Council' (Australia, December 2005) was chosen by the working group as one of key prototypes of the best medical practice in lymphoma patients on evidence-based medicine. The working group has conducted an additional search for original sources of scientific information in order to justify the choice of CT. The results of search were presented as evidence tables according to the efficacy of various CT regimes. In general, 56 sources have been analyzed. **RESULTS:** Clinical protocols in lymphoma patients with taking into account the obtained data have been developed. They included medical technologies with proven efficacy. However, it should be noted that some of the CT schemes with sufficient efficacy in clinical trials in patients with recurrent and refractory forms of lymphoma, high grade of aggressive non-Hodgkin lymphoma include bortezomib, vinorelbine, gemcitabine, carboplatin, cisplatin. These agents are not licensed for lymphoma, that results in impossibility to prescribe such regimes to patients. **CONCLUSIONS:** The up-to-date CT regimes allow achieving better results. However, the treatment is expensive, but prolongs survival and improves quality of life. Thus, introduction of modern approaches to the treatment of lymphomas in Ukraine and harmonization of Ukrainian and world's practices will provide comprehensive and effective medical care for patients.

PCN263

MAPPING THE DIAGNOSTIC PATHWAY FOR BREAST CANCER IN ENGLAND AND COMPARISON TO EUROPE

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OBJECTIVES: Breast cancer is the most common cancer in women in England and the second most common cause of cancer death. In 2011, there were >40,000 new breast cancer cases and >10,000 deaths, with delay to diagnosis thought to be an attributing factor. Our aim was to map out the breast cancer diagnostic pathways for women in England, quantify the number of women proceeding through each step of the pathway, and compare it to the pathway in France and Germany. **METHODS:** We performed literature searches for peer-reviewed papers and other published data from England, and conducted semi-structured interviews with cancer experts to understand the breast cancer diagnostic process. A patient pathway framework for diagnosis was modelled in Microsoft Excel and patient flow was quantified with published data and our own calculations where there were missing data. We validated the model with data from France and Germany. **RESULTS:** England's well-organised National Health Service Breast Screening Programme (NHSBSP) identifies women with early stage breast cancer to manage them promptly. Whilst NHSBSP coverage is 75% of invited women, only 40% of all malignancies are identified through screening, with the remaining cases from symptomatic referrals to breast services. We estimated that ~230,000 women present in general practice with breast symptoms annually and are referred to breast services, an estimated 46,000 symptomatic women have biopsies, yielding 24,528 malignant cases. The ratio of women attending breast services, having a biopsy, and having a malignancy differ between screened and symptomatic women. The diagnostic pathway is similar in France and Germany, although the proportion identified through screening differs. **CONCLUSIONS:** Data on the full breast cancer diagnostic pathway are sparse, especially for women with symptoms. Our complete diagnostic pathway gives a full understanding about the diagnostic process, tests conducted, and quantifies the burden on healthcare services.

PCN264

QUANTIFYING COSTS OF MEDICAL PERSONNEL INVOLVED WITH RADIATION THERAPY USING ADMINISTRATIVE DATABASES

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OBJECTIVES: Radiation oncologists and radiation therapists are key medical personnel involved with radiation therapy (RT). The objective was to determine costs associated with RT-personnel using provincial (Ontario) administrative databases. **METHODS:** A cohort of women diagnosed with primary breast cancer (BC) (ICD-9 174.x) was identified from the Ontario Cancer Registry (2007-2010) with up to one year follow-up timeframe. Radiation oncologists bill patient visits to the Ontario Health Insurance Plan (OHIP). Visits with $0 charge were excluded. Radiation therapists record planning and treatment workloads (conventional and intensity modulated RT or IMRT) using National Health Productivity Improvement Program (NHPIP) activity codes in the Activity Level Reporting (ALR) database. An hourly wage was then applied to these codes to determine costs within the first year after diagnosis. **RESULTS:** We identified 30,338 women diagnosed with primary BC, 86% (N=26,121) of whom visited a radiation oncologist. The average cost of these visits per patient was $1,013 ± $607. The total number of visits was 165,060 and the total cost was $26.5 million. Approximately 62% of the cohort received planning (N=18,859) and treatment (N=18,758) for conventional RT by radiation therapists and the average cost per patient was $479 ± $326 and $282 ± $176, respectively. The total planning and treatment cost for conventional RT was $9.0 million and $5.3 million, respectively. For IMRT planning (N=1,631) and treatment (N=5,883), the average cost per patient was $158 ± $84 and $637 ± $297, respectively. The total planning and treatment cost for IMRT was $258,239 and $3.7 million, respectively. The overall cost of radiation oncologist and RT visits was $44.8 million. **CONCLUSIONS:** Personnel costs for delivering RT to breast cancer patients in the first year after their diagnosis are significant. Future work will be to incorporate the cost of other personnel involved with RT, such as medical physicists and nurses.

