13th Euro Abstracts A263

platin (£21,126), the same regimen was also the most expensive in the second line (£13,366), irinotecan/cetuximab in the third line (£25,633), and FOLFIRI/cetuximab in the fourth line (£6479). CONCLUSIONS: New chemotherapeutic agents are associated with improvements in survival time but also with substantial costs. Factors influencing the selection of chemotherapy included: previous therapies, course of the disease, the patient's performance status, adverse events after previous chemotherapies, and concomitant diseases. However, open-ended coverage policies for new chemotherapeutic agents may prove difficult to sustain as costs continue to rise.

PCN64

#### SURVEY AND ANALYSIS OF THE COST OF METASTATIC COLORECTAL CANCER TREATMENT IN SLOVENIA

Rutkowski J<sup>1</sup>, Haldas M<sup>1</sup>, Jedynasty K<sup>2</sup>, Ocvirk J<sup>3</sup>

<sup>1</sup>HTA Consulting, Krakow, Poland; <sup>2</sup>Amgen GmbH, Headquarters Office for CEE, Vienna, Austria; <sup>3</sup>Onkoloski Institut Ljubljana, Ljubljana, Slovenia

OBJECTIVES: To describe chemotherapy regimens used in the first-, second-, third-, and fourth-line treatment of patients with metastatic colorectal cancer and to estimate costs of chemotherapy regimens, supportive care, and medical procedures in Slovenia (part of a multinational study in central Europe). METHODS: In this opinion-based study, necessary data were collected by online questionnaire. All information concerning treatment of colorectal cancer was based on experts opinion from an oncology center in Slovenia. Oncologist had access to medical records of approximately 800 patients treated in year 2008. RESULTS: The most commonly used regimen in the first line (30% of patients) was XELIRI (capecitabine, irinotecan) + bevacizumab. The most commonly prescribed regimen in the second (28%) and third lines (12%) was XELOX (capecitabine, oxaliplatin) + bevacizumab. XELIRI + bevacizumab was most commonly used in the fourth line (6%). Supportive care was not used in the first line with 9%, 55%, and 76% receiving it in the second, third, and fourth lines, respec tively. The most common treatment algorithm (21% of patients) was first-line XELIRI + bevacizumab and second-line XELOX + bevacizumab. Mean regimen costs per patient were estimated from a public payer perspective. FOLFOX + cetuximab was the most expensive regimen in all lines. Costs of this regimen were €35,896 in the first line and €36,179 in the second, third, and fourth lines. CONCLUSIONS: More than 50% of patients received an active treatment until the second line. Costs of treatment vary between lines. New chemotherapeutic agents are associated with improvements in survival time but also with substantial costs. Factors influencing the selection of chemotherapy included: previous therapies, course of the disease, the patient's performance status, adverse events after previous chemotherapies, and concomitant diseases. However, open-ended coverage policies for new chemotherapeutic agents may prove difficult to sustain as costs continue to rise.

PCN65

### COST-EFFECTIVENESS ANALYSIS OF A FOBT-BASED COLORECTAL CANCER SCREENING PROGRAMME

 $\underline{\underline{\text{Pizzo }E^1}}, Bracci \ E^2, Vagnoni \ E^2, Wilschut \ J^3, van \ Ballegooijen \ M^3$ 

 $\label{eq:lower_loss} Imperial College London, London, UK; \\ ^2University of Ferrara, Ferrara, Italy; \\ ^3Erasmus \\ University Medical Center; Rotterdam, The Netherlands$ 

