CONCLUSIONS: In France, the total treatment costs per patient by 21 months were 10,957€ for Gem/Cis, 12,512€ for Vin/Cis and 13,268€ for Pac/Carbo. The average number of chemotherapy cycles in the clinical trial was 4.02, 4.23, and 3.25 for Gem/Cis, Pac/Carbo and Vin/Cis, respectively, giving a lower total cost per chemotherapy cycle for Gem/Cis (2721€) than for Pac/Carbo (3136€) or Vin/Cis (3850€). The total cost difference between Gem/Cis and Pac/Carbo (2330€) was mainly due to the highest chemotherapy acquisition costs for Pac/Carbo, which were not offset by lower costs elsewhere. The difference in total costs between Gem/Cis and Vin/Cis (1375€) were due primarily to the higher rate of hospitalisation in the Vin/Cis group. CONCLUSIONS: Gem/Cis administered as a 3-week cycle incurs lower costs per patient than a 3-week cycle of Pac/Carbo and a 4-week cycle of Vin/Cis when other direct costs are considered in addition to chemotherapy acquisition costs. Notably, hospitalisation costs due to adverse events are a major cost driver for some chemotherapy regimens.

COMPARATIVE COSTS OF GEMCITABINE/CISPLATIN, PACLITAXEL/CARBOPlatin AND VINORELBINE/CISPLATIN IN THE TREATMENT OF NON-SMALL CELL LUNG CANCER IN GERMANY
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OBJECTIVES: Novel chemotherapy regimens are cost-effective relative to best supportive care in the treatment of patients with advanced non-small cell lung cancer (NSCLC). A recently published randomised controlled clinical trial demonstrated that gemcitabine/cisplatin (Gem/Cis), paclitaxel/carboplatin (Pac/Carbo) and vinorelbine/cisplatin (Vin/Cis) were equally effective with regards to overall survival and time to disease progression in Italian patients with advanced NSCLC. We performed a retrospective economic analysis to compare these three combination regimens from the perspective of the German health care system. METHODS: Cost-minimisation and cost-effectiveness analyses were based on resource use and efficacy data from the clinical trial of Scagliotti et al. (2002). The following direct treatment-related costs were identified for each chemotherapy regimen: chemotherapy acquisition, drug administration, hospitalisations, and other medical resources. Unit costs of medical resources in Germany were derived from official published sources. Costs were compared across four main resource categories: chemotherapy acquisition, drug administration, hospitalisations associated with adverse events and other medical resources. UK health care unit costs were derived from published literature and public NHS sources. RESULTS: Patients treated with Gem/Cis had lower mean total treatment costs (£6688) than patients treated with Pac/Carbo (£10,203) or Vin/Cis (£7102). Chemotherapy acquisition was the major cost component for Gem/Cis and Pac/Carbo patients (51% and 79% of total costs per patient, respectively), whereas chemotherapy acquisition and hospitalisations accounted for 31% and 32%, respectively, of the total per-patient costs of the Vin/Cis regimen. CONCLUSIONS: For treatment of advanced NSCLC in the UK, Gem/Cis is associated with lower direct treatment-related costs than Pac/Carbo or Vin/Cis. This analysis presents evidence that the Gem/Cis regimen provides greater value for money to fund-holders with a limited budget.

A COST COMPARISON OF GEMZAR PLUS CISPLATIN WITH OTHER NOVEL AGENTS IN THE TREATMENT OF NON-SMALL CELL LUNG CANCER IN ITALY
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OBJECTIVES: A prospective randomised controlled Phase III clinical trial demonstrated that three platinum-based chemotherapeutic regimens with novel agents—gemcitabine/cisplatin (Gem/Cis), paclitaxel/carboplatin (Pac/Carbo) and vinorelbine/cisplatin (Vin/Cis)—had comparable efficacy in chemotherapy-naive Italian patients with advanced non-small cell lung cancer (NSCLC): median survival times ranged from 9.5 to 9.9 months and median time to progression ranged from 4.6 to 5.5 months (Scagliotti et al. 2002). As part of the Gemzar Retrospective Economic Analysis of clinical Trials (GREAT2), we performed a retrospective cost comparison of these three chemotherapeutic regimens from the perspective of the Italian health care system. METHODS: The analysis involved costing of chemotherapy and medical resource utilisation collected prospectively during the trial published by Scagliotti et al. (2002). Direct costs were com-
pared from four resource categories: chemotherapy acquisition, drug administration, hospitalisation associated with adverse events, and other medical resources. Italian health care unit costs were obtained from published sources. RESULTS: Lowest treatment costs were incurred by the Gem/Cis group (8092€), followed by the Vin/Cis and Pac/Carbo groups (9320€ and 11,203€ respectively). The cost difference between the Gem/Cis and Pac/Carbo regimens was due to the difference in chemotherapy acquisition costs (3732€), which offset the increased costs for drug administration (4996€) and other medical resources (524€) in the Gem/Cis group. The overall per-patient cost saving for Gem/Cis versus Vin/Cis (1227€) was primarily due to reduced hospitalisations for adverse events (2223€) despite the increased acquisition costs for Gem/Cis (1422€). CONCLUSIONS: Based on data collected during a randomised clinical trial, first-line use of Gem/Cis offers potential cost savings compared to other platinum-based third-generation agent combinations in the treatment of advanced NSCLC in Italy. Since these savings relate primarily to chemotherapy acquisition and hospitalisation costs due to adverse events, they are likely to be transferred to the community setting.

