

of RCC-treatment in Finland. **METHODS:** Health care resource use, medication and survival data from 83 patients with metastatic RCC, who had received 1<sup>st</sup> line interferon-based therapy, were collected from the hospital records of 3 university hospitals. A structured form was utilized in the retrospective data collection. Kaplan-Meier method was used in survival analysis. **RESULTS:** Median survival time from diagnosis to death was 20.7 months (95%CI 14.9–26.4). All patients had received interferon- $\alpha$  (IFN) as the cytokine of choice, the duration of IFN-treatment was 5.6 months (median). Patients survived 11.9 months (95%CI 9.2–14.7) after initiation of active IFN-treatment. Median survival time after IFN-treatment failure was 3.8 months (95%CI 1.38–6.3). There were no significant differences in survival times between the hospitals. Most of the total treatment costs were due to hospitalization and IFN-treatment. The average treatment cost per follow-up day was €36 in population level. IFN- $\alpha$  caused 89% (median €7170/patient) of all medication costs. Hospitalization was responsible for majority of total non-medication costs (78%; median €10,980/patient). The composition of different costs changed during disease progression. During active treatment period, the medication costs comprised the majority (60%) of total treatment costs. After the active IFN-treatment was stopped, i.e. during palliative phase, 94% of all costs were non-medication costs. Average cost per treatment day was less during the active treatment than after disease progression. **CONCLUSIONS:** Prolonging progression-free time and keeping patients out of hospital provide desirable outcomes both from humanistic and from economic perspective. New targeted treatments have shown their potential in the treatment of RCC. Nevertheless, their economic consequences should be carefully evaluated.

PCN57

#### EVALUATION OF THE COMPLICATION RATE AND COST OF TREATMENT ACCORDING TO THE MASCC INDEX IN PATIENTS WITH FEBRILE NEUTROPENIA

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**OBJECTIVES:** Febrile neutropenia (FN) is a side effect of chemotherapy, inducing significant morbidity and mortality. A previous study showed that MASCC score can distinguish patients according to their risk of FN-related complications. The objective of this study was to assess the predictive value of the MASCC score in identifying patient management options following an FN episode. **METHODS:** Prospective study of consecutive patients with a solid tumour and FN. According to the MASCC score and the antibiotic treatment, 3 management groups were defined: ambulatory (A = MASCC > 21 and oral antibiotics), hospitalization (H = MASCC ≤ 19 and IV antibiotics) or short hospitalization followed by outpatient management (AH = 16 ≤ MASCC ≤ 26 and oral antibiotics). Data were collected on demographic, clinical, biological and therapeutic characteristics, as well as serious FN complications. Costs were analyzed from the societal perspective. Resources consumed (hospitalization, drugs, biological exams, transportations and follow-up) were collected during hospitalization and outpatient management. **RESULTS:** From January 2008 to April 2009, 138 FN episodes were registered in 128 patients. Mean age was 53 years and 77 patients were women. Thirteen patients received prophylaxis for FN with G-CSF. Twenty-seven episodes (20%) were managed at home (A); there was no complication and mean treatment cost was 498€ ± 748. Thirty nine episodes (28%) were treated in hospitalization (group H) for a mean of 6.9 days. Nine episodes were treated curatively with G-CSF. There were 8 complications, including 3 FN-related deaths, leading to a mean management cost of 6216€ ± 3844. The AH group was composed of 72 episodes (52%). Secondary prophylaxis by G-CSF concerned 15 episodes (20%). There was no complication and no death in this group. Patients were hospitalized for a mean of 4.1 ± 2.2 days, management cost being estimated at 3738€ ± 2038. **CONCLUSIONS:** MASCC score and type of antibiotic treatment allowed optimal management of patient to be determined. Future research would identify factors distinguishing high-risk patients from the intermediary population.

PCN58

#### RESOURCES USED IN PATIENTS WITH ANEMIA INDUCED BY CHEMOTHERAPY REQUIRING BLOOD TRANSFUSIONS. EPICOST STUDY, PRELIMINARY RESULTS (ONVIDA GROUP)

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**OBJECTIVES:** To evaluate the medical, non-medical and indirect resources used in a group of patients with anemia induced by chemotherapy requiring blood transfusions and their associated costs. **METHODS:** An epidemiological, prospective study was conducted in 19 Spanish hospital sites during 2007–2008. 108 patients with anemia induced by chemotherapy were included and finally 32 patients who required blood transfusions were analyzed. The consumption of resources was obtained through two medical visits: basal and 5 months later. The resources and costs estimated were: (i) direct medical: related to blood transfusions; (ii) Indirect: workplace absence for patients and carers; (iii) direct non-medical: transportation to the hospital. The time horizon used was 5 months. **RESULTS:** The mean age of patients was: 62.1 ± 8.6

