

29% of moderate, 6% of severe and 1% of very severe; 7) only patients in moderate, severe and very severe groups were considered as eligible for treatment with long-acting maintenance therapy; and 8) 53% of annual treatment persistence rate was applied. The ex-factory price with 24.38% of discount was used for indacaterol costs and 5% of annual discount rate was applied on the costs. Indacaterol 150 μ g uptake was assumed to be: 9%, 13%, 17%, 19%, 21%; and for indacaterol 300 μ g: 1%, 2%, 3%, 4%, 4%, over 5 years consecutively. **RESULTS:** The number of patients eligible for treatment with long-acting maintenance therapy in Brazil was estimated to be around 256,040 in the first year. The annual budget impact of indacaterol through the years was approximately: 20M, 30M, 38M, 42M and 44M (BRL) consecutively. **CONCLUSIONS:** Currently none drugs are reimbursed for COPD maintenance therapy by SUS. According to this analysis, considering only the costs with indacaterol, it should have a small impact on the Ministry of Health's budget.

PRS16

COST ANALYSIS OF HAEMOSTATIC TREATMENT WITH A FIBRIN-BASED SPONGE VERSUS FIBRIN SEALANT IN LUNG SURGERY AND LIVER RESECTION IN A SPANISH SETTING

Darba J¹, Kaskens L², Perez-Alvarez N²

¹Universitat de Barcelona, Barcelona, Spain, ²BCN Health, Barcelona, Spain

OBJECTIVES: To assess the health care resources used and estimate the costs associated with the use of a collagen sponge coated with human fibrinogen and thrombin compared with fibrin sealant to improve haemostasis in lung surgery and liver resection. **METHODS:** A cost-analysis of the healthcare resources used with the administration of a fibrin-based sponge and fibrin sealant was performed. Health care resource utilisation and unit costs associated with both treatments in lung surgery and liver resection was obtained from literature research. Costs included for lung surgery were drug costs, preparation and administration time and additional hospitalisation due to post-surgery pulmonary air leakage. Costs for liver resection included drug costs, preparation and administration time, drainage and hospitalisation days at ward or an intensive care unit. Drug costs were obtained from Spanish medication databases. All costs were referred to EUR 2010. Based on the healthcare resource use the mean cost per patient for each treatment was estimated. A two-way sensitivity analysis was performed determining minimum and maximum mean costs per patient. **RESULTS:** Mean drug costs for the fibrin-based sponge and fibrin sealant in lung surgery resulted in €275 and €345, respectively. Total treatment costs per patient were estimated at €376 and at €509 for the fibrin-based sponge and fibrin sealant. In liver resection mean drug costs resulted in €550 for the fibrin-based sponge and in €690 for fibrin sealant, respectively. The associated total treatment costs per patient added up to approximately €5725 for the fibrin-based sponge and €6148 for fibrin sealant. **CONCLUSIONS:** The use of a fibrin-based sponge showed benefits over the use of fibrin sealant in lung surgery and liver resection. Less use of health care resources with the application of fibrin-based sponges versus fibrin sealant resulted in lower associated treatment costs per patient.

PRS17

PREVALENCE AND COST OF SEVERE CHRONIC HAND ECZEMA REFRACTORY TO TOPICAL POTENT CORTICOSTEROIDS

Cortesi PA¹, Scalone L¹, De Pittà O², Angelini G³, Cristaudo A⁴, Girolomoni G⁵, Gola M⁶, Ayala F⁷, Cannavò S⁸, Satta R⁹, Gallo R¹⁰, Lisi P¹¹, Peserico A¹², Pigatto P¹³, Mantovani LG¹⁴, Belisari A¹⁵, Giannetti A¹⁶

¹University of Milano - Bicocca, Monza, Italy, ²Istituto Dermatologico dell'Immacolata (IDI)-IRCCS, Roma, Italy, ³University of Bari, Bari, Italy, ⁴Istituto Dermatologico San Gallicano IRCCS, Roma, Italy, ⁵University of Verona, Verona, Italy, ⁶University of Florence, Florence, Italy, ⁷University Federico II of Naples, Napoli, Italy, ⁸University of Messina, Messina, Italy, ⁹University of Sassari, Sassari, Italy, ¹⁰Di.S.E.M., University of Genoa, Genoa, Italy, ¹¹University of Perugia, Perugia, Italy, ¹²University of Padua, Padua, Italy, ¹³University of Milan, Milano, Italy, ¹⁴Federico II University of Naples, Naples, Italy, ¹⁵CHARTA Foundation, Milano, Italy, ¹⁶University of Modena, Modena, Italy

