reported approximately 20% impairment in productivity due to psoriasis. Twenty-six percent of the patients indicated psoriasis was the reason for altering their job type, description, or work responsibilities. Thirty-four percent of patients believed that their condition affected their choice of career or ability to find a job. Assuming patients were not paid during their absenteeism, absence from work resulted in lost mean patient wages of CDN $2,580.97 per person per year. With an estimated 330,000 Canadians suffering from moderate to severe psoriasis, total lost wages due to moderate to severe psoriasis may cost up to approximately CDN $852 million for all moderate to severe psoriasis patients in Canada. CONCLUSION: The results of this study indicate that moderate to severe psoriasis may have a substantial impact on the work productivity of patients with this disease. Further studies on lost productivity as well as societal impact of moderate to severe psoriasis are needed.

PSS44

USTEKINUMAB IMPROVES WORK PRODUCTIVITY AND DECREASES WORKDAYS MISSED DUE TO PSORIASIS IN PATIENTS WITH MODERATE TO SEVERE PSORIASIS

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OBJECTIVE: To examine the effect of ustekinumab on work productivity and the number of workdays missed due to psoriasis. METHODS: A total of 1,995 patients were enrolled in the PHOENIX I and II trials. Patients were randomized 1:1:1 to one of three groups: placebo, ustekinumab 45 mg, or ustekinumab 90 mg. In the ustekinumab groups, patients received treatment at weeks 0, 4, and every 12 weeks thereafter. Patients randomized to placebo at baseline crossed-over to receive either 45 mg or 90 mg of ustekinumab at weeks 12, 16, and every 12 weeks thereafter. Productivity was assessed using a 10 cm Visual Analog Scale (VAS), and change in productivity was recorded in cm units. Productivity and number of workdays missed due to psoriasis in the last 4 weeks was evaluated at weeks 0 and 12 in both trials. RESULTS: Mean and median baseline productivity scores and number of workdays missed due to psoriasis were similar between treatment groups at baseline. At week 12, the ustekinumab 45 mg and 90 mg groups had significantly greater improvements (p < 0.001) from baseline in productivity scores than the placebo group. The mean (median) change in productivity from baseline score at week 12 was −2.2 (−1.1) for the 45 mg group and −2.4 (−1.4) for the 90 mg group, compared with 0.0 (0.0) for the placebo group. The mean (median) change from baseline to week 12 in the number of workdays missed due to psoriasis in the last 4 weeks was 0.0 (0.0) in the placebo group, −0.2 (0.0) in the 45 mg group (p < 0.002), and −0.3 (0.0) in the 90 mg group (p = 0.002). This could translate to an annualized average reduction of missed workdays due to psoriasis of 2.6 days for the 45 mg group and 3.9 days for the 90 mg group. CONCLUSION: Ustekinumab 45 mg and 90 mg resulted in significantly improved productivity compared with placebo in moderate-to-severe psoriasis patients, as measured by the productivity VAS and workdays missed due to psoriasis.

PSS45

VALUE OF DRIVING FOR PATIENTS WITH GLAUCOMA: WILLINGNESS TO PAY

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OBJECTIVE: The loss of driving privileges in glaucoma patients has a significant impact on personal, social, and economic well-being. As a result, glaucoma patients are believed to highly value any intervention or pharmaceutical agent that can either preserve or extend visual acuity. The objective of this study was to assess the willingness to pay to maintain driving privileges in patients with glaucoma. METHODS: A mailed survey assessing glaucoma severity, current driving status and willingness to pay for additional years of driving privileges was sent to a random sample of 5,000 individuals. A contingent valuation scenario was posed to individuals as “Your physician tells you that there is a treatment available for glaucoma that will increase your chances to see for a longer period of time, and thus maintain your ability to drive independently. However, the treatment is not covered by your insurer. If you had to make a decision today, what is the maximum amount you would be willing to pay for the treatment in order to maintain driving privileges for one more year?” RESULTS: A total of 2,009 individuals completed the survey for a 40% response rate. The majority of the responders were women (70%) and the mean age of the population was 60.5 (SD = 16.5) years. Over 60% of individuals rated their glaucoma as mild and 73% of individuals reported that they still drive. Approximately 43% of responders replied that they would pay up to $50,000 for one additional year of driving privileges. CONCLUSION: Driving privileges and personal independence are highly valued by older individuals. In order to maintain their driving privileges and personal independence, older individuals are willing to pay a substantial amount of money to improve visual acuity.

