Penn Medicine
DERMATOLOGY
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DCERN Newsletter

Dermatology Clinical Effectiveness Research Network

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Inside this Issue:

Our latest DCERN publication…

Variation in Dermatologist Beliefs about the Safety and Effectiveness of Treatments for Moderate to Severe Psoriasis

This study sought to describe the variation in dermatologist's beliefs about the safety and effectiveness of psoriasis treatments and to evaluate how these relate to dermatologist characteristics and treatment preferences. A cross-sectional mail survey of a random sample of 500 National Psoriasis Foundation (NPF) members and 500 American Academy of Dermatology (AAD) members who treat psoriasis was conducted. Of the 989 clinicians who could be contacted, 246 NPF members and 141 AAD members returned the survey (39% response rate). Respondents perceived infliximab, ustekinumab, cyclosporine, and adalimumab to have the highest likelihood of skin clearance in 3 months (67%-75%). Etanercept, adalimumab, ultraviolet B, and ustekinumab had the lowest perceived likelihood of side effects requiring treatment discontinuation (9%-11%). Up to 49% of respondents "didn't know" the effectiveness or likelihood of side effects; calculated coefficients of variation were higher for perceived likelihood of side effects than perceived effectiveness. There were few significant associations between safety and effectiveness perceptions and respondent characteristics, and treatment preferences were not consistently predictive of perceptions. Psoriasis providers demonstrate wide variation in their perception of the effectiveness and especially safety of systemic treatments.

Abuabara K, Wan J, Troxel AB, Shin DB, Van Voorhees AS, Bebo BF, Jr., et al. Variation in dermatologist beliefs about the safety and effectiveness of treatments for moderate to severe psoriasis. Journal of the American Academy of Dermatology. 2012. Epub 2012/08/23

Newest DCERN study: Vascular Inflammation in Psoriasis (VIP) Trial

ViP
Vascular Inflammation in Psoriasis Trial

Purpose of this study:

- Assess the effect of Adalimumab (Humira) when compared to phototherapy or placebo injection.
- Compare the effects of each treatment on systemic inflammation and cardiovascular disease risk factors in subjects diagnosed with moderate to severe psoriasis.
- This study will look for systemic vascular inflammation in subjects enrolled in this study, with a test called FDG-PET/CT (Fluorodeoxyglucose-positron emission tomography computed tomography).

For more information, please visit:
http://clinicaltrials.gov/ct2/show/NCT01553058?term=814278&rank=1

Site Showcase:

University of Utah
Kristina Callis Duffin, MD
Gerald Krueger, MD

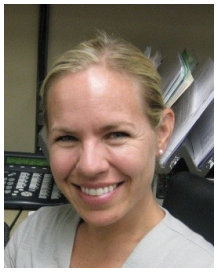
Gerald Krueger, MD is a dermatology, board certified, who joined the University of Utah School of Medicine in 1972. Dr. Krueger served as the principal investigator for over 100 clinical trials (mostly psoriasis), for the past 30 years. His current basic research is focused on identifying unique clinical phenotypes and their associated features, and on identifying genes/gene-sets that associate with or are causative of phenotypes unique to psoriasis. Dr. Krueger and Dr Callis Duffin started the Utah Psoriasis Initiative with the goal of creating a registry of patients with psoriasis. He recently completed a 10-year term as chairman of the Medical Advisory Board of the National Psoriasis Foundation and continues to serve on the executive committee of the Dermatology Foundation.

Kristina Callis Duffin, MD is an Assistant Professor of Dermatology at the University of Utah. She is board-certified in Dermatology and Internal Medicine. Her primary clinical focus is the management of psoriasis with all types of therapeutics, including phototherapy, systemic agents, biologics, and investigational agents. Dr. Duffin's research interests include medical co-morbidities of psoriasis, clinical trials of psoriasis therapeutics, and psoriasis outcomes measures. She is the co-director of the Utah Psoriasis Initiative, a research project aimed at correlating the phenotypic and genotypic features of psoriasis. Dr. Duffin has participated as Principal or Sub-investigator in over 40 clinical trials, mostly for therapeutic agents for psoriasis.

Liamara Stapley has been with the Department of Dermatology since 2006. She oversees data entry and ensures data purity by resolving queries for clinical trials and clinical registries. She is also responsible for clinical study blood sample processing and shipping as well as laboratory result filing.

Melissa Weidner RN BSN, head clinical coordinator has over 25 years experience in clinical trials for psoriasis and is certified as a clinical coordinator. She started in Dermatology studies when they were still conducting topical cortisone studies and is delighted by the advent of the biologics. She is gratified to work with the team of psoriasis specialists that have been assembled in this Department.

Michael Caglia, MD is a Research Fellow at the Utah Psoriasis Initiative. After completing an internship at Johns Hopkins in Baltimore, MD, Dr. Caglia returned to San Diego where he did a research fellowship in Pediatric Dermatology at the University of California, San Diego.



