(REC-L; N = 43) and patients with metastatic recurrence with or without locoregional recurrence (REC-M(L); N = 24). Data on treatments were collected during a one-year follow-up. Cost evaluation was made from the point of view of the French National Health Insurance.

Results: Primary tumor of the P-RES group was treated by surgery only in 18% of patients; 80% had radiotherapy, either alone (60%) or in combination with chemotherapy (20%). In the P-NR group, nearly all patients had radiotherapy, either alone (42%) or in combination with chemotherapy (48%). The mean global cost per patient was higher in group P-RES (FF 17,000 versus FF 73,000) because of the impact of surgery. Costs of radiotherapy were FF 32,000 in group P-RES versus FF 42,000 in group P-NR. Costs of chemotherapy treatments were about FF 35,000 per patient treated with chemotherapy in either group.

A majority (60%) of recurrent patients received only one type of treatment (mostly chemotherapy). Different regimens of mono- and combination chemotherapy were analysed. Association of treatments is more frequent (49%) when recurrence is only locoregional: the most frequent association is radiotherapy + chemotherapy (30%), with (9%) or without (21%) surgery. Chemotherapy alone prevails in presence of metastases. The mean global cost per patient was higher for patients with locoregional recurrence (L = FF 91,000; L+M = FF 104,000), because of the impact of surgery. As for patients with metastatic recurrence, mean global hospital costs was FF 78,000, chemotherapy accounting for about 74% of this amount. The mean cost of all chemotherapy treatments was FF 58,000, whatever the type of recurrence.

Conclusion: Costs assessment for patients with HNSCC becomes critical as increasing numbers of patients receive chemotherapy. Proper distribution of Health Care budget will allow to achieve utilization of new therapeutic scenarios.

856 POSTER

## Gernzar in the treatment of pancreatic cancer in the UK: An economic evaluation

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Purpose: This study reports on an economic evaluation of Gemzar relative to 5-FU, for the treatment of pancreatic cancer.

Methods: The perspective is that of the UK-NHS. Data were derived from a clinical trial (Burris 1998). Total treatment costs estimates are based on chemotherapy, infusions, hospitalisations, visits to health care professionals and concomitant medications. Resource utilisation data, derived from the trial, were combined with unit cost data from various UK sources. Extensive sensitivity analysis was performed to test the robustness of the results.

Results: Total treatment cost per patient on Gemzar was estimated at £3,569 and on 5-FU at £1,262 – largely attributed to drug costs. Gemzar was associated with an incremental gain of 0.188 life years, 0.116 progression-free-life-years and 19% of patients could be classifed as clinical benefit responders. As such, relative to 5-FU, the incremental cost-per-clinical-benefit-responder with Gemzar is £12,172, the incremental cost-per-life-year gained is £12,206 and the incremental cost-per-progression-free-life-year gained is £19,888. Sensitivity analyses showed that the results did not vary significantly with changes of the parameters. When 5-FU is administered by continuous infusion, the incremental cost-effectiveness of Gemzar is improved.

Conclusions: This economic evaluation demonstrates that Gemzar is a cost-effective treatment compared to 5-FU in the treatment of pancreatic cancer in the context of the UK NHS.

B57 POSTER

## Economic evaluation of Gemzar/cisplatin relative to other cisplatin based treatments for non small cell lung (NSCLC) cancer in the UK

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**Purpose:** This study reports on an economic evaluation of Gemzar/cisplatin (GC) relative to: mittomycin/ifosfamide/cisplatin (MIC), etoposide/cisplatin (PE) and mittomycin/vinblastine/cisplatin (MVP).

Methods: The study perspective is that of the UK-NHS. Data were derived from comparative clinical trials (Crino 1999, Cardenal 1997, Costa 2000). Costing is based on: chemotherapy, infusion, hospitalisations, visits to health care professionals and concomitant medications. Costs were

assesses over a one year period and outcomes were based on data from the clinical trials

Results: In the first setting the cost-per-patient on GC was £5,101 and on MIC £4,481. Overall tumour response rates were 39.6% and 27.6% respectively. Thus, the incremental cost-per-tumour-response of GC was £5,169. In the second setting, the cost on GC was £4,142 compared to £3,762 on PE. Overall tumour response was 40.6% and 21.9% and progression-free life years 0.575 and 0.358. Thus, the incremental cost-per-tumour-response of GC was £2,032 and the incremental cost-per-progression-free-life-year £1,751. In the final setting, the cost of GC was £5,084 and of MVP £4,004. Overall tumour response was 54.0% and 36.7% and one year survival 36% and 17%. The incremental cost-per-tumour-response of GC was £6,240 and the incremental cost-per-survivor-at-one-year was £5,681. In extreme changes to underlying variables the above ratios vary from dominance to a maximum of £14,000.

Conclusions: These results demonstrate that G/C represents a relatively cost-effective treatment for NSCLC with ratios comparable or below those of therapies currently in use within the NHS.

