**PSS11**

**PREVALENCE OF ACNE VULGARIS IN EUROPE AND IMPACT OF LIFESTYLE FACTORS**

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**OBJECTIVES:** Acne vulgaris is one of the most common skin conditions, affecting primarily the adolescents. This disorder is characterized by an abnormal functioning of the pilosebaceous follicle causing different types of lesions. The objectives of the present study were to determine the prevalence of acne in adolescents in Europe and evaluate the impact of environmental and lifestyle factors on this condition. **METHODS:** A survey was conducted in a sample of individuals residing in Europe and aged 15 to 24. To ensure representativeness, the quota method was applied considering age, sex, residence location and occupational status of the reference person. Study participants were asked to complete a specifically developed questionnaire online, on two occasions separated by 6 months (not reported here). **RESULTS:** A total of 10 521 questionnaires were completed yielding an self-reported average prevalence of acne of 57.8% in European adolescents. However, there were variations across countries, prevalence rates ranged from 42.2% in Poland to 73.5% in Czech Republic and Slovakia. Results from a multivariate regression demonstrated that heredity is a risk factor for developing acne whereas age appears to be protective. Indeed, in all selected countries, a decrease in the prevalence of acne associated with age was observed. Highest rates were reported in the age group 15-17 and lowest in the age group 21-24. Among the lifestyle factors investigated, only tobacco and chocolate consumption were associated with acne. Indeed, the former seems to prevent acne whereas the latter was associated with a higher probability of experiencing the condition. **CONCLUSIONS:** The self-declared prevalence of acne is relatively high in European adolescents even if there are variations across countries. Heredity is the main identified risk factor for developing acne whereas age is negatively associated with the prevalence of this condition.

**PSS12**

**SUN EXPOSURE IN MEXICO: AN OBSERVATIONAL STUDY ON POPULATION HABITS AND KNOWLEDGE OF RISKS ASSOCIATED WITH SUCH EXPOSURE**

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**OBJECTIVES:** The incidence of malignant melanoma has increased in the recent years and the role of ultraviolet radiation (UV) in the disease process is well established. Indeed, epidemiological data supported that sun exposure and, more particularly sunburns during childhood are associated with a higher risk of developing melanoma. The present study aims at evaluating sun exposure habits in the Mexican population and at assessing, in this population, the knowledge of risks associated with such exposure. **METHODS:** A total of 400 dermatologists practicing in the 11 most important cities of Mexico have been selected to participate in the study. Over a period of one week, each year from 2011 to 2014, they submitted questionnaires to every consulting patient whichever the reason for the consultation. These self-administered questionnaires were completed by the patients and aim at collecting data on sun exposure and prevention habits in the population as well as at evaluating knowledge about risks associated with sun exposure. **RESULTS:** A total of 11841 questionnaires were completed. The mean age of the study population was 49.3 years and respondents were predominantly women (sex ratio 2:1). The majority of individuals reported usually staying in the sun less than 2 hours a day but exposed themselves between 11 am and 4pm. However, most people reported using sunscreen when going to the beach and protecting themselves with tee-shirts and/or sunglasses. Sunscreen was predominantly bought in pharmacies but most people applied it only once day. Regarding knowledge on the risks associated with sun exposure, the study highlighted many gaps, particularly concerning differences between UVA and UVB and their health consequences. **CONCLUSIONS:** Enhancing knowledge about the risks associated with sun exposure is essential because a better und-erstanding of these risks is key for modifying people habits and improving outcomes.

## SENSORY SYSTEMS DISORDERS – Cost Studies

**PSS13**

**BUDGET IMPACT MODEL OF OMALIZUMAB IN THE TREATMENT OF CHRONIC SPONTANEOUS URTICARIA IN ITALY**

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**OBJECTIVES:** A 3-year budget-impact model (BIM) was developed to estimate the impact on the Italian health care budget of introducing omalizumab for the treatment of patients with chronic spontaneous urticaria (CSU) with inadequate response to H1-antihistamines (licensed dose). **METHODS:** The model considered patients with CSU aged ≥12 years. The BIM was developed from the perspective of the Italian National Health Service (NHS). Only direct medical costs were considered: drug costs (omalizumab 300mg and H1-antihistamines), drug-related costs (administration, screening and monitoring) and disease-related costs (physician, emergency department and hospitalisation). Omalizumab 300mg uptake was assumed to be 10.9% in the first year, 17.5% in the second year and 28.6% in the third year (only treatments that would be substituted for omalizumab were included in the market treatment shares). Ex-factory prices (included all discounts) and National Tariffs were considered to estimate costs of drug and medical resource used, respectively. Costs were assessed in Euros (2015 values). **RESULTS:** The total number of patients treated in the first year was estimated to be 27,490, with 2,996 of those treated with omalizumab, increasing to a total of approximately 27,708 in the third year, with 7,925 receiving omalizumab. Considering only drug costs, the incremental budget impact of introducing omalizumab 300mg to the current market share was estimated to be €4.4 million in the first year, increasing to €11.7 million in the third year. Considering total direct medical costs, it was possible to show that part of the incremental drug costs of introducing omalizumab 300mg was offset by decrease in other resources: €1.4 million (total incremental budget) in the first year to €3.7 million in the third year. **CONCLUSIONS:** The use of omalizumab to treat CSU with inadequate response to H1-antihistamines increases drug and drug-related costs, but this is partially offset by reduced disease-related costs in omalizumab recipients.

