OBJECTIVES: The objective was to estimate the CoD in wAMD, in Turkish setting. **METHODS:** An expert panel was held by participation of five ophthalmologists to discuss the disease management in wAMD. Physicians reviewed the literature, discussed the local clinical practices and all cost components; pharmaceuticals, treatment administration, monitoring, adverse events and blindness. The clinical/economic parameters were entered as inputs of a Markov model mimicking the follow-up of patients up to 20 years. Cost of ranibizumab treatment was studied. September-2014 local prices for medications and procedures were used as sources. September-2014 EUR currency rate (2.8671TL/EUR) was used. **RESULTS:** The frequency of treatments and outpatient visits in a year were assumed as 12 for the first year and 6 for the second year. Fluorescein angiography was assumed to be performed every six months. Total cost of blindness was estimated as 2,964EUR/year. The components of overall blindness cost include impairment salary in all (1,777EUR), home care services in 30% (990EUR), telescopic vision aid in one-thirds (96EUR), hip prosthesis operation, including prosthesis in 5% (64EUR), psychiatric management in 30% (32EUR) and visually impaired rehabilitation in 11% (6EUR). CoD calculation was started with the first implementation of treatment. The total cost for first year was 5,269EUR. The cost components included pharmaceutical costs (ranibizumab 4,915EUR), treatment administration (71-121EUR), monitoring (138-208EUR), adverse events (0-2EUR) and blindness (23EUR). The average yearly costs (calculated according to the cumulative five and twenty-year costs) were 1,864EUR and 1,110EUR in patients treated with ranibizumab. **CONCLUSIONS:** The treatment cost formed the major part of the total CoD in the first year of treatment. With the increasing number of patients getting blind throughout the years, the cost of blindness advanced to the first place.

PSS23

ESTIMATION OF INDIRECT (WORK-RELATED PRODUCTIVITY) COSTS ASSOCIATED WITH MODERATE-TO-SEVERE PLAQUE PSORIASIS IN GERMANY

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OBJECTIVES: Published data regarding indirect (or work-related productivity) costs in psoriasis are limited. We sought to estimate indirect costs of moderate-to-severe plaque psoriasis dependent on the level of psoriasis improvement (Psoriasis Activity Severity Index [PASI] change) due to treatment. **METHODS:** Work Productivity and Activity Impairment Questionnaire Psoriasis (WPAI-PSO) data from a recent clinical trial (CLEAR) were analyzed by PASI change at 16 weeks. Using reported data for work impairment due to psoriasis for trial subjects who were employed at baseline and data from national employment averages (full- vs. part-time employment, work hours/week, hourly wages), we estimated weekly and annual indirect costs by PASI change for moderate-to-severe plaque psoriasis patients in Germany. **RESULTS:** Overall work impairment due to psoriasis decreased with greater skin clearance (PASI change <50=23.8%, 50-74=13.3%, 75-89=6.4%, ≥90=4.9%), with the majority of impairment being related to productivity loss at work (presenteeism) rather than absenteeism. On average, patients working with poorly controlled (PASI change <50) moderate-to-severe psoriasis lost >8 hours a week of productive work time due to psoriasis symptoms; while productivity loss for patients with high clearance (PASI change ≥90) was small (<2 hours/week). From a societal perspective (includes patients not working), indirect costs per patient per week were estimated to be €117 for PASI change <50, €68 for 50-74, €33 for 75-89, and €25 for ≥90. Restricting the population to those employed at baseline (employer's perspective), indirect costs per employed patient per week decreased from €174 (PASI change <50) to €38 (PASI change ≥90). Annual indirect costs from the societal perspective decreased from €6,080 (PASI change <50) to €1,316 (PASI change ≥90) per patient. **CONCLUSIONS:** Based on our estimates, PASI improvement of ≥90 is linked to a prominent increase in workplace productivity and reduction in indirect costs in moderate-to-severe psoriasis patients from both the societal and employer perspectives.

