OBJECTIVES: This study assessed, from a societal perspective, the cost-effectiveness of standard-phase treatment with rituximab versus placebo, with or without the treatment of relapsed/refractory chronic lymphocytic leukemia (CLL). CLL is the most common leukemia in the Western world and is clinically characterized by peripheral blood B-cell lymphocytosis as well as lymphadenopathy, organomegaly, and symptomatic systemic symptoms in advanced stages. METHODS: A cost-effectiveness model adopted a lifetime horizon with three health states: 1) pre-progression, 2) post-progression and 3) death. Patients enter in the model in the progression state and in each cycle (1 week length) may survive without progression, advance to post-progression or die. Remission was not considered in the model: patients in post-progression state remain there until death. Costs and benefits were estimated for the Portuguese setting, and discounted at 5%, as recommended by national guidelines. Univariate and probabilistic sensitivity analyses assessed the robustness of results. Clinical efficacy, safety and utility data were based on published evidence, while survival curves were extrapolated using a Weibull model. The model was based on data derived from national legislation and opinions of an experts’ panel. Model outputs included lifetime years gained, quality-adjusted life years (QALYs), and incremental cost-effectiveness ratios (ICERs). RESULTS: Survival gains as well as direct medical costs were higher with rituximab compared to placebo, but costs related to adverse events and end-of-life care were lower. The ICER was of 32,730/QALY and 15,935/LY. Results were sensitive to the discount rates with an undiscounted ICER of 21,942 €. For other parameters univariate analyses ranged within 31,228/QALY and 34,176 v/QALY. PSA resulted in a median willingness to pay of 34,801/QALY or 17,000/LY. CONCLUSIONS: Idecnilab plus rituximab in the treatment of relapsed/refractory CLL, compared with rituximab plus placebo, is cost-effective in Portugal.

PCN181
LOSS OF OPPORTUNITY LINKED WITH THE SUBOPTIMAL COVERAGE RATE OF HPV VACCINATION IN FRANCE
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OBJECTIVES: HPV vaccination is recommended in France for girls aged 11 to 14 with a catch-up from 15 to 19 years old. Though, with a cumulative coverage rate (CVR) of less than 20% in girls aged 16 years old for the HPV vaccine, France has one of the lowest CVR in Europe. The objective of the present study is to examine the reasons why 80% of girls would be averted by reaching in France the CVR currently observed in several EU countries. METHODS: A dynamic transmission model including a wide range of health and cost parameters related to cervical, anal, vulvar, vaginal diseases and genital warts, was adapted to French setting. The health outcomes resulting from the vaccination of girls with quadrivalent HPV vaccine was assessed according to five different vaccine coverage rates: (i) the 2014 cumulative coverage rate in girls aged 0-19 years old reported by the French National Institute of Health and Medical Research [1]; (ii) a VCR of 70% as observed in several European countries. RESULTS: The analyses demonstrated that reaching in France a CVR comparable to those observed in other European countries would lead to avert additional 5,873,070 genital warts, 582,339 CIN2/3, 7,899 cervical cancers, 1,253 vaginal cancers, 1,756 vulvar cancers, and 19,978 anal cancers (including 4,774 in males) over 100 years. Overall, 27,222 deaths from HPV cancers could be averted by increasing the CVR at 70%. CONCLUSIONS: The present study shows that the implementation of HPV vaccination in France would contribute to improving health outcomes in young women with a tremendous loss of opportunity for the French population. Even though the applied CVR is not representative of the CVR of the entire targeted population, it clearly demonstrates that the HPV vaccination is still underminded. In a context where cancer is a health priority in France, combined efforts to improve HPV vaccine coverage rate must be pursued.

