hospital in Austria for the last two months of life of cancer patients. **METHODS:**Two groups of cancer patients, who had at least one stay in the inpatient palliative care unit, were formed retrospectively. All patients died in 2005 or 2006. Patients in the control group "no home care support team—NHCST" only got inpatient care. Patients in the intervention group "home care support teams—HCST" got additional home care support. Patients of NHCST and HCST were matched by age, sex and main diagnosis to ensure that patients in both groups were comparable (N = 60 for each group). Only public health care expenditures were considered. Data comprised of the Minimum Basic Data Set from all public hospitals in Styria and the follow-up costs dataset from the largest compulsory health insurance institution of Styria. Health care expenditures were allocated to costs for inpatient care, costs for outpatient care (general medicine, specialized medicine, drugs, assistive technology, costs of transport), and costs of home care support teams. Finally, health care expenditures of the last two months of life were compared for both groups. **RESULTS:** Mean costs for inpatient care of NHCST/HCST are €7502/€5843 (€1659/22.1% /p = 0.035). Mean costs for outpatient care of NHCST/HCST are €1106/€1391 (€ + 285 / + 25.8% / p = 0.063). The mean costs for home care support teams are €1290 for HCST group. Total health care costs are almost the same for both groups (HCST: €8524 vs. NHCST: €8608 /€ + 84 / + 1% / p = 0.988). **CONCLUSIONS:** HCST shows tendency of being self-financing due to savings of inpatient care for the last two months of life of cancer patients.

PCN65

A PHARMACOECONOMIC MODEL FOR THE MANAGEMENT OF CANCER PAIN: OPIOID MARKET WITH OR WITHOUT OROS HYDROMORPHINE IN TURKEY

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OBJECTIVES: Opioids comprise the main option in the management of moderate-to-severe cancer pain. Different opioids are used in rotation to eliminate tolerance and opioid side effects that limit increasing dose. Since there are only two non-parenteral opioids—morphine and fentanyl—in Turkey, pain control with rotation might not be successfully done and invasive treatment modalities are to be selected much earlier than optimal. The aim of the study is to evaluate the contribution of the addition of a new long-acting oral opioid (OROS hydromorphone) into the current opioid market, with regard to the cost of treatment in moderate-to-severe cancer pain. **METHODS:** Model: Decision tree modeling to compare the current two-opioid-market with the hypothetical three-opioid-market, is used in the calculation of costs. Patients are treated with rotation of two and three opioids in the current and hypothetical market respectively. Time horizon is eight weeks. The study has been performed from the health care payer perspective. Data sources: The clinical data are acquired from the literature. Prices of medications, discount rates, other costs related to the treatment are obtained from Ministry of Health Drug Price List, Price List of Social Security Institution Health Implementation Guideline Appendix 2/D and 8, respectively. Analysis: Direct medical costs that are considered are the costs of opioids, invasive treatment modalities, side effects, physician visits and hospitalization. Because time horizon is shorter than 1 year, costs are not discounted. The results are presented as total costs of alternatives. **RESULTS:** Costs of treatment are calculated as €1528/patient for the current two-opioid-market and €1070€/patient for hypothetical three-opioid-market. The amount of saving is €458/patient. **CONCLUSIONS:** Inclusion of OROS hydromorphine into the Turkish market will both increase the chance of patients be treated with non-parenteral opioids without need to non-invasive methods and also provide saving in the total medical costs of treatment.

PCN66

HOW COSTLY IS RADIOTHERAPY WITH PARTICLES? COST ANALYSIS OF EXTERNAL BEAM RADIOTHERAPY WITH CARBON IONS, PROTONS AND CONVENTIONAL PHOTONS

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OBJECTIVES: Particle therapy (PT) with protons or carbon-ions appears more effective in cancer treatment than conventional treatment with photons. The investment costs are however much higher. For a reliable estimate of the cost-effectiveness of particle therapy an objective cost estimate is crucial. Therefore, an extensive cost analysis was performed for each facility. **METHODS:** An analytical framework with all relevant parameters based on literature review and expert opinion was built in Excel. Costs were calculated for: (A) combined carbon-ion and proton facility (B) proton-facility, (C) photon-facility. The total costs per year were calculated as the sum of the capital costs divided by the life cycle of the facility (30 years) and the running costs per year. The cost per fraction was calculated as total costs per year divided by number of fractions per year. The number of fractions per year was calculated in an operational model. **RESULTS:** The capital costs per facility are: (A) €138.6 m, (B) €94.9 m, (C) €23,4 m. The annual running costs are: (A) €21 m, (B) €14.2 m (C) 6,9 m. The costs per fraction per facility are: (A) €787, (B) €516, (C) €187. The cost ratio is 4.2 for the combined-facility vs photon-facility and 2.8 for the proton-facility vs photon-facility. The incremental costs are €600 and €329 per fraction, respectively. The costs per fraction for (C) increased to 543€ when special treatment category tumors only were included. A ±20% variation in the annual number of fractions, capital costs and running costs, resulted in changes in the cost per fraction from –17% to +25%. The number of fractions caused the biggest change, the capital costs the smallest. **CONCLUSIONS:** A combined carbon-ion/proton facility is the most costly facility, followed by a proton facility. The outcomes are most sensitive for the patient throughput, patient mix, and average time per fraction.

PCN67

COST UTILITY ANALYSIS OF ALEMTUZUMAB COMPARED TO CHLORAMBUCIL IN UNTREATED PATIENTS WITH HIGH-RISK (17P-) CHRONIC LYMPHOCYTIC LEUKEMIA IN THE UNITED KINGDOM

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OBJECTIVES: To compare costs and outcomes of alemtuzumab and chlorambucil as first line treatment for patients with **high-risk (17p-)** chronic lymphocytic leukemia (CLL) in the UK. **METHODS:** A lifetime Markov model was developed. Patients were modeled receiving treatment and moving through post-treatment response and progressive disease. Three possible lines of chemotherapy were considered, followed by final disease progression and death. Patients had CLL, were chemotherapy naïve and exhibited deletion of the chromosome 17p, a defect associated with poor prognosis and failure to respond to other CLL therapies. Response rate and duration at first line were taken from a recent randomized study, the CAM307 trial, for subsequent lines