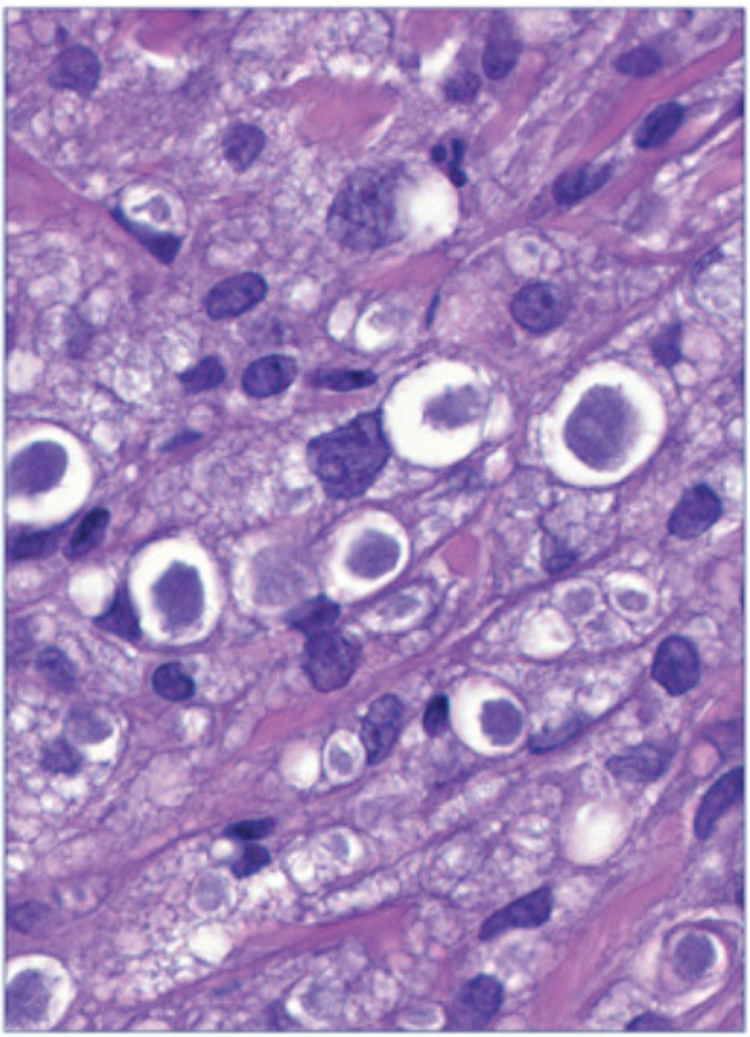
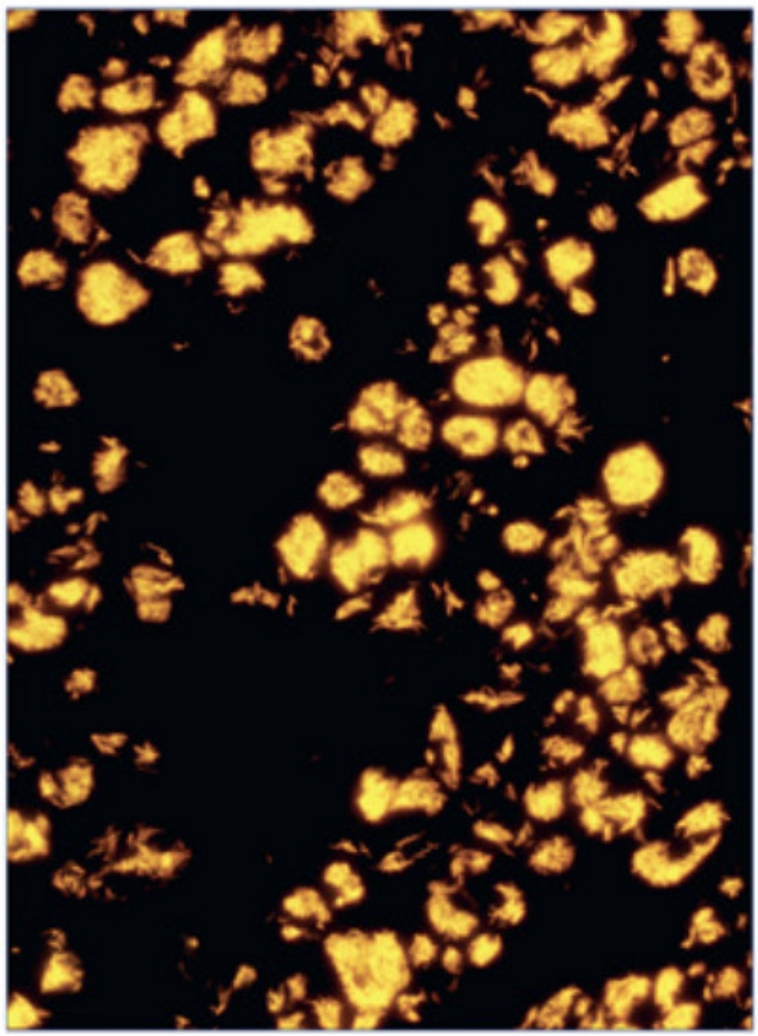
JAAD®
Journal of the American Academy of Dermatology

