ratio per correct diagnosis, $	Annual cost of trastuzumab therapy per 1000 patients screened, $ million
Strategy 1 (base strategy)	12.0 (3.1-21.3)	164 (124-208)	96.4 (94.7-97.5)	—	10 (7-13)
Strategy 2	0.0 (—)	108 (—)	88.2 (80.8-93.9)	664 (531-1074)‡	14 (11-18)
Strategy 3	0.0 (—)	108 (—)	92.9 (87.9-95.7)	1569 (826-3883)§	8 (5-12)
Strategy 4	83.8 (77.1-89.5)	331 (198-480)	98.2 (96.9-99.1)	9519 (2599-17 980)¶	11 (8-14)
Strategy 5 (selected strategy†)	28.3 (21.8-36.0)	240 (208-277)	97.6 (96.4-98.4)	6175 (3630-12 140)	9 (7-12)
Strategy 6	63.8 (36.1-94.1)	406 (275-555)	99.4 (98.7-99.9)	8061 (3972-13 570)	10 (8-13)
Strategy 7	100.0 (—)	467 (—)	100.0 (—)	8401 (5879-11 970)	11 (8-13)

Note: FISH = fluorescence in situ hybridization.
*See Table 1 for descriptions of testing strategies.
†Selected as having the lowest incremental cost-effectiveness ratio.
‡Dominated, simple (less accurate and more expensive than base strategy).
§Eliminated (less accurate and less expensive than base strategy).
¶Dominated, extended (less accurate and higher cost-effectiveness ratio than base strategy).