RESULTS: In spite of the same quality of life score at the first session of chemotherapy (74.5 out of 100), after finishing the chemotherapy cycle, patients in TAC arm had the lower score of QOL (64 in TAC vs. 68 in FAC) and higher range of toxicity and their medical costs were higher as well (the average costs in TAC was 391,176,982.8 Rials vs. 2,427,773.2 in FAC). ICER was negative that showed the dominant result for FAC comparing with TAC. CONCLUSIONS: It seems that because of the short horizon of the study, TAC regimen had the worse impact on the patient’s quality of life during the chemotherapy cycle because of more side effects than FAC. It is believed that there is need for other studies with longer time horizons and specific attention to the effects of these treatments on survival and quality of life.

**PCN98**

**PROJECTING THE POTENTIAL COST-EFFECTIVENESS OF A BREAST CANCER VACCINE IN COMPARISON TO OTHER STANDARD TREATMENTS: A DECISION ANALYTIC MODEL**

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OBJECTIVES: Breast cancer is known to be one of the leading causes of death among the female population. Preventive measures may provide an economic and outcome advantage by reducing treatment costs and increasing survival. The objective of this study was to evaluate the cost-effectiveness of a breast cancer vaccine versus current standard treatments. METHODS: TreeAge software was used to calculate the cost-effectiveness, a decision tree was constructed for different probabilities of success and failure for the vaccine versus standard treatment. Costs and outcomes (life-years saved) were obtained from published clinical trials. The vaccine effectiveness was projected from animal studies, with human clinical trials expected within a year. The range of effectiveness of the vaccine was considered between 30% and 90% with a baseline at 80%. The costs included for standard treatments ranged from $20,000 to $45,000 and the cost of the vaccine was assumed at $450 for three doses; therefore, the cost for vaccine ranged from $300 to $2000 depending on the number of doses. The incremental cost-effectiveness ratios were calculated from the range of costs and outcomes. Sensitivity analyses were performed to determine the robustness of the findings. RESULTS: Vaccination was found to be a potentially cost-effectiveness option with an ICER of 2.146 when compared to standard treatment. The incremental effectiveness was 8.2 life-years saved. The highest cost-effectiveness of the vaccine was at 90% success and a cost of not more than $1000 per individual. Sensitivity analyses indicated that the vaccine remained cost-effective over the range of model parameters. CONCLUSIONS: The breast cancer vaccine was projected to be the most cost effective treatment option in this analysis. It is expected that better screening for breast cancer vaccine patient candidates will be available in the future.

**PCN99**

**COMPARATIVE RETROSPECTIVE NON-RANDOMIZED PHARMACOECONOMIC TRIAL OF EFFICIENCY AND SAFETY OF USE OF PACLITAXELS (PACLITAXEL-LENS OR TAXOL) IN A MONOMODE FOR 2ND LINE OF TREATMENT OF METASTATIC BREAST CANCER PATIENTS**

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OBJECTIVES: For the first time in a modern Russian economic conditions, it has been made pharmacoeconomics trial (PE) using Russian generic of paclitaxel (Paclitaxel-Lens [PL] in comparison with original drug (Taxol [T]) at chemotherapy (ChT) in a monomode for 2nd line of metastatic breast cancer patients.

METHODS: It has been provided retrospective comparative nonrandomized clinical trial which have been included 70 patients for 35 patients of each group (PL or T) after analysis of 148 case records. RESULTS: At the analysis of effectively treatment MIC in group of the patients who have received T, the partial remission (PR, 28.5% against 10%) statistically significantly has been more often reached. At the analysis of safety, it has been shown that in group of the patients who have received PL, statistically significantly has been more often fixed hepatotoxicity (23.8% against 3.8%) and an anemia (19.2% against 3.5%). In group of the patients who have received T, statistically significantly has been more often fixed arthralgia/myalgia (29.8% against 0%). Total direct costs (DC) in group of patients with T also there were above, than in group of PL, namely $10,727 and $9765 accordingly. Calculation of efficacy of expenses has shown that treatment of MBC by T more expensive and more effective, than treatment by PL. CONCLUSIONS: Thus, as a result of research, it has been established that: 1) Application of T was more (from 7% to 11%) expensive, than PL, but gave the PR is much more often; 2) The alternative scenario and the comparison of cost-effectiveness of expenses has shown that treatment of MBC by T more expensive and more effective, than PR is much more often; 2) The alternative scenario and the comparison of cost-effectiveness of expenses has shown that treatment of MBC by T more expensive and more effective, than treatment by PL. CONCLUSIONS: Thus, as a result of research, it has been established that: 1) Application of T was more (from 7% to 11%) expensive, than PL, but gave the PR is much more often; 2) The alternative scenario and the comparison of cost-effectiveness of expenses has shown that treatment of MBC by T more expensive and more effective, than treatment by PL.

