

AMPLIACIÓN

Table 1. Standard clinical management strategies. Results from the systematic review

Reference(s)	Standard clinical management strategy (baseline comparator)
Kosuda et al Dietlein et al Bradbury et al Verboom et al Valk et al	Standard strategy 1 (S1). - TNM staging (mediastinal staging in Dietlein et al) using CT, followed by mediastinoscopy (Ms-t) in all patients independently of the result of CT. Ms-t-ve patients (usually patients with no abnormal mediastinal lymph nodes > 10mm, although this is not specified in many articles!) go for tumour resection (thorachotomy) and Ms-t+ve patients are referred to non-surgical treatment (chemotherapy and/or radiotherapy)
Scott et al Gambhir et al	Standard strategy 2 (S2). - Mediastinal staging using CT, followed by Ms-t only in CT+ve patients. CT-ve patients are referred straight to surgery. Of all CT+ve patients that undergo mediastinoscopy, MS-T-ve patients are referred to surgery and MS-T+ve patients are referred to non-surgical treatment
Von Schulthess et al	Standard strategy 3 (S3). - TNM staging using CT and bone scanning

Table 2. Intervention clinical management strategies. Results from the systematic review.

Reference(s)	PET-including clinical management strategy (intervention).
Dietlein et al Bradbury et al	Intervention strategy 1 (I1). - TNM staging (Mediastinal staging in Dietlein et al) with CT followed by PET in all patients. Independently of the results of CT, PET-ve patients go straight to surgery. PET+ve patients go all to non-surgical treatment.
Scott et al Dietlein et al Bradbury et al	Intervention strategy 2 (I2). - TNM staging (mediastinal staging in Dietlein et al) with CT followed by PET in all patients. Independently of the results of CT, PET-ve patients go straight to surgery and PET+ve patients undergo Ms-t, followed by surgery in Ms-t-ve patients and non-surgical treatment in Ms-t+ve patients (Scott, Dietlein). One variation of this strategy sends PET N0/N1 M1 patients straight to non-surgical treatment.
Dietlein et al	Intervention strategy 3 (I3). - TNM staging (Mediastinal staging in Dietlein et al) with CT followed by PET in CT-ve patients only. CT+ve patients go straight to non-surgical treatment. CT-ve patients are referred to non-surgical treatment if PET is +ve, and to surgery if PET is -ve.
Scott et al	Intervention strategy 4 (I4). - Mediastinal staging with CT followed by PET in CT-ve patients only. CT+ve patients go straight to non-surgical treatment. CT-ve patients are referred to Ms-t if PET is +ve, followed by non-surgical treatment in Ms-t+ve patients and surgery in Ms-t-ve patients. If PET is -ve, patients are referred straight to surgery.
Dietlein et al	Intervention strategy 5 (I5). - Mediastinal staging with CT followed by PET in all patients. In patients that are both CT-ve and PET+ve, Ms-t is performed followed by surgery in Ms-t-ve patients and non-surgical treatment in Ms-t+ve patients. For all other categories, independently of CT results, PET+ve patients undergo non-surgical treatment and PET-ve patients go to surgery.
Bradbury et al	Intervention strategy 6 (I6). - TNM staging with CT followed by PET in all patients. Patients that are both CT+ve and PET-ve undergo MS-T (aswell as patients that are both CT-ve and PET+ve), followed by surgery in Ms-t-ve patients and non-surgical treatment in Ms-t+ve patients.
Scott et al	Intervention strategy 7 (I7). - Mediastinal staging with CT followed by PET in all patients. MS-T is performed on all patients (followed by non-surgical treatment or surgery) except those that are both CT-ve and PET-ve, who are referred straight to surgery.
Gambhir et al	Intervention strategy 8 (I8). - Mediastinal staging using PET followed by CT in all patients. PET+ve patients all undergo Ms-t independently of CT results, followed by non-surgical treatment for Ms-t+ve and surgical treatment for Ms-t-ve patients.
Gambhir et al	Intervention strategy 9 (I9). - Mediastinal staging using PET followed by CT in all patients. Patients both PET-ve and CT-ve go straight to surgery. Patients that are both PET-ve and CT+ve (or PET+ve and CT-ve) go to MS-T (followed by non-surgical treatment if Ms-t+ve or surgery if Ms-t-ve). Patients both CT+ve and PET+ve go straight to non-surgical treatment.
Bradbury et al	Intervention strategy 10 (I10). - TNM staging with CT followed by MS-T in all patients. Ms-t-ve patients go to PET, followed by surgery if PET-ve and non-surgical treatment if PET+ve. Ms-t+ve patients are referred straight to non-surgical treatment.
Von Schulthess et al	Intervention strategy 11 (I11). - PET and CT only if PET indicates operable disease (no further details are given).
Verboom et al	Intervention strategy 12 (I12). - Conventional work-up and PET (no further details are given).

