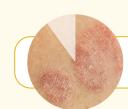


## Phase 2B Trial of Roflumilast Cream (ARQ-151) for the Treatment of Chronic Plaque Psoriasis

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## **KEY FACTS**

Psoriasis is a chronic, inflammatory skin disorder that affects more than 8 million people in the U.S.<sup>1</sup>



90% of cases are plaque psoriasis, which results in painful itchy raised areas of erythematous (red) skin covered by white or silvery scales and can be associated with poor quality of life.

### Location of disease poses specific treatment challenges Plaque psoriasis can appear on any area of the body, but often appears on the

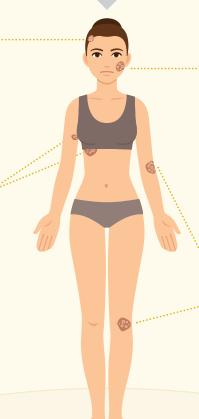
scalp, knees, elbows, face and intertriginous areas.

### ~40% of patients have plagues on their scalp

- Difficult to deliver drugs
- Inability to use topical creams or ointments

#### ~15% of patients have plaques on intertriginous areas (skin folds such as armpits and under breasts)

- Easily irritated, thin skin
- Use of topical steroids can cause side effects such as stretch marks, skin thinning, and spider veins, which can be irreversible
- Not amenable to treatment with high potency steroids or vitamin D



#### ~10% of patients have plaques on face

- Easily irritated, thin skin
- Risk of steroids in eyes, predisposing patients to cataracts and glaucoma
- Prolonged use of topical steroids can cause side effects such as acne, rosacea and spider veins, which can be irreversible
- Vitamin D can't be used on face

## ~35% of patients have plaques

### on elbows/knees Often resistant to treatment

## Current treatments have limitations.

CURRENT TREATMENT OPTIONS

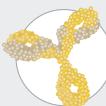


#### • High potency topical steroids show improvement — but use limited to 2–8 weeks Vitamin D analogues offer less benefit, are often irritating, and are contraindicated

**Topical Treatments** 

on the face and intertriginous areas

• Used by 90% of psoriasis patients in the U.S.



## • Injectable treatments that target specific proteins in the body

**Biologics** 

- Use restricted to moderate-to-severe disease (25% of patient population)
- Not indicated in patients with mild-to-moderate disease (75% of patient population) • Only used in ~6% of patients with psoriasis
- Very high cost



## • Side effects are significant and efficacy is less than biologics

Oral Medications

• Limited to use in patients with moderate-to-severe disease



## • Ultraviolet light therapy used alone or combination with medications

Phototherapy

- Risk of skin irritation, skin cancers with long-term use • Inconvenient for patients, requiring frequent, lengthy visits to doctor

approved by the FDA in **over 20 years.** 



Did you know? No novel mechanisms of action for topical treatments for psoriasis have been

# ≥18 YEARS

OF AGE

**STUDY DESIGN** 

331 ADULTS

-20%

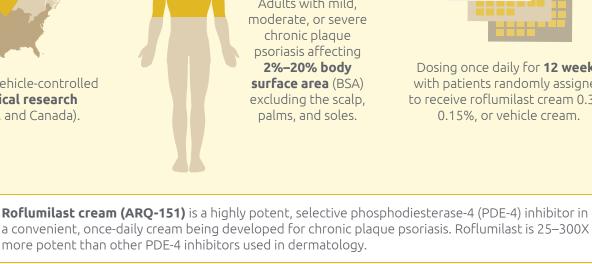
Adults with mild, moderate, or severe

> chronic plaque psoriasis affecting 2%-20% body

surface area (BSA) excluding the scalp, palms, and soles.

WITH PLAQUE PSORIASIS





Dosing once daily for 12 weeks with patients randomly assigned to receive roflumilast cream 0.3%, 0.15%, or vehicle cream.



**Primary Endpoint** 

23%

31%

27%

Vehicle

as 2 weeks of treatment.

0-clear and 1-almost clear to 4-severe.

14%

STUDY RESULTS

### Patients treated once-daily with roflumilast achieved clear or almost clear state at Week 6 on the Investigator Global Assessment (IGA) scale\*.

Roflumilast 0.3% 28%

Roflumilast 0.15%

Roflumilast demonstrated statistically significant improvement over the

vehicle cream on key psoriasis efficacy endpoints.

Vehicle **Secondary Endpoints** From Week 6 through Week 12, patients treated once-daily with roflumilast achieved separation from vehicle in IGA of clear or almost clear plus 2-grade improvement from baseline (IGA success). At Week 12:

Roflumilast 0.3%

Roflumilast 0.15%

Approximately 15% of patients had intertriginous psoriasis of at least mild severity at baseline; 93% of these patients treated with roflumilast 0.3% had an Intertriginous-IGA score of 0 (clear) at Week 12.

Psoriasis Area and Severity Index (PASI) of at least 75% at 12 weeks: 34% Roflumilast 0.3%

Patients treated once-daily with roflumilast achieved improvements in

16% Vehicle Significant improvements in itch and burden of disease were seen as early

\* Investigator Global Assessment (IGA) is a 5-point scale assessing disease severity ranging from

tolerated in the trial.

97% of AEs were rated mild

or moderate in severity.

**SAFETY** 

**Key Takeaway** 

Both doses of roflumilast

Most common were upper respiratory tract infection/viral upper respiratory tract infection and nasopharyngitis.



**94% of patients** treated with roflumilast 0.3% completed full 12 weeks of study.

Rates of application site reactions were low and were

similar between roflumilast

and vehicle groups.

These positive results highlight the potential of roflumilast once-daily cream as a novel, non-steroidal topical therapy for chronic plaque psoriasis.