

adherence various. This original approach could be useful to perform budget impact studies before implementing large public health screening programs.

## PCN27

**COST-EFFECTIVENESS ANALYSIS OF SCREENING SUBJECTS WITH DIFFERENT LEVELS OF RISK FOR HEPATOCELLULAR CARCINOMA IN TAIWAN**

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**OBJECTIVE:** The American Association for the Study of Liver Diseases 2005 practice guidelines recommended that various groups at different levels of risk to hepatocellular carcinoma (HCC) undergo surveillance. This study aimed to assess which high risk group had the lowest incremental cost-effectiveness ratio (ICER) for the HCC screening program from the insurer's perspective. **METHODS:** The high risk subjects were identified from the communities with high prevalence of hepatitis viral infection and classified into three groups at different levels of risk to HCC at the time of enrollment. The repeated ultrasound screenings at an interval of three, six, and twelve months were applied to cirrhosis group, early cirrhosis group, and no cirrhosis group, respectively. The Markov-based decision model was constructed to simulate progression of HCC and to estimate the ICER for each group over a time horizon of 50 years or the subjects' remaining life expectancy. Validity of the model outcomes was examined against the health statistics. **RESULTS:** The incremental ICER for the cirrhosis group, early cirrhosis group, and no cirrhosis group were \$1375, \$816, and \$861, respectively. Among the three groups, the early cirrhosis group had the highest incremental effect (3.41 years per person) and the cirrhosis group had the largest incremental cost (\$4247 per person). It is noteworthy that when compared to the other two groups, the cirrhosis group showed the lowest incremental effect (2.03 year) and the highest incremental cost (\$4247). **CONCLUSION:** Screening the no cirrhosis group for HCC at a 12-month interval had the lowest incremental cost-effectiveness ratio.

## PCN28

**COST-EFFECTIVENESS ANALYSIS OF RITUXIMAB-CHOP VS. CHOP ON NON-HODGKIN LYMPHOMA PATIENTS IN THE MEXICAN CONTEXT**

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**OBJECTIVE:** This study is intended to evaluate the costs derived from the treatment of aggressive and indolent Non-Hodgkin Lymphoma (NHL), in patients treated with R-CHOP vs. CHOP in order to provide solid pharmacoeconomic arguments for decision-makers in regards to a cost-effective therapy for patients with NHL and hence have a more efficient allocation of resources. **METHODS:** A cost-effectiveness analysis model was developed based on the efficacy reports of the international literature in regards to treatment of NHL estimating the probabilities of no remission or disease relapse and the costs of treatment failure and those derived from salvage therapies used. This was calculated in a time horizon of 3 years with a 5% discount rate, based on public health care institutions perspective. **RESULTS:** The results of the model using a cohort of 200 hypothetical NHL patients, 100: aggressive-NHL and 100: indolent-NHL, in which 50% received treatment with R-CHOP and the other half with CHOP showed that the use of Rituximab in addition to the CHOP therapy in the case of patients with Aggressive NHL represents savings per patient in complete remission of

USD\$138,530.33. In the case of patients with Indolent NHL the savings were USD\$1,366,417.78. Both savings represents the possibility to obtain 10 more patients in complete remission (3 and 7 respectively). **CONCLUSION:** The use of Rituximab in addition to CHOP as first line therapy for NHL is not only a cost-effective intervention when compared to CHOP therapy in the Mexican context, but, according to the results, it is also a cost-saving intervention with an average saving of USD\$821,739.23.

## PCN29

**SCREENING, PREVENTION, AND TREATMENT OF CERVICAL CANCER—A GLOBAL AND REGIONAL GENERALIZED COST-EFFECTIVENESS ANALYSIS**

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**OBJECTIVE:** The paper calculates regional generalized cost-effectiveness estimates of screening, prevention, treatment and combined interventions for cervical cancer. **METHODS:** Standardised WHO-CHOICE methodology was used. A cervical cancer model was employed to provide estimates of screening, vaccination and treatment effectiveness. Intervention effectiveness was determined via a population state-transition model (PopMod) that simulates the evolution of a sub-regional population accounting for births, deaths and disease epidemiology. Economic costs of procedures and treatment were estimated, including programme overhead and training costs. **RESULTS:** In regions characterised by high income, low mortality and high existing treatment coverage, the addition of any screening programme to the current high treatment levels is very cost effective. However, based on projections of the future price per dose (representing the economic costs of the vaccination excluding monopolistic rents and vaccine development cost) vaccination is the most cost-effective intervention. In regions characterized by low income, low mortality and existing treatment coverage around 50%, expanding treatment with or without combining it with screening appears to be cost effective or very cost-effective. Abandoning treatment in favour of screening in a no-treatment scenario would not be cost effective. Vaccination is usually the most cost-effective intervention, however in some regions one-off PAP or VIA screening at age 40 are more cost-effective than other interventions though less effective overall. In regions characterised by low income, high mortality and low treatment levels, expanding treatment with or without adding screening would be very cost-effective. One-off PAP or VIA screening at age 40 are more cost-effective than other interventions though less effective overall. **CONCLUSION:** From a cost-effectiveness perspective, consideration should be given to implementing vaccination (depending on cost per dose) and screening programmes on a worldwide basis to reduce the burden of disease from cervical cancer. Treatment should also be increased where coverage is low.

## PCN30

**COSTS RELATED TO ADVERSE EVENTS IN CHRONIC MYELOID LEUKEMIA PATIENTS TREATED WITH TYROSINE KINASE INHIBITORS IN CANADA**

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**OBJECTIVE:** Treatment options for the relatively small group of patients resistant or intolerant to imatinib, a recommended first-line therapy for chronic myeloid leukemia (CML), include nilotinib or dasatinib. Current data indicates that nilotinib and