alone from 3.6% to 45.8%, and omalizumab from 0% to 6%. Annual hospitalizations rates and emergency visits decreased by 78% and 75%, respectively. The savings were 1800 per controlled patient per year. **CONCLUSIONS:** Managing asthma patients in a specialized AC is cost-effective and has significant impact on patient control, indicating better survival and quality of life for the patient according to published literature evidence.

**PSRS** IMPACT OF ALLERGEN IMMUNOTHERAPY ON SYMPTOM-FREE DAYS AND HEALTH CARE COSTS IN PATIENTS WITH GRASS POLLEN-INDUCED ALLERGIC RHINITIS IN GERMANY

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**OBJECTIVES:** A health economic assessment was conducted to determine the relative impact of treatment with Oralair® or Grazax® on clinical outcomes and health care costs in patients with grass pollen-induced allergic rhinitis (AR) in Germany. **METHODS:** The effects of three years of drug treatment on symptom-free days (SFDs) and associated costs were assessed using a health economic model. **RESULTS:** Oralsair® relative to Grazax® were generated accordingly. The uncertainty around patient co-payments, were calculated. The incremental costs and QALYs gained for free days (SFDs) and associated costs were assessed using a health economic model. **CONCLUSIONS:** The base case analysis over 9 years predicts a total of 206.6 discounted SFDs for patients in France. The technical report of this research will be available on the HAS website at the time of the congress (November 2014).

**PSRS5** COST-EFFECTIVENESS OF SUBCUTANEOUS IMMUNOTHERAPY IN ALLERGIC RHINITIS USING ONE OR MORE ALLERGENS - AN ANALYSIS LONG OVERDUE

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**OBJECTIVES:** Allergic rhinitis – hay fever and mist hypersensitivity – is a prevalent and increasingly common condition, causing considerable morbidity and economic burden to society. A minority of patients have an indication for subcutaneous immunotherapy (SCIT). SCIT using extracts of tree pollen, grass pollen and/or house dust mite is common practice in The Netherlands, Europe and beyond. SCIT is widely reimbursed, but very few prospective cost-effectiveness studies have been conducted. In a 2-year multicenter, randomized controlled trial with two parallel treatment arms was performed, comparing SCIT + usual care (UC) with UC alone, using online resource use and labor productivity questionnaires, and electronic health records. **METHODS:** Primary endpoints were the costs per QALY, costs per successfully treated patient and the cost per additional symptom-free day. A Generalized Estimation Equation (GEE) model was two-way repeated measured as dependent variable, followed by a 1000-iteration bootstrap procedure. **RESULTS:** A total of 183 adult patients aged 18 to 45 years with persistent moderate to severe allergic rhinitis due to one (43%) or more (57%) allergens (93 SCIT+UC, 90 UC) were included. There were no significant differences at baseline. The percentage of patients that reported to be treated successfully was 36% in SCIT and 20% in UC after two years. Other health outcomes did not differ between SCIT and Usual Care. Two-year costs of SCIT were €2946 per patient. There was no difference in other costs. Cost per additional successfully treated patient were about 15,000 Euro. For the other outcomes, SCIT was dominated by UC. **CONCLUSIONS:** This study could not support the cost-effectiveness of SCIT. A restriction in the indication of SCIT to patients with severe persistent symptoms would be a cost effective response to maximum symptomatic therapy may improve cost-effectiveness.

**PSRS6** IMPACT OF ALLERGEN IMMUNOTHERAPY ON QUALITY OF LIFE AND HEALTH CARE COSTS IN ADULTS AND CHILDREN WITH GRASS POLLEN-INDUCED ALLERGIC RHINITIS IN GERMANY

