(EQ-5D and the condition specific Dermatitis-Life-Quality-Index (DLQI)), direct and indirect costs, from the societal perspective. **RESULTS:** A preliminary sample of 305 patients (mean age + SD = 41.4 + 14.9, 38.2% male) were enrolled. Two hundred fifty five patients (83.6%) had CHE and of these the 27.8% were severe. Overall, 20.0% of the enrolled patients were chronic, severe and refractory to therapy. DLQI mean + SD sum score was 10.38 + 5.98. With EQ-5D 92.7% of patients reported moderate or severe pain/discomfort, 70.9% problems with usual activities, 58.2% anxiety/depression and 40% problems with self-care. VAS mean + SD = 61.96 + 21.48. On average hospitalization cost €87.90/patient-month, travels due to CHE cost €69.54/patient-month, specialist visit costs €52.81/patient-month, other products (gloves, gauze bandage, vacuum cleaner, cosmetics) costs €35.70/patient-month, diagnostic exam costs €20.77/patient-month, non pharmacological therapy (emollients, galenic products, soap, UV-ray) cost €15.65/patient-month and pharmacological therapy cost €9.22/patient-month. Patients lost a mean + SD 4.35 + 8.68 workdays/patient-month for reasons attributable to their condition. **CONCLUSIONS:** most of the patients in the Italian centers of dermatology have CHE and a fifth are severe and refractory to therapy. Patients with severe CHE and refractoriness to therapy have poor HRQoL and high costs. a correct diagnosis and treatment is necessary to efficiently manage this condition.

PSS4

COST-OF-ILLNESS IN PATIENTS WITH CHRONIC HAND ECZEMA: RESULTS FROM A MULTI-CENTRE STUDY IN GERMANY

Augustin M[1], Purwins S[1], Diepgen T[2], Posthumus J[3], Kuessner D[3]
[1]University Clinics of Hamburg, Hamburg, Germany; [2]University Heidelberg, Heidelberg, Germany; [3]Basilea Pharmaceutica, Basel, Switzerland

OBJECTIVES: It is assumed broadly that the costs caused by chronic hand eczema (CHE) are significant. However, there is a lack of cost-of-illness studies on CHE. The objective of this study is, therefore, to determine the direct and indirect costs of chronic hand eczema under routine conditions overall and in different treatment stages in Germany. **METHODS:** The survey was conducted in 24 outpatient practices and clinics across Germany. Patients with CHE refractory to potent topical treatments and insured by statutory health insurances were eligible. Patient characteristics and resource use were directly gathered from patients and physicians. Costs were evaluated from the societal perspective. Four treatment stages were defined: only topical treatments (stage I), additionally photo therapy (II), systemic therapy (III) and inpatient treatment (IV). Bivariate associations between costs and treatment stage were assessed. **RESULTS:** A total of 223 CHE patients enrolled in the study. The yearly direct and indirect costs per patient are €1742 (SE: €139) and €386 (€83), respectively. a total of 63.2% of patients were treated only with topical treatments; additionally 15.7% with photo therapy, 11.7% with systemic treatments. a total 9.4% of all patients were admitted to hospitals. The total costs increase with treatment stage I-IV ($P < 0.001$): €1044 (€85), €2307 (€145), €2697 (€461) and €8407 (€991), respectively. Accordingly, costs also correlated with clinical severity. **CONCLUSIONS:** CHE patients refractory to topical steroids incur marked costs to the society. The costs are increasing disproportionately with escalating treatment stages, especially in patients admitted to hospitals. Hence, new and innovative treatments may help to reduce the societal costs of CHE.

PSS5

COST OF GLAUCOMA IN THE UNITED KINGDOM ACCORDING TO THE UK GPRD

Salmon J[1], Lafuma A[2], Robert J[2], Berdeaux G[3]
[1]Oxford Eye Hospital, Oxford, UK; [2]CEMKA-EVAL, Bourg la Reine, France; [3]Alcon France, Rueil-Malmaison, France