**PCN100**

**PHARMACOEPIEMIOLOGICAL AND PHARMACOECONOMIC EVALUATION OF OXALIPLATIN IN PALLIATIVE CHEMOTHERAPY OF METASTATIC COLORECTAL CANCER (mCRC)**

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The problem of original drugs substitution on generics presents in the Russian clinical practice due to rational expenditures allocation. Pharmacoepidemiological and pharmacoeconomic study of generic should be confirmed by therapeutic one. Only after such kind of confirmation, the mentioned substitution could be made in different segments of doctors’ practice especially in antitumor chemotherapy. OBJECTIVES: To evaluate the clinical-economic interchangeability of the original oxaliplatin (Oxaliplatin-Platinol®) for its subsequent generic (Exomor®) in the chemotherapy of mCRC. METHODS: The retrospective clinical-economic analysis of FOLFOX scheme for chemotherapy of mCRC and EL and EX in the real practice has been performed. Fifty case histories (23 with using of EL, 27—EX. The alternative scenario has confirmed the clinical-economic added value of EX. CONCLUSIONS: Based on this modeling analysis, EL + Bev + Car therapy is a clinically superior and cost-effective treatment for patients with adeno carcinoma-non squamous NSCLC when compared to chemotherapies such as Pem + Cis.

**PCN101**

**EVALUATION OF OXALIPLATIN IN PALLIATIVE CHEMOTHERAPY OF METASTATIC ADENOCARCINOMA OF THE LUNG (NSCLC) FROM A POLISH PUBLIC PAYER’S PERSPECTIVE**

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OBJECTIVES: To determine and compare the cost-effectiveness of Bev + Pac + Car versus Pem + Cis regimens in the treatment of patients with adenocarcinoma non-squamous NSCLC from a Polish Public Payer’s perspective. METHODS: Efficacy and safety of 15 mg of bevacizumab + 200 mg/m² of paclitaxel + 6 mg/m²/min of carboplatin versus 500 mg/m² of pemetrexed and 75 mg/m² of cisplatin was assessed based on a systematic review performed for both therapies according to evidence-based medicine principles. A cost-effectiveness analysis was performed with a lifetime (5 years) horizon and the National Health Fund perspective. A three state (progression-free, progression, death) Markov model was developed. Costs of 1st and 2nd line therapy, administration and monitoring, adverse events treatment and palliative care were included. Sensitivity analyses testing the influence of length of time horizon, probability of progression, utilities, discounting rates, cisplatin dose, and the length and costs of 2nd line therapy were performed. RESULTS: Bev + Pac + Car results in 0.21 life-years gained per patient when compared to Pem + Cis in the treatment of patients with adenocarcinoma non-squamous NSCLC. The additional cost per patient was 18,840 pln (1 EURO = 4.1PLN) over patient’s lifetime when Bev + Pac + Car was used instead of Pem + Cis regimen. The incremental cost-effectiveness ratio (ICER) was at an acceptable 91,216 pln. The sensitivity analyses demonstrated that the duration of 2nd line treatment (assumption of 2nd line treatment continuation for more than six cycles) considerably influenced the ICER (1,198 pln). Other sensitivity analyses confirmed the base-case results, proving conclusions’ robustness. CONCLUSIONS: Based on this modeling analysis, EL + Bev + Car therapy is a clinically superior and cost-effective treatment for patients with adenocarcinoma non-squamous NSCLC when compared to chemotherapies such as Pem + Cis.