OBJECTIVES: Colorectal cancer (CRC) is one of the most common forms of cancer in western countries and represents the second leading cause of cancer mortality in Europe (AIRTUM 2009). Early detection and removal of cancerous lesions can reduce CRC and mortality and improve patients' quality of life (Taupin et al. 2006). The main literature on this topic refers to the United States and few studies have been conducted in Italy to date (Zappa et al. 1997; Tappenden 2007). Aim of the paper is to shed some light on the effectiveness and costs of screening programs in the Italian health-care system, presenting the results of a cost-effectiveness analysis of a CRC screening program in Italy. METHODS: We use as case study a Regional CRC screening program to determine the full costs and the effectiveness of the adopted techniques, FOBT combined with colonoscopy. The costs involved in each phase of the program are evaluated using a microcosting analysis. Effectiveness is valued in terms of early detected lesions and years of life gained. Cost and effectiveness data are used to estimate the costs for year of life gained, using a MISCAN-COLON Model© to simulate and compare two alternative scenarios, with or without the screening program. RESULTS: The preliminary results show that the screening will prevent almost 2.0 deaths (11.2%) per 1000 screened individuals, corresponding to 19.4 years of life gained in 30 years with an incremental cost-effectiveness ratio of €2.400 for life-year gained. CONCLUSIONS: The results outpace those of previous studies (Sonnenberg 2000), signaling an increasing effectiveness of CRC screening program. Besides, the paper highlights the importance of implementing a screening not only for the effects that prevention can have in clinical terms, but also for the economic impact of such a policy in relation to the long-term sustainability of health-care systems.

PCN66

## ECONOMIC ANALYSIS OF CAPECITABINE PLUS OXALIPLATIN (XELOX) VERSUS FLUOROURACIL/LEUCOVORIN PLUS OXALIPLATIN (FOLFOX) IN THE TREATMENT OF ADVANCED COLON-RECTUM CANCER IN CHINA

Chen W

Fudan University, Shanghai, China

OBJECTIVES: The objective of the study was to examine the direct medical cost of XELOX (capecitabine plus oxaliplatin) compared to FOLFOX (fluorouracil/leucovorin plus oxaliplatin) for the treatment of advanced colon-rectum cancer in China.

METHODS: Since the equal efficacy was already demonstrated by the published literature and local clinical guideline, cost minimization analysis was performed to compare the direct medical costs of XELOX and FOLFOX for the treatment of advanced colon-rectum cancer. The direct medical costs were associated with the drug costs, drug administration costs, hospitalization costs, and adverse events management costs. The costs were calculated based on a questionnaire survey from an expert panel of 23 pharmacists and 10 gastrointestinal surgeons and medical oncologists. RESULTS: According to the recommendation of expert panel, the standard treatment duration of XELOX and FOLFOX was eight cycles and 12 cycles, respectively. The drug cost of XELOX regimen was CNY 47,306 (US\$6926), higher than FOLFOX by CNY 22,118 (US\$3238). However, the cost increment of XELOX regimen was offset by the higher drug administration cost (deviation CNY 6,820), hospitalization cost (deviation CNY 10,200), and adverse events management cost (deviation CNY 7,710) of FOLFOX regimen. As a result, XELOX showed a significant overall cost savings of CNY 2612 (US\$382) compared with FOLFOX. CONCLUSIONS: According to the study, XELOX is cost saving in comparison with FOLFOX for the treatment of advanced colon-rectum cancer in China, especially in the chemotherapy administration and hospitalization utilization.

PCN67

### MANAGEMENT OF MALIGNANT ASCITES IN GERMANY—TREATMENT PATTERNS, RESOURCE CONSUMPTION, AND COSTS

Ehlken B1, Berger K1, Shlaen R1, Gonschior AK2, Lordick F3

<sup>1</sup>IMS Health, Munich, Germany; <sup>2</sup>Fresenius Biotech GmbH, Munich, Germany; <sup>3</sup>Medizinische Klinik III, Klinikum Braunschweig, Braunschweig, Germany

