Secukinumab Provides Greater Symptom Control in Psoriasis-Related Pain, Itching, and Scaling Compared With Previous Treatments: Evidence From a Real-World Study in the US

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BACKGROUND

Plaque Psoriasis

- Psoriasis is a common, immune-mediated, inflammatory skin condition. Plaque psoriasis is characterized by erythematous plaques and scaling that can cause potentially severe pain and pruritus.¹ Plaques commonly occur at the knees, elbows, legs, lumbosacral region, and scalp.²
- While the cause of psoriasis is unknown, accumulating evidence indicates that psoriasis is a multifactorial disorder caused by the concerted action of multiple disease genes in a single individual, triggered by environmental factors.³
- Biologic therapy is recommended for patients with moderate-to-severe psoriasis.¹
- The first human anti-interleukin–17A monoclonal antibody secukinumab has shown efficacy relative to other biologics in improving symptoms and quality of life in patients with psoriasis.⁴
- Limited real-world data characterizing patients' experiences and satisfaction with secukinumab treatment are available due to approval in January 2015.

OBJECTIVE

 The aim of this real-world, cross-sectional survey was to evaluate patient symptom control vs. their previous treatment among United States patients with moderate-tosevere plaque psoriasis who recently initiated or switched to secukinumab.

METHODS

- United States patients aged ≥ 18 years with a self-reported diagnosis of moderate-to-severe plaque psoriasis who had initiated secukinumab in the last 2 to 6 months were invited to participate in a cross-sectional, web-based survey.
 - Patients were recruited either via the National Psoriasis Foundation's web-based newsletter or through a psoriasis group blog.
- Patients were screened for eligibility and provided informed consent electronically before they completed the full survey.
- Patient symptom control data (itching, pain, scaling/flaking, skin cracking, redness, stinging/burning, sleep problems, and fatigue) were collected with a focus on the core symptoms of itching, pain, and scaling with secukinumab versus their most recent treatment (nonbiologic systemics or biologics).

- Patients were asked to rate their current psoriasis symptoms and symptom control compared to their most recent experience before taking secukinumab using a 7-point scale: a lot worse, moderately worse, a little worse, no change, a little better, moderately better, and much better. Responses of "a little better," "moderately better," and "much better" were interpreted as better symptom control for secukinumab.
- Results were stratified by the most recent previous treatment category (nonbiologic systemics or biologics).
 - Biologics included certolizumab pegol, etanercept, adalimumab, rituximab, golimumab, ustekinumab, and ixekizumab.
 - Nonbiologics included over-the-counter topicals, prescription topicals, oral systemic prescription medications, injectable methotrexate, apremilast, and photo therapy.
- Presence of psoriasis symptoms on most recent treatment (biologic or nonbiologic) versus current treatment with secukinumab was collected.
- A summary of symptom severity between most recent treatment and secukinumab was collected.

ANALYTIC METHODS

- Data analyses were descriptive in nature, and symptom control ratings were described using percentages.
- Patient demographics were described using means (or medians) and standard deviation (SD) for continuous variables and percentages for categorical variables.

RESULTS

Sample Characteristics

- The study included 169 adults with moderate-tosevere plaque psoriasis.
 - Prior to starting secukinumab, 77 patients (45.6%) were on a biologic, and 92 patients (54.4%) were on a nonbiologic.
 - On average, participants reported taking secukinumab for 3.7 months (SD=1.3)
 - Mean (SD) age was 34.7 (10.5) years, and mean (SD) weight was 169 (42.4) pounds. The population was 64.5% male, 68.6% white, and 76.8% employed full-time, and 23.7% reported having PsA.

Demographics

Table 1. Patient Demographics (N = 169)