PCN182
COST-EFFECTIVENESS OF CERTITINIB IN PREVIOUSLY TREATED PATIENTS WITH CHRONIC MYELOID LEUKEMIA IN ANAPLASTIC LYMPHOMA KINASE-POSITIVE (ALK+) NON-SMALL CELL LUNG CANCER (NSCLC): A MULTICENTER REAL-WORLD EXPERIENCE
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OBJECTIVES: To assess the cost-effectiveness of certitinib versus alternative treatments in patients who discontinue treatment with crizotinib in anaplastic lymphoma kinase-positive (ALK+) non-small cell lung cancer (NSCLC) from a Canadian healthcare perspective. METHODS: A partitioned survival model with three health states (progression-free, progressive, and death) was developed to compare certitinib versus other alternative treatments in patients with ALK+ NSCLC who were previously treated with an ALK inhibitor. Comparators were chosen based on reported utilization from a retrospective Canadian chart study; comparators were pemetrexed, best-supportive care (BSC) and historical control. Progression-free survival and overall survival for certitinib were estimated using data from reported single-arm clinical trials (ASCEND-1[NCT01283516] and ASCEND-2[NCT01685060]). Survival data for comparators were obtained from published clinical trials in general NSCLC population and from a chart study. CER were calculated by comparing the incremental cost and effect of certitinib versus other treatments. Parameter models were used to extrapolate outcomes beyond trial period. Drug acquisition, administration, resource use and adverse event (AE) costs were obtained from Canadian and international cost estimates. Sensitivity and cost-effectiveness analyses were performed using a Monte Carlo simulation with 1000 replications. RESULTS: Certitinib was associated with a lower incremental cost per QALY compared to pemetrexed or BSC. The incremental cost per QALY was $194,117 comparing certitinib vs. BSC, $80,100 vs. pemetrexed, and 104,436 vs. historical controls. Additional scenarios included comparison to docetaxel with an ICER/QALY of $149,780 and utility scores reported from PROBLE: 1007, with a reported ICER/QALY ranging from $62,543 vs. pemetrexed to $119,735 vs. BSC. Sensitivity analysis results were consistent with the base-case findings. CONCLUSIONS: Baseline scenarios estimated that certitinib would be a cost-effective option compared with other alternative treatments in patients who have progressed or are intolerant to crizotinib.

PCN183
A COST-EFFECTIVENESS ANALYSIS OF ASPIRIN IN THE PRIMARY PREVENTION OF CARDIOVASCULAR DISEASES AND COLORECTAL CANCER
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OBJECTIVES: The nonvascular benefit, by protecting against five additional oncogenic HPV types, and nine HPV types in total (6, 11, 16, 18, 31, 33, 45, 52 and 58), is

PCN184
COST-EFFECTIVENESS ANALYSIS ON STARTING PATIENTS WITH CHRONIC MYELOID LEUKEMIA ON A HIGHLY POTENT TYROSINE KINASE INHIBITOR AND EARLY SWITCHING TO IMATINIB
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OBJECTIVES: To evaluate the cost-effectiveness of several sequential treatment strategies for chronic myeloid leukemia (CML) dependent on early molecular response (MR) in the Austrian healthcare context. METHODS: We adapted a pre- validated developed Markov state transition model to Austrian healthcare setting options (imatinib, dasatinib, nilotinib) dependent on achievement of MR after 3 months. We analyzed eight sequential treatment strategies using cohort simulation over a lifetime horizon. Model parameters were extracted from published literatures, epidemiological and economic databases. We applied a 3% discount for health outcomes and costs. We analyzed 3 different base-case scenarios for patients not achieving an MR after 3-months of imatinib treatment that were switched to a second-generation TKI, assuming three different effectiveness for these second-generation TKIs. Comprehensive sensitivity analyses were conducted. RESULTS: The base-case analysis resulted in two non-dominated strategies: (i) imatinib, followed by nilotinib in case of non-achieved MR at 3 months and dasatinib after treatment failure or imatinib continuation in case of achieved 3-month MR and nilotinib after treatment failure, (ii) nilotinib followed by its continuation in case of non-achieved MR at 3 months or switch to imatinib in case of achieved 3 month MR and dasatinib after treatment failure. Depending on the scenario, strategy 2 resulted in an incremental cost-effectiveness ratio (ICER) of $84,200/QALY, $118,500/QALY or $142,200/QALY gained compared to the baseline strategy. Remaining strategies were excluded due to dominance. Sensitivity analyses on generic pricing of imatinib showed that starting with a more potent second-generation TKI and switching to imatinib after an achieved MR are the preferred strategies. CONCLUSIONS: Based on our analyses, we suggest nilotinib and its continuation for non-achieved MR at 3 months or imatinib after treatment failure as a cost-effective strategy for Austria if the willingness-to-pay threshold is at least around €120,000/QALY.

PCN185
ESTIMATING THE PUBLIC HEALTH IMPACT OF A VACCINATION PROGRAMME WITH A NONANALYTICAL HPV VACCINE IN GERMANY
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OBJECTIVES: The nonvascular benefit, by protecting against five additive oncogenic HPV types, and nine HPV types in total (6, 11, 16, 18, 31, 33, 45, 52 and 58), is

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