Sasha Hamel has over 5 years of experience working as a study coordinator. Her primary experience has been working on phase 1 and 2 oncology trials. She joined the department of dermatology this year and is excited to expand her clinical trials experience.

Rosemary deShazo, MD has been working in the University of Utah Department of Dermatology for just over one year. She participates as a sub-investigator in the department's ongoing psoriasis clinical trials, as well as her own academic pursuits.

Kristine VanAusdal is a financial analyst and has been managing the department's research funding, budgets etc. for nine years. Kristine manages several grants and is a great asset to the team.

We are happy to be part of this project and look forward to your continued participation!

DCERN Publications

Patient-Reported Reasons for the Discontinuation of Commonly Used Treatments for Moderate to Severe Psoriasis.

Despite widespread dissatisfaction and low treatment persistence in moderate to severe psoriasis, patients' reasons behind treatment discontinuation remain poorly understood. This study sought to characterize patient-reported reasons for discontinuing commonly used treatments for moderate to severe psoriasis in real-world clinical practice. A total of 1095 patients with moderate to severe plaque psoriasis from 10 dermatology practices who received systemic treatments completed a structured interview. Eleven reasons for treatment discontinuation were assessed for all past treatments. A total of 2231 past treatments were reported. Median treatment duration varied by treatment, ranging from 6.0 to 20.5 months ($P < .001$). The frequency of each cited discontinuation reasons differed by treatment (all $P < .01$). Patients who received etanercept and adalimumab were more likely to cite a loss of efficacy than those who received Methotrexate. Patients who received etanercept, adalimumab, and ultraviolet B phototherapy were less likely to cite side effects than those who received Methotrexate, whereas those who received acitretin were more likely to do so. Patients who underwent ultraviolet B phototherapy were more likely to cite an inability to afford treatment. Different patterns of treatment discontinuation reasons are important to consider when developing public policy and evidence-based treatment approaches to improve successful long-term psoriasis control.

Yeung H, Wan J, Van Voorhees AS, Callis Duffin K, Krueger GG, Kalb RE, et al. Patient-reported reasons for the discontinuation of commonly used treatments for moderate to severe psoriasis. Journal of the American Academy of Dermatology. 2012. Epub 2012/08/01

Comparative Effectiveness of Commonly Used Systemic Treatments or Phototherapy for Moderate to Severe Plaque Psoriasis in the Clinical Practice Setting.

The effectiveness of psoriasis therapies in clinical practice may be lower than that reported in previous trials. Although relative differences in objective response rates among therapies may exist, absolute differences are small and may not be clinically significant. Dosing of common therapies varied from trial recommendations. The proportion of patients with clear or almost clear ratings on the Physician Global Assessment scale differed among treatments: Methotrexate (23.8%), adalimumab (47.7%), etanercept (34.2%), ustekinumab (36.1%), and narrowband UV-B (27.6%) ($P < .001$). In adjusted analyses, patients receiving adalimumab (relative response rate, 2.15; 95% CI, 1.60-2.90), etanercept (1.45; 1.06-1.97), and ustekinumab (1.57; 1.06-2.32) were more likely to have clear or almost clear skin vs. patients receiving Methotrexate. Patients receiving phototherapy showed no significant difference (1.35; 95% CI, 0.93-1.96) compared with those receiving Methotrexate. No response difference was observed with respect to quality of life. Treatment doses were double the recommended doses in 36.1% of patients taking etanercept and 11.8% of those taking adalimumab; 10.6% of patients undergoing phototherapy received the recommended treatment frequency

Gelfand JM, Wan J, Callis Duffin K, Krueger GG, Kalb RE, Weisman JD, et al. Comparative effectiveness of commonly used systemic treatments or phototherapy for moderate to severe plaque psoriasis in the clinical practice setting. Archives of dermatology. 2012;148(4):487-94. Epub 2012/04/18

Dermatologists Preferences for Treatments to Compare in Future Randomized Controlled Comparative Effectiveness Trials for Moderate-to-Severe Psoriasis

The treatments dermatologists most wanted to compare in an RCT were etanercept (58.7% [95% CI, 53.6%-63.6%]), adalimumab (50.9% [95% CI, 45.8%-56.0%]), ustekinumab (50.1% [95% CI, 45.0%-55.2%]), and Methotrexate (45.5% [95% CI, 40.4%-50.6%]). When preferences were stratified by provider characteristics, including sex, NPF vs. AAD membership, geographic region, duration of practice, practice type, patient volume, and infusion center affiliation, the top 4 overall treatments remained the same, although the order of treatments within the top 4 occasionally differed .