Variable	n (%)
Age	
Mean (SD)	34.7 (10.5)
Gender	
Male	109 (64.5)
Race and/or ethnicity (select all that apply)°	
White	116 (68.6)
Hispanic	14 (8.3)
Black	33 (19.5)
Employment status	
Employed full-time	129 (76.8)
Employed part-time/work at home/ student	24 (14.3)
Disabled/unable to work	8 (4.8)
Weight at diagnosis (pounds)	n = 165
Mean (SD)	169 (42.4)
Current health conditions (select all that apply)	169
Anxiety	8 (4.7)
Chronic pain	16 (9.5)
Crohn's disease or ulcerative colitis	3 (1.8)
Depression	9 (5.3)
Diabetes	5 (3.0)
Heart disease	1 (0.6)
Heart disease High blood pressure (hypertension)	1 (0.6) 14 (8.3)
High blood pressure (hypertension)	14 (8.3)
High blood pressure (hypertension) High cholesterol (hyperlipidemia)	14 (8.3) 6 (3.6)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy	14 (8.3) 6 (3.6) 2 (1.2)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease Psoriatic arthritis	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4) 40 (23.7)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease Psoriatic arthritis Skin cancer Stroke (or had one in the past)	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4) 40 (23.7) 3 (1.8)
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High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease Psoriatic arthritis Skin cancer Stroke (or had one in the past) Time since plaque psoriasis diagnosis	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4) 40 (23.7) 3 (1.8) 4 (2.4)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease Psoriatic arthritis Skin cancer Stroke (or had one in the past) Time since plaque psoriasis diagnosis Less than 1 year ago	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4) 40 (23.7) 3 (1.8) 4 (2.4) 169 2 (1.2)
High blood pressure (hypertension) High cholesterol (hyperlipidemia) Lymphoma/malignancy Obesity Peripheral vascular disease Psoriatic arthritis Skin cancer Stroke (or had one in the past) Time since plaque psoriasis diagnosis Less than 1 year ago 1-2 years ago	14 (8.3) 6 (3.6) 2 (1.2) 15 (8.9) 4 (2.4) 40 (23.7) 3 (1.8) 4 (2.4) 169 2 (1.2) 37 (21.9)

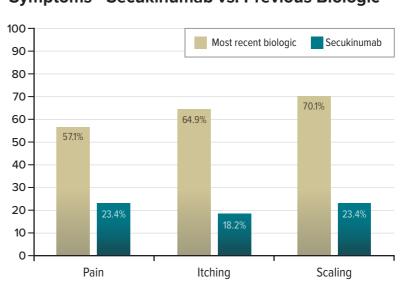
^a No patients indicated that they were African American, Asian or Pacific Islander, Native American or Alaskan native, or other race. Note: The number of patients who responded to a question was used as the denominator for the percentage reported.

Symptom Control

Patients Switching From a Previous Biologic to Secukinumab

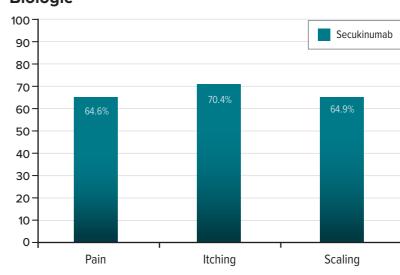
- Treatment efficacy (37.7%) was reported as the top reason for switching to secukinumab.
- Fewer patients reported pain, itching, and scaling with secukinumab compared to their previous biologic (Figure 1).

Figure 1. Percentage of Patients Reporting Symptoms—Secukinumab vs. Previous Biologic



 Patients exhibited greater symptom control (pain, itching, and scaling) with secukinumab versus their previous biologic (Figure 2).

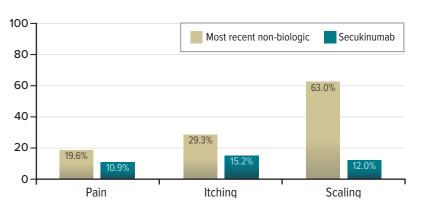
Figure 2. Percentage of Patients Reporting Better Symptom Control With Secukinumab vs. Previous Biologic



Patients Switching From a Previous Nonbiologic to Secukinumab

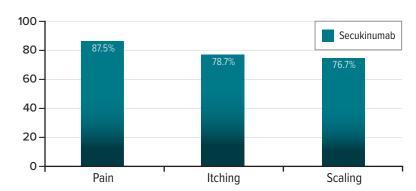
 Negative side effects (27%) were reported as the top reason for switching among patients who started secukinumab after a previous nonbiologic. Fewer patients reported pain, itching, and scaling with secukinumab compared to their previous nonbiologic (Figure 3).

Figure 3. Percentage of Patients Reporting Symptoms—Secukinumab vs. Previous Nonbiologic



 Patients exhibited greater symptom control (pain, itching, and scaling) with secukinumab versus their previous nonbiologic (Figure 4).

Figure 4. Percentage of Patients Reporting Better Symptom Control on Secukinumab vs. Previous Nonbiologic



CONCLUSIONS

 Patients reported fewer symptoms and better symptom control with secukinumab than with their previous systemic treatment (biologic or nonbiologic).

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