years old; 90.6% were men. Mean basal Hb level was 9.33 ± 0.96 g/dl. and years from disease diagnostic: 0.50 ± 0.96. (i) **Direct medical costs:** each patient received 3.7 ± 2.6 units of red cell concentrates, the estimated cost was 306.40€. Mean length of stay due to transfusions was 318.6 ± 280.2 minutes, the mean cost per patient was €699.22; (ii) **Indirect costs:** all patients visited the hospital with a carer; 16.1% of patients and 24.1% of carers had an employment, the estimated cost per patient and carer was €33.82; (iii) **Direct non-medical costs:** the means of transport used were car (60.7%), taxi (21.4%) and bus/metro (17.9%); being mean cost per patient/carer €3.13. **The total cost along 5 months, from the social perspective, related to blood transfusions in a patient with anemia induced by chemotherapy was €1,042.57/transfusion. CONCLUSIONS:** According to the study, blood transfusions in patients with anemia induced by chemotherapy involve substantial costs due to consumption of medical and non-medical resources.

PCN59

#### REAL-WORLD COSTS OF ADJUVANT TREATMENT FOR STAGE III COLON CANCER PATIENTS IN THE NETHERLANDS

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**OBJECTIVES:** The potentially limited generalisability of RCT-based economic analysis may seriously restrict their relevance to policy-making. Therefore, the present study aimed to examine the costs of adjuvant treatment in stage III colon cancer based on real-world resource use. In addition, we determined the economic burden in the Netherlands. **METHODS:** Real-world data were gathered from the Dutch population-based Cancer Registry supplemented with data from medical records in 19 hospitals. We were able to observe treatment patterns in clinical practice during 2005–2006 (N = 427). From a representative patient sample (N = 206), mean costs per patient were calculated in regard to the four most common treatment groups. Total costs for individual patients were determined by estimating resource use and unit costs of all relevant cost components. All costs were reported in euro 2007. **RESULTS:** Four percent of the patients received fluorouracil plus leucovorin (5FU/LV), 24% received capecitabine, 35% received 5FU/LV plus oxaliplatin and 37% received capecitabine plus oxaliplatin. Mean costs per patient amounted to €8,968, €9,901, €32,593 and €23,593 respectively. We found a substantial cost variation in the total costs obtained for individual patients as well as in each individual cost component. Inpatient hospital days, daycare treatments, outpatient visits and chemotherapy (leucovorin, capecitabine and oxaliplatin) were the most important cost drivers. Extrapolating the mean treatment cost per treatment group to all patients treated in 2005 and 2006 (n = 2248) resulted in an economic burden of €26.1 million per year. **CONCLUSIONS:** Our results suggest a trend towards oxaliplatin plus either 5FU/LV or capecitabine as the preferred treatment for stage III colon cancer which is in line with national guidelines. Furthermore, a trend towards capecitabine is observed. This can be encouraged by lower treatment costs for capecitabine plus oxaliplatin over 5FU/LV plus oxaliplatin which may in part relieve the economic burden of stage III colon cancer in the future.

PCN60

#### TREATMENT COSTS ASSOCIATED WITH METASTATIC BREAST CANCER

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**OBJECTIVES:** To better understand the economic implications of breast cancer on Korean society, it is important to quantify the costs of interventions during the late stage of breast cancer. This study was designed to examine the treatment costs in patients with metastatic breast cancer based on the clinical practice guidelines in breast cancer from Korea Breast Cancer Society. **METHODS:** To estimate the treatment costs consisting of drug and administration, we identified the preferred regimens for metastatic breast cancer from the Korean clinical practice guidelines in breast cancer; 'Preferred single agents', 'Preferred agents with Bevacizumab', 'Preferred Chemotherapy Combination', 'Preferred first-line agents with trastuzumab for HER2-positive disease' and 'Preferred agents for trastuzumab-exposed HER2-positive disease'. Mean body surface area and weight of female adults in Korea were obtained from the Korea National Health and Nutritional Examination Survey (KNHANES). Costs of each agent and the administration costs were drawn from Korean pharmaceutical pricing lists, and the published chemotherapeutic administration reference from Health Insurance Review & Assessment Service, respectively. Shares of metastatic breast cancer patients to 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>-line treatments were derived from the Market Research Report [2007–2008, 575 breast cancer patients]. The two non-reimbursed agents were excluded from the cost estimation. **RESULTS:** Among the single agents, the cost per month of taxanes class based regimen (KRW 1,013,600–2,173,148) is higher than anthracyclines class (KRW 120,497 ~ 354,950). The most frequent 1<sup>st</sup> line treatment, namely, docetaxel-based or paclitaxel-based combination chemotherapy was more than KRW 2,000,000 per month. The monthly cost of first-line agents with trastuzumab for HER2-positive disease was from KRW 2,620,030 to 5,085,866. The weighted monthly cost of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> line treatment was KRW 1,562,312, 1,226,304, and 1,322,615, respectively. **CONCLUSIONS:** The treatment costs of the metastatic breast cancer are substantial and vary by regimen in Korea.