858 POSTER

# An economic evaluation of different chemotherapy regimens used in the treatment of advanced colorectal cancer (ACRC) in a Cooperative Group

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Background: Significant changes appeared in the field of chemotherapy (CT) for ACRC in recent years. New drugs and combination schedules has been introduced. Effects on costs are yet not completely accounted. Economic evaluation is needed for new approaches and new drugs.

**Purpose:** Economic evaluation model applied to the costs of treating ACRC in Spain in Oncology Units Hospital-based. Treatment schedules of 6 consecutive Phase II multicenter trials has been analysed.

Method: Total monthly amount has been calculated in pesetas (pts) and euros. Standarized dose for 1.7 m2 body surface has been used. The economic model includes: drug cost (per mg), pumps and infusional devices (including surgical implant procedure), blood tests, X-rays, costs of preparation specific drugs, staff costs (nurse-time for administration and doctor-time for visit of the patient). The public center medium satary has been used. The costs has not been taken in account are: premedication drugs, treatment of complication/secondary effects, refunds and travel expenditures.

Results: Monthly drug-cost for treating ACRC can vary form 6.654 pts (39.9 euros) to 268.524 pts (1613.8 euros)using different schedules that has been published. Our model has been applied to 6 different CT-regimens testes in consecutive Phase II trials in the setting of the Cooperative Group: 5-Fluorouracii (5FU) plus low-dose Folinic Acid (FA) (Mayo schedule), 5FU continuous infusion (c.i.)48 h weekly (TTD schedule), 5FU c.i. weekly plus Oxaliplatin (OHL-P)biweekly, 5FU c.i. plus CPT-11 both weekly, Tegafur-Uracii (UFT) plus F.A. by mouth (p.o.) and UFT p.o. as single agent. The monthly costs for every schedule using this model are: 45,925 pts/276 euros for 5FU bolus plus FA; 103.346 pts/621.1 euros for 5FU c.i.; 315.715 pts/1897.4 euros for 5FU c.i. plus OHL-P; 265.822 pts/1597.6 euros for 5FU plus CPT-11; 77.192 pts/468.2 euros for UFT plus FA and 41.008 pts/246.4 euros for UFT.

Conclusions: The new drugs and schedules cause an incremental costs for treating ACRC. The drug-cost can vary 40x. The present model including other charges limit the variability to 7x. These analyses open possibilities to identify other relevant costs and to reduce this costs modifying administration procedures and follow-up. The results of cost-benefit analysis based on the modeled-results (time to progression and survival) of the analysed Phase II trials will be presented.

859 POSTER

# Pharmacoeconomic analysis of advanced non-small cell lung cancer treatment with docetaxel-cisplatin, paclitaxel-cisplatin and paclitaxel-carboplatin

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Purpose: To compare the efficiency (the evaluation of efficacy in relation

S234 Tuesday 23 October 2001 Poster Sessions

with the costs) of three first-line treatment options for advanced non-small cell lung cancer (stage IIIB and IV): docetaxel/cisplatin (75/75 mg/m2/day; 1 hour IV infusion of docetaxel), paclitaxel/cisplatin (175/75 mg/m2/day; 3 or 24 hour IV infusion of paclitaxel) and paclitaxel/carboplatin (175/400 or 225/400 mg/m2/day; 3 hour IV infusion of paclitaxel).

**Methods:** Following from the results of the ECOG phase III clinical trial (Schiller et al, 2000) it was assumed that there were no relevant differences in efficacy (survival, objective response) between the treatment options. Therefore, a cost-minimisation analysis was performed, using a pharmacoeconomic model.

Results: The average estimated treatment cost per patient (median: 4 cycles) with docetaxel/cisplatin would be 1,067,836 Spanish pesetas (Ptas) (6,418 Euros; 5,741 US Dollars, USD), 1,365,304 or 1,439,369 Ptas (8,205 or 8,651 euros; 7,340 or 7,738 USD) with paclitaxel/cisplatin (3 or 24 hour infusions, respectively), and 1,417,995 or 1,616,784 Ptas (8,522 or 9,717 euros; 7,623 or 8,692 USD) (paclitaxel dose of 175 or 225 mg/m2/day, respectively) with paclitaxel/carboplatin.

Conclusion: According to our study, the treatment option docetaxel/cisplatin, with equal efficacy, would result in a cost saving of between 297,468 and 548,948 Ptas (1,788 and 3,299 euros; 1,599 and 2,951 USD) per patient treated. This difference is mainly due to the lower treatment cost of docetaxel

### Psychosocial aspects

860 POSTER

#### Psychosocial factors in women with breast cancer

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**Purpose:** To describe the proportion of women with a behavior problem and examine which specific factors are associated with the presence of behavior problems in a group of 38 women with breast cancer.

