expected to prevent an even broader spectrum of HPV-related cancers and other diseases. A shortage of cervical cancer screening services is a concern. The objective of this study was to estimate the incremental public health impact of a girls-only vaccination program with that of a universal vaccination program with a nonavalent human papillomavirus vaccine in Germany as compared to the current girls-only vaccination with the bivalent HPV vaccine. METHODS: A dynamic transmission model of HPV infection and the related diseases was calibrated to the German epidemiological data. Up to 70% of cervical cancer cases were attributed to HPV 16/18, the quadrivalent HPV vaccine (6/11/16/18) and an additional 20% to the five additional types included in the nonavalent vaccine. In the base case, a two dose vaccination program with lifelong protection and a cumulative vaccination coverage rate of 55.6% was assumed. Sensitivity analyses were conducted. RESULTS: The findings of the analyses indicate that girls-only vaccination with the nonavalent HPV vaccine has the potential to: i) reduce the incidence of HPV16/18/31/33/45/52/58 -related cervical cancer by 73% after 100 years, relative to 57% for the quadrivalent vaccine and ii) prevent an additional of 345,627 cases of 455,257 cases of cervical cancer over 100 years. When vaccination of girls with the nonavalent vaccine was extended to boys, the cumulative reduction over 100 years in the incidence was 498,007 and 39,489 of CIN2/3 and cervical cancer respectively. CONCLUSIONS: The current HPV vaccine immunization program in Germany is estimated to significantly reduce the public health impact of cervical and other HPV-related diseases.

PCN186
COST-EFFECTIVENESS AND FEASIBILITY OF IMPLEMENTING MRI-GUIDED NEOADJUVANT TREATMENT TO TREAT ER-POSITIVE HER2-NEGATIVE BREAST CANCERS IN THE NETHERLANDS

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OBJECTIVES: Evidence suggests that response-guided neoadjuvant chemotherapy (RG-NACT) with magnetic resonance imaging (MRI) is effective in treating oestrogen receptor (ER) negative and human epidermal growth factor receptor-2 positive (HER2-) breast cancer patients. We estimated the expected cost-effectiveness and resource requirements of implementing RG-NACT with MRI vs. conventional-NACT for treatment of ER+HER2- breast cancers in the Netherlands (NL). METHODS: A Markov model was used to analyse the incremental cost-effectiveness ratios (ICER) from a hospital perspective over a 5-year time horizon. Health services required (MRI scans performed, MRI technologists, breast radiologists and confrontational scans) for and health outcomes (prevented relapses, prevented deaths, patients with adverse events or contraindications and MRI technologists with adverse events) of implementing RG-NACT were estimated via resource modelling analysis considering the current (4%) and a full implementation (100%) scenarios in the Dutch population of ER+HER2- breast cancer women (n=6306). RESULTS: RG-NACT is expected to generate 0.001 and 0.07 QALYs and save €8 and €341 costs for the 4% and 100% implementation scenarios respectively. At current implementation rate, 213 MRI examinations, 273 MRI technologists and 1 breast radiologist are required to prevent 0.4 relapses and 6 cancer deaths. At full implementation, a 25-fold increase in MRI examinations is projected, requiring ~5 times higher MRI utilization and 6560 additional MRI examinations and 6 cancer deaths. At full implementation, a 25-fold increase in MRI examinations is projected, requiring ~5 times higher MRI utilization and 6560 additional MRI examinations, which is expected to prevent 10 additional relapses (~240%) and 169 cancer deaths (~420%). Increasing implementation rates markedly increases additional costs and benefits. A dynamic transmission approach was used to model the transmission of cervical cancer over 100 years. When vaccination of girls with the nonavalent vaccine was extended to boys, the cumulative reduction over 100 years in the incidence was 498,007 and 39,489 of CIN2/3 and cervical cancer respectively. CONCLUSIONS: The current HPV vaccine immunization program in Germany is estimated to significantly reduce the public health impact of cervical and other HPV-related diseases.

PCN187
ECONOMIC EVALUATION OF ORAL CHEMOTHERAPY REGIMEN IN METASTATIC BREAST CANCER EGYPTIAN PROSPECTIVE

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OBJECTIVES: The main objective for conducting this study was to evaluate economic evaluation through the cost-effectiveness study of oral chemotherapy regimens we choose vinorelbine oral capsule plus oral capecitabine versus docetaxel iv plus methotrexate a dynamic transmission model of HPV infection and the related diseases was calibrated to the German epidemiological data. Up to 70% of cervical cancer cases were attributed to HPV 16/18, the quadrivalent HPV vaccine (6/11/16/18) and an additional 20% to the five additional types included in the nonavalent vaccine. In the base case, a two dose vaccination program with lifelong protection and a cumulative vaccination coverage rate of 55.6% was assumed. Sensitivity analyses were conducted. RESULTS: The findings of the analyses indicate that girls-only vaccination with the nonavalent HPV vaccine has the potential to: i) reduce the incidence of HPV16/18/31/33/45/52/58 -related cervical cancer by 73% after 100 years, relative to 57% for the quadrivalent vaccine and ii) prevent an additional of 345,627 cases of 455,257 cases of cervical cancer over 100 years. When vaccination of girls with the nonavalent vaccine was extended to boys, the cumulative reduction over 100 years in the incidence was 498,007 and 39,489 of CIN2/3 and cervical cancer respectively. CONCLUSIONS: The current HPV vaccine immunization program in Germany is estimated to significantly reduce the public health impact of cervical and other HPV-related diseases.