Table 3. Evidence for increased effectiveness using PET in the clinical management of NSCLC patients. Results from the literature review.

Study	Source of effectiveness data	Outcomes with each strategy	Comments regarding evidence for increased effectiveness.
Verboom et al	Clinical trial (n=188)	Futile surgery (I12) = 21% Futile surgery (S1) = 41% (p=0.003)	Strong evidence.
Valk et al	Clinical series (n=99)	15 thoracotomies avoided due to PET finding 6 non-surgical treatments avoided due to PET findings	No p-values or C.I.s given. No sample size necessary for detection of significant effect reported.
Von Schultness et al	2 studies in the literature	- PET staging was accurate, in detecting N3 in 4 of 65 patients, which were understaged as N2 disease with CT. - Unsuspected metastases were identified with PET in 14 out of 95 patients (...) 9 of those 14 patients were initially diagnosed as N0/N1 or N2 disease (...) Only with the PET was the disease recognised as inoperable.	Weak evidence due to: - insufficient information on statistical significance of results provided. - Small sample sizes with no power calculations.
Dietlein et al	Literature review	LE under each strategy: CT+M (S1): 3.308 yrs CT+PET (I3): 3.322 yrs CT+PET+M (I2): 3.328 yrs CT+PET+M (I5): 3.282 yrs CT+PET (I1): 3.255 yrs Max LE gain= LE(I2)-LE(S1)= 0.02 yrs	Weak evidence (Max LE gain = 1 week.) Patients included all had normal size Ms-tiastral lymph nodes (which excludes 75% of patients with NSCLC). Thus, limited external validity.
Scott et al	Literature review	LE under each strategy: CT+ M (S2): 4.921 yrs CT+M+PET (I4): 4.928 yrs CT+M+PET (I7): 4.930 yrs CT+M+PET (I2): 4.928 yrs Max LE gain= LE(I7)-LE(S2)= 0.009 yrs	Weak evidence (Max LE gain < 1 week.)
Gambhir et al	Literature review	LE gain (I8 – S2) = 2.96 days	Weak evidence
Kosuda et al	Literature review and clinical series (n=56)	LE under each strategy: CT alone (S3): 10.33 yrs/patient CT+ FDG PET (I11): 10.94 yrs/patient LE gain (I11-S3): 0.61 yrs	No external validity: - Standard practice in this study not used anywhere else. - 30% patients included not NSCLC patients
Bradbury et al	Literature review	CT+ve patients: CT+M (S1): 71.86 QALYs CT+M+PET (I10): 66.03 QALYs CT+PET+M (I6): 66.16 QALYs CT+PET+M (I2): 72.11 QALYs CT+PET (I1): 66.17 QALYs QALE (I2)-QALE (S1)= 0.15 QALYs CT-ve patients: CT+M (S1): 189.63 QALYs CT+PET+M (I2): 190.96 QALYs CT+PET (I1): 181.97 QALYs CT+PET +M (I6): 181.39 QALYs CT+M+PET (I10): 181.28 QALYs QALE (I2)-QALE(S1)= 1.33 QALYs	CT+ve patients: QALYs gained with most effective intervention strategy in a cohort of 100 patients = 0.15 QALYs CT-ve patients: QALYs gained with most effective intervention strategy in a cohort of 100 patients = 1.33 QALYs Weak evidence of increased effectiveness.

