

Online Resource 4:

Change in treatment strategies: data input and supplementary results

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Change in the costs of palliative chemotherapy

Table 1 Change for an average CRC patient when increasing the input variable

Treatment	20% increase		0.1 quota increase ^a
	Per cent change	Costs change	Per cent change
Change in the probability of receiving			
5-FU/FA in 1 st line of treatment (5FU/FA-scenario)	-0.48	-230	-0.83
Chemotherapy, 2 nd line of treatment in the '5-FU/FA-scenario'	0.72	340	0.60
Bevacizumab, 1 st line of treatment, assumed in 'no-5-FU/FA-sc'	1.08	510	1.35
Chemotherapy, 2 nd line of treatment, assumed in 'no-5-FU/FA-sc'	1.66	790	1.38
Chemotherapy (EGFR-inh + irinotecan), 3 rd line of treatment	1.63	770	1.36
Change in costs for the treatment			
5-FU	0.27	130	
Bevacizumab+FLIRI	1.29	620	
Bevacizumab+FLOX	0.14	70	
FLIRI 1 st line of treatment	0.16	80	
FLOX 1 st line of treatment	0.37	170	
EGFR-inh (+ irinotecan)	1.89	890	
Change in the costs of the medicine			
Bevacizumab	0.92	430	
FLIRI	0.51	240	
FLOX	0.54	250	
EGFR-inh (+ irinotecan)	1.47	690	
5-FU/FA	0.24	110	

^a10 percentage points increase

To show the importance of uncertainty in the input data, we estimated the effect of changes in both prices and probabilities (Table 1). Most sensitive to the 20% change in treatment costs were the EGFR-inh + irinotecan treatment with a 1.89% change (€780) and the '*bevacizumab* + *FLIRI*' treatment with a 1.29% change (€540).

When we only considered a 20% increase in drug costs from the pharmacy, EGFR-inh + irinotecan had a 1.47% change (€610), and bevacizumab had a 0.92% change (€380). The price of 5-FU/FA was least sensitive (0.24%, €100) to a 20% change.

Input data to the screening analysis

Assuming that a person has CRC, Table 2 shows the probability of being diagnosed at the different stages of CRC. The data were based on one study from Denmark and one from the UK (Nottingham) (1, 2).

Table 2 How CRC patients are distributed in the screened and control groups

	Denmark		UK (Nottingham)	
	Screened	Control	Screened	Control
Stage I	0.370	0.148	0.506	0.151
Stage II	0.277	0.338	0.205	0.346
Stage III	0.272	0.300	0.241	0.285
Stage IV	0.081	0.214	0.048	0.218

References

1. Scholefield JH, Moss SM, Mangham CM, Whynes DK, Hardcastle JD. Nottingham trial of faecal occult blood testing for colorectal cancer: a 20-year follow-up. *Gut*. 2012;61(7):1036-40.
2. RCPH. Screening for colorectal cancer in Vejle and Copenhagen county: Research Centre for Prevention and Health (RCPH); 2007.