OBJECTIVES: The objective of this analysis was to estimate the total budget dedicated to glaucoma care according to the UKGPRD and to identify factors associated with high costs. **METHODS:** Data were extracted on patients treated on the National Health Service with a diagnosis of ocular hypertension or glaucoma, or treated with topical intraocular lowering treatment, surgery or laser for glaucoma. The budget was estimated from resources consumed in 2008 and included glaucoma drugs, laser, surgery, hospitalization, specialist and general practitioner (GP) visits. In-patient resources were estimated from the Hospital Episode Statistics. Results were expressed in GBP, 2008. Factors associated with high cost were identified using linear stepwise regression. National extrapolation was performed according to the relative size of the GPRD to the UK general populations. **RESULTS:** Details of 33,441 patients were extracted, which suggests that about 510,000 patients were treated in the NHS in UK in 2008. The Mean age was 74.2 years, and 47.3% were male. The initial diagnosis was made at 67.8 years. Older patients, longer time since diagnosis, a higher number of previous treatments, a higher number of treatment switches in the previous one year period and use of laser/surgery were associated with a higher annual cost. Spending varied little between regions. Annual drug spending was £91.2 million on in-patient care, £4.4 million on drug prescription renewal (not specific to the glaucoma drug). Visits to the GP cost £34.8 million and visits to the eye specialist was >£54.0 million although the latter figure is likely to be an under estimate (GPRD underreported eye doctor care). **CONCLUSIONS:** The 2008 expenditures to care for glaucoma were >£185 million with no regional differences. Three factors were strongly associated with high costs: time since diagnosis, treatment changes, and rescue treatment. This analysis suggests that longer treatment persistence is likely to be associated with cost saving.

PSS6

COST OF ILLNESS OF PSORIASIS—A 1-MONTH PROSPECTIVE STUDY IN SOUTHERN SWEDEN

Ghatnekar O[1], Ljungberg A[2], Lundqvist T[2], Svensson Å[3], Wirestrand LE[4]
[1]The Swedish Institute for Health Economics, Lund, Skåne, Sweden; [2]Abbott Scandinavia AB, Solna, Sweden; [3]University of Lund, Malmö, Sweden; [4]Kristianstad Hospital, Kristianstad, Sweden

OBJECTIVES: Published cost-of-illness studies of psoriasis in Sweden are not available. This study estimates the societal cost of psoriasis care in a defined Swedish patient population. **METHODS:** A prevalence-based prospective recruitment of patients visiting two dermatology clinics in Sweden between September and December 2009 was performed. Patients collected resource utilization of health care contacts, treatment, travelling distance and time, and productivity loss (human capital approach) during 1 month (Swedish unit prices, 2009). **RESULTS:** A total of 164 patients (49% males) were included; average age 52, 76% plaque psoriasis with PASI 5.7, DLQI 7.7 and EQ-5D utility weight 0.71. The mean total cost per patient-month was €994. Main cost drivers were outpatient visits (OP) and light therapy (49%), biological drugs (20%) and productivity loss (22%). When patients were stratified according to treatment strategy, total costs (fraction of patients) for topical treatment only (TT; 34%) was €369, light therapy (LT; 24%) €1274, traditional systemic treatment (TST; 26%) €1085 and biological systemic treatment (BST; 16%) €1709 per patient-month. Main cost drivers in each treatment strategy were: OP (56%) in TT, OP (78%) in LT, productivity loss (40%) in TST and biological drugs (71%) in BST. There was no clear relationship between clinical (PASI) or subjective (DLQI) severity estimations and costs. **CONCLUSIONS:** In this study the cost-of-illness for a psoriasis patient amounts to almost €1000/month, with great variation depending on treatment strategy. Despite the 1200 difference in drug cost for TST vs. BST, total cost per month differed by €600 because of offsets from improved productivity and reductions in OP and topical treatment. As expected, biologically treated patients had higher costs but lower severity probably due to the treatment effectiveness. The relationship between costs and severity is complex, probably due to the selected study period and differences in effect between strategies.

PSS7

THE ECONOMIC COST OF TREATING PATIENTS WITH AGE-RELATED MACULAR DEGENERATION IN SPAIN

Darba J[1], Kaskens L[2]
[1]Universitat de Barcelona, Barcelona, Spain; [2]BCN Health, Barcelona, Spain

OBJECTIVES: Wet macular degeneration associated with age (wet-AMD) is the leading cause of legal blindness in Spain in people over 55. The aim of this study is to determine health care resource utilization and mean costs per patient with wet-AMD in 2009. **METHODS:** A micro-costing analyses was performed to estimate direct medical costs of patients with wet-AMD. Patient level data was obtained from different public hospitals in Spain and ophthalmologists were surveyed with a semi-structured questionnaire to obtain treatment patterns. Inpatient costs were considered from the perspective of the public health care system. Treatments under study were pegaptanib, verteporfin, ramibizumab and bavacizumab. Although bevacizumab in Spain is not approved for wet-AMD, it was used off-label in the hospital. Direct medical costs considered were drug costs, administration cost, doctors' visits, nurse time, ophthalmologist time, anaesthetics, ambulant hospital care, external consultation, surgery and treatment of adverse effects. All costs are referred to 2009. **RESULTS:** Mean cost per patient treated with wet-AMD represented the following cost for the public health care system: €7290 for pegaptanib, €5810€ for verteporfin, €8650 for ramibizumab and €3110 for bevacizumab. We also estimated that in Spain 180,000 people over 50 years have wet-AMD in 2009. **CONCLUSIONS:** Pharmacological treatments for wet-AMD are photo dynamic therapy with verteporfin, pegaptanib, verteporfin and ramibizumab, with the last one having the highest medical costs. The aging of the population and development of new drugs will probably increase the future economic impact of AMD, which remains a major health care burden.