Table 4. Incremental cost-effectiveness ratios from the literature review. Outcome measure: Life Expectancy (LE).

Study	ICER
Dietlein et al	ICER (I3-S1) = 142 EUR per life year saved ICER (I2-S1) = 11,100 EUR per lys ICER (I2-I3) = 36,667 EUR per lys ICER (I5-I3) = 15,325 EUR per lys ICER (I5-I2) = 18,109 EUR per lys ICER (I1-I3) = 15,716 EUR per lys ICER (I1-I2) = 17,438 EUR per lys
Scott et al	ICER (I4-S2) = \$25,286 per lys ICER (I7-I4) = \$70,889 per lys ICER (I2-I7) = \$137,857 per lys.
Gambhir et al	Not reported
Kosuda et al	Not reported

Table 5. Patient types for which initial health state valuations were elicited using EQ-5D (Spanish tariff).

Type 1	Type 2	Type 3	Type 4
<p>Patients with a weight loss of at least 10 kg prior to Ms-tiastinal staging and one or more of the following symptoms: hemoptysis persistent cough difficulty breathing chest pain fever</p>	<p>Patients with a weight loss of at least 10 kg prior to Ms-tiastinal staging and none of the following symptoms: hemoptysis persistent cough difficulty breathing chest pain fever</p>	<p>Patients with no weight loss prior to Ms-tiastinal staging and one or more of the following symptoms: Hemoptysis persistent cough difficulty breathing chest pain fever</p>	<p>Patients with no weight loss prior to Ms-tiastinal staging and none of the following symptoms: hemoptysis persistent cough difficulty breathing chest pain fever</p>

Table 6. Quality of life profiles modelled for each treatment.

Patient referred to surgery (N0/N1 disease)	Patient referred to non-surgical treatment (N2/N3 disease)
Profile 1: no surgical complications, no chemotherapy/radiotherapy	Profile 5. Patient treated with chemotherapy and radiotherapy
Profile 2: no surgical complications, patient given chemotherapy and radiotherapy	
Profile 3: surgical complications, no chemotherapy/radiotherapy	
Profile 4: surgical complications, patient given chemotherapy and radiotherapy	

Table 7. Quality of life profiles developed for each treatment. Source: REFERENCE and expert opinion.

QOL profiles	Estimated change in QOL	Algebraic formula
Profile 1	Surgery induces a fall in QOL of 0.05 from the initial health state (U_0) during the first month. QOL remains stable for the rest of the time except the last 6 months of life, during which QOL drops to 0.2.	QALYs (Profile 1): $1/12 \times (U_0 + (U_0 - 0.05) \times (LE - 7) + (0.2 \times 6))$
Profile 2	Same as Profile 1 except that chemotherapy /radiotherapy induce a drop in QOL of 0.4 during the 4 months of non-surgical treatment. After non-surgical treatment, QOL rises by .4 until the last 6 months of life, in which QOL drops to 0.2	QALYs (Profile 2): QALYs (Profile 1) – $4/12 \times 0.4$
Profile 3	Same as Profile 1 except that complications induce a drop in QOL to 0 during the first month after surgery	QALYs (Profile 3) $1/12 \times (U_0 + (U_0 - 0.05) \times (LE - 6) + (0.2 \times 6))$
Profile 4	Same as Profile 3 with the addition of changes in QOL produced by Profile 2	QALYs (Profile 4): QALYs (Profile 3) - $4/12 \times 0.4$
Profile 5	Chemotherapy induces a fall in QOL of 0.4 after 1 month in the initial health state, and remains stable for the 4 months of non-surgical treatment. It then rises by 0.2 until the last 6 months of life, during which QOL drops to 0.2	QALYs (Profile 5): $1/12 \times (U_0 + 4 \times (U_0 - 0.4) + (U_0 - 0.2) \times (LE - 11) + 0.2 \times 6)$

Table 8. Departments from which average resource consumption was obtained for the alternative staging procedures and treatments. All services except PET Center are in hospital 12 de Octubre.