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**OBJECTIVES:** To evaluate the potential economic impact of the 100% whey-based partially hydrolyzed infant formula (FH-W) in comparison with a control milk formula (SF) in the prevention of atopic dermatitis (AD) in at-risk children at the age periods 0–12 and 0–36 months in Russia. **METHODS:** The Excel model was constructed to estimate costs of artificial feeding with FH-W vs SF and expected AD cases treatment. The model was based on the results of meta-analysis of randomized controlled trials (RCTs) and literature data. The costs of artificial feeding and AD treatment were calculated from the positions of different payers: health care system, family, and society as a whole. The incremental cost-effectiveness ratio (ICER) per prevented AD case was calculated for FH-W vs SF. **RESULTS:** From health care system point of view the use of FH-W uniquely lead to cost savings. If we consider all costs from the societal perspective FH-W vs SF requires additional costs in the first year of baby’s life, but in leads to cost savings in a 3-year horizon. From the perspective of the at-risk child’s family artificial feeding costs will increase from 266 to 408 Euro for FH-W vs SF. However the likelihood of AD development in a child will decrease from 15 to 8% in the first year and from 27 to 10% over three years and accordingly this will prevent AD treatment costs. **CONCLUSIONS:** Using FH-W for the AD prevention in high-risk children has benefits for both the health system and for individual family.

**PSRS4** A COST-EFFECTIVENESS ANALYSIS OF TREATMENT FOR MILD TO MODERATE OBSTRUCTIVE SLEEPAEA-HYPOVENTILATION SYNDROME (OSAHS) IN FRANCE

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**OBJECTIVES:** In France, continuous positive airway pressure (CPAP) is recommended as first-line treatment for patients with severe OSAHS or mild-to-moderate OSAHS with high cardiovascular risk. Dental devices are recommended as second-line therapies for these patients. **METHODS:** This study aimed to assess the cost-effectiveness of these treatments for mild-to-moderate OSAHS patients. **METHODS:** This study was commissioned by the French National Authority for Health (HAS) and followed their recommendations. A Markov model was developed to simulate the lifetime progression of a cohort of mild-to-moderate OSAHS patients. CPAP was compared with dental devices, lifestyle advice and no treatment. **RESULTS:** Costs and outcomes were discounted at 4% per year and a 1% increment. Robustness of results was assessed using sensitivity analyses. The assessed outcomes were the incremental cost per quality-adjusted life-year (QALY) gained and total life-years gained (LYG). **CONCLUSIONS:** This study will inform public decision making about reimbursement of mild-to-moderate OSAHS treatments. CPAP was more effective and QALY gained compared with dental devices, lifestyle advice and no treatment. Several sensitivity analyses were undertaken and it was found that the most sensitive parameters were related to sleepiness and cardiovascular inputs. Further investigation (clinical trial/observational study) of treatment effects on these parameters is needed. **CONCLUSIONS:** This analysis is the first to assess the cost-effectiveness of treatments in mild-to-moderate OSAHS patients in France. The technical report of this research will be available on the HAS website at the time of the congress (November 2014).

**PSRS7** ECONOMIC EVALUATION OF OMALIZUMAB COMPARED WITH STANDARD TREATMENT IN THE TREATMENT OF SEVERE ALLERGIC ASTHMA IN ADULT PATIENTS IN GREECE: A COST-EFFECTIVENESS ANALYSIS BASED ON CLINICAL TRIAL AND REAL-WORLD DATA

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**OBJECTIVES:** To evaluate the potential economic impact of the 100% whey-based partially hydrolyzed infant formula (FH-W) in comparison with a control milk formula (SF) in the prevention of atopic dermatitis (AD) in at-risk children at the age periods 0–12 and 0–36 months in Russia. **METHODS:** The Excel model was constructed to estimate costs of artificial feeding with FH-W vs SF and expected AD cases treatment. The model was based on the results of meta-analysis of randomized controlled trials (RCTs), literature data and expert opinion to determine the costs of artificial feeding and AD treatment were calculated from the positions of different payers: health care system, family, and society as a whole. The incremental cost-effectiveness ratio (ICER) per prevented AD case was calculated for FH-W vs SF. **RESULTS:** From health care system point of view the use of FH-W uniquely lead to cost savings. If we consider all costs from the societal perspective FH-W vs SF requires additional costs in the first year of baby’s life, but in leads to cost savings in a 3-year horizon. From the perspective of the at-risk child’s family artificial feeding costs will increase from 266 to 408 Euro for FH-W vs SF. However the likelihood of AD development in a child will decrease from 15 to 8% in the first year and from 27 to 10% over three years and accordingly this will prevent AD treatment costs. **CONCLUSIONS:** Using FH-W for the AD prevention in high-risk children have benefits for both the health system and for individual family.