**OBJECTIVES:** To estimate the annual number and frequency of medical consultations for EGW in dermatology, gynecology, proctology and in Sexually Transmitted Disease Clinics (STDC) in France. **METHODS:** This is an observational study with patients recruited prospectively from representative physicians samples. Data related to the management of EGW was retrieved for all patients suffering from EGW and willing to take part in the study, during one 2-week period in June 2004. **RESULTS:** The patients (n = 308) were recruited by the physician sample that included 198 gynecologists, 102 dermatologists, 50 proctologists and 122 physicians working in 51 STDCs. The annual number of consultations for EGW is estimated at 423,751 (36% for dermatologists, 53% for gynecologists, 6% for proctologists, 5% in STDC). The annual number of visits for a new episode of EGW amounted to 160,247, representing 38% of the consultations. The annual frequency of consultation is 1,1 to 1.4% for dermatologists and gynecologists and 4.4% to 5.1% for proctologists. Almost half of the patients (43%) were seeking care because of an EGW recurrence. EGW are treated using pharmacological treatments and in-office procedures (electrocoagulation, cryotherapy, surgery, laser). Imiquimod treatment is used as first-line therapy is 40% of patients with a first episode of EGW and in 38% of patients presenting for an EGW recurrence. **CONCLUSION:** Gynecologists are the most consulted specialists for EGW and proctologists have the highest annual frequency of consultation. Various treatments are used to manage EGW patients.

### EXAMINATION OF ADHERENCE TO PHARMACOTHERAPY TREATMENT GUIDELINES IN PATIENTS WITH PSORIASIS IN THE UNITED STATES

Kulkarni A[1], Horn E[2], Balkrishnan R[1], Feldman S[3]
[1]Ohio State University College of Pharmacy, Columbus, OH, USA; [2]National Psoriasis Foundation, Portland, OR, USA; [3]Wake Forest University School of Medicine, Winston Salem, NC, USA

**OBJECTIVE:** The American Academy of Dermatology guidelines provide a standard for appropriate pharmacological therapy in psoriasis treatment. This survey study examined if patients with severe psoriasis were on appropriate medications. **METHODS:** A survey for this study was conducted by the National Psoriasis Foundation between November and December 2004. A total of 400 interviews (telephone n = 188 and online n = 212) were held with psoriasis and psoriatic arthritis respondents. The respondents were asked questions regarding their psoriasis. Some of these pertained to the type of medication participants were currently using. Respondents chosen from a random sample were screened for a mix of gender and age. Severity was categorized according to self-reported body surface area involvement. Descriptive data were generated to determine demographic characteristics of study population and prescription patterns. **RESULTS:** Approximately 55% of the population had severe psoriasis. Almost 50% of the population was on topical therapy while 32% of the study sample was using systemic medications for their psoriasis. About 19% of the study population indicated that they were currently not on any treatment. Almost 54% of these were suffering from severe psoriasis. A total of 157 patients with severe psoriasis were on some form of topical therapy, however, only 63 of these were on concurrent recommended systemic therapy. As much as 60% of the patients with severe psoriasis were on some form of topical therapy alone to treat their psoriasis. **CONCLUSIONS:** Even with such easily accessible guidelines in place, this study finds that there are several people suffering from severe psoriasis that are not on the recommended therapy in the United States. There remains a need to inform both the patients and physicians about

appropriate pharmacotherapy to avoid further worsening of health status of the patients involved.

### PATTERNS OF TOPICAL ACNE PRESCRIPTION MEDICATION USE: ANALYSIS OF A LARGE-SCALE RETROSPECTIVE CLAIMS DATABASE

Hankin C[1], Patel BV[2], Leslie S[2], Gyang E[1]
[1]BioMedEcon, LLC, Moss Beach, CA, USA; [2]MedImpact Healthcare Systems, Inc, San Diego, CA, USA