**PSS14**

**BIOLOGIC TREATMENTS FOR MODERATE-SEVERE PSORIASIS. WHAT EFFICACY GIVES YOU, COST SHOULD NOT TAKE IT AWAY**

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**INTRODUCTION:** Superiority of secukinumab, reported in two head to head (H2H) trials, provided new horizons to stablish standard of efficacy (clear skin or at least PASI 90) for biologic treatments (Bx) for patients with moderate-severe psoriasis. The budget impact of new Bx might preclude its use, preventing that patients can have **OBJECTIVES:** To compare the cost-efficacy cost of Bx for moderate-severe psoriasis **METHODS:** We built an average cost-efficacy model represented by a decision tree for a time horizon 2 years. Efficacy was measured as the proportion of patients achieving at least PASI 90. Patients considered non-responders at week 10-16 (as per SmPC recommendations) were switched to another Bx (consecutive treatment). Efficacy was drawn from published clinical trials (CT). For secukinumab and ustekinumab, efficacy data came from CLEAR study (H2H study comparing efficacy of both Bx). Highest efficacy according CT's (week 24), was considered constant along the study period. Only pharmacologic costs were included in the analysis. Induction phase costs for the second Bx were ascribed to first Bx. Number Needed to Treat (NNT) and cost per patient achieving at least PASI 90, were calculated. **RESULTS:** Along 2 years, secukinumab monotherapy had the lowest NNT to achieve clear skin (NNT 1.39), followed by ustekinumab (2.44), infliximab (2.95), adalimumab (3.47) and etanercept (12.7). Out of the eleven most cost-efficacy consecutive treatments, secukinumab was present in 9, mainly as the first line Bx. **CONCLUSIONS:** Secukinumab had the lowest NNT to achieve at least PASI 90, with lower cost in the majority of alternatives analyzed. New standards of efficacy (cleasr skin or ar least PASI 90) are of paramount importance to achieve clear skin and better quality of life for patients. Economic analyses are also key for health care systems sustainability.

**PSS15**

**ECONOMIC BURDEN OF PNEUMOCOCCAL INFECTIONS IN CHILDREN UNDER FIVE YEARS OLD**

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**OBJECTIVES:** Knowing the economic burden of pneumococcal infections on healthcare system is important for disease control and prevention. We aimed to estimate the economic burden of pneumococcal infections in children <5 years old in Turkey. **METHODS:** Electronic medical records of children diagnosed with pneumonia, meningitis, and acute otitis media (AOM) between January 2013 and April 2014 were retrospectively evaluated. Children developed pneumonia 48 hours after hospitalization or hospitalized for ≥2 days in the last 90 days were excluded. Direct costs for inpatients (pneumonia and meningitis) included costs of healthcare services (hospitalization, visit, consultation, laboratory, radiology), drugs, and medical consumables. Direct costs for outpatients (AOM) included hospital visit and prescribed drug costs. Indirect costs for all patients included parents' productivity loss cost and their travel expenses to hospital. Costs were expressed as median (minimum-maximum). **RESULTS:** Data of 131 children with meningitis (n=10), pneumonia (n=53), and AOM (n=68) were analyzed. While the direct costs for meningitis, pneumonia, and AOM were €3,346.38 (€591.54-€42,940.02), €480.66 (€84.46-€18,627.56), and €335.89 (€57.07-€2,765.58), respectively, their indirect costs were €851.97 (€415.55-€8,319.34), €335.89 (€57.07-€2,765.58), and €96.91 (€96.91-€310,406.23), respectively. The total cost was €4,080.58 (€1007.1-€50,721.44) for meningitis, €838.84 (€141.53-€21,393.14) for pneumonia, and €114.49 (€112.56-€310,438.64) for AOM. The economic burden will be €9,258,836.02 for meningitis, €190,317,696.88 for pneumonia, and €286,225,000 for AOM when the total costs per patient are adjusted to the annual average number of patients with meningitis, pneumonia, and AOM was 2269; 226,882; and 2,500,000, respectively, in Turkey. Accordingly, the total economic burden of pneumococcal infections, excluding bacteremia, will be €485,801,532.9 in Turkey. **CONCLUSIONS:** Pneumococcal infections pose a significant burden on healthcare system due to its high direct and indirect costs. Thus, preventive actions, mainly vaccination, should be conducted regularly.

**PSS16**

**COMPARABLE ANALYSIS OF PRICES FOR FIRST STAGE OF DENTAL IMPLANTATION IN UKRAINE**

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**OBJECTIVES:** dental implantation significantly improves the quality of patients' life. However, it is an expensive treatment. We conducted our research to study the best price-quality relationship for dental implants made of different materials: titanium, zirconia and sandblasted and acid etched titanium implants. The objective of the present study was to analyze and compare prices for first stage implantation depending on the material of dental implant in ten private dental clinics in Ukraine. **METHODS:** We compared and analyzed the costs of first stage of dental implantation which was conducted in 10 private dental clinics in Ukraine during the period of 6 month (01 December 2014 - 31 May 2015). For that purpose we selected five leading manufacturers which produce dental implants. Prices for the technologies and materials were set by the Administration of Dental clinic. Statistical analysis of the costs was performed by a computer program x7 2009. **RESULTS:** The prices for implantation in ten private dental clinics were used for the comparative cost calculation of technologies with five different implants: one zirconia, one titanium and three sandblasted and acid etched titanium implants. According to our