PSS8

PREDICTIVE FACTORS OF GLAUCOMA TREATMENT COST IN GERMANY

Lorenz K[1], Wolfram C[1], Claus V[2], Plesnila-Frank C[2], Verboven Y[3], Pfeiffer N[1]
[1]Universitätsmedizin Mainz, Mainz, Germany; [2]IMS Health, München, Germany; [3]Alcon Research Ltd., Puurs, Belgium

OBJECTIVES: To describe total costs and factors predicting cost in Germany for glaucoma disease states: ocular hypertension (OHT), and early (EARLY), moderate (MOD) and advanced (ADV) glaucoma. **METHODS:** A 5-year retrospective analysis collected health care utilization, clinical parameters, treatment(s) used and reasons for treatment change. Disease states defined by the European Glaucoma Society were applied. Costs for health care resources were based upon the German EBM/OPS code for ambulatory visits/procedures, diagnosis-related groups for hospital procedures and the Rote Liste for medication. Factors predicting cost were identified using stepwise backward multiple linear regression, entry criterion a = 0.2. **RESULTS:** A total of 154 patients (27 OHT, 43 EARLY, 35 MOD, 49 ADV) were enrolled from 15 centers across 5 German regions. Average age was 67 ± 11 and 57% were female. Number of years since diagnosis was 9.0 ± 5.7, 8.7 ± 4.6, 8.7 ± 4.1 and 13.2 ± 8.3 years for OHT, EARLY, MOD and ADV, respectively. Total costs, for patients with OHT, EARLY, MOD or ADV, were €226 ± 117, €423 ± 647, €493 ± 385, and €808 ± 877, respectively. Most costs were due to medication (€121 ± 99, €217 ± 150, €245 ± 161, €340 ± 193) and hospital interventions (€32 ± 101, €115 ± 538, €154 ± 285, €367 ±

811). Other costs included consultations (€54, €63, €64, €58) and examinations (€19, €26, €26, €26). Factors predicting high cost ($R^2 = 0.6426$) were the number of hospital interventions, treatment switches, disease state changes, current disease state and issues with ocular burning, stinging or aching affecting daily activities. For glaucoma patients having 0, 1, 2 or ≥3 treatment switches this gave total costs of €273 ± 108, €320 ± 231, €511 ± 462 and €932 ± 950, respectively. Medication costs were €177, €187, €268 and €368, and interventional procedure costs were €0, €50, €166 and €478, respectively. **CONCLUSIONS:** Glaucoma treatments (medication and interventional procedures) are the key cost drivers in management of glaucoma in Germany. Avoiding treatment switches, disease progression and interventional procedures should have an impact on the cost of glaucoma care.

PSS9

COSTS OF GLAUCOMA IN SWEDEN—A PILOT STUDY

Svensson J[1], Berdeaux G[2], Bergstrom A[3], Forsby M[4], Ghatnekar O[1]
[1]IHE, Lund, Sweden; [2]Alcon France, Rueil-Malmaison, France; [3]Skåne University Hospital, Lund, Sweden; [4]Pygargus AB, Sävedalen, Sweden