Methods: All data were obtained from the patients during a structured interview. The behavior problems were assessed by the 35-item questionnaire. The quality of social and family support was evaluated using DUKE (UNC-functional Social Support questionnaire). Epidemiological and specific illness factors such as severity of breast cancer, medication use, health-care utilization, level of activity restriction etc. were collected. Descriptive statistics and Pearson x² test were used. Fisher's exact test was computed when needed. A logistic model was also used.

**Results:** Findings revealed that 36% of the women with breast cancer had developed behavior problems. Epidemiological factors were not significantly associated with the occurrence of a behavior problem. Significant variables were the severity of breast cancer (p = 0.0001) the family and social support (p = 0.0494) and the duration of illness (p = 0.0566). Women classified with a high and moderate level of breast cancer symptoms were more likely to experience a behavior problem than women with a low level of breast cancer symptoms. In addition, people with low family and social support were more likely to experience a behavior problem than people with high layel

Conclusion: Our data support previous studies that women with more severe and chronic symptoms as well as inadequate social and family support are more susceptible in developing psychological problems. The consideration of the above mentioned aspect should help to improve the medical therapy and psychological support provided to women with severe breast cancer.

B61 POSTER

### The informational needs of greek cancer patients receiving chemotherapy

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**Purpose:** The objective of the study was to identify the specific informational needs of cancer patients receiving chemotherapy in a Greek outpatient setting, and to assess the patients' overall need for oral and written information relevant to their condition and management.

**Methods:** One hundred patients with different solid turnours (53 men and 47 women, median age 62.5 years) agreed to participate in the study. Data were collected by structured individual interviews.

Results: The data exhibited a great variability among specific informational needs. That is, the need to have more information about the aftermath of chemotherapy (81%), prognosis (63%), how chemotherapy worked (61%), diagnosis (49%), how to deal with an emergency (42%), duration of treatment (42%), and medical test results (40%) dominated those about the pros and cons of treatment (33.3%), management of side effects (24.2%), daily activities (22%), daily precautions (21%), diet/nutrition (20%), and how to take medication at home (19%). With respect to patients' overall need for oral information, the majority scored either quite a bit (6%) or very much (64%). In a similar vein, patients expressed a great need for cancer-specific written material (i.e., an information booklet): that is, 4% scored quite a bit and 80% very much.

Conclusion: The results suggest that the Greek cancer patient needs more factual information relevant to his or her condition and management. The implication is that health professionals should not only try to detect the informational needs of the patient, but should also be qualified to meet them in the best possible way. In addition, the use of well-evaluated patient information booklets should be incorporated into routine clinical practice as a supplement to information presented orally.

862 POSTER

### Support group for the family of patients with brain tumors (BT)

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The near relations of patients with brain tumors (primary BT or metastases) have not only to face the disease with a pejorative prognosis but also to face the neuro-psychological symptomatology caused by the brain localization of the tumor: personality alterations, gradual alterations of intellectual ability, difficulties to communicate and delirium. In some patients, the tumor development is quite slow and most of them can stay at home until an important alteration of their condition. The family of these patients is in first line concerning care. In order to support these families, a support group has been created in our institution since a year, with the collaboration of a psycho-oncology unit. The physician informed the families about the existence of the group and gave them an information chart. The aim of such a group was to allow the families to talk about their feelings and to meet together to share their experience. This one hour and half meeting took place once a month inside the hospital. Two physicians (a psychiatrist and a radiation oncologist), a head nurse and a social worker attended the meeting. To date, four meetings took place, with spouse and children of the patients. Some of them attended the meeting several times. The first conclusions confirmed the high level of distress of the families with "someone confused". At the same time, some of them showed a surprising adjustment to the situation and wished to "stay together" as long as possible. The families of the youngest patients appeared to be the most in distress. Three main information's characterized the families enquiries: • the non psychological aspect of the behavioral trouble; • the treatment characteristics, its aims and its potential benefit; • help possibilities especially at home. Several families evoked their hostility towards the sick person. Some of them asked about information given to the patient. Exchanges between the families were intense about that topic. We encouraged the families to define in order to face them and to anticipate their problems and the help they needed. This program was supported by the National League Against Cancer.

863 POSTER

## Parental coping and the course of depression over nine months following the diagnosis of childhood cancer

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**Aims:** To identify aspects of parental coping following the diagnosis of childhood cancer that are predictive of later mental health problems, and provide pointers to mechanisms.

Methods: A three centre prospective study of children with cancer, using assessments of child, parental and family functioning at 6, 12 and 40 weeks. The eventual sample size will be approximately 80 treated children and 80 matched controls ages 3-10. Here we present preliminary data on 33 mothers and 23 fathers of children with cancer. Parental depression at 6 and 40 weeks was assessed using the Beck Depression Inventory. A standardized measure of repressive coping was administered at 6 weeks. This is hypothesised to reflect a denial of emotional needs and we predicted that it would be associated with the persistence or emergence of depression.