inform this model are US-specific and would require adaptation to be generalizable elsewhere. Depending on the threshold used by the decision maker, RAM+DOC may be a cost-effective option for the overall and nonsquamous NSCLC population.

PCN158
COMPARATIVE EFFICACY AND COSTS OF TREATMENT SEQUENCES IN METASTATIC CASTRATION RESISTANT PROSTATE CANCER
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OBJECTIVES: Abiraterone (ABI) and enzalutamide (ENZ) have been recently approved for the treatment of docetaxel (DOC)-naïve metastatic castration-resistant prostate cancer (mCRPC) but the cost-effectiveness associated with sequencing of these agents remains unclear. The objective of this study was to compare the efficacy and drug costs of different treatment sequences considering the loss of efficacy associated to subsequent treatments in mCRPC patients. **METHODS:** Median overall survival (OS) and costs were estimated for the following sequences: (A) ABI-DOC-CBZ; (B) ABI-DOC-ENZ; (C) ENZ-DOC-CBZ and (D) ENZ-DOC-ABI. OS and duration of treatment (DoT) estimates were based on data from clinical trials and adjusted according to literature review and expert clinical opinion, to account for potential efficacy loss after ABI or ENZ exposure as follows: DOC -10%; CBZ -10%; ENZ -40%; ABI -50%. The cost analysis included only drug costs and was undertaken from the perspective of the Spanish National Healthcare System. Incremental cost-effectiveness ratios (ICERs) were calculated in terms of cost per life year gained (LYG) for the following comparisons: A-vs-B and C-vs-D. Uncertainties around efficacy and DoT assumptions were explored in a sensitivity analysis. **RESULTS:** In the base case scenario, median OS estimates for patients treated with sequences A, B, C and D were 40.1, 37.5, 34.8 and 29.1 months, with respective costs of €68,967, €62,228, €60,766 and €50,952. The ICERs were €31,712/LYG for A vs B and €20,697/LYG for C vs D. When reduction rates were applied only to OS but were not considered their influence on DoT, treatment sequences containing third-line CBZ were dominant vs sequences containing ENZ or ABI. **CONCLUSIONS:** Sequences containing third-line CBZ were more effective than sequences containing third-line ABI or ENZ. Third-line CBZ after ABI-DOC or after ENZ-DOC could be considered as cost-effective compared to third-line ABI or ENZ.

PCN159
THE COST–EFFECTIVENESS OF REGORAFENIB IN THE TREATMENT OF PATIENTS WITH METASTATIC COLORECTAL CANCER (MCRC) WHO HAVE PROGRESSED AFTER STANDARD THERAPIES IN TURKEY
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OBJECTIVES: To evaluate the cost-effectiveness of regorafenib compared to the standard of care (SoC), in the treatment of metastatic colorectal cancer in previously treated patients. **METHODS:** A cohort partition model demonstrating the progression of mCRC patients towards death and evaluating clinical and economical outcomes was adapted to the Turkish setting. Event and mortality rates were derived from the CORRECT clinical trial. An expert panel, with the participation of experts in colorectal cancer, was established for the adaptation of clinical data to Turkish practice. The analysis was undertaken from payer perspective. The time horizon was taken as life time period. Costs of each health state included year 2015 local costs of medications, monitoring and events (TL/EUR currency rate was set at 2.9274; mid 2015). Incremental cost effectiveness ratios (ICER) per life year (LY) were calculated. Willingness-to-pay (WTP) threshold was set to two times of the local gross domestic product per capita per life years saved (adapted from World Health Organization definition) and was calculated as 18,481EUR. One-way sensitivity analyses were conducted to test the robustness of the model. **RESULTS:** The total cost of regorafenib was 2,173EUR higher compared to SoC. Regorafenib was associated with increment of 0.153 LYs, leading to an ICER of 14,188EUR/LY gained. Life years gained were 0.215 and 0.221 years in patients with wild type K-ras mutation and patients with less than 4 lines of treatment, respectively. Accordingly, ICER values were lower (10,280EUR and 8,308EUR) than overall group in these subgroups. Sensitivity analyses showed that the cost-effectiveness results are fairly insensitive to most inputs. **CONCLUSIONS:** Regorafenib, given its improvement in progression free survival and overall survival, and ICER values below WTP threshold, is suggested to be a cost-effective alternative in the treatment of metastatic colorectal cancer in previously treated patients in Turkey.