PSS24

NATIONAL STUDY TO ASSESS THE COSTS OF PATIENTS WITH HIGH MYOPIA WITH AND WITHOUT CHOROIDAL NEOVASCULARISATION

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OBJECTIVES: To determine the direct costs associated with high myopia (HM) patients with and without choroidal neovascularisation (mCNV). **METHODS:** Observational, retrospective, multicentre study in adult patients selected consecutively with HM with/without mCNV. The patient characteristics, clinical course and use of health resources were recorded. Patients reported the use of assistive devices and employment status from diagnosis. Annual direct medical costs (AMC, from the perspective of the National Health System) and direct non-medical costs were estimated (AnMC) [€, January 2014]. Differences were assessed using Chi-square (or Fisher exact), Mann-Whitney or Kruskal-Wallis (Bonferroni contrast) tests. A multivariate regression analysis was done (General Linear Model, GLM). **RESULTS:** A total of 137 mCNV and 48 HM patients were included (mean of age±SD: 55.1±12.8 vs. 54.7±13.8 years, respectively; p=0.2). 80% were women in both groups. The observation time ranged from 17.9±9.6 to 20.0±9.7 months in mCNV and from 47.1±21.5 to 45.5±20.7 months in HM. In mCNV patients, a greater need for visits to the emergency room (41.7% vs. 25%; p=0.06) and retinal specialists (91.2% vs. 77.1%; p=0.01) was found. The AMC was higher in mCNV patients 1,985 € (95% CI 1,772-2,198) vs. 356 € (251-480), p<0.001. The AnMC was also higher in mCNV patients 256 € (11-524) vs. 19 € (11-26); p>0.4. Healthcare costs were not homogeneous in all geographic areas (p=0.002). The number of affected eyes, the follow-up time and mCNV were factors associated to the direct cost (according to the GLM). The impact on job performance was higher in mCNV vs. HM (fairly or very affected) 27.7% vs. 10.4%. **CONCLUSIONS:** The mCNV implies higher health costs than HM. Moreover, mCNV patients have a greater need of care and assistive devices, and a greater impact on their working life.

PSS25

COST EFFECTIVENESS ANALYSIS OF RANIBIZUMAB COMPARED TO AFLIBERCEPT AND LASER INTERVENTION IN TREATMENT OF DIABETIC MACULAR EDEMA (DME) IN THE CZECH REPUBLIC

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OBJECTIVES: Diabetic retinopathy/ DME are substantial complications leading to blindness. Ranibizumab (RBZ) 0.5mg and aflibercept (ABC) (anti-VEGF) change the DME-treatment paradigm. We estimated the cost-effectiveness of RBZ vs. ABC and laser from the Czech health care system perspective. **METHODS:** A Markov cohort model with 8 health states (based on visual acuity) + dead in life-time horizon (3% discount rate) was used. Base-line patient characteristics came from the RESTORE study; 60% of patients were treated for their worse seeing-eye. Patients who were treated in both eyes were not included in the analysis. Transition probabilities (efficacy) for the first 3 years of treatment for RBZ 0.5mg and laser were derived from RESTORE, for ABC from a published network meta-analysis (gain at least 10 letters: RBZ vs. ABC: OR = 1.59; 95%CrI 0.61 – 5.37). Natural progression of disease came from Wisconsin Epidemiologic Study. Utility for better and worse seeing-eye were derived from literature. RBZ and ABC dosing came from RESTORE (pro re nata, PRN) and from VIVID-DME, VISTA-DME study (bi-monthly after 5 initial monthly doses), respectively. Cost parity per dose of anti-VEGF (€855) was assumed. **RESULTS:** Using a life-time horizon, total (discounted) costs and QALYs for RBZ, ABC, laser were :€7,110; €9,562; €1.490 and 7.589; 7.502; 7.022 QALYs, respectively. The incremental costs and QALYs for RBZ vs. laser were €5.620 and 0.567 QALYs, with base-case ICER of 9.918 €/QALY. RBZ vs. ABC brought 0.087 QALY gain with €2.452 savings, reflecting dominance of RBZ over ABC. According to probabilistic sensitivity analysis, there is 64%/ 90% probability that RBZ's ICER is below 1GDP/ 3GDP per capita (€13,800/ €40,000) compared to laser. There is 62% probability that RBZ compared to ABC brings more QALY with lower costs. **CONCLUSIONS:** RBZ is dominant, cost-effective compared to ABC, laser approach, respectively in DME patients from the Czech health care system perspective.

