

characteristics were obtained from WHO estimates or local sources, adjusted to local conditions. PCV13 direct and indirect effectiveness was extrapolated from PCV7 trials and surveillance records, adjusted to local serotype distribution. Cost of vaccine was USD 16.34. A discount rate for cost and life-years was 3%. The payer and societal perspectives were considered. **RESULTS:** The budget impact in a single year with PCV13-based NIP in place would amount to USD 1.82 million, or USD 7.93 million without indirect vaccine protection considered. From this investment, 141 971 illnesses (1071 IPDs, 12477 CAPs and 128423 OMs) and 347 deaths could be avoided annually. Without indirect vaccine protection, 58 524 illnesses (601 IPD, 4721 CAP, 53202 OM) and 184 deaths could be avoided. The cost-effectiveness analysis produced ICER of USD 340/LYG or USD 367/QALY from the payer's perspective. From the societal perspective, the NIP is dominant. Not considering indirect protection, the ICER would be USD 140/LYG or USD 152/QALY from a societal perspective and USD 1157/LYG or USD 1254/QALY from a payer perspective. **CONCLUSIONS:** PCV13-based NIP delivers benefits and cost savings that greatly offset the investment into vaccine. WHO strongly encourages investment in interventions that deliver an additional year of life in full quality for less than one GDP per capita (USA 4237); hence, a PCV13-based NIP with the above ICER presents an attractive option.

PSS25

RANIBIZUMAB FOR THE TREATMENT OF VISUAL IMPAIRMENT DUE TO MYOPIA CHOROIDAL NEOVASCULARIZATION: COST-EFFECTIVENESS VERSUS AFLIBERCEPT

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OBJECTIVES: Ranibizumab has demonstrated efficacy in patients with myopic choroidal neovascularization (mCNV) and is the first anti-VEGF licensed in this indication. Aflibercept is being evaluated for use in mCNV. An existing model demonstrating the cost-effectiveness of ranibizumab versus verteporfin photodynamic therapy was adapted to provide an initial evaluation of ranibizumab versus aflibercept. **METHODS:** A Markov model in mCNV with a lifetime horizon and visual acuity health states was adapted to evaluate the cost-effectiveness of ranibizumab and aflibercept from a UK health care perspective. Baseline characteristics, injection frequency and ranibizumab efficacy were based on the disease activity treatment arm from the RADIANCE study (n=116, Caucasian, Indian and East Asian patients). Data for aflibercept were derived from initial results for the aflibercept treatment arm from the MYRROR study (n=90, East Asian patients only). Relative efficacy was assessed by indirect comparison. An evaluation using the East Asian subgroup of the ranibizumab disease activity treatment arm in RADIANCE (n=35) was also conducted. **RESULTS:** Ranibizumab dominated aflibercept in both evaluations. Based on the disease activity arm from RADIANCE, ranibizumab was associated with a lower lifetime cost (incremental cost -£1770) and higher lifetime quality-adjusted life-years (QALYs) (incremental gain 0.02) than aflibercept. Results were similar for the evaluation based on the East Asian subgroup. Ranibizumab was associated with a lower lifetime cost (incremental cost -£2856) and higher lifetime QALYs (incremental gain 0.06) than aflibercept. These results were driven by the greater number of injections, higher treatment and recurrence costs, and smaller proportion of patients gaining ≥20 letters visual acuity for aflibercept compared with ranibizumab. **CONCLUSIONS:** This initial analysis suggests that ranibizumab is less costly and is associated with a gain in QALYs relative to aflibercept based on the disease activity arm and the East Asian subgroup from RADIANCE, as well as initial data from MYRROR.

PSS26

COST-EFFECTIVENESS OF AFLIBERCEPT IN THE TREATMENT OF MACULAR OEDEMA SECONDARY TO CENTRAL RETINAL VEIN OCCLUSION IN SWEDEN

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OBJECTIVES: Central retinal vein occlusion (CRVO) is caused by a blood clot in the central retinal vein, which slows or stops blood from leaving the retina. As a result, blood and fluids can accumulate, causing retinal injury and vision loss. Thus, a major complication in eyes with CRVO is macular oedema (ME) and is the primary factor for poor visual acuity and visual fields in non-ischemic CRVO. A global cost-effectiveness model was developed and adopted to estimate effects and associated costs, in Sweden, for treatment of ME secondary to CRVO with aflibercept compared to ranibizumab. **METHODS:** A Markov model was developed, including health states that reflect the clinical treatment and disease progression/regression of the ME. The simulated patient population consisted of adults treated for ME secondary to CRVO with an average starting-age of 64 years. Patients were treated and monitored for two years and followed for 15 years in the base case. Treatment regimens were taken from clinical trials with aflibercept (GALLILEO & COPERNICUS) and ranibizumab (CRUISE & HORIZON), with 8.2 vs. 8.8 injections the first year and 2.9 vs. 3.5 injections the second year, respectively. **RESULTS:** Aflibercept can be regarded as a cost-effective, i.e. dominating, treatment-alternative compared to ranibizumab as aflibercept is both less costly (total incremental cost of more than -35,000 SEK) and more effective (total incremental QALYs of 0.061) than ranibizumab. Due to the more treatments, ranibizumab had higher drug (incremental cost: -8,537 SEK) and administration (incremental cost: -5,793 SEK) costs compared to aflibercept. Probabilistic sensitivity analysis showed that aflibercept was dominating over ranibizumab in 70% of the simulations. **CONCLUSIONS:** Aflibercept is more cost-effective than ranibizumab for the treatment of ME secondary to CRVO in Sweden.

