

chance of resection (<10%), followed by local recurrence (30%). Palliative care for pain is managed with paracetamol, progressing to morphine. Physiotherapy for the patient and psychological support for both the patient and relatives are offered. Many terminally ill patients (>75%) spend their final days (last 2 weeks) in hospital rather than at home, despite the extensive 'at home hospitalisation' program to support these patients with daily visits from nurses and GPs.

**Discussion:** One concern identified during this pilot study is the logistical challenge of following the patient population. Both the patient referral system and the number of centres involved in the care of these patients in France may contribute to the difficulty of measuring resource use in these patients. The data collected in this pilot study will be used in planning a large formal resource utilisation and costing study in patients with Dukes' C colon carcinoma.

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#### PP26. Comparing the costs and cost-effectiveness of new chemotherapy regimens for treating non-small cell lung cancer (NSCLC).

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Several new chemotherapeutic regimens for NSCLC have become available in the 1990s. These regimens have been reported to have favorable results in initial trials. Randomized studies have been conducted with some of the agents, while only phase II results are available for several regimens. Nonetheless, many regimens are currently in widespread use. The objectives of this analysis are to compare the costs (including drugs, supplies, disposal, overhead, personnel) and cost-effectiveness (in years of life gained compared with either supportive care [BSC] or with the lowest cost regimen in this analysis) of these newer regimens. Survival rates were based on reported randomized and phase II studies, and on the recent meta-analysis (Brit Med J, 31 1, 1995) which evaluated survival in BSC. Costs were based on an average of 4 months of treatment with chemotherapy given on an ambulatory basis (shown in a large randomized study to be comparable to inpatient treatment, Mor et al, J Epid, 1988). Results (with costs in US dollars, K = X 1000) (vs Lowest Cost Reg = vs LCR):

TREATMENT OPTION	REPORTED MED SURVIVAL in Months	COST (4 Months)		COST/YR LIFE GAINED	
		DRUGS in \$K	TOTAL in \$K	vs BSC in \$K	vs LCR in \$K
BSC	3 to 5	---	10.0	---	N/A
Nav+DDP	8 to 11	3.3	4.3	-11.4	---
Gem+DDP	8 to 13	7.7	8.8	-2.3	54.2
Txt+DDP	9 to 10	9.4	10.6	1.2	75.1
Tax+DDP	9 to 10	9.2	10.0	1	68.7
Tax+Carbo	9 to 11	15.2	15.8	11.5	137.4
Tax+Carbo+	9 to 11	25.4	25.9	31.8	259.4

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Although survival differences among the chemotherapy regimens have not been demonstrated to date, the cost-effectiveness analysis is based on a hypothetical one month survival advantage for the higher cost regimens over the lowest cost combination. We conclude that: 1) substantial differences exist in cost and cost-effectiveness among the newer regimens, although survival results to date are similar; 2) most regimens are cost effective vs BSC, but are not cost-effective when compared with the lowest cost regimen; 3) growth factors markedly increase costs without benefit in survival or cost-effectiveness, especially when regimens that are not associated with a high degree of febrile neutropenia are included in the analysis; and 4) it is appropriate to factor cost-effectiveness into study design when testing for meaningful survival differences in planning randomized trials.

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#### PP27. Cost minimization analysis of treatment of T1N0 glottic squamous cell carcinomas: Comparison between radiotherapy, laser microsurgery and partial laryngectomy

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**Background:** Radiotherapy (RT), laser microsurgery (L) and partial laryngectomy (PL) are known as equally effective treatment options for T1N0 glottic squamous cell carcinomas. In this framework, parameters other than treatment efficacy may be taken into consideration for the choice between one of these options. A cost minimization analysis of these options was thus carried out.

**Methods:** For each treatment, the various events associated with the diagnostic procedure, the primary treatment, the complications, the local recurrence and the salvage treatment were individualized. For each of these events, the frequency of occurrence based on the standard management procedure used in our institution and review of the published data, was then determined. The cost was then calculated using the billing codes for the "fee for service" established by the National Health Insurance of Belgium or for some specific events, using average cost estimates from a data base developed by the UCL Center for Interdisciplinary Study in Health Economics.

**Results:** A total cost of 226,250 and 457 kBEF were calculated for RT, L and PL, respectively. For L, cost included the cost of post-operative RT applied to 30% of patients in case of positive margins. For PL, the cost of the primary treatment accounted for 70% of the total cost whereas it only accounted for 47% and 39% for L and RT, respectively. For RT, L or PL, complications accounted for less than 10% of the total cost. The cost of salvage treatment reached 26%, 18% and 6% of the total cost for RT, L and PL, respectively. A sensitivity analysis was performed by varying the frequency of occurrence of some of the events that impacted the more on the total cost, e.g., duration of hospitalization stay, hospitalization cost, recurrence rate, frequency of post-operative RT after L, percentage of in-patients in the RT group. In most situations, the ranking of the cost between the three options was not affected. Interestingly, the cost of laser microsurgery could be substantially reduced even slightly below the cost of RT by decreasing the need for post-operative RT.

**Discussion:** RT and L have almost the same expected average cost for the treatment of T1N0 glottic SCC, whereas PL is twice as expensive. A better selection of the patients referred for treatment by L could decrease the need of post-operative RT and consequently impact on the total cost. Cost-effectiveness analysis (with voice quality as effectiveness parameter) is in progress.

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#### PP28. Cost considerations in alternatives to inpatient care in the administration of chemotherapy and supportive care

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Two outpatient approaches (home and ambulatory care) were examined to determine which was less costly. In a previous randomized study with 440 patients, administration of chemotherapy in an outpatient clinic setting provided significant cost savings (33% to 50%, p=0.001) with greater patient and family satisfaction than treatment in the hospital (J Epid 1988). Randomized cost comparisons between home care and either inpatient or ambulatory care have not been conducted. In the current study, major cost elements were: personnel (treating and support staff), drugs and supplies, and overhead (space and utilities). We examined four chemotherapy treatments (of short, medium and long durations) given in three common