**OBJECTIVES:** To examine one-year patterns of topical acne prescription medication use among enrollees of a US national pharmacy benefits management system. **METHODS:** We conducted a one-year, retrospective, longitudinal cohort study of pharmacy claims (i.e., prescription fills) for topical acne prescription medications among continuously enrolled patients with at least one claim for: retinoids (tazarotene, retinoic acid) or antimicrobials (erythromycin, erythromycin with benzoyl peroxide, clindamycin, clindamycin with benzoyl peroxide, azelaic acid, sulfacetamide, benzoyl peroxide). We examined patient characteristics (age, gender), proportion of patients using topical medications as monotherapy or in combination with other targeted medications, and average number of targeted medication claims per patient. **RESULTS:** Among 76,407 identified patients, 11.4% were under age 14, 35.3% age 14 to 17 years, 19.1% age 18 to 24 years, 9.2% age 25 to 31 years, 8.3% age 32 to 38 years, 6.9% age 39 to 45 years, and 9.8% over 45 years. Sixty-four percent were female. Three quarters (74%) of patients used only one targeted topical acne medication (i.e., monotherapy) throughout the index year. Among patients receiving monotherapy, total average number of claims was 2.3 (erythromycin, 1.7 claims; erythromycin with benzoyl peroxide, 2.4; clindamycin 2.8; clindamycin with benzoyl peroxide 2.7; azelaic acid, 2.3; benzoyl peroxide, 2.8; sulfacetamide, 1.9; retinoids, 2.0). Among patients receiving combined therapy, total average number of antimicrobial claims was 2.2 and total number of retinoid claims was also 2.2 Number of claims, types of topical acne prescription medications, and other patterns of use did not significantly differ by age or gender. **CONCLUSIONS:** Overall, patients had approximately two targeted prescriptions fills over a one-year index period. Rates of prescription fills did not differ by class of medication, patient age, or gender. Assumptions that females or older patients are more compliant with their topical prescription acne regimens were not supported by our findings.

### THE RISE OF THE GENERIC DRUG MARKET: IMPLICATIONS FOR THE TREATMENT OF SKIN DISEASES

Bhosle M[1], Balkrishnan R[1], Feldman S[2]
[1]Ohio State University College of Pharmacy, Columbus, OH, USA; [2]Wake Forest University School of Medicine, Winston Salem, NC, USA

**OBJECTIVE:** In spite of a significant growth in comparatively inexpensive generic medications, the bioavailability concerns associated with dermatological drugs make the generic substitution practices controversial for skin conditions. The objective of this study was to analyze the trends in branded and generic drugs used in dermatological conditions from 1990–2003. It also analyzed the overall trend in branded and generic drugs in the United States. **METHODS:** A number of summary databases including the National Ambulatory Medical Care Survey (NAMCS), NDC Health Corporation's Pharmaceutical Audit Suite (PHAST) database, and the Food and Drug Administration resources from 1990–2003 were analyzed to obtain and compare information on the manufacturing, production, patents and prescription of branded and generic drugs. These data were examined to

examine which drugs had generic equivalents available for each year. The Pharmaceutical Red Book was referred for drug pricing and product information. **RESULTS:** Generic drugs accounted for almost half of total prescription drugs dispensed in 2003 as compared to 19% in 1983. In 1990, two of the ten drugs prescribed in outpatient clinics were generics, which rose to six in 2003. Out of ten top-selling drugs, six drugs will lose their patents in next five years. In 1990, none of the top ten dermatological drugs were generics. With few drugs losing their patents since 1990 (e.g. Retin-A®), two out of top ten dermatological drugs were generics in 2003. **CONCLUSIONS:** This study finds an increasing trend in the availability of generic medications. However, concerns regarding the bioavailability of generic equivalents used in dermatological conditions may limit their use. However, increased pressure from managed care organizations to prescribe inexpensive generics, overall growth in generic drug market, and anticipated drug patent expirations may influence prescribing patterns of these medications.

### PREDICTORS OF HEALTH CARE OUTCOMES AND COSTS RELATED TO MEDICATION USE IN PATIENTS WITH ACNE IN THE UNITED STATES

Balkrishnan R[1], Kulkarni A[1], Feldman S[2]
[1]Ohio State University College of Pharmacy, Columbus, OH, USA; [2]Wake Forest University School of Medicine, Winston Salem, NC, USA