OBJECTIVES: To estimate the cost of treatment of glaucoma in Sweden and cost by treatment change. **METHODS:** Two private ophthalmologic clinics in southern Sweden were chosen for a retrospective chart review. Longitudinal data from patients older than 18 years was extracted from digitalized medical records. a glaucoma diagnosis (ICD-10: H40) and prescription of glaucoma treatment (ATC: S01E) were used as search terms to identify patients. Data on outpatient visits, glaucoma related pharmaceuticals and laser surgery was collected for the period 2004-01-01 to 2009-06-30. Unit prices from official sources in year 2008. Health care provider costs incurred during year 2008 were stratified according to the number of treatment changes. **RESULTS:** A total of 815 patients with pharmacological treatment were included in the analysis. Mean age was 77.6, 63% were female, 39% had ocular hypertension (OHT), 55% primary open angle glaucoma (POAG) and 6% other glaucoma diagnosis. Mean direct medical cost per patient during 2008 was €393. The cost per patient varied depending on diagnosis and number of treatment changes since 2004. Costs for patients diagnosed with OHT, POAG and other glaucoma was €341, €423 and €477, respectively. Patients diagnosed with POAG ranged from €350 (no change in treatment) to €540 (3 or more changes). Patients with OHT ranged from €301 (no changes in treatment) to €613 (3 or more changes). Costs were approximately equally split between outpatient visits and drugs regardless of diagnosis or treatment changes. Regression analysis also revealed that costs were significantly influenced by years since diagnosis and clinic of enrolment. **CONCLUSIONS:** The annual cost of glaucoma treatment in Sweden is estimated to €393 in 2008. Costs increase with number of treatment changes but also depend on diagnosis, years since diagnosis and clinic of enrolment. This is in line with other studies.

PSS10

CLINICAL AND COST-EFFECTIVENESS EVALUATION OF A LOW FRICTION AND SHEAR PRODUCT IN THE MANAGEMENT OF PATIENTS AT RISK OF SKIN BREAKDOWN WITHIN A HOSPITAL SETTING

Ingram A[1], Smith G[2]
[1]NHS Innovations London, London, UK; [2]St Mary's Hospital, Isle of Wight, Newport, UK

OBJECTIVES: To determine the clinical and cost-effectiveness of the low friction Parafricta™ products to reduce pressure ulceration on pre-existing skin breakdown within a hospital setting. **METHODS:** Patients admitted to the participating hospital wards who had a Waterlow score ≥15 and were unable to reposition independently, were offered the Parafricta products. Assessments of their level of ulceration and outcome were made over a 3-month period prior to the use of Parafricta products and then for a further three months during which Parafricta products were used. **RESULTS:** A total of 650 patient cases were assessed. Of these, 204 patient cases met the inclusion criteria in the three months prior to Parafricta use and 165 patient cases during Parafricta use. The results demonstrated that, in patients at risk of skin breakdown, there was a statistically significant reduction in the number of patients who developed ulceration with the use of Parafricta products (16% reduction; $p = 0.0286$). In addition, the number of patients who were ulcer-free on admission but who developed ulceration and then went on to improve or completely heal before discharge was also statistically significant (41% increase; $p = 0.0065$). Fewer patients admitted with ulceration deteriorated on the Parafricta products (21% reduction; $p = 0.0012$). The results were used to build a cost-effectiveness model and locally derived costs for length of stay, wound dressings and mattresses, as well as the additional cost of the Prafricta products were applied to determine the overall costs savings that would result from the reduction in ulceration on Parafricta products. The base-case model indicated a saving of over £63,000 per 100 incidences. **CONCLUSIONS:** The results of this evaluation support the conclusion that Parafricta products in an acute inpatient environment have a significant role to play in the avoidance of skin breakdown, and that they constitute an intervention that is both clinically effective and cost-effective.

PSS11

THE COST-EFFECTIVENESS OF A NEW GEL FORMULATION OF CALCIPOTRIOL/BETAMETHASONE DIPROPIONATE FOR THE TREATMENT OF SCALP PSORIASIS IN NORWAY

Holm MV[1], Ekman M[2], Ryttov J[3]
[1]LEO Pharma, Ballerup, Denmark; [2]i3 Innovus, Stockholm, Sweden; [3]LEO Pharma, Marlow, UK