PSS27

COST-EFFECTIVENESS OF LASER DOPPLER IMAGING IN BURN CARE IN THE NETHERLANDS; A RANDOMISED CONTROLLED TRIAL

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OBJECTIVES: In patients with burns an early accurate diagnosis of burn depth is essential to determine optimal treatment. The combination of Laser Doppler imaging (LDI) and clinical assessment leads to an accurate estimate of burn depth. However, the actual effects of the introduction of LDI on therapeutic decisions, clinical outcomes and costs are unknown. The aim of our study was to analyse the effectiveness and cost-effectiveness of LDI in burn care. The effects of LDI on decision-making, clinical outcomes, costs, and cost-effectiveness were assessed. **METHODS:** A randomised controlled trial was conducted in all three Dutch burn centres, including subsequent patients with burns of indeterminate depth. In the standard care (SC) group, burn depth and treatment choices were based on clinical assessment only, in the other group (LDI) clinical assessment and LDI results were combined. Primary outcome was the effect of the introduction of LDI on wound healing time. The economic evaluation was performed from a societal perspective with a bottom up approach, following the micro-costing method. **RESULTS:** Mean time to wound healing from randomisation was 14.3 days in the LDI group and 15.5 days in the SC group (p=0.258). In the subgroup of clinical patients requiring surgery earlier decision for surgery and a shorter wound healing time were observed in the LDI group (16.0 versus 19.9 days, p=0.029). Mean total costs per patient were €18 549 versus €18 896 (p=0.837). **CONCLUSIONS:** LDI proved to provide guidance for therapeutic decisions with a significantly shorter wound healing time in the subgroup of clinical patients requiring surgery. When time to surgery can be reduced by 2.4 days, similar to the time to decision for surgery in our study, cost savings of €794 per scanned patient can be achieved.

PSS28

COST-EFFECTIVENESS ANALYSIS OF INGENOLO MEBUTATO VERSUS MIQUIMOD IN THE TREATMENT OF ACTINIC KERATOSES IN THE PERSPECTIVE OF THE ITALIAN HEALTH SYSTEM

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OBJECTIVES: Actinic Keratosis (AK) is the most common neoplastic lesion of the skin, its prevalence in Italy is 1.4% in the adult population, over the age of 45 years. The objective of this study is to evaluate through the development of a decision-tree model, the impact in terms of cost-effectiveness of treatment of patients with actinic keratosis (on the face), of ingenolo mebutato gel vs. imiquimod cream. **METHODS:** The effectiveness was expressed in terms of utility; the ratio of cost effectiveness was expressed in terms of cost per Quality Adjusted Life Years (QALYs). The time horizon of the simulation was 12 months. For ingenolo mebutato was considered the price to the public starting from the ex-factory price currently lower in Europe (Spain price), while for imiquimod has been adopted the reference price, because of the drug generation. It was also considered the adherence rate of patients to the two treatment alternatives, due to the different duration of treatment (2-3 days Vs. 4-8 weeks) and adverse events, which in the case of imiquimod may persist for all the therapy length. **RESULTS:** Based on these assumptions, ingenolo mebutato therapy is found to be less expensive and more effective, and so dominant, compared to imiquimod. The cost-effectiveness analysis has been tested with univariate sensitivity analysis, which confirmed the validity of the base case. **CONCLUSIONS:** Based on these statement, it seems clear that ingenolo mebutato, due to its way of administration combined with its expected cost, represents a rational investment for the treatment of AK in the landscape of our national health system.

PSS29

COST-EFFECTIVENESS OF 13-VALENT VERSUS 10-VALENT PNEUMOCOCCAL CONJUGATE VACCINE USE IN CROATIA NATIONAL VACCINATION PROGRAM

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OBJECTIVES: The national immunization program (NIP) on a voluntary basis started in 2010 in Croatia, including the 10-valent PCV10 and the 13-valent PCV13. We compare the cost-effectiveness of PCV10 and PCV13 use in the NIP. **METHODS:** A Markov model was developed to examine cost-effectiveness of PCV13 versus PCV10 from the payer's perspective in 10 years. The simulated diseases were invasive pneumococcal disease (bacteremia and meningitis), all-cause community acquired pneumonia (CAP), and all-cause acute otitis media (AOM). Direct effectiveness was extrapolated from PCV7 clinical trials, adjusted by local serotype. Indirect effect (IE) was extrapolated from the US surveillance data following universal PCV7 use. Vaccine prices per dose for PCV10 and PCV13 were €45.16 and €47.71, respectively. The epidemiology inputs were based on national sources or adopted from neighboring Slovenia. Costs were obtained from local reimbursement lists and the DRG system. The IE for PCV10 was separately taken at 0%, 50% and 100% level. **RESULTS:** Compared to PCV10 with presumed no IE, PCV13 could avoid additional 985 IPD cases, 15583 cases of inpatient and 26481 cases of outpatient CAP, and 53555 AOM cases, whereas for modeled 50% IE of PCV10 only 679,10568,17 641 and 35026 cases would be avoided, and for modeled 100% IE of PCV10 372,5552,8798,16498 cases would be avoided, respectively. There would be 2778 or 1958 or, 1137 deaths avoided, respectively. PCV13 compared to PCV10 with assumed no IE leads to €3.060 million more spent on vaccination and €28.585 million saved, giving thus overall saving €25.524 million in 10 years. **CONCLUSIONS:** The cost-effectiveness analysis showed PCV10 to be dominated by PCV13 by its overall lower costs and higher number of QALY as well as LYG gained, regardless of the IE level. The results were most sensitive to the cost and incidence of hospitalized pneumonia.