PSS46

SENSORY SYSTEMS DISORDERS—Health Care Use & Policy Studies

PROSTAGLANDIN ANALOG USE WITH AND WITHOUT ADJUNCTIVE THERAPY FOR THE TREATMENT OF GLAUCOMA: A NETHERLANDS POPULATION BASED ANALYSIS

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OBJECTIVES: Glaucoma is an optic neuropathy associated with visual field loss. Currently, treatment for glaucoma is focused on controlling intraocular pressure. First-line treatment typically involves ß-blockers or prostaglandin analogs (PAs), ß-blockers and other intraocular pressure lowering agents (IOPLAs) may be used as adjunctive therapy to prosta glandins. We quantified the use of adjunctive therapy in association with prostaglandins. METHODS: We conducted a cohort study using pharmacy dispensing data from The Netherlands using the PHARMO database. We identified all patients with a first dispensing for bimatoprost, latanoprost or travoprost between January 2, 1998 and July 1, 2006, and determined the proportions of patients who received adjunctive therapy in the first 12 months of prosta glandin use. Use of adjunctive therapy was identified by at least

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one intermittent dispensing of any IHOPA other than PAs in the 12-month follow-up period from their first prostaglandin dispensing. Rates were compared across the three prostaglandin analogs using chi-square tests. Statistical and descriptive analyses were performed using SAS 9.1. RESULTS: In total, 9402 patients were included, aged 70 (±SD = 12) years, 56% were female. The proportions of patients requiring adjunctive therapy were 31%, 42%, and 31% for bimatoprost, latanoprost and travoprost, respectively. A significantly higher proportion of adjunctive therapy was associated with latanoprost users (bimatoprost vs. latanoprost: Chi-square = 26.59, p < 0.001; travoprost vs. latanoprost: Chi-square = 19.82, p < 0.001). Bimatoprost and travoprost did not differ Chi-square = 0.01, p = 0.94). CONCLUSIONS: Approximately 40% of continuous prostaglandin users required adjunctive therapy in the first 12 months. The latanoprost cohort had the highest rate of adjunctive therapy. Higher rates of adjunctive therapy use may result in higher overall patient care costs.

PSS47
AN OBSERVATIONAL DATABASE ANALYSIS OF TREATMENT PATTERNS OF PATIENTS WITH PSORIASIS
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OBJECTIVE: The objective of this retrospective cohort study is to understand current treatment patterns of patients with psoriasis. METHODS: A total of 56,871 patients diagnosed with psoriasis (ICD 9: 696.0, 696.1) between index month of June 2005 and March 2007 were selected from the Pharmetrics® database. Patients with comorbid psoriatic arthritis and/or rheumatoid arthritis were excluded leaving a sample of 50,075 psoriasis only patients. Patients included had at least 12-month follow-up as well as a minimum 2-year history. Treatments included biologic agents (Amevive, Enbrel, Remicade, Raptiva and Humira), systemic therapies (methotrexate, acitretin, PUVA, cyclosporine and other systemic therapies), topicals, and light UVB therapy. Patients were classified as “biologic naive” or “biologic experienced” based on their exposure to the biologic therapies. Patient treatment dynamics (switching, drop-off therapy, intermittent and continuous use etc.) were analyzed based on a 12-month follow up period. RESULTS: A total of 34.6% of the cohort was newly diagnosed with psoriasis (after the index month of June 2005). About 28% of all patients with psoriasis only were currently on treatment. Topical therapy only was dominant accounting for 72% of all currently treated patients. Biologic use was observed in <10% of currently treated patients with Enbrel as the clear market leader accounting for >80% of all biologic usage. Raptiva was a distant second at 12%. Analysis of treatment dynamics over a 12-month follow up period revealed a 35% growth in the biologic exposed population primarily due to the flow of “biologic naive” patients to their first biologic therapy. The persistency of Enbrel (67%) and Raptiva (64%) were lower than that of Remicade (80%). Switching patterns showed limited sequential use of biologics over a 12-month period. CONCLUSION: Use of biologic therapies is currently limited but growing at a rate of 35%. Enbrel is the market leader and Humira is the fastest growing biologic in this market.

