

# Fewer Doses, Same Results: Azithromycin in Pityriasis Lichenoides

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## Introduction

- Pityriasis lichenoides chronica (PLC) and pityriasis lichenoides et varioliformis acuta (PLEVA) are rare inflammatory skin diseases.
- Characterized by pruritic, scaling, erythematous papules.
- Etiology remains unknown, but infectious agents are suspected triggers.
- Other treatments used for PLC, PLEVA, or unspecified PL include:
  - Clarithromycin, doxycycline, erythromycin
  - Methotrexate
  - Systemic and topical corticosteroids
  - Phototherapy

## Hypothesis

Azithromycin is as effective and safe as other commonly used treatments for PLC, PLEVA, and Unspecified PL.

## Methods

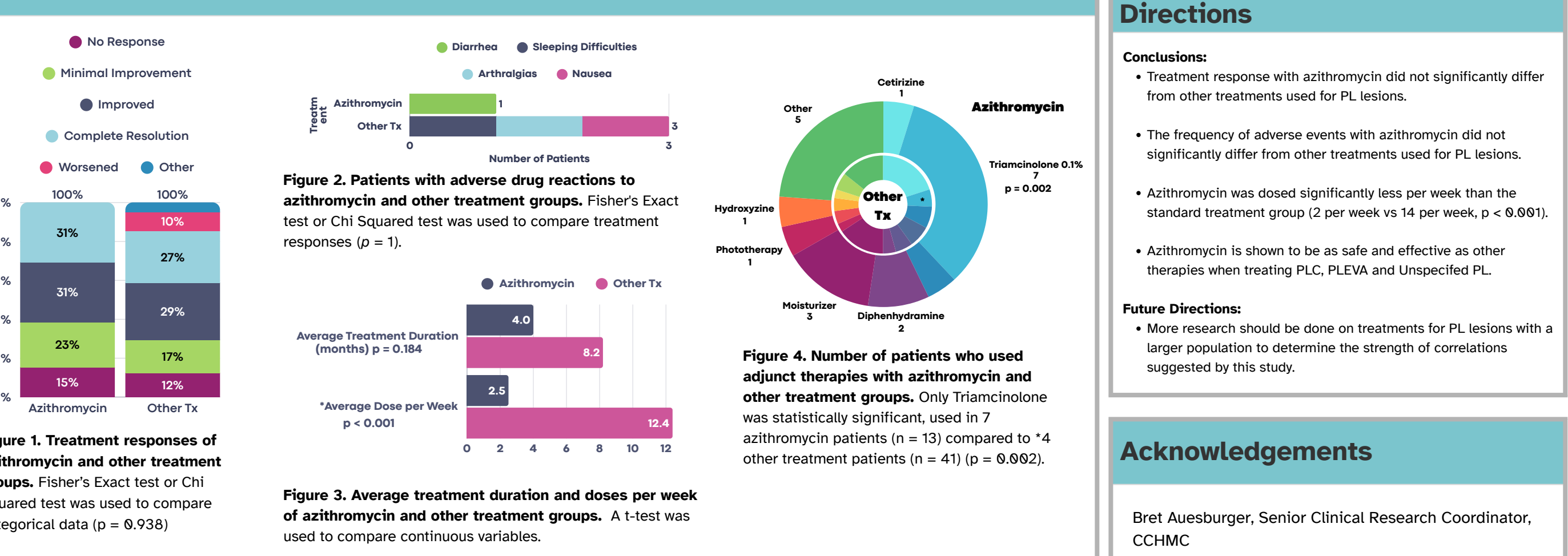


## Demographics

	Full cohort n = 54	Azithromycin n = 13	Other Tx n = 41	p-value <sup>‡</sup>
<b>Demographic</b>				
Age (y)	8.28 (4.8)	6.8 (5)	8.8 (4.7)	0.207
Male sex	27 (50)	6 (46.2)	21 (51.2)	0.180
Black Race	7 (53.8)	3 (25)	7 (13.7)	0.639
Hispanic or Latino	1 (1.9)	0 (0)	1 (2.4)	0.427
<b>Comorbidities</b>				
ADHD	7 (13)	1 (7.7)	6 (14.6)	1
Anxiety	4 (7.4)	1 (7.7)	3 (7.3)	1
Asthma	5 (9.3)	0 (0)	5 (12.2)	0.321
Depression	3 (5.6)	1 (7.7)	3 (5.6)	1
Developmental Delay	4 (7.4)	0 (0)	4 (9.8)	1
Eczema	7 (13)	1 (7.7)	6 (14.6)	1
Seizures/Epilepsy	4 (7.4)	0 (0)	4 (9.8)	0.562
Other*	24 (44.4)	7 (53.8)	17 (41.5)	0.528
<b>Diagnosis</b>				
Diagnosis				0.83
PLEVA	16 (29.6)	5 (38.5)	11 (26.8)	
PLC	29 (53.7)	6 (46.2)	23 (56.1)	
Unspecified PL	9 (16.7)	2 (15.4)	7 (17.1)	
Confirmed with Biopsy	42 (82.4)	10 (90.9)	32 (80)	0.663
<b>Lesion Locations</b>				0.366
1 location	3 (5.6)	0 (0)	3 (7.3)	
2-5 locations	26 (48.1)	6 (46.2)	20 (48.8)	
6-10 locations	22 (40.7)	5 (38.5)	17 (41.5)	
11-14 locations	3 (5.6)	2 (15.4)	1 (2.4)	
<b>Past Treatments</b>				0.948
Past Treatments Tried				0.395
Past Treatment Outcomes				
No previous treatments tried	14 (25.9)	5 (38.5)	9 (22)	
No Change	12 (40)	2 (25)	10 (45.5)	
Minimal Improvement	9 (30)	2 (25)	7 (31.8)	
Improved	4 (13.3)	1 (12.5)	3 (13.6)	
Unspecified	2 (6.7)	1 (12.5)	1 (4.5)	

<sup>1</sup>Continuous variables were summarized as mean and standard deviation, and categorical variables were summarized as count and percentage.  
<sup>§</sup>Other treatments include topical or oral antibiotics, topical or systemic corticosteroids, phototherapy, and methotrexate.  
<sup>‡</sup>Comparisons between two independent groups (Azithromycin vs Other Tx) were done using Chi-square test or Fisher's Exact test for categorical variables and t-test was used for continuous variables. Data analyses were performed using SAS version 9.4 (SAS Institute, Cary, North Carolina).  
<sup>\*</sup>Other comorbidities include Hypoplastic Left Heart Syndrome, Crohn's, chronic diarrhea, GERD, lymphatic malformation, psoriasis, Juvenile Idiopathic Arthritis, Uveitis, Hypermobility Syndrome, Autism Spectrum Disorder, Disruptive Mood Regulation Disorder, and lactose intolerance.

## Results



## Conclusions and Future Directions

- Conclusions:**
- Treatment response with azithromycin did not significantly differ from other treatments used for PL lesions.
  - The frequency of adverse events with azithromycin did not significantly differ from other treatments used for PL lesions.
  - Azithromycin was dosed significantly less per week than the standard treatment group (2 per week vs 14 per week, p < 0.001).
  - Azithromycin is shown to be as safe and effective as other therapies when treating PLC, PLEVA and Unspecified PL.
- Future Directions:**
- More research should be done on treatments for PL lesions with a larger population to determine the strength of correlations suggested by this study.

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