Resource Consumption	Procedures/treatments					
	MS-T	CT	PET	Surgery	Chemotherap	Radiotherapy
Materials	Thoracic surgery department	Radiodiagnosis Department	NA	Thoracic surgery Department	Oncology Department	Oncological radiotherapy Department
Pharmaceutic alproducts						
Personnel time						
Hospital stay						
Overheads	Accounting department	Accounting department		Accounting department	Accounting department	Accounting department
Capital depreciation	Not applicable			Not applicable	Not Applicable	

Table 9. Departments from which unit costs were obtained for the alternative staging procedures and treatments. All services except PET Center are in hospital H.

Resource Consumption	Procedures/treatments					
	MS-T	CT	PET	Surgery	Chemotherapy	Radiotherapy
Materials	Supplies department		NA	Supplies department		
Pharmaceutical products	Hospital pharmacy			Hospital pharmacy		
Personnel time	Personel department			Personel department		
Hospital stay	Accounting department	Accounting department		Accounting department	Accounting department	Accounting department
Overheads				Accounting department	Accounting department	
Capital depreciation	Not applicable			Not applicable	Not applicable	

Table 10. Allocation of overhead costs and capital costs across treatments/procedures

Procedure/treatment	Overhead cost allocation	Capital depreciation allocation
MS-T	Fixed costs were allocated per patient-day spent in the thoracic surgery ward	Not applicable
CT	Fixed costs were allocated per CT procedure performed in the radiodiagnosis department	Equivalent annual cost of CT equipment (no resale price, interest rate 5%) was divided into number of CTs performed annually
PET	Fixed costs were allocated per PET procedure performed in the PET Center	Equivalent annual cost of PET cyclotron equipment (no resale price, interest rate 5%) was divided into number of PETs performed annually
Surgery	Fixed costs were allocated per patient-day spent in the thoracic surgery ward	Not applicable
Chemotherapy	Fixed costs were allocated by patient treated in the oncology ward	Not applicable
Radiotherapy	Fixed costs were allocated by patient treated in the oncological radiotherapy department	Equivalent annual cost of accelerator equipment (no resale price, interest rate 5%) was divided into number of patients treated annually

Table 11. Baseline values (range) for all variables in the decision tree model.

Variable	Baseline value (range for sensitivity analysis)	Variable	Baseline value (range for sensitivity analysis)
ProbMS-Tpos	0.27 (0.2-0.36)	CostMS-T	626 (313-918)
ProbCTpos	0.48 (0.39-0.57)	CostCT	582 (291-873)
ProbCTorPETpos	0.58 (0.47-0.66)	CostPET	450 (450-900)
ProbMS-TposCTpos	0.49 (0.36-0.62)	CostSurgery	3,938 (1,969-5,907)
ProbMS-TposCTorPETpos	0.43 (0.32-0.55)	Cost Chemotherapy	6383 (3,191-9,574)
ProbSmortMS-Tneg	0.08 (0.04-0.16)	Cost Radiotherapy	5836 (2,918-8,754)
ProbSmortCTposMS-Tneg	0.16 (0.05-0.33)	Costs below are derived from costs above using simple arithmetic formulae (range of values not available from DATA software)	
ProbSmortCTneg	0.04 (0.01-0.12)		
ProbSmortCTorPETposMS-Tneg	0.16 (0.07-0.31)		
ProbSmortCTandPETneg	0.02 (0.001-0.01)	CostMs-tqr	12,845
QMs-tqr	0.52 (0.03-2.20)	CostMs-tss	6,118
QMs-tss	2.78 (0.05-6.20)	CostMs-tds	4,564
QMs-tds	0 (0)	CostctMs-tqr	13,427
QctMs-tqr	0.58 (0.03-2.20)	CostctMs-tss	9,712
QctMs-tss	1.78 (0.07-4.33)	CostctMs-tds	5,146
QctMs-tds	0 (0)	Costctss	6,388
Qctss	3.07 (0.05-3.20)	Costctds	4,520
Qctds	0 (0)	CostctpetMs-tqr	13,877
QctpetMs-tqr	0.47 (0.03-1.60)	CostctpetMs-tss	9,375
QctpetMs-tss	1.83 (0.07-4.33)	CostctpetMs-tds	5,596
QctpetMs-tds	0 (0)	Costctpetss	6,757
Qctpetss	3.22 (0.05-6.20)	Costctpetds	4,970
Qctpetds	0 (0)		

Table 12. Cost-effectiveness analysis.