July 2020, Volume 83, Number 1 www.jaad.org *Helping dermatologists improve patient outcomes*





Hansen's disease

ELSEVIER

REFERENCES

1. Dicle O, Parmaksizoglu B, Gurkan A, Tuncer M, Demirbas A, Yilmaz E. Skin infections in 401 renal transplant recipients in southern Turkey. *Exp Clin Transplant*. 2009;7(2):133-136.
2. Savoia P, Ranghino A, Fava P. Characterization and management of cutaneous side effects related to the immunosuppressive treatment in solid organ recipients. *Curr Drug Targets*. 2017;18(4):436-446.
3. Iannacone M, Sinnya S, Pandeya N, et al. Prevalence of skin cancer and related skin tumors in high-risk kidney and liver transplant recipients in Queensland, Australia. *J Invest Dermatol*. 2016;136(7):1382-1386.
4. Rizvi SM, Aagnes B, Holdaas H, et al. Long-term change in the risk of skin cancer after organ transplantation: a population-based nationwide cohort study. *JAMA Dermatol*. 2017;153(12):1270-1277.

https://doi.org/10.1016/j.jaad.2019.09.045

Apremilast and psoriasis in the real world: A retrospective case series

To the Editor: Apremilast is an oral systemic medication approved for moderate-to-severe plaque psoriasis (PSO) that inhibits phosphodiesterase 4, a key inflammatory mediator. A 2015 phase III clinical trial (ESTEEM2) demonstrated that apremilast significantly reduced the severity of PSO in 20.4% of patients at 16 weeks.[1] Treatment success within trials may differ from that in the general population owing to trial exclusion criteria. Our goal was to examine the results of apremilast as a treatment for PSO in a true clinical setting.

A single-center retrospective chart review was conducted within a private practice dermatology office in Miami, Florida, reviewing patients who began treatment with apremilast for PSO. The dataset, ranging from 2014 to 2018, included patients [18 years who received apremilast for a minimum of 12 weeks. All candidates began oral apremilast treatment with 10 mg, which was titrated up to the oral maintenance dose of 30 mg twice a day through day 6. Efficacy was determined by a Physician Global Assessment (PGA) score of 0 (clear) to 1 (almost clear) using the 5-point scale. If the PGA score was not documented, 2 reviewers assigned PGA scores using the physical descriptions and distribution of the lesions. Treatment failure was defined as a continued PGA score of 3 or higher or discontinuation because of adverse events.

Sixty-one patients were included in this retrospective analysis. The average age was 53 years, with a female predominance (56%) and an average baseline PGA score of 3.3. Twenty-two (36%) achieved the primary efficacy endpoint of PGA score 0 or 1 after 12 weeks with no significant impact related to age, gender, initial PGA score, or number of prior failed therapies (Table I). Concurrent treatments were present in all 22 patients who achieved a PGA score of 0 or 1, and in 100% of patients overall, with topical agents being most common (97%) (Table II).

Apremilast was used in combination with systemic medications in 3 of the 4 patients receiving systemic treatment for improved psoriatic arthritis control. Previous failed treatment modalities in 60 patients included topical medications (n = 60); biologic medications (n = 19) (etanercept, adalimumab, ustekinumab, infliximab) or multiple biologic treatment failures (n = 1 ≥ 3 prior biological failures); narrowband ultraviolet B and/or excimer laser treatments (n = 14); and other oral systemic medications (n = 5) (methotrexate, acitretin, cyclosporine). Fourteen (23%) patients experienced 1 or more adverse events. These included nausea (11%), diarrhea (11%), and headache (8%). Three patients (5%) withdrew because of adverse events.

Unlike many clinical trials, patients in our clinical setting could use concurrent therapies with apremilast. Although topical agents were the most common adjunct treatment, systemic and biologic medications can also be combined with apremilast with good risk-benefit profiles.[2] Our review demonstrated that apremilast had a higher success rate and similar tolerability in the true clinical setting compared with the ESTEEM2 apremilast study with comparable demographics (age within a standard deviation, higher female predominance of 56% vs 33%, and equal baseline PGA score average of 3.3).[1] Limitations include the small number of patients within the study, the inherent nature of retrospective chart review, and data stemming from a single, private practice outpatient center.