**PCN19**

**NEW TARGETED THERAPY FOR PATIENTS WITH PREVIOUSLY-TREATED ADVANCED NON-SMALL CELL LUNG CANCER—GEFTINIB (“IRESSA”)**

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OBJECTIVE: As the prognosis of non-small cell lung cancer (NSCLC) patients after first and second line treatment remains poor, new targeted strategies in third-line treatment are of high interest. This study estimates the cost-effectiveness of gefitinib compared to Best Supportive Care (BSC) in the Dutch health care setting. METHODS: A Markov model was designed to evaluate the lifetime clinical and economic outcomes of gefitinib treatment and BSC. The model was calibrated using clinical data from randomized clinical studies, a Delphi panel (n = 10), patient chart analysis and literature for costs data. The analysis was performed from a societal perspective for a hypothetical cohort of advanced NSCLC patients, who have failed two chemotherapy regimens. Only direct costs related to the treatment of severe adverse events, radiotherapy, evaluation of disease progression and terminal care were considered. The time horizon related to mortality, estimated the costs from start of therapy until death. Both costs and effects were discounted at 4% pa. RESULTS: With an assumed difference in survival of 2.45 months between gefitinib and BSC, the model predicts survival of 0.573 life years (LY) for BSC and 0.790 LY for gefitinib. Total costs related to BSC and gefitinib treatment until death are 8444€ and 15,272€ respectively. The average cost-effectiveness ratio of gefitinib is higher than BSC (19,326€/LY versus 14,743€/LY). The incremental cost-effectiveness ratio of gefitinib compared to BSC is 31,380€ per LYG. Applying the threshold proposed by the Institute for Medical Technology Assessment for disease with highest burden (45,000€/QALY), gefitinib is cost-effective in 73% of advanced NSCLC patients compared to BSC in third-line therapy. CONCLUSION: In addition to its convenient oral administration, its favorable tolerability profile, gefitinib is cost-effective compared to not only BSC but also compared to heart or liver transplantations. “Iressa” is a trademark of the AstraZeneca group of companies.

**PCN20**

**COSTS OF TREATING ADVANCED NON-SMALL-CELL LUNG CANCER IN SPAIN USING GEMCITABINE IN COMBINATION WITH CISPLATIN: A COMPARISON WITH OTHER 2ND GENERATION NOVEL AGENTS**

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OBJECTIVES: To evaluate the costs in Spain of treating advanced non-small-cell lung cancer (NSCLC) with gemcitabine plus cisplatin (Gem/Cis) in comparison with other platinum-based combination chemotherapy regimens, and to compare the findings with previously published cost analyses. METHODS: A retrospective economic analysis was conducted based on medical resource utilisation in a randomised controlled trial (Scagliotti et al. 2002), which found that Gem/Cis demonstrated comparable efficacy to paclitaxel/carboplatin (Pac/Carbo) and vinorelbine/cisplatin (Vin/Cis) regimens in 612 patients with advanced NSCLC. Treatment costs were compared across four main resource categories: chemotherapy acquisition, drug administration, hospitalisation episodes, and other medical resources. Spanish Health Care unit costs were derived from published literature and public sources. Results were compared with those published by Schiller et al. (2004). RESULTS: The mean total treatment-related costs of Gem/Cis were 5578€ per patient, which was lower than those seen with Pac/Carbo (11,541€) or Vin/Cis (6084€). Chemotherapy acquisition was the major cost driver for Gem/Cis (63% of total costs) and Pac/Carbo (90% of total costs), but other component costs, especially hospitalisations, were considerable for the Vin/Cis regimen (36% of total costs). The total costs per patient are comparable to those reported for Spain by Schiller et al. (2004) with calculations based on Comella et al. (2000) (Gem/Cis 4072€, Vin/Cis 4899€) and Schiller et al. (2002) (Gem/Cis 5082€, Pac/Carbo 840€), trials employing different dosing schedules. CONCLUSIONS: Cost-minimisation analyses based on chemotherapy and resource utilisation in randomised controlled clinical trials demonstrate that Gem/Cis has lower total treatment costs from the perspective of the Spanish national health system than Pac/Carbo and Vin/Cis for the treatment of advanced NSCLC.

**PCN21**

**A PHARMACOECONOMIC MODEL OF THE COST-EFFECTIVENESS OF GEFTINIB (“IRESSA”) COMPARED WITH BEST SUPPORTIVE CARE (BSC) IN THIRD-LINE TREATMENT OF PATIENTS WITH REFRACTORY ADVANCED NON-SMALL-CELL LUNG CANCER (NSCLC) IN THE UK**

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OBJECTIVE: To assess the cost-effectiveness of gefitinib (“Iressa”) compared to BSC in patients with refractory advanced NSCLC in the UK National Health Service (NHS). METHODS: A probabilistic model was developed to assess the cost-effectiveness (and associated uncertainty) of gefitinib compared with BSC in patients with refractory advanced NSCLC in the UK with an assumed difference in survival of 2.45 months. Efficacy data were drawn from two independent sources: data for gefitinib were derived from IDEAL II (patients refractory to platinum and docetaxel) and data for BSC were derived from a literature review (BSC arm of a randomised controlled trial in second-line advanced NSCLC). Cost data were collected from the perspective of the UK NHS. In the absence of a UK price for gefitinib, the pre-approval sales price in France (1950€) was converted into UK prices (approximately £1300). Resource utilisation and cost data for gefitinib were derived from pub-