Strategy	Cost (EUR)	Incremental cost (EUR)	Effectiveness (QALYs)	Incremental Effectiveness (QALYs)	ICER (EUR/QALY)
SCM	7843.7		2.007		
IS1	8639.6	795.9	2.035	0.028	28,904
IS2	9183.5	543.9	1.951	-0.084	Dominated

Table 13. One-way sensitivity analysis. ICERs at minimum and maximum values for probabilities, QALYs and costs

Variable	Minimum value: Result	Maximum value: Result
ProbMS-Tpos	0.2: IS1 and IS2 dominated by SCM	0.36: ICER (IS1-SCM) = 850 EUR/QALY IS2 dominated by IS1
ProbCTpos	0.39: ICER (IS1-SCM) = 1,812 EUR/QALY IS2 dominated by IS1	0.57: IS1 and IS2 dominated by SCM
ProbCTorPETpos	0.47: Extended dominance of strategy IS1 by SCM and IS2. ICER (IS2-SCM) = 4,000 EUR/QALY	0.66: ICER (IS1-SCM) =28,904 EUR/QALY IS2 dominated by SCM and IS1
ProbSmortMS-Tneg	0.04: Strategies IS1 and IS2 dominated by SCM	0.16: ICER (IS1-SCM) = 4,669 EUR/QALY IS2 dominated by SCM and IS1
Prob SmortCTposMS-Tneg	0.05: ICER (IS1-SCM) = 12,176 EUR/QALY IS2 dominated by SCM and IS1	0.33: IS1 and IS2 dominated by SCM
ProbSmortMS-Tneg	0.04: IS1 and IS2 dominated by SCM	0.16: ICER (IS1-SCM) = 4,670 EUR/QALY IS2 dominated by IS1
Prob SmortCTorPETpos MS-Tneg	0.07: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1	0.31: ICER (IS1-SCM) =28,904 EUR/QALY IS2 dominated by IS1
Prob SmortCTandPET neg	0.001: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1	0.01: ICER (IS1-SCM) =28,904 EUR/QALY IS2 dominated by IS1
CostMS-T	313 EUR: ICER (IS1-SCM) = 27,180 EUR/QALY IS2 dominated by IS1 and SCM	938 EUR: ICER (IS1-SCM) =30,621 EUR/QALY IS2 dominated by IS1 and SCM
CostCT	291 EUR: ICER (IS1-SCM) = 18,336 EUR/QALY IS2 dominated by IS1 and SCM	873 EUR: ICER (IS1-SCM) =39,471 EUR/QALY IS2 dominated by IS1 and SCM
CostPET	450 EUR: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1 and SCM	900 EUR: ICER (IS1-SCM) =28,904 EUR/QALY IS2 dominated by IS1 and SCM
CostSurgery	1,969 EUR: ICER (IS1-SCM) = 26,415 EUR/QALY IS2 dominated by IS1 and SCM	5907 EUR: ICER (IS1-SCM) =31,392 EUR/QALY IS2 dominated by IS1 and SCM

Table 13 (cont).

