21% in the second, 53% in the third, and 94% in the fourth line. The most common treatment algorithm (18%) was FOLFOX, FOLFIRI and supportive care in the first-, second-, and third-lines, respectively. Mean regimen costs per patient were estimated from a public payer perspective. The most expensive first, second, third and fourth-line regimens were FOLFOX 4 (€14,200), FOLFIRI + bevacizumab (€7912€), cetuximab + irinotecan (€7237) and capecitabine (€2609), respectively. **CONCLUSIONS:** The most common regimen in the first line was also the most expensive one. 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.

PCN59

COST OF MANAGEMENT OF BREAST CANCER WITH BRAIN METASTASES USING FRENCH HOSPITAL PATIENT CHAINING SYSTEM

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OBJECTIVES: Breast cancer (BC) is the second neoplasm which disseminates brain metastases (BM). We estimated the incidence of patients with BCBM, those overexpressing HER2 (HER2+), and the costs related to their management using the new chaining system of the French hospital information program (PMSI). This was to identify predictors of costs. **METHODS:** A retrospective analysis using the PMSI database (2006–2008) was conducted to estimate the number of public and private stays related to the diagnosis of BCBM. Stays were extracted and chained to patients' identification number to calculate the number of patients concerned by BCBM. The administration of *trastuzumab* was used as a surrogate for the HER2 status. Costs were estimated from the health insurance perspective including health-related group tariff, supplements for intensive care, number and length of stays, and expensive-drugs status. Spearman's rank correlation coefficient and nonparametric test (Kruskal–Wallis) were used for univariate analyses. **RESULTS:** In 2008, 3610 women were hospitalized for BCBM (vs. 3273 and 3523 in 2006 and 2007, respectively) of whom average age was 56.1 years (SD: 13.3). Patients had an average of 4.8 hospitalizations (SD: 6.4) mostly for palliative care (42%), chemotherapy (39%), and radiotherapy (14%). Twenty-one percent of patients suffered from BM only and 79% had multiple metastases; 16% were identified as HER2+. Annual mean cost of care was €8049 per patient with BCBM compared with €19,412 specifically for HER2+ patients (respectively, 11% and 59% were dedicated to expensive drugs). Age ($P < 0.001$), patients with newly diagnosed BCBM ($P < 0.001$), and the number of metastases ($P < 0.001$) were associated with the cost of BCBM. **CONCLUSIONS:** Incidence of BCBM seemed to increase during 2006–2008. BCBM management appeared resource-consuming especially for HER2+ patients. The development of chaining system in PMSI database is an opportunity to estimate economic data accurately as well as to generate epidemiological data from an exhaustive database.

PCN60

CLINICAL AND ECONOMIC OUTCOMES ASSOCIATED WITH ADJUVANT CHEMOTHERAPY IN ELDERLY PATIENTS WITH EARLY STAGE OPERABLE BREAST CANCER

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OBJECTIVES: Chemotherapy is a major factor contributing to the economic burden associated with breast cancer in the elderly. However, there are no clear recommendations for adjuvant chemotherapy use in elderly women aged 70 and above due to lack of efficacy data in that age group. The study objective was to examine the clinical and economic outcomes associated with adjuvant chemotherapy in elderly patients aged 65 and above with early stage operable breast cancer. **METHODS:** We studied a cohort of 23,110 node positive and 31,572 node negative women aged 65 and over diagnosed with incident American Joint Committee on Cancer (AJCC) stage I, II, or IIIa breast cancer between January 1, 1991 and December 31, 2002 using SEER-Medicare data. Total treatment and chemotherapy costs were estimated from the Medicare payments using the phase of care approach. Cox proportional hazard ratio of mortality was used to determine the effectiveness of adjuvant chemotherapy after adjusting for selected patient and tumor characteristics. a propensity score analysis was also employed to minimize the bias associated with the receipt of adjuvant chemotherapy. **RESULTS:** The difference in the total unadjusted costs for patients who received chemotherapy in contrast with patients not receiving any chemotherapy was $16,795 in node positive patients and $11,882 in node negative patients. Regression adjusted cost estimates for all node positive patients receiving chemotherapy was approximately $6500 and was significantly higher ($P < 0.05$) than for patients not receiving chemotherapy. Mortality was significantly reduced in node positive women aged 65–69 who received adjuvant chemotherapy compared to those who did not receive chemotherapy (HR, 0.66; CI, 0.58–0.74) and in patients aged 70–74 (HR,0.66; CI, 0.59–0.74), after adjustment for factors that may affect survival. **CONCLUSIONS:** Decision makers can use cost and effectiveness estimates from this study to assess relative value of chemotherapy in different age groups.