PCN160
COST-EFFECTIVENESS OF FIRST-LINE TYROSINE KINASE INHIBITORS (TKIS) IN NEWLY DIAGNOSED CHRONIC MYELOID LEUKEMIA (CML) PATIENTS IN KOREA: COMPARISON OF DASATINIB (100MG), NILOTINIB (600MG) AND IMATINIB (400MG)
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OBJECTIVES: This study aims to evaluate cost effectiveness of currently available first-line TKIs, Dasatinib (100mg), Nilotinib (600 mg) and Imatinib (400mg), in treatment of newly diagnosed CML patients in Korea. **METHODS:** We developed a Markov model model composed of four health states: response in chronic-phase (CP), no-response in CP, accelerated or blastic phase (AP/BP) and Death. Progression rate to AP/BP is assumed to be dependent on the presence of cytogenetic or molecular response to TKI at 12 month. Clinical effectiveness were obtained from DASISION and ENESTnd trials. In terms of cost, only direct medical costs (e.g. outpatient, hospitalisation and medication costs) with 5% of patient copayment were included into the study. Average medical cost of CML patients were calculated using claims data from the National Health Insurance Service of Korea. All costs were measured in Korean won (KRW) and converted to US dollars (USD) using 2014 official exchange rate (1USD=1,053.22KRW). Discount rate of 5% was applied to cost and effectiveness. **RESULTS:** Based on complete cytogenetic response rates at 12 month, Imatinib ($277,971) was less costly than Dasatinib ($388,232) and Nilotinib ($445,548). Life-year gains of Dasatinib (15.18 LYs), were superior to other TKIs (Imatinib: 14.52 LYs, Nilotinib: 15.13 LYs), but ICER was $167,010 per LYs which far exceeds current willingness to pay level ($28,484) in Korea. Applying major molecular response rates at 12 month, the most effective strategy was Nilotinib ($416,513, 14.76 LYs), but its cost was the highest among others: Dasatinib ($365,602, 14.47 LYs) and Imatinib ($300,490, 13.8 LYs). The ICER of Dasatinib and Nilotinib was $98,483 and $170,431 per LYs respectively compared to Imatinib. **CONCLUSIONS:** Given the current willingness to pay level of $28,959 in Korean setting, Imatinib (400 mg) was found out to be the most cost-effective strategy compared to Dasatinib (100mg) and Nilotinib (300 mg).

PCN161
COST-EFFECTIVENESS OF DIRECTLY MAILED FOBT KITS TO PREVIOUS RESPONDERS BEING RECALLED FOR SCREENING
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OBJECTIVES: To conduct a cost-effectiveness analysis to evaluate whether the addition of a fecal occult blood test (FOBT) kit to a mailed invitation for recall compared to a mailed invitation for recall alone increases participation among patients who had responded previously to a mailed invitation in screening for colorectal cancer (CRC). **METHODS:** The perspective of the analysis will be that of the cancer agency in Ontario, Canada. Eligible patients (responders to the initial pilot study invitation, FOBT negative, and now due for repeat screening) from 61 physicians were randomly allocated to one of the two interventions: (1) Mailed FOBT kit and mailed invitation for recall from their family physician (intervention group) OR (2) mailed invitation alone for recall (control group). Health system and program resources and costs associated with each group will be identified and quantified. Resources will be stratified into fixed costs (initial set-up costs including document development, programming for ongoing maintenance, etc.), variable or recurrent costs (costs of the kit, administrative costs, physician visits etc.) and staff costs (call centre support personnel and business analyst). **RESULTS:** There are a total of 431 patients in the intervention group and 452 patients in the control group. Overall costs for each group will be determined, and the cost per patient will be reported. Cost drivers will be identified by conducting a series of univariate sensitivity analyses, including reducing the cost of the kit and using different assumptions for kit wastage. The results will show whether the addition of the FOBT kit to the mailed invitation is cost effective when compared to a mailed invitation only. **CONCLUSIONS:** This cost effectiveness analysis will help in determining effective strategies for screening programs that are needed to reduce CRC mortality at a population level.

PCN162
MAMMOGRAPHY FOR BREAST CANCER SCREENING IN INDIA – A HEALTH TECHNOLOGY ASSESSMENT
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OBJECTIVES: To assess the clinical and cost effectiveness of mammography for breast cancer screening in India **METHODS:** A systematic literature search was conducted in all the available scientific databases - Cochrane library, MEDLINE, PUBMED Science Direct, EMBASE, SCOPUS and Google Scholar for relevant studies. We identified 31 studies and literature filter started by scanning titles; abstracts as well as the content of the articles according to Inclusion criteria; finally 12 studies were included in quantitative synthesis (Meta analysis). We estimated risk of bias using Cochrane collaborating guidelines. **RESULTS:** Review Manager 5.2 was used to do the data analysis and results are expressed in legible diagrams, considering all 12 studies with data from 4047721 participants, Risk Ratio was calculated (RR): 0.71 (95% confidence Interval, CI: 0.67, 0.75). **CONCLUSIONS:** Annual screening of female population above 30 years of age could reduce breast cancer associated mortality by 29% mainly due to early detection of breast cancer detection and subsequent early treatment pathways. The cost effectiveness is about Rs. 19520/- per life year gained which is an excellent social return on investment on this technology.

PCN163
PHARMACOECONOMIC ANALYSIS OF AFATINIB AS 1ST-LINE TREATMENT OF METASTATIC NON-SMALL CELL LUNG CANCER WITH DEL19 MUTATION OF EGFR GENE
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OBJECTIVES: Evaluation of cost-effectiveness and cost-utility of afatinib in patients with non-small cell lung cancer (NSCLC) with deletion in 19th exon of epidermal growth factor receptor (EGFR) gene in 1st-line therapy. **METHODS:** Markov modeling was implemented to simulate clinical and economical outcomes of different strategies in treatment of naïve patients with NSCLC over 18 years old based on results of randomized clinical trials LUX-Lung 3 and LUX-Lung 6. Direct medical costs were considered. The time horizon of the analysis – 10 years. Compared drugs: afatinib, erlotinib, gefitinib and combination cisplatin/pemetrexed. Results were expressed in terms of quality-adjusted life years (QALY), life years (LY) gained and ICER (QALY). **RESULTS:** Afatinib used as 1st-line treatment in patients with