Wan J, Abuabara K, Troxel AB, Shin DB, Van Voorhees AS, Bebo BF, Jr., et al. Dermatologist preferences for treatments to compare in future randomized controlled comparative effectiveness trials for moderate to severe psoriasis. Archives of dermatology.2012;148(4):539-41. Epub 2012/04/18

Dermatologists Response Rates to a Mailed Questionnaire: A Randomized Trial of Monetary incentives

In a survey methodological study, we demonstrated that dermatologists are more likely to respond to a survey when a nominal financial incentive is included ($5.00). The overall response rate was 39.1%, with rates of 25%, 43% (odds ratio [OR], 2.26; 95% CI, 1.61-3.16), and 48% (OR, 2.80; 95% CI, 1.99-3.93) in the $0, $5, and $10 groups, respectively. We demonstrated that nominal financial incentives are cost-effective. For example, once questionnaire and postcard costs surpassed $1.88 and $1.63, respectively, the cost per response in the $0 group exceeded that in the $5 group; at these material costs and higher, the use of $5 incentives, compared with no incentive, thus represents better value when investigators are concerned with increasing the total number of responses.

Wan J, Abuabara K, Shin DB, Troxel AB, Bebo BF, Jr., Gelfand JM. Dermatologist response rates to a mailed questionnaire: a randomized trial of monetary incentives. Journal of the American Academy of Dermatology. 2012;66(1):e18-20. Epub 2011/11/01

Dermatologists Preferences for First-Line Therapy of Moderate-to-Severe Psoriasis in Healthy Adult Patients.

Despite increasing therapies for moderate to severe psoriasis, dermatologists' treatment preferences are unknown. Preferred therapies for male and female patients were: ultraviolet (UV) B (40% and 56%, respectively), etanercept (15% and 19%), Methotrexate (16% and 4%), and adalimumab (12% and 10%). Of respondents, 66% administered phototherapy in their practice. After adjusting for all physician characteristics, those preferring first-line UVB for male or female patients were significantly more likely to have phototherapy in their practice (odds ratio [OR] 3.4, 95% confidence interval [CI] 1.8-6.6 and OR 2.8, 95% CI 1.5-5.3, respectively) and to have used UVB in more than 10 patients in the last 3 months (OR 8.0, 95% CI 3.9-16.4; OR 9.6, 95% CI 4.3-21.6). Dermatologists in the Midwest were more likely than those in the Northeast to prefer adalimumab first line for male and female patients. Although UVB is most commonly preferred as a first-line treatment for moderate to severe psoriasis in healthy adults, and preferences vary based on region, phototherapy availability, and prior treatment use.

Wan J, Abuabara K, Troxel AB, Shin DB, Van Voorhees AS, Bebo BF, Jr., et al. Dermatologist preferences for first-line therapy of moderate to severe psoriasis in healthy adult patients. Journal of the American Academy of Dermatology. 2012;66 (3):376-86. Epub 2011/08/23

WE ARE CURRENTLY ACCEPTING NEW DCERN MEMBERS!

Please join us in welcoming our new DCERN members:

April Armstrong, MD MPH (University of California– Davis)
Dr. April Armstrong is Director of the Clinical Research Unit and Teledermatology Program at the Department of Dermatology. Dr. Armstrong completed training at Harvard Dermatology Residency Program and Harvard School of Public Health. Dr. Armstrong's clinical expertise lies in psoriasis. She is dedicated to providing the highest quality of care for psoriasis patients and makes the latest treatment options available to them. Dr. Armstrong receives referrals from colleagues for patients with severe psoriasis and enjoys caring for these patients.

Bruce Strober, MD (University of Connecticut)
Dr. Bruce Strober is Director of Clinical Trials Unit at the Department of Dermatology and an Assistant Professor of Dermatology. Dr. Bruce Strober completed training at the New York University: School of Medicine and continued on to pursue his fellowship training in Dermatopharmacology. Dr. Bruce Strober is an expert in psoriasis. Dr Bruce Strober serves on the DCERN steering committee.

We look forward to working with you!

Media Coverage

New Psoriasis Drugs Not Much Better Than Standard Therapy, Study Finds, U.S. News & World Report

New Psoriasis Drugs Not Much Better Than Standard Therapy, Study Finds, MSN Health & Fitness

Psoriasis Monotherapies Differ Little in Effectiveness, Medscape

Study Compares Effectiveness of Psoriasis Treatments, Doctors Lounge

DCERN Sites

- University of Pennsylvania, Philadelphia, PA*
- University of Utah, Salt Lake City, UT*
- Dermatology Associates of Lancaster, Lancaster, PA
- DermDOX Centers for Dermatology and Teldermatology, Hazelton, PA
- Buffalo Medical Group, P.C., Buffalo, NY*
- Peachtree Dermatology Associates, Atlanta GA
- Colorado Springs Dermatology Clinic P.C., Colorado Springs, CO
- East Penn Dermatology P.C., North Wales, PA
- University of California, Davis, CA*
- National Heart, Lung, Blood Institute, Bethesda, MD*
- University of Connecticut, Storrs, CT*

*VIP trial sites

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