OBJECTIVES: Earlier research has shown that Hand Eczema (HE) is often work-related, widespread, potentially disabling and costly, but often misdiagnosed and mistreated. Severe Chronic Hand Eczema (CHE) can be particularly burdensome, especially among severe patients refractory to therapy. We assessed cost-of-illness of severe CHE patients refractory to topical potent corticosteroids and their prevalence among HE patients accessing dermatology centres. **METHODS:** a naturalistic, multicentre study was conducted in 14 Italian dermatology centres. HE patients aged ≥ 18 years, consecutively accessing the participating centers through a 6-month period were enrolled. Socio-demographic and clinical data were collected for all patients, while direct, indirect costs and HRQoL data were collected on severe refractory CHE patients. HRQoL was collected with the EQ-5D and the condition-specific Dermatology-Life-Quality-Index (DLQI), having a summary score ranging from 0 to 30, higher score corresponds to more impaired HRQoL. Direct and indirect costs data were collected through a retrospective 8-week time horizon, using the societal perspective. **RESULTS:** in total 981 HE patients were enrolled (mean age + SD = 39.1 + 15.1, 35.9% male), 11.0% had severe refractory CHE. DLQI mean + SD sum score was 11.3 + 6.3. With EQ-5D 96.2% of patients reported moderate or severe pain/discomfort, 73.1% problems with usual activities, 55.8% anxiety/depression and 52.9% problems with self-care. VAS mean + SD = 60.4 + 23.3. On average hospitalizations cost 67.3€/patient-month, travels cost 43.4€/patient-month, specialist visits cost 41.0€/patient-month, other products (gloves, gauze bandage, vacuum cleaner, cosmetics) cost 27.2€/patient-month, diagnostic exams cost 19.6€/patient-month, non pharmacological therapy (emollients, galenic products, soap, UV-therapy) cost 18.7€/patient-month, pharmacological therapy cost 18.2€/patient-month. Patients lost on average 4.9 workdays/patient-month for reasons attributable to their disease. **CONCLUSIONS:** Approximately one tenth of HE patients accessing

dermatology centers have severe refractory CHE. These generate high costs to manage their condition, and have a significant productivity loss and a poor HRQoL. An appropriate diagnosis and treatment is necessary to efficiently manage the disease.

PRS18

ECONOMIC BURDEN OF CYSTIC FIBROSIS IN THE US: COSTS OF CARE BY DISEASE SEVERITY AND AGE

Becker CC¹, Clements K², DeLong K², Harrow B¹, O'Sullivan A²

¹Vertex Pharmaceuticals Incorporated, Cambridge, MA, USA, ²OptumInsight, Eden Prairie, MN, USA

Cystic fibrosis (CF) is a genetic disease characterized by progressive lung disease. In the US, the median age of death is 27 years. Published studies of the cost of CF by severity are outdated and do not report costs stratified jointly by age and FEV₁. **OBJECTIVES:** To gain understanding of the current economic burden of disease, we estimated the cost of CF by severity and age group. **METHODS:** We used an administrative claims database from a large US health plan to estimate mean annual total costs for patients with CF by age category (in 5-year increments) for patients ages 5 and older from 2004 to 2008. As claims data do not contain information on FEV₁, we derived the proportions of patients with mild (FEV₁ $\geq 70\%$ predicted), moderate (40-69% predicted), and severe (<40% predicted) CF by age category using data from the CF Foundation Registry. We then estimated the ratios of costs for moderate and severe patients relative to mild patients using data from Lieu et al. (1999). Finally, we estimated treatment costs for patients with CF by age and FEV₁ using proportions of patients in each FEV₁ category, relationships between cost and disease severity, and costs by age from the database analysis. **RESULTS:** Preliminary estimated annual costs of care were \$30,000, \$57,000, and \$215,000 for patients with mild, moderate, and severe disease, respectively. For all severity groups, costs were highest among children 10-14 years, and decreased with increasing age through age 45 years. Estimated annual costs of care for patients with CF ranged from \$15,600 for mild patients aged 40-44 years to \$343,900 for severe patients aged 10-14 years. **CONCLUSIONS:** Annual costs of CF care are highly variable by age and disease severity. Interventions that keep patients out of the severe disease state may save costs.

