portive care were cost-drivers in total medical costs during chemotherapy. In this study, we comprehensively investigated medical costs from diagnosis through terminal care in patients with advanced or recurrent gastric cancer. METHODS: Patients with advanced or recurrent gastric cancer who received the newly developed oral fluoropyrimidine TS-1 or conventional intravenous chemotherapy were identified on the basis of ordering system data at Showa University Hospital from January 1998 through July 2001. The costs during diagnosis, chemotherapy, and terminal care were evaluated according to Japanese National Health Insurance fee schedule. RESULTS: Costs were evaluated in 13 patients receiving TS-1 and in 10 patients receiving conventional intravenous chemotherapy. Monthly costs during diagnosis, chemotherapy, and terminal care in the TS-1 group were 597,057 +/− 105,148 (mean +/− SE) Yen, 327,640 +/− 47,647 Yen, and 687,595 +/− 96,276 Yen. The corresponding costs for conventional intravenous chemotherapy were 615,150 +/− 95,299 Yen, 852,874 +/− 62,412 Yen, and 619,721 +/− 86,745 Yen. Monthly costs during chemotherapy were significantly lower in the TS-1 group than in the conventional intravenous chemotherapy group, whereas costs during diagnosis and terminal care were similar in the groups. CONCLUSIONS: Medical costs from diagnosis through terminal care are high in patients with advanced or recurrent gastric cancer. The use of oral anticancer drugs such as TS-1, which facilitates transition from inpatient to ambulatory treatment, reduces medical costs in patients with gastric cancer.

Data on head and neck cancer (HNSCC) is lacking, especially in France. OBJECTIVES: Estimate the costs of inoperable HNSCC patients treated in the private sector and their relationship with patient’s medical characteristics. METHODS: We conducted a cohort study in one centre to collect medical data from diagnosis until date of last news or death. Reimbursements of medical fees were obtained from the French Sickness Fund. For the private sector, fee for service rules are applied; as a consequence, all types of health care consumptions could be identified. Consumptions were further linked to treatment phases (initial treatment, follow-up, palliative care) and medical events (chemotherapy, radiotherapy, relapse, adverse event . . .). Logistic regression was carried out to identify which of the medical characteristics (performance, status, staging, age, localisation) were the main cost drivers. Thirty patients were included and mean duration of follow-up was 13.8 months. Mean total direct costs was estimated at €20,752 per patient, with more than one half for initial radio-chemotherapy (€11,399) phase, around one quarter for follow-up (€4684) and the same for palliative care (€4669). 14 patients died during the study and only 9 received palliative care for an average cost per treated patient of €15,363. RESULTS: Type of care distribution varied according to treatment phases with more hospitalisations and medical procedures during initial treatment, more medication during follow-up and more hospitalisation costs during palliative care. Costs of side effects were very high, particularly those associated with mucositis that concerned all patients with a mean cost of €4582 of which €1607 for hospitalisation. CONCLUSIONS: Logistic regression highlighted the importance of the nodal staging on the mean total cost per patients and on the daily cost: €35 for AJCC stage III, €55 for stage IVa, €93 for stage IVb patients.

COST REDUCTION IN THE DIAGNOSTIC EVALUATION OF PATIENTS WITH NON-SMALL CELL LUNG CANCER USING ENDOSCOPIC ULTRASONOGRAPHY WITH FINE-NEEDLE ASPIRATION

Groen H, Post WJ, Groen HJM, Kramer H, TenVergert EM Groningen University Hospital, Groningen, Netherlands

OBJECTIVES: The prognosis of non-small cell lung cancer (NSCLC) patients is determined by mediastinal lymph node involvement at the time of diagnosis. The objective of this study was to investigate the cost consequences of using endoscopic ultrasonography with fine-needle aspiration (EUS-FNA) instead of mediastinoscopy (MS) or explorative thoracotomy (ET) in patients with NSCLC and suspected mediastinal involvement on positron emission tomography (PET). METHODS: Potentially operable patients with NSCLC and positive PET were eligible. If EUS-FNA was negative or inconclusive, patients underwent MS. If MS was negative, ET was performed. If EUS-FNA was positive for malignancy, no ET was performed. The primary outcome was the reduction of invasive diagnostic procedures and as a result, the reduction of direct medical costs, assessed from the hospital viewpoint. The time horizon was the diagnostic trajectory until discharge from the hospital. RESULTS: Of 82 patients, 49 (60%) had positive EUS-FNA, and did not undergo invasive diagnostic procedures. In 33 patients (40%) EUS-FNA was either negative (6) or inconclusive (27). Surgical staging by MS or ET was performed in 26 of these 33 patients: 12 patients underwent MS, nine patients had ET, and four patients both procedures. The costs were $1590 for MS and $5822 for ET. The costs for EUS-FNA were $591. Assuming that, without EUS-FNA, all patients would undergo MS, and 15% would need additional ET to reach a diagnosis, the differences in total costs were calculated at $55,000. CONCLUSIONS: Introduction of EUS-FNA in the diag-
nnostic work-up of NSCLC patients’ leads to a reduction of invasive procedures, resulting in cost savings of $669 per patient.