PSS48
HEALTH CARE COSTS INCREASE IN THE YEAR FOLLOWING A DIAGNOSIS OF PSORIASIS
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OBJECTIVE: To evaluate the impact of psoriasis (PsO) on health care costs in the first year after diagnosis. METHODS: A retrospective study of the PharMetrics database, compiled from managed care plans throughout the United States, from January 1, 2000 through December 31, 2006 was conducted. Patients between the ages of 18 to 80 years, who had a minimum of 12 months of continuous enrollment before and after their index diagnosis with PsO were included. The index diagnosis date was derived from the first claim for PsO during the study period. Health care costs in the years prior to and subsequent to the diagnosis of PsO were compared. Wilcoxon Signed-Rank Tests were used to test for significant differences between pre- and post-index periods. The cost of adverse events could not be identified separately in this study. RESULTS: The study cohort included 48,068 patients; 52.3% were females and the mean age was 46.3 years. The total health care costs increased by 32.73% ($4,834.22 to $6,416.52). The largest cost increase was for inpatient care (31.8%), followed by pharmacy costs (25.6%), physician visits (19.7%), outpatient care (11.1%), other services (8.9%), emergency room (1.3%) and laboratory services (1.4%). About 75% of the cost increase was for non-pharmacy related services. All the changes in costs were statistically significant (p < 0.001) after the adjustment for inflation. CONCLUSION: This study indicates that following a diagnosis of PsO, health care costs in the first year after such a diagnosis increases significantly. The greatest increase in costs was for inpatient care, and it is notable that 75% of the increased costs were for non-pharmacy related services. Additional studies are needed to further explore the reasons for this large increase in the cost of treating patients in the first year after a diagnosis of PsO.

PSS49
HEALTH CARE UTILIZATION INCREASES IN THE YEAR FOLLOWING A DIAGNOSIS OF PSORIASIS
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OBJECTIVE: To evaluate the impact of psoriasis (PsO) on health care utilization and average costs in the first year after diagnosis. METHODS: A retrospective study of the PharMetrics database, compiled from managed care plans throughout the United States, from January 1, 2000 through December 31, 2006 was conducted. Patients between the ages of 18 to 80 years, who had a minimum of 12 months of continuous enrollment before and after their initial diagnosis with PsO, were included. The index diagnosis date was derived from the first claim for PsO during the study period. RESULTS: The study cohort included 48,068 patients; 52.3% were female, and the mean age was 46.3 years. Compared with one year prior to the diagnosis, the average cost of treating patients in the year after the diagnosis of PsO was 33% greater (p < 0.0001). Post-diagnosis utilization increased by 2.77 physician visits (mean of 8.44 to 11.21), 1.92 prescriptions (mean of 9.56 to 11.48), 0.34 outpatient visit (mean of 1.39 to 1.73), 0.22 laboratory service (mean of 0.94 to 1.16), 0.02 inpatient stay (mean of 0.13 to 0.15), and 0.02 emergency room visit (mean of 0.18 to 0.20). Also, the inpatient length of stay increased by 0.34 day (mean of 1.39 to 1.73). All changes were statistically significant with Wilcoxon Signed-Rank Tests (p < 0.001). CONCLUSION: This study indicates that following a diagnosis of PsO, health care utilization and average costs in the first year after such a diagnosis increases significantly. While we found that the greatest increase occurred in the number of physician office visits, additional studies are needed to further explore the reasons for the large increase (33%) in the cost of treating patients in the first year after a diagnosis of PsO.