PRS19

QUALITY OF LIFE AND ECONOMICS OF ASTHMA CONTROL IN FRANCE AND SPAIN: FINAL RESULTS OF THE EU-COAST STUDY

Brosa M¹, Com-ruelle L², Calvo E³, Chouaid C⁴, Robert J⁵, Doz M⁵, Decuyper L⁶, Huerta A⁷, Pribil C⁸, Detournay B⁹

¹Oblikue Consulting, Barcelona, Spain, ²IRDES, Paris, France, ³Universidad Autónoma de Madrid, Madrid, Spain, ⁴Service of Pneumology, Paris, France, ⁵Cemka-Eval, Bourg la Reine, France, ⁶GlaxoSmithKline, Marly le Roi, France, ⁷GlaxoSmithKline, Tres Cantos, Madrid, Spain, ⁸GSK France, Marly le Roi, France, ⁹Cemka, Bourg la Reine, France

OBJECTIVES: Current asthma management guidelines are based on the level of asthma control. This study was designed to estimate quality of life and health care costs according to the patients' level of asthma control in France and in Spain in real-life setting. **METHODS:** On a 1-month and a 3-months period. An observational retrospective bottom-up cost of illness study (XX2113553) was conducted simultaneously in both countries among adults with asthma. Patients were recruited by samples of general practitioners during four quarterly waves throughout the year 2010 avoiding thus a seasonal bias. Asthma control was evaluated using the auto-test Asthma Control Test (ACTTM) for a one month period and 2009 GINA's asthma control criteria for a three months period. Quality of life (QoL) was assessed using EQ-5D profile. Costs (direct and indirect) were evaluated from a societal perspective. **RESULTS:** A total of 2671 patients (France: 1154; Spain: 1517) were enrolled in the survey. Asthma was determined to be well-controlled (ACT ≥ 20) in 54.2% [IC 95%: 50.9% - 57.7%] and 58.8% [IC95: 56.2% - 61.3%] of French and Spanish patients respectively. In both countries, average EQ-5D scores were higher for patients with well-controlled asthma (France: 0.9 vs 0.7, p<0.0001; Spain: 0.9 vs 0.6, p<0.0001). Total costs of asthma varied accordingly to asthma control in both countries. The average total cost (Euros/month/patient) of well-controlled asthma was 57 € (± 467) in France and 82 € (± 171) in Spain compared with 111 € (± 618) (p<0.0001) and 221 € (± 323) (p<0.0001) respectively for not well-controlled asthma. Similar variations were observed using the GINA's criteria on a 3-months period. **CONCLUSIONS:** Results suggested that a poor asthma control is associated with higher costs and lower QoL in patients with asthma in both countries. Improving the control of asthma could eventually be associated to a decrease of the burden of asthma.

PRS20

COSTS OF COPD BY DISEASE SEVERITY - A COMPARISON OVER 10 YEARS

Jansson SA, Backman H, Lindberg A, Rönmark E, Lundbäck B

The OLIN Studies, Luleå, Sweden

OBJECTIVES: To examine the relationship between costs and severity of COPD, and to up-date the economical burden of COPD for the Swedish society. **METHODS:** The study sample was identified in 2009 from earlier clinical examinations of general population cohorts within the OLIN (Obstructive Lung Disease in Northern Sweden) studies. A number of 993 subjects were identified as having COPD (GOLD spirometric criteria). In 2009-2010, telephone interviews on resource utilization were made to a sample of 244 subjects, stratified by disease severity. Interviews were performed quarterly to minimize the risk of recall bias. Costs were calculated by applying unit costs from 2010. The prevalence for each disease severity was multiplied with the mean costs in order to calculate total societal costs. Non-parametric tests were used for testing the influence of COPD severity on costs in 2010, and when comparing the results with a previous study in 1999. **RESULTS:** A highly significant relationship was found between disease severity and costs. The mean