OBJECTIVES: To describe treatment patterns, resource use, and associated costs for cancer patients with malignant ascites (MA) receiving paracentesis in Germany. METHODS: The study was conducted as an observational, multicenter, prevalencebased cohort study. Inclusion criteria were: age ≥18 years, diagnosis of ovarian or gastrointestinal carcinoma (CA) with MA, paracentesis as treatment option for MA at the time of enrolment. Resource consumption data were collected by chart review and patient questionnaire covering the time period from the first paracentesis documented in the study until ascites diagnosis retrospectively and subsequent paracenteses prospectively. Direct medical costs were analyzed from third-party payers' (TPP) and patients' perspective. RESULTS: A total of 29 patients (38% male) with a mean age of  $65 \pm 9$  years were enrolled at 11 centers (six hospitals, five office-based practices) between July 2008 and August 2009. Seven patients had ovarian CA (24%), 5 gastric CA (17%), and 17 other gastrointestinal CAs (59%). a total of 101 paracenteses were documented for all patients. From ascites diagnosis to death patients received on average 4.6 paracenteses. Mean time between two paracenteses was  $11.9 \pm 12.3$  days. Data from 42 paracenteses were eligible for resource and cost analysis. Diuretics were applied in 57% of paracentesis units and human albumin in 29%. Intraperitoneal chemotherapy was applied rarely (5%). From TPPs' perspective, mean total costs per paracentesis unit amounted to €1064 ± 1453, from patients' perspective €17 ± 46. Direct medical costs per paracentesis unit varied from €671 ± 1070 at office-based practices to €2.742 ± 1.535 at hospitals (inpatient treatment). CONCLUSIONS: This is the first comprehensive study evaluating the burden of MA in cancer patients undergoing paracentesis in Germany. Our findings indicate that the costs for paracentesis range around €670 to €2700 depending on health-care setting. Our results might serve as a basis for further research on the economic implication of malignant ascites.

PCN68

# COST-EFFECTIVENESS OF PRIMARY PROPHYLAXIS WITH PEGFILGRASTIM VERSUS FILGRASTIM FOR THE PREVENTION OF FEBRILE NEUTROPENIA IN NON-HODGKIN LYMPHOMA AND STAGE II BREAST CANCER PATIENTS IN GERMANY

Taylor DC<sup>1</sup>, Ozer-Deniz S<sup>1</sup>, Hill G<sup>1</sup>, Skornicki M<sup>1</sup>, Danel A<sup>2</sup>, Kunz E<sup>3</sup>

 $^{\rm l}$ i3 Innovus, Medford, MA, USA;  $^{\rm 2}$ Amgen (Europe) GmbH, Zug, Switzerland;  $^{\rm 3}$ Amgen (Europe) GmbH, München, Germany

OBJECTIVES: To assess the cost-effectiveness in Germany of primary prophylaxis (PP) with pegfilgrastim versus 6- or 11-day filgrastim (F6, F11) in the prevention of febrile neutropenia (FN) in non-Hodgkin lymphoma (NHL) patients receiving CHOP-14 chemotherapy and in breast cancer (BC) patients receiving TAC chemotherapy, METHODS: A paver perspective Markov model of febrile neutropenia prophylaxis in chemotherapy patients was developed. PP was defined as initiating prophylaxis with the first chemotherapy cycle. Model cycle length matches chemotherapy cycle length (CHOP-14:14 days, TAC: 21 days); model time horizon is the duration of chemotherapy (6 cycles). Cycle 1 FN risk with no prophylaxis was estimated to be 21% for NHL CHOP-14 and 14% for BC TAC; all cycle relative risks of FN versus no prophylaxis for PP using Pegfilgrastim, F6, and F11 were 0.25, 0.87 and 0.61, respectively, based on published literature and meta-analyses. Pegfilgrastim cost was estimated as €1686 per chemotherapy cycle; corresponding costs for F6 and F11 were €1347 and €2469 based on German national pricing. Incremental costeffectiveness ratios (ICERs) were calculated per FN events avoided. Costs and outcomes were discounted (3%/year). Sensitivity analyses were performed. RESULTS: For NHL FN events per patient were 0.15, 0.76, and 0.47 for Pegfilgrastim, F6, and F11, respectively. ICER for Pegfilgrastim versus F6 was €1386 per FN avoided. For BC, corresponding FN events per patient were 0.09, 0.43, and 0.27. The ICER for Pegfilgrastim versus F6 was €6651 per FN avoided. Pegfilgrastim was dominant (less costly, more effective) compared with F11 in both populations. Results were most sensitive to baseline risk of FN, cost of prophylaxis and cost of FN events. CONCLU-SIONS: Primary prophylaxis with pegfilgrastim costs <€1400 per additional FN