PCN61

COST IMPACT OF ORAL CAPECITABINE COMPARED TO 5-FLUOROURACIL FOR TREATMENT OF PATIENTS WITH METASTATIC COLORECTAL CANCER

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OBJECTIVES: To evaluate the cost of biweekly oxaliplatin plus oral capecitabine (OXXEL) versus oxaliplatin combined with leucovorin-modulated 5-fluorouracil (5-FU) given as i.v. bolus every 2 weeks (OXAFAFU) in patients with metastatic colorectal cancer (MCRC) in Italy. **METHODS:** We conducted a multicenter, retrospective longitudinal treatment-cost analysis. Direct medical costs attributable to MCRC were quantified using 2008 prices and tariffs. The analysis was applied to a time horizon of 6 months. The study was conducted from the perspective of the National Healthcare Service (NHS). **RESULTS:** A total of 322 patients (59.9% males; mean age 65.2 ± 9.4 years) were analyzed. Mean total cost per patient over follow-up period was estimated at €5242.18 ± 2542.06 and €6732.80 ± 3423.72 in the Capecitabine and 5-FU arms respectively ($P < 0.0001$). **CONCLUSIONS:** The study estimated that oral capecitabine administration would produce a saving of €1490.62 to the NHS. The differences in cost between the two arms are determined by the administration route (i.v. vs. oral administration). Therefore, the important economic and practical advantage of capecitabine oral home-based therapy is the reduced number of hospital visit and the relative costs. Avoiding the hospital access fees reduces the impact of higher acquisition cost of capecitabine. Moreover, capecitabine in comparison to the 5-FU regimen was associated with lower complication. Therefore, oral capecitabine may represent a valid alternative in the management of metastatic colorectal cancer.

PCN62

SURVEY AND ANALYSIS OF THE COSTS OF METASTATIC COLORECTAL CANCER TREATMENT IN SLOVAKIA

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OBJECTIVES: To describe chemotherapy regimens used in the first-, second-, and third-line treatment of patients with metastatic colorectal cancer and to estimate costs of regimens, supportive care, and medical procedures in Slovakia (part of a multinational study in central Europe). **METHODS:** In this opinion-based study, data were collected by online questionnaire. All information concerning treatment of colorectal cancer was based on expert opinion at three oncology centers in Slovakia. Oncologists had access to medical records of approximately 1600 patients treated in year 2008. **RESULTS:** The most commonly used first-line regimen (27% of patients) was IFL (irinotecan, 5-FU, leucovorin) + bevacizumab. The most commonly prescribed second-line regimen (27%) was cetuximab + irinotecan and capecitabine was the most common third-line regimen (15%). None of patients received supportive care in the first line. The percentages of patients receiving supportive care in the second and third lines were 27% and 45%, respectively. The most common treatment strategy (8%) was first-line capecitabine and supportive care in the second line. Mean regimen costs per patient were estimated from a public payer perspective. The most expensive first-line regimen was IFL + bevacizumab (€36,369). In the second and third lines, modified FOLFOX 4 (oxaliplatin, 5-FU, leucovorin) was the most expensive regimen at €31,318 and €31,572, respectively. **CONCLUSIONS:** More than 50% of patients received an active treatment until the second line. The most common regimen in the first line was also the most expensive one. 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.

PCN63

SURVEY AND ANALYSIS OF THE COSTS OF METASTATIC COLORECTAL CANCER TREATMENT IN SERBIA

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OBJECTIVES: To describe chemotherapy regimens used and to estimate costs of chemotherapy regimens, supportive care, and medical procedures in the first-, second-, third-, and fourth-line treatment of patients with metastatic colorectal cancer in Serbia (part of a multinational study in central Europe). **METHODS:** An online questionnaire was used to collect necessary information in this opinion-based study. All information concerning treatment of colorectal cancer was based on experts opinion from four oncology centers in Serbia. Oncologists had access to medical records of approximately 1760 patients treated in year 2008. **RESULTS:** The leading first-line regimen (38% of patients) was Mayo (Folinic acid, 5-FU). The most commonly prescribed second-line regimen (46%%) was FOLFOX 4. Modified FOLFIRI (irinotecan, folinic acid, 5-FU) was the most popular regimen in the third line (35%), while FOLFIRI/cetuximab (35%) was the most commonly used fourth-line regimen. The percentage of patients receiving supportive care was 7%, 5%, 10%, and 56% in the first, second, third, and fourth lines, respectively. The most common treatment path (8%) was FOLFOX 4 B in the first line, FOLFIRI B in the second, and Mitomicin mono in the third. Mean regimen costs per patient were estimated from a public payer perspective. The most expensive regimen in the first line was bevacizumab + capecitabine + oxali-