

Supplementary Table: Variables used in the Markov model for transition probabilities and

costs

Variable	Base case	Range for		Distribution for	Source
	Value	Deterministic analysis	Probabilistic analysis		
<i>Clinical data</i>					
<i>Proportions</i>					
Background mortality	0.008	-	-	-	1
Chemotherapy complication (Gastro)	0.24	0.23*	0.25*	Beta	2
Chemotherapy complication (Haemato)	0.20	0.19*	0.21*	Beta	2
Chemotherapy with Trastuzumab	0.22	0.20	0.36	Beta	3
Endoscopy under anaesthesia	0.12	0.06	0.18	Beta	4
Endoscopy sensitivity	0.93	0.44	0.99	Beta	5
ESD bleeding	0.031	0.023	0.078	Beta	6,7
ESD mortality	0.00	0.00	0.009	Beta	6,7
ESD perforation	0.011	0.011	0.043	Beta	6,7
ESD recurrence	0.012	0.011	0.035	Beta	6,7
ESD probability without screening	0.01	0.01	0.02	Beta	Expert opinion
ESD probability if stage I	0.30	0.20	0.40	Beta	8
Gastric cancer incidence	0.000131	0.000047	0.000299	Beta	9
Male gender	0.61	0.58*	0.64*	Beta	10
Pepsinogens sensitivity	0.67	0.64	0.70	Beta	11
Pepsinogen positive test	0.034	0.032	0.036	Beta	11
Radiotherapy complication	0.48	0.46*	0.50*	Beta	12
Screening adherence	0.25	0.13	0.44	Beta	13-16
Stage I without screening	0.07	0.07	0.09	Beta	8,17
Stage II without screening	0.17	0.14	0.34	Beta	8,17
Stage III without screening	0.33	0.32	0.46	Beta	8,17
Stage IV without screening	0.43	0.43	0.45	Beta	8,17
Stage I with screening	0.85	0.62	0.85	Beta	8,17,17,18
Stage II with screening	0.04	0.04	0.29	Beta	8,17
Stage III with screening	0.08	0.08	0.29	Beta	8,17
Stage IV with screening	0.03	0.03	0.07	Beta	8,17
Surgery if stage II	0.60	0.40	0.60	Beta	8
Surgical bleeding	0.10	0.03	0.27	Beta	19
Surgical dehiscence	0.01	0.002	0.10	Beta	19
Surgical hernia	0.05	0.02	0.11	Beta	19
Survival at 5 years if Stage I	0.64	0.57	0.71	Beta	20
Survival at 5 years if Stage IIa	0.46	0.33	0.46	Beta	20
Survival at 5 years if Stage IIb	0.33	0.33	0.46	Beta	20
Survival at 5 years if Stage III	0.14	0.09	0.20	Beta	20
Survival at 5 years if Stage IV	0.04	0.01	0.04	Beta	20
<i>Days lost for procedures or treatments</i>					
Chemotherapy complication	5	2*	8	Gamma	Expert opinion
Chemotherapy with De Gramont	16	13	16	Gamma	Expert opinion
Chemotherapy with ECF	12	10	12	Gamma	Expert opinion
Chemotherapy with LV5FU2	24	19	24	Gamma	Expert opinion
Endoscopy	1	1*	2*	Gamma	Expert opinion
ESD	3	2	4	Gamma	7
ESD complication	3	2	8	Gamma	7
Palliative treatment	50	47*	53*	Gamma	Expert opinion
Radiotherapy	25	20	25	Gamma	Expert opinion
Radiotherapy complication	5	2	8	Gamma	Expert opinion
Surgery complication	5	4	8	Gamma	Expert opinion
Surgery (in hospital)	10	8.4	18.8	Gamma	21
Surgery (recover at home)	10	9*	11*	Gamma	Expert opinion
<i>Cost data</i>					
Anaesthesia	183	174*	192*	Gamma	22
Appointment	31	29*	33*	Gamma	22
Cancer staging	282	268*	296*	Gamma	22
Cancer staging with EUS	102	97*	107*	Gamma	22
Cancer staging with PET scan	1,033	981*	1,085*	Gamma	22
Cancer surveillance	205	195*	215*	Gamma	22
Chemotherapy with LV5FU2	347	330*	364*	Gamma	23
Chemotherapy with Trastuzumab	16,306	15,491*	17,121*	Gamma	23
Chemotherapy with De Gramont	139	132*	146*	Gamma	23
Chemotherapy with ECF	237	225*	249*	Gamma	23