Variable	Minimum value: Result	Maximum value: Result
Cost Chemotherapy	3,191 EUR: ICER (IS1-SCM) = 29,516 EUR/QALY IS2 dominated by IS1 and SCM	9,574 EUR: ICER (IS1-SCM) = 28,291 EUR/QALY IS2 dominated by IS1 and SCM
Cost Radiotherapy	2,918 EUR: ICER (IS1-SCM) = 27,619 EUR/QALY IS2 dominated by IS1 and SCM	8,754 EUR: ICER (IS1-SCM) = 29,188 EUR/QALY IS2 dominated by IS1 and SCM
QMs-tqr	0.03 QALYs: ICER (IS1-SCM) = 4,979 EUR/QALY IS2 dominated by IS1 and SCM	2.20 QALYs: IS1 and IS2 dominated by SCM
QctMs-tss	0.07 QALYs: IS1 and IS2 dominated by SCM	4.33 QALYs: ICER (IS1-SCM) = 1,442 EUR/QALY IS2 dominated by IS1 and SCM
QctMs-tqr	0.03 QALYs: IS1 and IS2 dominated by SCM	2.20 QALYs: ICER (IS1-SCM) = 1,948 EUR/QALY IS2 dominated by IS1 and SCM
Qctss	0.05 QALYs: IS1 and IS2 dominated by SCM	3.20 QALYs: ICER (IS1-SCM) = 4,708 EUR/QALY IS2 dominated by IS1 and SCM
QctpetMs-tqr	0.03 QALYs: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1 and SCM	1.60 QALYs: Extended dominance of IS1 by SCM and IS2 ICER (IS2-SCM) = 5,951 EUR/QALY
QctpetMs-tss	0.07 QALYs: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1 and SCM	4.33 QALYs: Extended dominance of IS1 by SCM and IS2 ICER (IS2-SCM) = 2,101 EUR/QALY
Qctpetss	0.05 QALYs: ICER (IS1-SCM) = 28,904 EUR/QALY IS2 dominated by IS1 and SCM	6.2 QALYs: Extended dominance of IS1 by SCM and IS2 ICER (IS2-SCM) = 1,145 EUR/QALY

Appendix. Estimated costs per procedure. Perspective: hospital H12X

ESTIMATED COST OF PERFORMING ONE CT SCAN (EUROS 2003)

1.- Materials	units consumed	unit cost	total cost
Film plaque	6	85.91	515.46
intravenous set	4	0.22	0.88
TOTAL MATERIAL			516.33
2.- Medication	units consumed	unit cost	total cost
Optiray 300 ionic contrast 100 ml	1	37.47	37.47
TOTAL MEDICATION			37.47
3.- Personnel time	hours	salary per hour	total cost
Senior radiologist	0.3 hrs	16.76	5.03
Nurse	0.3 hrs	6.94	2.08
Radiology technician	0.3 hrs	7.60	2.28
TOTAL PERSONNEL TIME			9.39
4.- Overhead costs	number of CTs	overhead cost per CT	total cost
	1	6.38	6.38
TOTAL OVERHEAD			6.38
5.- Capital costs	number of CTs	depreciation per CT	total cost
	1	12.22	12.22
TOTAL CAPITAL			12.22
TOTAL CT			581.79

*The cost of performing one PET scan was not calculated as a bottom-up cost, since Hospital H pays a fixed price for each PET performed to an external provider:

Cost of PET scan (2003)= Charges made by company to hospital = 450 euros

ESTIMATED COST OF MEDIASTINOSCOPY (standard patient, EUROS 2003)

