

and indirect (the “cost of illness” analysis), connected with patient treatment at different stage of disease treatment. Epidemiology of INN in Russia was investigated: prevalence, incidence, structure of disease depending on age, disease progression, and death rate indicators. The expert opinion of real practice of HCC treatment was collected. All these methods allowed to estimate the direct and indirect costs of HCC. **RESULTS:** HCC incidence rate was 2.4 patients per 100,000 population (85% in the structure of primary liver cancer). HCC incidence rate index was 8658 patients as of 2008. In the HCC, structure intermediate stage prevails—61%, the terminal and local stages—30% and 9% correspondingly. HCC treatment costs were 2370 bln RUB (€67.7 mln) (2008). Direct medical costs were 2208 bln RUB (€63.1 mln) including inpatient care (90%), outpatient care (6.6%), and diagnostics (3.4%). Indirect costs were 0.161 bln RUB (€4.6 mln) including GDP losses (26%) and payment related with temporary disability (74%). The current HCC treatment standards do not correspond to international approaches. Very few patients with primary liver cancer get target pharmacotherapy. The analysis of actual practice of managing patients with HCC shows prevalence of drugs with no indications for usage from the point of view of the existing standards and recommendations (form 33% according to regional reimbursement to 58% according to Federal reimbursement). **CONCLUSIONS:** Developing of new standards of HCC treatment including target therapy can reduce the cost of illness by reducing off-label use and optimizing the treatment strategy.

PCN54

HOSPITAL UNDERTAKING OF PATIENTS WITH A RESECTION OF LUNG TUMOR IN FRANCE

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OBJECTIVES: With 30,651 new cases diagnosed in 2005, lung cancer is the fourth most frequent cancer in France and the first in terms of mortality, with 26,624 deaths per year. The survival rate at 5 years is less than 15%. The purpose of this study was to describe the 2 years hospital undertaking of patients with a resection of lung tumor and to estimate associated hospital costs. **METHODS:** The 2006 to 2008 PMSI French hospital databases were used. Patients with a resection linked to a lung cancer (ICD10 diagnoses: C33* and C34*) in 2006 were identified and followed up during 2 years. Hospital stays, chemotherapy, and radiotherapy sessions were extracted and associated costs (excluding expensive drugs) were assessed using DRG. Kaplan Meier method was applied to estimate associated costs over time, by taking into account survival probabilities. **RESULTS:** In 2006, 8798 patients were hospitalized for a resection of lung tumor of which 75.8% were men. Mean age at inclusion was 62.4 years; 2343 patients (26.6%) died in hospital during follow-up. The mean number of hospitalizations for repeated surgery was 0.11 per patient, 2.00 for radiotherapy sessions, 2.99 for chemotherapy sessions, and 2.57 for other hospitalizations. Total mean hospital cost per patient was estimated at €16,169.89 for the 2 years follow-up. First surgery account for 48%, repeated surgeries for 6%, radiotherapy session for 2%, chemotherapy sessions for 8%, and other hospitalizations for 37%. First month of first year supported half of the total cost, and first year bore 86% of it. **CONCLUSIONS:** In France, lung resections for cancer represent a heavy charge for hospitals. During the follow-up period, major burden is dedicated to hospital stays especially for the first months. These results could be relevant to estimate the impact of coming drugs which will be associated to resection of lung tumor.

PCN55

COST OF TREATMENT OF BREAST CANCER IN RUSSIA

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OBJECTIVES: Estimating the amount and the structure of annual expenses for treatment of breast cancer (BC) at different stages in Russia. **METHODS:** Identifying the annual direct costs of treatment BC based on the Russian standard of treatment confirmed by Minister of Health of Russian Federation. Direct costs of BC include cost of medical services (MS) (hospitalizations, physician services, diagnosis, surgery, and other supporting services), and cost of pharmacotherapy (PT) (cytostatics, hormones and antihormones, accompanying drugs, and other drugs). **RESULTS:** Annual direct costs of treatment BC totaled 138,680, 1,379,980, and 1,923,050 roubles at stages I–II, III, IV accordingly. With increase in weight of disease, the relative share of expenses for MS decreases and for PT increases. Analyzing the structure of costs at different stages showed that the cost of PT is substantial, especially at metastatic stage. The presence and relative share of components vary at different stages in structure of expenses for MS, in which expenses for radiotherapy share about 60% and 68% at stage III and IV, accordingly. In structure of expenses for PT, the expenses for cytostatics are substantial and take 85% at both stages III and IV. Analyzing the gain of expenses for separate groups of drugs from stage III to IV showed that expenses for cytostatics and accompanying drugs have grown by 43% and 128% accordingly, while expenses for other groups have almost not changed. **CONCLUSIONS:** Expenses for treatment BC at different stages vary in size and structure, and rises with increase in weight of disease. With the amount of 51,865 patients with BC in 2007 (62.3%, 26.3%, 10.5% at stages I–II, III, IV accordingly), we received total expenses for treatment of 33,777,217.655 roubles (\$1,125,907,255), in which expenses for treatment of stage I–II, III, IV are 4,481,031,599 roubles (\$149,367,120), 18,823,610,290 roubles (\$627,453,676), and 10,472,593,166 roubles (\$349,860,459), accordingly.

