Taiwan was used in this study. There are three screening tools: 1) Pap smear alone, 2) HPV DNA testing followed by Pap smear triage, and 3) self-sampling for HPV testing followed by Pap smear triage. Self-sampling for HPV testing strategy is annual, and another strategies of screening intervals are annually, every 3 years, and every 5 years. The model parameters are collected from the published references and the health-related governments in Taiwan. Outcome measures included life expectancy, quality-adjusted life years (QALYs), lifetime costs, and incremental cost-effectiveness ratios (ICERs). Probabilistic sensitivity analyses (PSAs) were conducted to assess parameter uncertainty. RESULTS: When three times GDP per capita is used as the decision threshold, and all seven screening strategies were cost-effective compared with the no-screening strategy. Compared with the primary screening strategy (an annual Pap smear), self-sampling HPV testing followed by Pap smear triage, HPV DNA testing followed by Pap smear triage every 5 years and every 3 years were cost-effective. CONCLUSIONS: Self-sampling for HPV testing followed by Pap smear triage is one of the cost-effective screening strategies in Taiwan.

PCN23 COST-EFFECTIVENESS ANALYSIS OF GEFTINIB FOR LUNG CANCER: A POPULATION-BASED STUDY
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OBJECTIVES: Gefitinib is an effective targeted therapy for a subset of non-small cell lung cancer (NSCLC) patients, although its cost-effectiveness remains controversial. This study used national health insurance claims data to evaluate the cost-effectiveness of gefitinib in patients with NSCLC in Taiwan. METHODS: Using claims data and enrollment record from the 2002-2009 National Health Insurance Research Database (NHIRD) in Taiwan, we identified lung cancer patients via the ICD-9-CM codes and billing codes to identify those who received chemotherapy containing platinum-based regimens followed by taxane-based regimens between November 1, 2004 and October 31, 2007. We defined the index date as the date of 1st claim for taxane-based chemotherapy and limited the observational period for cost and survival to 2 years after index date. We further classified these patients into two groups: those who had subsequently received gefitinib vs those who had not. We determined survival status by using a previously developed algorithm using the enrollment file of the NHIRD and converted direct medical costs to 2011 US dollars. We then calculated the net benefit for each patient by applying various willingness-to-pay (WTP) values and employed the net benefit regression approach to assess the cost-effectiveness of gefitinib. RESULTS: We identified 2555 lung cancer; 979 (38%) had received gefitinib during our study period. The average cost (standard deviation) were 64150(29482) USD for the gefitinib users and 39529(27360) USD for non-users. The average survival was 487 days (228) for the gefitinib users and 291 days (248) for non-users. Net benefit regression suggested that gefitinib is cost-effective at WTP 53,000 USD/life-year or higher. CONCLUSIONS: Among lung cancer patients who started with platinum-based chemotherapy, followed by taxane-based regimen, adding gefitinib to chemotherapy is likely to be cost-effective.

PCN24 HEALTH RELATED QUALITY OF LIFE, DIRECT AND INDIRECT COST ANALYSIS OF STAGE III COLORECTAL CANCER PATIENTS RECEIVING DIFFERENT ADJUVANT CHEMOTHERAPY TREATMENTS IN TAIWAN: A COST UTILITY ANALYSIS
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OBJECTIVES: To evaluate the cost utility of stage III colorectal cancer patients receiving either capecitabine-based or 5-FU/LV-based adjuvant treatments from the societal perspective. METHODS: The data used in this research is being reported in another study (Health Related Quality of Life, Direct and Indirect Cost Analysis of Stage III Colorectal Cancer Patients Receiving Different Adjuvant Chemotherapy Treatments in Taiwan). Direct and indirect costs, including productivity loss of patients and their accompanying persons caused by receiving outpatient or inpatient services, were involved in this study. Propensity score matching was used to reduce selection bias and avoid endogenous problems between two groups of patients. The perspective adopted in this analysis was that of a society in Taiwan. All costs were expressed in 2011 New Taiwan dollars (1 USD is about 30 NTD). Utility value for the health states were derived by mapping the 16 dimensions of EQ-5D to the utility scores (based on the public valuation data from van der Pol, 2009). RESULTS: After propensity score matching, a total of 219 patients were included in the analyses. There are 109 in the capecitabine-based treatment and 110 in the 5-FU/LV-based treatment. Over the study period of 6 months, the average cost of capecitabine-based treatment per patient was NT$282,576.2 while yielding 0.47 quality-adjusted life years (QALY). On the other hand, the average cost of 5-FU/LV-based treatment was NT$566,832.1 with 0.42 QALY. Between these two adjuvant treatments, the capecitabine-based treatment was dominant. CONCLUSION: The cost utility of stage III colorectal cancer patients were directly obtained from patients. Thus, based on patient-level information and the from the societal perspective, our study showed that capecitabine-based treatment not only saved costs but also improved quality-adjust life year compared with 5-FU/LV-based treatment in the adjuvant treatment of stage III colorectal cancer in Taiwan.

CANCER - Patient-Reported Outcomes & Patient Preference Studies

PCN25 UTILITY OF ADVANCED NON-SMALL CELL LUNG CANCER PATIENTS IN THAILAND: PRELIMINARY STUDY
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OBJECTIVES: Lung cancer is the common cause of cancer death in developing countries. In Thailand, lung cancer, including non-small cell lung cancer (NSCLC) ranks third of 10 leading sites of cancers. NSCLC has a poor prognosis which has an effect on quality of life of both individual patients and their family. Understanding the quality of life and health utility for lung cancer is important, however, little data are available in Thailand. This study aimed to measure baseline health utility among advance NSCLC patients before treated with first-line chemotherapy. METHODS: A prospective cohort study was implemented in Maharaj Nakhon Chai Mai hospital which is a medical teaching hospital located in the north of Thailand. A variety of first-line chemotherapy regimens were available for treatment. In this study, we included patients aged 18 or above, diagnosed with NSCLC with stage IIIB or IV, had performance status (ECOG) 0-1, and were scheduled to receive first-line chemotherapy. The data were collected from January to March 2012. Utility was measured using EuroQol. Thai version. The data were collected while patients visited outpatient oncology clinic. Descriptive statistics were used for data analyses. RESULTS: During three months period, 24 patients were included. Eight patients were NSCLC stage IIIB while 16 were stage IV. Mean utility value of overall NSCLC, NSCLC stage IIIB and NSCLC stage IV at baseline before receiving first-line chemotherapy were 0.419, 0.473 and 0.392, respectively. CONCLUSIONS: Utility values of patients with advanced NSCLC are likely to be downward due to the severity of disease; therefore, choosing the appropriate first-line chemotherapy regimen might need to consider the quality of life of patients.