Lauren Dozier, DO,[a] Gregory Bartos, DO,[b] and Francisco Kerdel, MD[c,d]

From the Dermatology Residency Training Program[a] and the Traditional Rotating Internship,[b] Larkin Community Hospital/Lake Erie College of Osteopathic Medicine, South Miami, FL; Department of Dermatology, Florida International University, Miami, FL[c]; and Florida Academic Dermatology Center, Coral Gables, FL.[d]

Funding sources: None.

Disclosure: Dr Kerdel has served as a speaker for Amgen, AbbVie, Janssen, Lilly, Celgene, Actelion, Novartis, Regeneron, Sanofi, Valeant, and Ortho. He has received research support from Amgen,

Table I. Demographics and initial data

Demographics	Achieved PGA score of 0 or 1	Failed to achieve PGA score of 0 or 1	*P* value
Average age (y)	57	51	.1654
Gender	68% Female (n = 15)	49% Female (n = 19)	.1416
Initial PGA score	3.1	3.3	.0864
Prior failed therapies	1.8	1.7	.6407

PGA, Physician Global Assessment.

Table II. Therapies used in combination with apremilast in 61 patients

Treatment type	Patients, no. (%)	Patients who achieved PGA score of 0 or 1, no. (%)
Topical steroid	43 (70)	11 (26)
Topical calcipotriene	3 (5)	1 (33)
Combination topical steroid-calcipotriene	13 (21)	7 (54)
Topical calcineurin inhibitors	8 (13)	2 (25)
Narrowband UVB	9 (15)	2 (22)
Excimer laser	2 (3)	0 (0)
Nonbiologic systemic medication (cyclosporine)	1 (2)	1 (100)
Biologic systemic medication (ixekizumab, etanercept)	3 (5)	1 (33)

PGA, Physician Global Assessment; *UVB,* ultraviolet B.

AbbVie, Janssen, Lilly, Celgene, Actelion, Novartis, Pfizer, Leo Pharma, Regeneron, Sanofi, UCB, AstroZeneca, XBiotech, Dr. Reddy's Laboratories, Ortho, and Menlo. He has served on the board of directors of Celgene and Lilly. Drs Dozier and Bartos have no conflicts of interest to declare.

Reprints not available from the authors.

Correspondence to: Gregory Bartos, DO, 7031 SW62nd Ave, South Miami, FL 33143

E-mail: Jbartos3302@gmail.com

REFERENCES

1. Paul C, Cather J, Gooderham M, et al. Efficacy and safety of apremilast, an oral phosphodiesterase 4 inhibitor, in patients with moderate-to-severe plaque psoriasis over 52 weeks: a phase III, randomized controlled trial (ESTEEM 2). *Br J Dermatol.* 2015;173(6):1387-1399.
2. AbuHilal M, Walsh S, Shear N. Use of apremilast in combination with other therapies for treatment of chronic plaque psoriasis: a retrospective study. *J Cutan Med Surg.* 2016;20(4):313-316.

https://doi.org/10.1016/j.jaad.2019.10.009

S-100B serum protein is elevated in children with medium-to-giant congenital melanocytic nevi: An exploratory case-control study

To the Editor: Congenital melanocytic nevi (CMN) are neurocutaneous disorders ultimately related to neural crest development abnormalities.[1] Markers of disease progression are critical for monitoring purposes. S-100 is a damage-associated molecular pattern protein expressed in melanocytes that has not been proposed as a marker in melanocytic tumors other than melanoma.[2] Elevated serum S-100B levels can be found in patients with vitiligo and active depigmentation.[3] We explored serum S-100B protein levels in children with CMN compared with children without skin diseases.

In this exploratory observational, case-control, 2-center study we enrolled 24 patients from the Pediatric Surgery Department of Hospital La Paz in Madrid and the Dermatology Department of the Navarra University Clinic in Pamplona, Spain; in these patients CMN were projected to reach medium-to-giant size in adulthood. CMN were categorized according to the recommendations of Krengel et al.[1] The patients were enrolled from May 2016 to May 2018. Controls were seen in the Departments of Pediatrics and Otolaryngology. All participants provided informed consent. The study protocol was approved by the institutional review board at the University Clinic of Navarra.

Peripheral blood samples were obtained from the majority of patients during the last CMN removal surgery; samples were centrifuged, and the supernatants were transferred into tubes and stored at −80°C until further use. S-100B protein concentrations were determined in a blinded manner using an electrochemiluminescence