1.- Materials	units consumed	unit cost	total cost
1.1.- Anesthesia			
syringe (20 ml)	4	0.06	0.24
syringe (5 ml)	4	0.02	0.09
face mask	1	0.06	0.06
manual ventilation circuit	1	8.56	8.56
anesthetic filter + tube	1	2.37	2.37
tracheal tube	1	78.00	78.00
intravenous set	1	0.22	0.22
3-way "tap"	1	0.22	0.22
Intravenous catheter	1	0.29	0.29
Perfusion pump	1	3.97	3.97
aspiration sonda	1	0.11	0.11
ECG electrode	6	0.06	0.35
ventimask	1	0.93	0.93
bandages (pack)	1	1.48	1.48
1.2.- Surgery			
Surgical cloth	1	7.21	7.21
bandages (pack)	1	1.48	1.48
skin stapler	1	6.43	6.43
TOTAL MATERIAL			105.58
2.- Medication	units consumed	unit cost	total cost
2.1.- Anesthesia			
Atropine 1 mg	2	0.10	0.19
Dormicum 5 ml	1	0.47	0.47
Fentanest flask	1	0.29	0.29
Pentothal 500 mg	1	0.93	0.93
Anectine 100 mg	1	0.11	0.11
Nimbex 10 mg	1	4.01	4.01
Prostigmine 1 ml	4	1.02	4.08
Propofol 50 ml perfusion	1	4.23	4.23
Renifentanile perfusion (1%)	1	27.90	27.90
Nimbex 125 ml perfusion	1	10.05	10.05
2.1.- Surgery			
Nolotil flask	1	0.20	0.20
TOTAL MEDICATION			52.46
3.- Personnel time	hours	salary per hour	total cost
3.1.- Anesthesia			
Senior anaesthetist	0,75 hrs	16.76	12.57
Resident anaesthetist	0,75 hrs	6.94	5.21
3.2.- Surgery			
Senior surgeon	0,75 hrs	16.76	12.57
Resident surgeon	0,75 hrs	6.94	5.21
Nurses (3)	2,25 hrs	9.69	21.79
TOTAL PERSONNEL TIME			57.35
4.- Hospital stay	mean stay per patient	mean cost per day	total cost
	1 day (24 hrs)	376.00	376.00
TOTAL HOSPITAL STAY			376.00
5.- Overhead costs	hospital days per patient	cost per day	total cost
	1.00	34.27	34.27
TOTAL OVERHEAD			34.27
TOTAL MEDIASTINOSCOPY			625.66

ESTIMATED COST OF THORACHOTOMY (standard patient, EUROS 2003)

1.- Materials	units consumed	unit cost	total cost
1.1.- Anesthesia and reanimation			
syringe (20 ml)	5	0.06	0.30
syringe (5 ml)	7	0.02	0.16
face mask	1	0.06	0.06
manual ventilation circuit	1	8.56	8.56
anesthetic filter + tube	1	2.37	2.37
tracheal tube	1	78.00	78.00
intravenous set	1	0.22	0.22
3-way "tap"	1	0.22	0.22
Intravenous catheter	2	0.29	0.58
Artery catheter	1	4.30	4.30
Central venous catheter	1	10.22	10.22
epidural catheter (set)	1	15.97	15.97
Vesical sonda	1	0.48	0.48
Nasogastric sonda	1	0.41	0.41
Fluid heater	1	32.15	32.15
Air convection blanket	1	11.72	11.72
Blood pressure system	1	13.22	13.22
Perfusion pump	3	3.97	11.91
aspiration sonda	2	0.11	0.23
ECG electrode	6	0.06	0.35
ventimask	1	0.93	0.93
bandages (pack)	5	1.48	7.38
1.2.- Surgery			
Vesical sonda	1	0.48	0.48
aspiration terminal	2	0.37	0.74
thoracic drain	2	2.10	4.21
pleurevac	1	28.00	28.00
vascular stapler	1	114.47	114.47
bronchus stapler	1	108.04	108.04
skin stapler	1	6.43	6.43
Surgical cloth	1	7.21	7.21
bandages (pack)	1	1.48	1.48
suture string (pack)	3	81.14	243.41
skin stapler	1	6.43	6.43
TOTAL MATERIAL			720.63
2.- Medication	units consumed	unit cost	total cost
2.1.- Anesthesia and reanimation			
Atropine 1 mg	2	0.10	0.19
Dormicum 5 ml	1	0.47	0.47
Fentanest flask	8	0.29	2.28
Pentothal 500 mg	1	0.93	0.93
Anectine 100 mg	1	0.11	0.11
Nimbex 10 mg	1	4.01	4.01
Prostigmine 1 ml	4	1.02	4.08
Naropin 1% perfusion	4	3.88	15.52
Propofol 50 ml perfusion	1	4.23	4.23
Renifentanil perfusion (1%)	1	27.90	27.90
Volurent 500 ml	4	9.01	36.04
Nimbex 125 ml perfusion	1	10.05	10.05
Dopamine flask	1	0.45	0.45
Lidocaine 1% flask	1	0.54	0.54
Toradol 30 mg	1	0.74	0.74
2.1.- Surgery			
Tisucol flask (1 in 10 times)	1	294.42	294.44
TOTAL MEDICATION			136.98
3.- Personnel time	hours	salary per hour	total cost
3.1.- Anesthesia			
Senior anaesthesist	2.5 hrs	16.76	41.91
Resident anesthesist	2.5 hrs	6.94	17.36
3.2.- Surgery			
Senior surgeon	2.5 hrs	16.76	41.91
Resident surgeon	5 hrs	6.94	34.71
Nurses (3)	7.5 hrs	9.69	72.65
TOTAL PERSONNEL TIME			208.54
4.- Hospital stay	mean stay per patient	mean cost per day	total cost
	7	376.00	2632.00
TOTAL HOSPITAL STAY			2632.00
5.- Overhead costs	hospital days per patient	cost per day	total cost
	7	34.27	239.88
TOTAL OVERHEAD			239.88
TOTAL THORACHOTOMY			3938.03