OBJECTIVES: The study examines the cost-effectiveness of calcipotriol 50 mcg/g plus betamethasone dipropionate 0.5 mg/g in combination in a new convenient gel formulation for the treatment of scalp psoriasis compared to existing alternatives in Norway. **METHODS:** A decision analytic model with a time horizon of 16 weeks was developed. The perspective chosen is that of the Norwegian health care system. Responders to treatment were defined as cleared or almost cleared and efficacy was derived from two clinical trials. Relapse rates were estimated from data in the literature. The alternative treatments were betamethasone dipropionate gel and calcipotriol gel, comparators in the clinical trials, matched to marketed formulations in Norway. Costs of medical therapy and follow-up management in scalp psoriasis in 2009 were taken from the Norwegian Medicines Agency and hospital price lists. The outcomes were measured in QALYs derived from SF-36 collected in one of the clinical trials. **RESULTS:** The overall cost for calcipotriol liniment treatment added up to 2340 NOK over 16 weeks and for calcipotriol/betamethasone dipropionate gel 1497 NOK and betamethasone dipropionate liniment 1407 NOK (1 NOK = 0.127 EUR). The treatment associated with the best outcome was calcipotriol/betamethasone dipropionate gel, generating a gain in change from baseline over 16 weeks of 0.0111 QALYs while calcipotriol generated 0.0091 QALYs and betamethasone dipropionate 0.0106 QALYs. The analysis showed that calcipotriol/betamethasone dipropionate gel is a dominant treatment compared to calcipotriol. The ICER was 180,000 NOK per QALY gained compared to betamethasone dipropionate. The probabilistic sensitivity analysis showed a probability of calcipotriol/betamethasone dipropionate gel being cost-effective of 82% at a WTP of 400,000 NOK compared to betamethasone dipropionate. **CONCLUSIONS:** The new gel formulation of calcipotriol/betamethasone dipropionate indicated for the treatment of scalp psoriasis is a cost-effective alternative to both calcipotriol liniment and to betamethasone dipropionate liniment in a Norwegian health care setting.

PSS12

ECONOMIC EVALUATION OF RANIBIZUMAB IN THE TREATMENT OF AGE-RELATED MACULAR DEGENERATION IN GREECE

Maniadakis N, Athanasakis K, Fragoulakis V, Tsiantou V, Kyriopoulos J
National School of Public Health, Athens, Greece

OBJECTIVES: To investigate the cost-effectiveness of ranibizumab in relation to verteporfin photodynamic therapy (PDT), pegaptanib sodium and best supportive care (BSC) for the treatment of Age-Related Macular Degeneration (AMD) at varying disease states in the Greek health care setting. **METHODS:** A six-state Markov model was constructed according to patient visual acuity in the better seeing eye. Data on effectiveness were derived from randomized controlled trials comparing the outcomes of ranibizumab 0.5 mg administered over a 2year period (8 injections in the first year of treatment, 6 in the second) versus other alternative comparators for the treatment of AMD patients with predominantly classic (PC) lesions and versus BSC and pegaptanib for those with minimally classic (MC) or occult lesions. Resource utilization reflected the Greek health care setting and was defined via a panel of experts. Economic and clinical outcomes were estimated over a 10year timeframe from the perspective of a third-party payer (social insurance fund), discounted at 3.5% per annum. **RESULTS:** the estimated mean 10-year direct treatment cost in the ranibizumab arm ranged from €24,844 to €32,931 with a projected benefit of 4.50–4.74 Quality Adjusted Life-years, depending on type of lesion. For PC lesions, the cost per QALY gained with ranibizumab was estimated at €10,037, €19,152 and €3,759 relative to PDT, BSC and pegaptanib, respectively. The corresponding ratios for patients with MC lesions were €28,201/QALY and €19,018/QALY for ranibizumab relative to BSC and pegaptanib, whereas for patients with occult lesions were estimated at €23,976/QALY and €39,696/QALY respectively. The probability of ranibizumab being cost-effective at the €30,000/QALY threshold was 92.6%, 83.0% and 100% (PC lesions), 67% and 87% (MC) and 75% and 42% (occult) for the above presented ICERs. **CONCLUSIONS:** ranibizumab may be a cost-effective option for the treatment of AMD compared to selected alternatives in the Greek health care setting.

PSS13

COSTS AND EFFECTS OF FIXED COMBINATION THERAPIES IN OPEN ANGLE GLAUCOMA

Wickstrøm J[1], Centofanti M[2], Johnson M[3]
[1]Wickstrøm & Langkilde, Vejle, Denmark; [2]Fondazione G.B Bietti-IRCCS, Università di Roma Tor Vergata, Roma, Italy; [3]Allergan, Inc., Marlow, UK

OBJECTIVES: Using data from a recently published head to head clinical trial comparing the efficacy and safety of the fixed combination bimatoprost/timolol (BTFC, Ganfort®) versus fixed combination latanoprost/timolol (LTFC, Xalacom®), the objective was to investigate the cost-effectiveness of BTFC versus LTFC in 10 European countries. **METHODS:** A model was developed to evaluate the cost-effectiveness of BTFC versus LTFC taking a health care perspective including only direct health care costs. Efficacy data originated from a recent head to head trial of BTFC and LTFC. Outcomes where measured as percentage reduction in intraocular pressure (IOP) from baseline and percentage of patients achieving >15% and >20% reduction in IOP from baseline, respectively. Safety was not included in the base-case analyses as no significant