Daily outpatient in Day Care Oncology	39	37*	41*	Gamma	24
Daily inpatient in Oncology	382	363*	401*	Gamma	24
Daily inpatient in Palliative treatment	326	310*	342*	Gamma	24
Daily inpatient in Radiotherapy	143	136*	150*	Gamma	24
Daily outpatient in Radiotherapy	6	5*	7*	Gamma	24
Daily inpatient in Surgery	408	388*	428*	Gamma	24
Discount	0.03	0.00	0.05	Beta	25
Endoscopy biopsy	28	27*	29*	Gamma	22
Endoscopy only	60	60	398	Gamma	22
Endoscopy (full price including fees, anaesthesia, work lost and transportation)	137	60	398	Gamma	22
Endoscopic clipping	203	193*	213*	Gamma	22
Endoscopic haemorrhage	13	12*	14*	Gamma	22
Endoscopic injection	34	32*	36*	Gamma	22
Endoscopic screening from a societal point of view	166	60	398	Gamma	22
ESD	933	886*	980*	Gamma	22
Pepsinogens I/II ratio	100	10	100	Gamma	22
PICC placement	75	71*	79*	Gamma	22
PICC removal	48	46*	50*	Gamma	22
PICC if chemotherapy with De Gramont	153	145*	161*	Gamma	23
PICC if chemotherapy with ECF	122	116*	128*	Gamma	23
PICC if chemotherapy with LV5FU2	229	218*	240*	Gamma	23
Radiotherapy	2,723	2,587*	2,859*	Gamma	22
Surgery	1,909	1,814*	2,004*	Gamma	22
Surgical biopsy	315	299*	331*	Gamma	22
Surgery with complication	4,531	4,304*	4,758*	Gamma	22
Transport between home and hospital	5	0	25	Gamma	Expert opinion
User fee for endoscopy	12	11*	13*	Gamma	24
User fee for Anaesthesia	29	28*	30*	Gamma	24
User fee for ESD	20	19*	21*	Gamma	24
Working day	52	46*	58*	Gamma	1
Utility data					
Cancer if female	0.70	0.42	0.97	Beta	26
Cancer if male	0.66	0.49	0.83	Beta	26
Chemo or radiotherapy if female	0.76	0.60	0.92	Beta	26
Chemo or radiotherapy if male	0.85	0.79	0.91	Beta	26
ESD if female	0.70	0.33	1	Beta	26
ESD if male	0.77	0.50	1	Beta	26
Premalignant condition if female	0.70	0.66	0.74	Beta	26
Premalignant condition if male	0.82	0.79	0.85	Beta	26
Surgery if female	0.71	0.62	0.80	Beta	26
Surgery if male	0.79	0.72	0.87	Beta	26

Legend: All variables have a value for the base case scenario plus a range for inclusion in deterministic one-way sensitivity analysis and distributions for the probabilistic Monte Carlo sensitivity analysis. ESD- endoscopic submucosal dissection, EUS-endoscopic ultrasonography, PET-positron emission tomography; PICC-peripherally inserted central catheter; ECF- epirubicin, cisplatin and fluorouracil; LV5FU2- fluorouracil, folinic acid and cisplatin; de Gramont- fluorouracil and folinic acid.

* Range not available in published literature and calculated for a 10% deviation (5% below and 5% above the base case value).

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