ESTIMATED COST OF CHEMOTHERAPY (standard patient, euros 2003)

1.- Materials	units consumed	unit cost	total cost
intravenous set	4	0.22	0.88
TOTAL MATERIALS			0.88
2.- Medication	units consumed	unit cost	total cost
Cisplatinum 80 mg/m ²	4	43.20	172.80
Gemcitadine 1.2 g/m ²	4	134.05	536.21
Dexametasone 32 mg	4	1.86	7.42
Gramisetron flask	4	26.16	104.64
Eprex 10,000 units (1/3 patients)	4	79.12	316.48
TOTAL MEDICATION			1139.30
3.- Tests	number of tests	unit cost	total cost
Hemogram	15	4.81	72.12
Biochemical analysis	6	1.26	7.57
Thorax X-ray	4	99.13	396.53
CT	5	581.40	2907.00
TOTAL TESTS			3383.22
4.- Personnel time	hours	salary per hour	total cost
Senior oncologist	3 hrs	16.76	50.29
TOTAL PERSONNEL TIME			50.29
5.- Hospital stay	mean stay per patient	mean cost per day	total cost
5.1.- Stay for treatment complications	2 days	376.00	752.00
5.2.- Stay for terminal care	1 day	376.00	376.00
TOTAL HOSPITAL STAY			1128.00
6.- Overhead costs	patient	cost per patient	total cost
	1	681.12	681.12
TOTAL OVERHEAD			681.12
TOTAL CHEMOTHERAPY			6382.82

ESTIMATED COST OF RADIOTHERAPY (standard patient, EUROS 2003)

1.- Materials	units consumed	unit cost	total cost
Moulds	1	27.05	27.05
TOTAL MATERIALS			27.05
2.- Medication	units consumed	unit cost	total cost
Epex 10,000 units (1/4 patients)	5	79.12	395.60
TOTAL MEDICATION			395.60
3.- Tests	units consumed	unit cost	total cost
Hemogram	30	4.81	144.24
Thorax X-ray	15	99.13	1486.98
CT	2	581.40	1162.80
TOTAL TESTS			2794.03
4.- Simulation	simulations	unit cost	total cost
	1	149.64	149.64
TOTAL SIMULATION			149.64
5.- Personnel time	hours	salary per hour	total cost
Senior radiotherapist	56,25 hrs	16.76	942.94
Nurse	113 hrs	6.94	784.55
Oncologist	1,5 hrs	16.76	25.15
TOTAL PERSONNEL TIME			1752.63
4.- Hospital stay	mean stay per patient	mean cost per day	total cost
Stay for treatment complications	0,2 days	376.00	75.20
TOTAL HOSPITAL STAY			75.20
5.- Capital costs	treated patients	depreciation per treated patient	total cost
	1	165.44	165.44
TOTAL CAPITAL COSTS			165.44
6.- Overhead costs	patient	cost per patient	total cost
	1	476.41	476.41
TOTAL OVERHEAD COSTS			476.41
TOTAL RADIOTHERAPY			5835.99