CLINICO-ECONOMIC ANALYSIS OF TREATMENT OF CHILDREN WITH RHABDOMYOSARCOMAS ON PROTOCOLS CWS

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OBJECTIVES: To carry out clinico-economic analysis of treatment of children with rhabdomyosarcomas on protocols CWS in Chelyabinsk Region, to estimate medical, social, and economic efficiency of technology. **METHODS:** We reviewed 21 patients <16 years old with rhabdomyosarcomas. All patients received therapy on protocols CWS. We used following methods of clinico-economic analysis: cost of illness, cost-effectiveness analysis, and analysis of the kept years of a life. **RESULTS:** The sum of direct medical expenses for one patient has made US\$16,904 dollars, and the total sum of direct medical expenses for treatment of 21 patients included in research, has made US\$354,984. The overall survival rate was 52% that testifies to high medical efficiency of applied technology. For all groups of patients, the treatment keeps 694.4 years of a life that makes 33 years of a life on one patient. The parity of a cost/efficiency for one patient has made US\$512 dollars for 1 year of the kept life. Considering that in 2008 gross national product has made US\$9.5 thousand per capita, an expense for 1 year of the kept life in 18.5 times there is less than parameter of gross national product, means that expenses are justified. Before achievement of a pension age, the survived patients will work 422 years and will make gross national product for the sum US\$4009 thousand. The survived patients provide the state with the income 11.2 times the society for their treatment. **CONCLUSIONS:** The clinico-economic analysis has shown high medical, economic, and social efficiency of technology of treatment of children with rhabdomyosarcomas on protocols CWS.

PCN57

EXAMINING PATIENT-BASED COSTS FOR IRINOTECAN CHEMOTHERAPY: UK PRACTICE-BASED MICRO-COSTING STUDY

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OBJECTIVES: To conduct a robust economic evaluation, it is necessary to describe current practice and associated costs. Available data on clinical pathways and cost of chemotherapy are clinical trial-based, which may not reflect UK National Health Service (NHS) practice. Practice-relevant costs of drug administration, patient monitoring and management of adverse events, required for a practice-relevant economic model, are not available. This study aimed to inform an economic evaluation by describing patient-based cost of NHS patients with advanced colorectal cancer (CRC) undergoing irinotecan-based chemotherapy. **METHODS:** Resource use data were collected from the medical records of 48 patients prescribed irinotecan-based (IrMdG) chemotherapy at a UK tertiary care center. Using the hospital perspective, data were collected from starting chemotherapy until treatment ended. Unit costs were assigned, based primarily on NHS Reference Costs 2008/09. Data were analyzed using descriptive statistics and variations around the costs were obtained. Predictors of cost were identified from a stepwise multiple regression analysis (ordinary least squares). **RESULTS:** Total cost for 48 patients was £598,765.54 (UK £ 2008/09). Mean cost per patient was £12,474.28 (95% CI: £11,233.24–£13,715.32, median £13,307.82, range £3,024.48–£21,276.18). Cost components comprised: chemotherapy drugs (36.9%), chemotherapy delivery (21.4%), pharmacy cost (15.0%), oncology appointments (9.5%), central line insertion (5.0%), management of complications and comorbidities (5.1%), management of adverse events (4.9%), and imaging (2.2%). Significant predictors of increased cost ($P < 0.05$) identified from the stepwise regression were: number of chemotherapy cycles received (adjusted R^2 0.81), neutropenia (adjusted R^2 0.83), no prior chemotherapy (adjusted R^2 0.85), and full-dose chemotherapy (adjusted R^2 0.86). **CONCLUSIONS:** This study provides the first data describing patient-based costs associated with current NHS practice in this patient group, derived from a pragmatic observational study with no trial protocol dictating practice. These data should be used in ensuing economic evaluations to ensure relevance to current clinical practice.

PCN58

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

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OBJECTIVES: To describe chemotherapy regimens used in the first, second, third, and fourth line of treatment in patients with metastatic colorectal cancer. Costs of chemotherapy regimens used as well as supportive care and medical procedures in Bulgaria will be estimated (as part of a multinational central European study). **METHODS:** This opinion-based study collected required data by online questionnaire. All information concerning treatment of colorectal cancer was based on experts opinion from four oncology centers in Bulgaria. Oncologists had access to medical records of approximately 1220 patients treated in year 2008. **RESULTS:** The leading first line regimen (60% of patients) was FOLFOX 4 (oxaliplatin, calcium folinate, and fluorouracil). The most commonly prescribed second-line regimen (50%) was FOLFIRI (irinotecan, calcium folinate, and fluorouracil). Capecitabine was the most popular in both the third- (26%) and fourth-line (4%) settings. The percentage of patients receiving supportive care increased with disease stage, from 1% in the first,