PSS26

INTRAVITRAEL AFLIBERCEPT INJECTION FOR THE TREATMENT OF VISUAL IMPAIRMENT DUE TO MACULAR OEDEMA SECONDARY TO BRANCH RETINAL VEIN OCCLUSION: COST-EFFECTIVENESS VERSUS RANIBIZUMAB

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OBJECTIVES: To evaluate the cost-effectiveness of intravitreal aflibercept (IVT-AFL) compared with ranibizumab in the management of patients with macular oedema secondary to branch retinal vein occlusion (BRVO). **METHODS:** A 25-health-state Markov model considering ranges of visual acuity in both eyes was developed. Patients had a confirmed diagnosis of macular oedema secondary to BRVO and had best corrected visual acuity (BCVA) at baseline between 25 and 73 letters. The evaluation compared IVT-AFL 2mg with ranibizumab 0.5mg: the frequency of injections and monitoring were identical for both treatments, taken from randomised trials and a physician survey. A systematic review and indirect comparison were conducted to determine the probabilities of gaining at least 15 BCVA letters from baseline to 6 months; BCVA was then extrapolated over time to determine costs and outcomes. Utilities were taken from published literature and costs were estimated from a UK payer perspective. Published drug prices were discounted to reflect patient access schemes. Costs and benefits were discounted at 3.5%. **RESULTS:** The indirect comparison found that IVT-AFL was associated with a small numerical advantage in the likelihood of gaining 15 BCVA letters, compared with ranibizumab (median odds ratio = 1.08 95% CrI: 0.43-2.56). IVT-AFL was associated with a higher number of QALYs (0.045) per patient than ranibizumab. Both treatments are available to the National Health Service under confidential patient access schemes. Cost-effectiveness was estimated for a range of possible discounts for each treatment. At price parity, IVT-AFL reduces cost by £4 per patient and was a dominant therapy. Resultswere sensitive to the unit cost of the drugs used, to comparative efficacy and number of injections for both treatments. **CONCLUSIONS:** IVT-AFL 2mg was found to offer greater QALYs and to be a cost-effective option when compared with ranibizumab 0.5mg in the management of macular oedema secondary to BRVO.

PSS27

COST-UTILITY ANALYSIS OF APREMILAST FOR THE TREATMENT OF MODERATE TO SEVERE PLAQUE PSORIASIS IN THE ITALIAN SETTING

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OBJECTIVES: This analysis assessed the value of apremilast in adult patients with moderate to severe chronic plaque psoriasis who have failed to respond to, have a contraindication to, or are intolerant to other systemic therapy in the Italian setting. **METHODS:** A Markov state-transition cohort model was adapted to the Italian setting to compare costs and quality-adjusted life years (QALYs) from 2 treatment sequences: apremilast, etanercept, adalimumab, ustekinumab, best supportive care (BSC) vs. etanercept, adalimumab, ustekinumab, BSC. The time horizon was 5 years, and a 28-day cycle was used. The National Health Service (NHS) perspective was chosen. Data on treatment efficacy (based on ≥75% improvement in Psoriasis Area and Severity Index [PASI-75] response rate) were taken from a network meta-analysis that included 22 clinical trials (2001-2013). Resource use and unit costs were taken from Italian standard sources. Frequency of screening and monitoring tests was obtained from real-world data (database analysis). Utility weights associated with PASI states were taken from a UK NHS health technology assessment appraisal. A 3% discount rate was applied to costs and benefits. Both deterministic and probabilistic sensitivity analyses were performed. **RESULTS:** In the base case, the sequence including apremilast was dominant, with cost savings of €1,169 (€57,965 vs. €59,134) and 0.01 QALYs gained (3.96 vs. 3.95) over 5