characteristics were obtained from WHO estimates or local sources, adjusted to local sociodemographic conditions. PCV13 direct and indirect effectiveness was extrapolated from PCV7 trials and surveillance records, adjusted to local seroconversion 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- arm model with PCV13 NIP in place would amount to USD 1.82 million, or USD 7.93 million without indirect vaccine protection considered. From this investment, 161 971 illnesses (1071 IDPs, 12477 CAPs and 128423 OMs) and 347 deaths could be avoided annually. Without indirect vaccine protection, 58 524 illnesses (601 IDP, 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 146/LYG or USD 154/QALY from a societal viewpoint. The ICER would be USD 1157/LYG or USD 1254/QALY from a payor perspective.

**CONCLUSIONS:** FCV13-based NIP delivers benefits and cost savings that greatly offset the investment into vaccination. Therefore, strong support is recommended for the incorporation of PCV13 into the national immunization program that over an additional year of life in full quality for less than one GDP per capita (USD 4237), hence a FCV13-based NIP with the above ICER presents an attractive option.

**PSS25**

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

**LETENEXUS C1, HAUG J2, XUE W4, BHATTACHARYYA S4**

1Nouriors Pharma AG, Basel, Switzerland, 2Optum, Burlington, ON, Canada, 3Optum, Usbridge, UK, 4Nouriors Healthcare Pvt. Ltd., Hyderabad, India

**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 demonstrates 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, to evaluate the cost-effectiveness of the 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). Daily costs 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 (incremental QALYs 0.035) 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 more effective than aflibercept for 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 imiquimod treatment, the public sector price is 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 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 ANALYSIS OF INGENOLO MEBUATATO VERSUS MIQUIMOD IN THE TREATMENT OF ACTINIC KERATOSES IN THE PERSPECTIVE OF THE ITALIAN HEALTH SYSTEM**

**MARTINELLI G1, COLOMBO G2, LUCANIA C1, BRUNO GM1**

1A.S.V. E. Studi Analisi e Valutazioni economiche, Milan, Italy, 2University of Favia, Milan, Italy, 3Università degli Studi di Modena e Reggio Emilia, Modena, Italy

**OBJECTIVES:** Actinic Keratosis (AK) is the most common neoplastic lesion of the skin. The incidence of AK has doubled in Italy in 14% 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 keratoses (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 imiquimod treatment, the public sector price is 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 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.

**PSS27**

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

**BLOMBERG E1, CASTELLON A1, MOLIN J1,2**

1Bayer AB, Solna, Sweden, 2OptumInsight, Stockholm, Sweden

**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 ischaemic CRVO. A global cost-effectiveness model was developed and adapted 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 modelled for up to 15 years in the base case. Treatment regimens were taken from clinical trials with aflibercept (GALELLO & 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 is considered a cost-effective, i.e. dominating treatment-duration 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. **CONCLUSIONS:** The ICER of aflibercept compared to ranibizumab is the highest cost -8,537 SEK and administration (incremental cost -5,793 SEK) costs compared to aflibercept. Probabilistic sensitivity analysis showed that aflibercept was dominating ranibizumab in 70% of the simulations. **CONCLUSIONS:** Aflibercept is more cost-effective than ranibizumab for the treatment of the ME to CRVO in Sweden.