

# Defining and Treating Moderate Plaque Psoriasis in a Real-World Clinical Setting: A Dermatologist Survey and Prospective 6-Month Chart Review of Patients Treated With Apremilast

Melissa L. F. Knuckles, MD, PSC<sup>1</sup>; Eugenia Levi, PharmD<sup>2</sup>; Jennifer Soung, MD<sup>3</sup>

<sup>1</sup>Melissa L. F. Knuckles, M.D., P.S.C. Dermatology, Richmond, KY; <sup>2</sup>Celgene Corporation, Summit, NJ; <sup>3</sup>Southern California Dermatology, Santa Ana, CA

## INTRODUCTION

Management of moderate psoriasis remains a significant challenge, with some evidence suggesting patients with moderate disease are often undertreated and experience unsatisfactory clinical outcomes.<sup>1,2</sup> However, there is a lack of consensus on how to define moderate psoriasis, and no explicit guidelines exist for the treatment of this patient population.

Apremilast (APR), an oral phosphodiesterase 4 inhibitor, is the first new oral systemic, nonbiologic medication approved for the treatment of psoriasis in the past 20 years, and is approved in the United States for treatment of adult patients with active psoriatic arthritis (PsA) and patients with moderate to severe plaque psoriasis who are candidates for phototherapy or systemic therapy.<sup>3</sup>

Given the lack of guidance for treating patients with moderate psoriasis and the recent availability of APR, the objectives of the current investigation were (1) to determine how dermatologists in the real-world clinical setting define and treat moderate plaque psoriasis, and (2) to describe real-world clinical characteristics and 6-month treatment outcomes among patients with moderate psoriasis treated with APR.

## METHODS

### Dermatologist Survey

The survey portion of the investigation was conducted between October 2015 and July 2016.

US dermatologists treating patients with psoriasis were invited to complete an online survey which asked:

- How they typically assess psoriasis severity
- What cutoff criteria they use to define moderate psoriasis
- Which treatments they commonly prescribe to patients with moderate plaque psoriasis

Eligible survey participants were US dermatologists who:

- Treat >20 adult patients with plaque psoriasis per month, >1% of whom must be considered to have moderate psoriasis
- Spend >40% of practice time in medical dermatology or >70% in medical and surgical dermatology
- Have been in practice for 2 to 30 years
- Spend >75% of practice time in direct patient care

### Prospective 6-Month Patient Chart Review

Surveyed dermatologists were also asked to provide data from charts of 4 patients with a diagnosis of moderate plaque psoriasis whom they had seen in the last month, including ≥1 patient treated with APR. 6 months later they were invited to provide follow-up patient chart information.

The patients were required to meet the following criteria:

- Adult patient (>18 years of age), diagnosed with plaque psoriasis and currently living
- Moderate disease severity (as determined by the surveyed, treating dermatologist)
- Seen by the dermatologist within the month before the dermatologist took the survey
- Using prescription topical or systemic medication for the treatment of moderate plaque psoriasis at the time of the survey

## METHODS (cont'd)

Chart information included:

- Patient demographic characteristics
- Clinical disease characteristics
- Treatment patterns, including treatment shifts and discontinuations
- Effectiveness of treatment
- Safety and tolerability

## RESULTS

### Dermatologist Survey

#### Respondent Dermatologists

A total of 150 dermatologists responded to the survey.

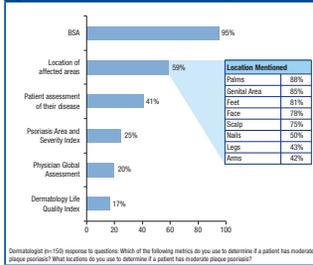
- Dermatologists had an average of 13.5 years in practice, most currently worked in a single-physician or multiphysician dermatology specialty practice (83%). They saw an average of 72 patients with moderate psoriasis per month.

#### Scales Used to Assess Psoriasis Severity

The large majority of dermatologists (95%) reported they assessed disease severity based on the percentage of psoriasis-affected body surface area (BSA) (Figure 1).

- 59% of dermatologists responded that they also considered location of the affected area in their assessment of severity.

Figure 1. Criteria Used to Assess Psoriasis Severity

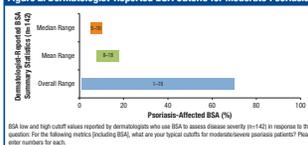


#### Defining Moderate Plaque Psoriasis

- Dermatologist-reported BSA cutoffs to define moderate psoriasis varied widely, revealing a lack of consensus among dermatologists (median: 5% to 10%) (Figure 2).

## RESULTS (cont'd)

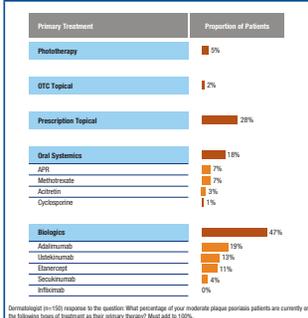
Figure 2. Dermatologist-Reported BSA Cutoffs for Moderate Psoriasis



#### Treatment of Moderate Plaque Psoriasis

When asked to estimate what proportions of their patients with moderate plaque psoriasis receive various types of medications as their primary treatment, dermatologists reported that 47% were receiving biologic agents, 28% prescription topicals, 18% oral systemics, 5% phototherapy, and 2% over-the-counter (OTC) topical agents (Figure 3).