PCN188
COST-EFFECTIVENESS OF ORAL VINORELBINE PLUS CAPSITABINE VS. INTRAVENOUS TRASTUZUMAB IN HER2+ BREAST CANCER PATIENTS: A MACEDONIAN COST-MINIMIZATION ANALYSIS

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OBJECTIVES: The aim of this study is to compare the total cost of subcutaneous trastuzumab (SC-TRA) vs intravenous trastuzumab (IV-TRA) for HER2+ breast cancer patients from the R. Macedonia. Recent studies suggest that SC-TRA has a pharmacokinetic profile and efficacy non-inferior to standard IV-TRA and is a valid alternative for the treatment of eligible breast cancer patients. METHODS: A cost-minimization analysis was performed using data from prior prospective time-motion study. Total time and cost of both types of TRA administration were quantified in a time horizon of over 18 cycles therapy course. The total of 169 patients (mean weight 74.20 kg) (300 observed episodes) from two oncology clinics were enrolled. Patients were HER2+ and received the drug in the adjudvant (152 patients) or first line metastatic (57 patients) settings. RESULTS: The model accounted the 3%wastage of IV-TRA administration. Unit costs were obtained utilizing official (government and hospital pharmacy) publicly available data and they were expressed in Euro 2015, with no discount. DIRECT: Direct medical costs per (mean weight) patient were €30 500 for IV-TRA and €30 102 for SC-TRA. The mean total costs per patient of IV compared to SC administration of TRA for 589,2 Mean savings (preparation and administration) in time with SC-TRA were 47 min. CONCLUSIONS: SC-TRA can be time and cost-saving therapy for HER2+ breast cancer patients from the R. Macedonia.

PCN189
PHARMACOECONOMIC EVALUATION OF THE USE OF TRASTUZUMAB FOR SUBCUTANEOUS ADMINISTRATION COMPARED TO INTRAVENOUS DOSAGE FORM IN THE TREATMENT OF BREAST CANCER

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OBJECTIVES: To determine the preferable treatment scheme for breast cancer (BC) from the pharmacoeconomic perspective by the comparison of subcutaneous (SC) and intravenous (IV) administration. METHODS: The following pharmacoeconomic methods were used: cost-minimization analysis, budget impact analysis. RESULTS: For cost-minimization analysis the following costs were included: cost of testing on tumor expression of HER2, the main drug therapy, concomitant therapy (medical services and drugs), introduction, services provided by medical personnel and the conditions of administration (in case of hospitalization or outpatient). Total costs per 1 patient with BC for treatment course with trastuzumab for subcutaneous administration were 1 314 181 RUB/21 863 EUR and 1 503 716 RUB/25 016 EUR of trastuzumab for IV administration. Cost minimization analysis showed that the subcutaneous treatment from trastuzumab for IV administration on trastuzumab for SC administration gave economy of 189 535 RUB/3 153 EUR per 1 patient for treatment course. According to budget impact analysis it was determined that trastuzumab for SC administration allows to make economy of 175 508 955 RUB/2 919 796 EUR. CONCLUSIONS: During cost-minimization analysis it is determined that trastuzumab for IV allows to obtain economy compared with IV dosage form. Budget impact analysis reveals that change of BC treatment from trastuzumab for IV administration on trastuzumab for SC one give monetary economy.

PCN190
PHARMACOECONOMIC STUDY OF THE USE OF RITUXIMAB FOR SUBCUTANEOUS ADMINISTRATION IN THE TREATMENT OF FOLLICULAR LYMPHOMA

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OBJECTIVES: To determine the most preferable from the pharmacoeconomic perspective treatment scheme for follicular lymphoma (FL) treatment with rituximab for subcutaneous (SC) and intravenous (IV) administration. METHODS: For this objective, the following pharmacoeconomic methods were used: cost-minimization analysis, budget impact analysis. RESULTS: The following costs were calculated for cost-minimization analysis: the main drug therapy, concomitant therapy, including medical services and medicines, administration, services provided by medical personnel and the conditions of administration (outpatient or hospitalization). According to the cost analysis it was determined that cost of FL treatment equals 3 534 687 RUB/ 58 803 803 EUR under IV administration and 3 498 840 RUB/58 207 EUR under SC one. Cost minimization analysis revealed that rituximab for SC administration compared with IV one gives economy of 35 847 RUB/ 596 EUR per one patient for treatment course. During budget impact analysis it was determined that rituximab for SC administration gives 177 083 678 RUB/ 2 945 994 EUR economy for treatment course of all patients in Russia. CONCLUSIONS: During cost-minimization analysis, subcutaneous form of rituximab allows to obtain economy compared with intravenous form. Budget impact analysis shows that switch of BC treatment from rituximab for IV administration on SC one give monetary economy.