**PCN 18**

THE COST OF GEMCITABINE/CISPLATIN COMPARED WITH FOUR OTHER NOVEL CHEMOTHERAPEUTIC AGENTS IN POLAND

Tielen DP1, Syynes G2, Aristides M3, Lis J3
1Medical Technology Assessment Group, Hammersmith, United Kingdom; 2Eli Lilly Polska, Warsaw, Poland

**OBJECTIVES:** This study estimates the total health care costs of five chemotherapeutic agents used to treat non-small cell lung cancer (NSCLC) in Poland. This information can be used to determine the most cost-efficient treatment option for health care providers in Poland.

**METHODS:** Two economic evaluations comparing gemcitabine/cisplatin (Gem/Cis) with four other novel regimens were conducted using evidence from relevant randomised controlled trials. The economic evaluation based on the trial by Comella et al. (2000) compares Gem/Cis with vinorelbine/cisplatin (Vin/Cis), while the economic evaluation based on the trial by Schiller et al. (2002) compares Gem/Cis with paclitaxel/cisplatin (Pac/Cis), paclitaxel/carboplatin (Pac/Car), and docetaxel/cisplatin (Doc/Cis).

**RESULTS:** The economic evaluation based on the Comella et al. trial indicates that the Gem/Cis combination is virtually cost neutral compared to the Vin/Cis combination, costing an average of PLN 110 (€25) more per patient. The higher acquisition costs of gemcitabine compared to vinorelbine were offset by lower drug administration costs and lower rates of hospitalisation for Gem/Cis patients. The economic evaluation based on the Schiller et al. (2002) trial showed that patients treated with Gem/Cis incurred higher total treatment costs than those treated with Pac/Cis, by an average of PLN 2880 (€652) per patient. However, patients treated with Gem/Cis incurred significantly lower total treatment costs than those treated with Pac/Car and Doc/Cis. The average cost savings associated with Gem/Cis were PLN 1829 (€414) per patient and PLN 3921 (€888) per patient, respectively.

**CONCLUSIONS:** Gem/Cis is the most advantageous treatment alternative based on cost-minimisation for two out of the four comparators (Pac/Car and Doc/Cis). Using a cost-effectiveness analysis, Gem/Cis is considered cost-effective against the other two comparators (Vin/Cis and Pac/Cis). Overall, a claim for cost-effectiveness of Gem/Cis regimens in the treatment of advanced NSCLC is supported.

**PCN 19**

COST ANALYSIS OF COMPLEXED PROSTATE SPECIFIC ANTIGEN IN THE DIAGNOSIS OF PROSTATE CANCER

Warie H1, Annemans L2, Oosterlinck W3
1HEDM, Meise, NA, Belgium; 2Ghent University, HEDM, Meise, NA, Belgium; 3Ghent University, Ghent, NA, Belgium

**OBJECTIVES:** Complexed Prostate Specific Antigen (cPsa) testing offers an improved specificity compared to currently applied total PSA (tPSA) in the diagnosis of prostate cancer in patients at risk. Our objective was to assess the cost of cPsa if it would replace tPSA as first diagnostic test, based on medical management and cost data for Belgium. Both tests have the same unit cost.

**METHODS:** A medical decision tree simulating a patient’s flow and applying a time horizon of one year was developed in MS-Excel. Sensitivity and specificity data were obtained from published directly comparative clinical literature. An expert panel with 19 members (7 urologists and 12 general practitioners) provided input data regarding the further diagnostic work-up in case of a positive PSA test and further therapeutic decisions and medical resource use in relation to the diagnostic outcomes (true and false positives and negatives). Costs of medical resources were obtained from the public health insurance perspective.

**RESULTS:** When aiming for a target sensitivity of 90%, a diagnosis starting with cPsa costs €86.65 in total compared to €91.61 for tPSA. In a second analysis, if published manufacturer cut-off values were applied rather than a target sensitivity, total costs were €75.50 and €91.60 respectively. The savings were respectively €4.95 and €16.10 in favour of cPsa per patient. For a yearly cohort of 500,000 men, savings up to €8Mln could be realised. Sensitivity analyses on prevalence of prostate cancer and costs of diagnostic work-up showed that the results were robust (savings range €4.45–€5.46 in first analysis and €13.3–€18.8 in second).

**CONCLUSIONS:** cPsa as standard screening test in prostate cancer in patients at risk appears to have a strong saving potential compared to the current use of tPSA. Further research should focus on the psychological impact of less false positive results.

**CANCER—Quality of Life**

**PCN 20**

PEGFILGRASTIM IS PREFERRED TO FILGRASTIM IN CANCER PATIENTS ON MYELOSUPPRESSIVE CHEMOTHERAPY TREATMENT REGIMENS

Viens P1, Namer M2, Selle F3
1Institut Paoli Calmettes, Marseille, France; 2Centre Antoine Lacassagne, Nice, France; 3Hôpital Tenon, Paris, France

**OBJECTIVE:** To evaluate patient preference and Quality of Life (QoL) with the administration of filgrastim versus pegfilgrastim during myelosuppressive chemotherapy.

**METHODS:** Nine centres in France and 2 in Portugal participated. The study was designed as an open-label, cross-over trial with 76 cancer patients receiving 3 to 6 cycles of chemotherapy. Subjects were randomised on a 1:1 ratio to receive either multiple filgrastim injections per cycle or pegfilgrastim as a single, fixed-dose injection once per cycle. In cycle 2, patients received the other study medication. On day 1 of cycle 3, they were asked to complete the Subject Preference Questionnaire to indicate their preference for the remainder of the cycles. Data