Figure 3. Primary Treatments for Moderate Plaque Psoriasis



#### 6-Month Prospective Chart Review of Patients With Moderate Psoriasis Treated With APR

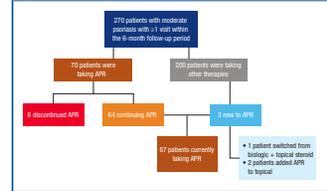
##### Patient Disposition and Demographic/Clinical Features

- The participating dermatologists identified 270 patients with moderate psoriasis who had ≥1 follow-up visit within the 6-month follow-up period. Among these, 70 patients who had ≥1 follow-up visit (mean visits=2) within the 6-month follow-up period were initially receiving APR.

## RESULTS (cont'd)

- At the 6-month chart review, among patients treated with APR at baseline, 91% (64/70) remained on APR; 3 patients were new to APR (Figure 4).
- 65 patients (24%) were receiving APR as their primary therapy.
- APR discontinuation occurred in 6 patients; reasons for discontinuation included loss of efficacy (n=2), poor tolerability (n=3), and noncompliance (n=2); 1 patient discontinued due to both poor tolerability and noncompliance.

Figure 4. 6-Month Disposition of APR-Treated Patients



Demographic and clinical characteristics of the patients receiving primary treatment with APR included in the current prospective chart review are summarized in Table 1.

Patients given APR had been treated by the responding dermatologists for a mean of 24.8 months, with office visits occurring at a mean of every 2.8 months.

Table 1. Demographic and Clinical Characteristics Among Patients With Moderate Psoriasis Receiving APR as Primary Treatment

Characteristic	Patients With Moderate Psoriasis Receiving APR as Primary Treatment* (n=65)
Age, mean (range), years	47.3 (20-75)
Male, %	45
Weight, mean (range), lb.	163.7 (130-245)
Race, %	
White	92
Hispanic	3
African American	3
Asian	2
Employed full-time, %	62
Any comorbidity, %	57
Comorbidities in >5% of patients, %	
Hypertension	23
Obesity	9
Dyslipidemia	19
Diabetes	8
PsA	9
Depression	8

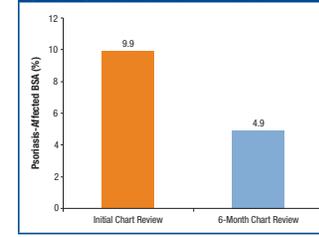
\*Primary therapy as defined by the surveyed dermatologist. \*Includes type 2 diabetes mellitus.

## RESULTS (cont'd)

#### Clinical Effectiveness of APR Treatment for Moderate Psoriasis

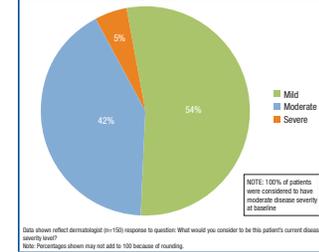
- In patients receiving APR as their primary therapy, mean BSA changed from 9.9% at initial chart review to 4.9% at the 6-month chart review (Figure 5).

Figure 5. Change in BSA at 6 Months With APR Treatment



Of patients receiving APR as their primary therapy, 54% were rated as having mild psoriasis at the 6-month chart review, marking a shift for these patients from moderate psoriasis at baseline (Figure 6).

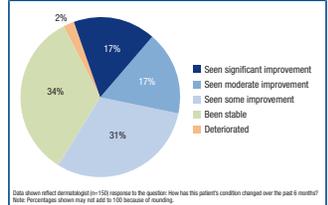
Figure 6. Disease Severity at 6 Months, Among Patients With Moderate Psoriasis Treated With APR



- At the 6-month chart review, 65% of patients receiving APR as primary therapy were rated by dermatologists as having shown at least some improvement; 17% were rated as having shown significant improvement (Figure 7).
- When asked about their clinical experience with APR, 68% of dermatologists stated that APR exceeded or met their expectations.

## RESULTS (cont'd)

Figure 7. Dermatologist Assessment of Condition Change at 6 Months in Patients Treated With APR



#### Side Effects With APR Reported During the 6-Month Chart Review Period

- Among patients with available safety information, 8/66 (12%) reported side effects during treatment; these included diarrhea (n=5), nausea (n=3), abdominal pain (n=3), and headache (n=1).
- All side effects were considered mild, except 1 case of diarrhea that was considered moderate; 2 patients took loperamide to manage diarrhea.
- On average, side effects resolved within 2 weeks, with the exception of abdominal pain, which persisted for an average of 7 weeks.
- 1 patient temporarily discontinued APR because of diarrhea but was re-initiated and continued on treatment.

## CONCLUSIONS

- In the real-world clinical setting, widely varying BSA cutoff values to identify moderate psoriasis reveal a lack of consensus surrounding the definition of moderate psoriasis among US dermatologists.
- Based on patient chart review, APR is well tolerated and effective for treatment of moderate psoriasis.

## REFERENCES

- Armstrong AK, et al. *JAMA Dermatol*. 2013;149:1180-1185.
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## CORRESPONDENCE

Melissa L. F. Knuckles - info@lfc.com

## DISCLOSURES

M.L.F.K. Knuckles, Eugene, Oregon; Celgene Corporation; Eli Lilly, Galderma, Novartis, and Sanofi - advisory board member, consultant, and/or speaker. A.S. Levi, Eugene, Oregon; Bayer, Biogen, Crown Labs, Eli Lilly, Johnson and Johnson, LEO Pharma, and MedImmune - investigator. J.C. Soung, Eugene, Oregon; Celgene Corporation - employment. J.C. Soung, Eugene, Oregon; Celgene Corporation; Eli Lilly, Galderma, Genzyme, Johnson, Johnson, Merck, Pfizer, and Regeneron - advisory board member, investigator, and/or speaker.