PCN265

MEASURING THE IMPORTANCE OF DECISION MAKING CRITERIA FOR ANTICANCER DRUG REIMBURSEMENT IN KOREA

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OBJECTIVES: The cost-effectiveness, based on economic evaluation, has been an important basis for reimbursement decisison making in Korea. Recently, the value-based pricing, which reflects disease burden, therapeutic innovation, and social values, is suggested. This study attempts to measure the importance of cost-effectiveness and other values for a new anticancer drug. **METHODS:** Through literature reviews and experts' advices, eight health insurance benefit criteria were selected: disease severity, size of population affected by disease, pediatric medicine, alternative drugs, innovativeness, clinical benefit, cost-effectiveness, and budget impact. Preference for the criteria was investigated by using Discrete Choice Experiments(DCE), Analytic Hierarchy Process (AHP), swing weighting (SWING), and direct point allocation (DIRECT). The survey was conducted in three hundred general population through face to face interview. Respondents were selected using stratified random sampling by age, sex and region. The conditional logistic regression for DCE was conducted with STATA ver.12. **RESULTS:** In the preference investigation using DCE, people preferentially considered disease severity (OR: 1.837, 95% CI: 1.673 to 2.017), alternative drugs (OR: 1.556, 95% CI: 1.458 to 1.661), and size of population affected by disease (OR: 1.408, 95% CI: 1.285 to 1.543). According to the results by using AHP, respondents considered clinical benefit to be the most important, followed by cost-effectiveness and disease severity as the main evaluation items. As estimated by SWING and DIRECT, clinical benefit was also evaluated as the most important item. There was no difference in the first to third priority evaluation items between SWING and DIRECT. **CONCLUSIONS:** The priorities derived from all methodologies show that clinical benefit and disease severity were more important than cost-effectiveness in general terms. In the situation where decision-making is mostly centered on cost-effectiveness, our results may be seen as the social demand that clinical benefit and the influence of applicable disease should be reflected appropriately in the insurance coverage.

PCN266

EXPERIENCES WITH PRICE COMPETITION OF BIOSIMILAR DRUGS IN HUNGARY IN CASE OF COLONY-STIMULATING FACTOR PRODUCTS

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OBJECTIVES: The aim of our study is to analyse the biosimilar bids of the Hungarian National Health Insurance Fund Administration in case of colony-stimulating factor (CSF) products. **METHODS:** Data derived from the nationwide pharmaceutical database of Hungarian National Health Insurance Fund Administration (NHIFA). We analysed how the number of patients treated by colony-stimulating factor products changed before (01.07.2011.-30.06.2012.) and after (01.07.2012.-30.06.2014.) the first biosimilar bid performed in March 2012 in Hungary. **RESULTS:** In the 12 months before biosimilar bid 27,367 patients received colony-stimulating factor treatment, while in the first 12 months after the bid 26,149 patients, resulting in a 4.5 % decline. The second 12 months after the bid 28,463 patients received colony-stimulating factor treatment, resulting in a 4.0 % increase. Before the biosimilar bid, the NHIFA spent 7.49 billion Hungarian Forint (HUF) health insurance reimbursement for CSF products, which decreased by 44 % to 4.19 billion HUF in the first year after biosimilar bid. **CONCLUSIONS:** The analyses of the Hungarian price competition bid of biosimilar products showed a minimal decline in the number of patients under treatment by colony-stimulating factor products while the health insurance reimbursement of these drugs significantly decreased.

PCN267

HOW CAN BIOSIMILARS COMPETE WITH EXISTING BIOLOGICS: UPDATE OF THE RESULTS OF A PREVIOUS STUDY

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OBJECTIVES: To assess the ability of G-CSF (Granulocyte-Colony Stimulating Factors) biosimilars (G-CSF-BIOSIM) to compete with their reference (REF) within the same therapeutic class by analyzing EU-5 and Japanese G-CSF markets and the factors influencing G-CSF-BIOSIM uptakes, 3 years after a same analysis carried out in 2011. **METHODS:** Data on medicine volumes, values and ex-manufacturer prices for all G-CSF categories in the EU-5 and in Japan were provided by IMS Health. Volumes were calculated in DDD (Defined Daily Doses) and prices in euros per DDD. **RESULTS:** There are two G-CSF market profiles: i) countries with a high retail market distribution (R) which are the largest G-CSF markets with low global G-CSF-BIOSIM uptakes (11.8% in France and 12.8% in Germany); ii) countries with a dominant hospital channel (H) which are the smallest markets with higher G-CSF-BIOSIM uptakes (56.8% in Spain, 40.7% in the UK and 25.2% in Italy). Japan is a special case: H market and 12.0% G-CSF-BIOSIM uptakes (G-CSF-BIOSIM arrived latter in Japan than in Europe). The G-CSF-BIOSIM uptakes depend critically on their market access at a local/regional level. The more the decisions are decentralized (hospitals, local purchasing structures) the more their uptakes are high (51.4% of the hospital market in France and 40.7% in the UK). The price discount between G-CSF-BIOSIM and REF plays a marginal role globally (-7.8% in France, and +12.2% in the UK). **CONCLUSIONS:** Global G-CSF-BIOSIM uptakes sharply increased in EU-5 countries between 2011 and 2014 (e.g. +358% in Spain in volume, +119% in France). We confirm the results of our first study: there are two G-CSF market profiles and the competition with G-CSF-BIOSIM is not mainly based on prices, but on local political options. The study should now be extended to other countries to definitively validate these results.

PCN268

APPRAISING THE VALUE OF LENVATINIB FOR RADIO-IODINE REFRACTORY DIFFERENTIATED THYROID CANCER (RR-DTC): A MULTI-COUNTRY STUDY APPLYING HOLISTIC MULTICRITERIA DECISION ANALYSIS (MCDA)

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