**OBJECTIVE:** To investigate the relationship between health status, costs linked with the treatment of acne in the United States and aspects related to medication use. **METHODS:** The United States Medical Expenditure Panel Survey (MEPS) database was analyzed for a cohort of people with acne. Patients for this study were identified using the ICD-9 (International Classification of Diseases, 9th revision) code "706" for acne vulgaris and similar conditions (The MEPS dataset uses only the first three digits of the ICD-9 codes to identify disease states). Records of medical events were obtained using this ICD-9 code for acne and the receipt of medication for acne. This cross sectional study obtained costs, demographics, health care service utilization and clinical patient variables from the MEPS database. The subjects were divided into categories depending on type of medications used, mainly, oral antibiotics, oral retinoids, oral contraceptives, topical antibiotics, topical retinoids and oral contraceptives. The EuroQOL (EQ-5D) scores available in MEPS for subjects 18 years and older were used for obtaining health status information for these patients. Indices for medication adherence and comorbidities were also calculated using the data from the MEPS. Multivariate weighted analysis was performed on data for approximately 5 million patients (weighted sample size). **RESULTS:** Nearly 70% of the patients used some type of medication for acne. Acne-related medication accounted for approximately 36% of the total acne related health care costs, with an average of 2 annual acne prescription refills. Increased number of refills of acne specific drugs was associated with an improvement in health status (p < 0.05). Increased office based visits were the only predictors of higher acne related health care costs (p < 0.01). **CONCLUSIONS:** Adherence to acne medications is an important component of better health status. Pharmacological treatment of acne does not significantly add to acne-related health care costs.

### NAIL PSORIASIS: ELABORATION OF A SCALE FOR FUNCTIONAL DISCOMFORT

Taieb C[1], Corvest M[2], Voisard J[3], Marionneau N[1], Myon E[1]
[1]Pierre Fabre, Boulogne-Billancourt, France; [2]APLCP, Vannes, France; [3]Pierre Fabre Dermatologie, Lavaur, France

**OBJECTIVES:** To validate a scale for functional discomfort due to nail psoriasis. The questionnaire will have to be adapted both in the case of toe or finger nail psoriasis. The measured criterion will be unidimensional and related to the bother caused by nail psoriasis in daily life. **METHODS:** The scale was developed according to the international recommendations on quality of life. In October 2004, a questionnaire was sent to 4000 members, selected by drawing lots, among the French patients support group (APLCP). The first step of the process has led to the selection of 10 items related to functional discomfort induced by nail psoriasis. **RESULTS:** In total, 795 questionnaires concerning individuals affected by nail psoriasis were analysed. Validation analyses included the 10 selected items. Questionnaire's contents were coherent with the a-Cronbach coefficient equaling 0.88. The unidimensional feature of the questionnaire was verified: the analysis in principal components revealed that 49% of the total variance was explained by one component. The DLQI specific to dermatological pathologies was also given and enabled a comparison with the scale. Pearson's correlation coefficient between both scales was 0.48. The severity of the affection assessed through the DLQI evolved in the same way as the evaluation for the "Nail Psoriasis" scale. A test-retest performed on a sample of 15 individuals showed that the scale could be reproduced with an intra-class correlation coefficient of 0.82 between 2 administrations. **CONCLUSION:** The "Nail Psoriasis" scale is simple to use and easy to give to the patient. The qualitative features which must be found in a quality of life scale have been checked: comprehensibility, reliability and validity. The scale will have to be used during clinical trials in order to demonstrate its ability in measuring change in condition (before and after treatment).

### REFINEMENT AND REDUCTION OF THE IMPACT OF PSORIASIS QUESTIONNAIRE: CLASSICAL TEST THEORY VS RASCH ANALYSIS

Nijsten T[1], Unaeze J[2], Stern RS[3]
[1]University Hospital of Antwerp, Edegem, Belgium; [2]Harvard medical school, Boston, MA, USA; [3]Beth Israel Deaconess Medical Center, Harvard Medical school, Boston, MA, USA

Quality of life instruments are increasingly important in assessing disease severity. However, some of these measurements have been developed on a more or less ad hoc basis. Although not well standardised, psychometric analyses can be used to re-test, refine and shorten existing quality of life instruments more strictly. **OBJECTIVES:** To psychometrically test and refine the Impact of Psoriasis Questionnaire (IPSO) and to compare the results of two different statistical approaches. **METHODS:** Among 792 psoriasis patients who were included in the PUVA Follow Up Study, we used Classical Test Theory (CTT) and Rasch analysis to test and optimise the IPSO. Thereafter, two shortened versions of the IPSO derived from these models were compared. **RESULTS:** CTT analyses of the original IPSO demonstrated suboptimal item performance for 6 of 16 items and inappropriate subscaling. In contrast to the original 4 subscales, factor analysis of the CTT version yielded 3 subscales (mental functioning, mental wellbeing and stigmatisation). The Rasch approach, which included ordering of thresholds, differential item functioning and item fit, resulted in an unidimensional 11-