Outcomes Studies

EAR/EYE/SKIN DISEASES OR DISORDERS—Clinical

Outcomes Studies

PATIENTS’ PERSISTENCE AND ADHERENCE WITH GLAUCOMA THERAPY: A LONGITUDINAL RETROSPECTIVE DATABASE ANALYSIS OF OPHTHALMIC LIPIDS

Wait 1, Kline SE 2, Carlson A 3, Trygstad GJ 3, Ravelo A 1

1 Allergan, Irvine, CA, USA; 2 IMS Health, Plymouth Meeting, PA, USA; 3 Data Intelligence Consultants LLC, Eden Prairie, MN, USA

OBJECTIVE: This study examined the persistence and adherence for patients using latanoprost, travoprost, and bimatoprost across multiple health plans over 12 months. METHODS: Glaucoma patients were identified from an employer-based database covering 1.8 million lives in 40 health plans. Patients with a glaucoma medical claim and a pharmacy claim for latanoprost, travoprost, or bimatoprost from September 31, 2001 through March 31, 2002 were eligible for study entry. Continuous eligibility was required 180 days prior to the index date, defined as the date of the first prescription claim for an ophthalmic drug of interest, with no evidence of ophthalmic drug use during that time. These patients were defined as “new therapy starts”. Persistence at 12 months and number of days of adherence was determined for new starts with at least 3 months of therapy following the index date. Due to potential inconsistencies with days supply reporting at the pharmacy level, a clinical algorithm was developed to compute days on therapy. RESULTS: At total of 3822 glaucoma patients were identified with at least one claim for latanoprost, travoprost, or bimatoprost. Patients were on average 73.1 years (SD = 10.1, range = 15–88) and 53.1% female. A total of 2666 (69.8%) completed the first three months. A total of 70.1% were persistent with therapy at 12 months and were adherent 83.1% of the time. Using the quantity dispensed and the number of days between refills yielded 8 days of therapy per 1-mL of ophthalmic solution. The mean number of days on therapy for bimatoprost was significantly greater than latanoprost (p < 0.05). CONCLUSIONS: This retrospective database analysis assessed persistence and adherence for glaucoma patients using latanoprost, travoprost, and bimatoprost for 12 months. Although most patients were persistent and adherent to their therapy for at least 3 months and then at 12 months there may still be opportunities to improve persistence and adherence with these important ophthalmic therapies.

MEDICATION ADHERENCE RATES AND DISEASE SEVERITY CHANGES IN PSORIASIS

Balkrishnan R 1, Carroll CL 2, Camacho F 3, Feldman S 2

1 University of Texas School of Public Health, Houston, TX, USA; 2 Wake Forest University School of Medicine, Winston-Salem, NC, USA

OBJECTIVE: It is a commonly known fact among physicians that patients are non-adherent to medication regimens. In dermatology, there has been little study into the issue of medication non-adherence. This study examined trends in adherence behavior (measured electronically) to topical medication regimen over time in patients with psoriasis enrolled in a clinical study. Additionally, the association between adherence behavior and changes in severity of psoriasis was explored. METHODS: Twenty four subjects with psoriasis that were already enrolled in an 8-week study with salicylic acid and topical tacrolimus ointment combination therapy were given the salicylic acid in a bottle with the Medication Event Monitoring System (MEMS) cap. Electronic medication adherence was downloaded from the cap to a computer at each follow up visit. The primary outcome was the difference in the change from baseline in the disease severity (sum score of erythema, scale and thickness scores). RESULTS: Over the 8 week period the overall adherence rates declined by 50% from 75.6% to 51%. A significant correlation was found between increased adherence and decreased disease severity summary score in the first week of treatment (Pearson’s rho = -0.42, p = 0.02), after accounting for treatment effect. This relationship did not persist after week 1. CONCLUSIONS: The precipitous decrease in psoriasis medication adherence rates, even in clinical study settings is cause for concern. Benefits from these medications may decrease as a result of decreased adherence to prescribed regimens over time.

PRIOR AUTHORIZATION OF TOPICAL RETINOIDS NEEDED? EVIDENCE FROM OUTPATIENT US NATIONAL PRACTICE DATA

Balkrishnan R 1, Shenolikar R 1, Sansbury JC 2, Feldman S 2

1 University of Texas School of Public Health, Houston, TX, USA; 2 Wake Forest University School of Medicine, Winston-Salem, NC, USA

OBJECTIVE: Fears of potentially costly use of topical retinoids for cosmetic treatment of photodamaged skin has resulted in many managed care organizations placing prior authorization requirements on this class of medications. The purpose of this investigation was to examine whether prescribing patterns of a nationally representative sample of US physicians shed light on potential inappropriate use of topical retinoids. METHODS: A retrospective, cross-sectional study of data from the National Ambulatory Medical Care Survey (1996–2000) was used to determine the impact of patient diagnosis of acne on the probability of retinoid prescription were examined in weighted multivariate logistic regression models. RESULTS: Topical retinoids were prescribed in 0.4% of the 3.67 billion visits for any diagnosis from 1996–2000, and in nearly 31% of the visits for 38.7 million visits for acne. The study found that there was negligible prescription of topical retinoids for non-acne related conditions (Risk Ratio [RR] for topical retinoid prescription with acne diagnosis: 58.8, 95% CI: 33.4, 103.7). This finding held when individual retinoids (tretinoin and adapalene) were examined separately. Clear age-related prescription trends were observed, with significant decrease in prescriptions beyond the teen years. CONCLUSIONS: The data do not support a need for general prior authorization of topical retinoids. Prior authorization requirements for topical retinoids may not be necessary in young patients, given the very small probability of non-acne related use. In older patients, prior authorization, if needed at all, should focus only on those topical retinoids for which there is evidence of efficacy in treatment of cosmetic photoaging.