

Barriers and Facilitators of Clinical Research Participation among Racial and Ethnic Minoritized Adults with Psoriasis

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Psoriasis Epidemiology

- Common, chronic skin disease affecting ~3% of the U.S. population
- 0.4-2.3% have undiagnosed psoriasis
- Typical onset in 20s to 30s

Neimann AN, et al. Expert Review of Dermatology. 2006;1:63-75.

Gelfand JM, et al. J Am Acad Dermatol. 2005;52:23-26.

Kurd SK, Gelfand JM. J Am Acad Dermatol. 2009;60:218-224.



Plaque psoriasis



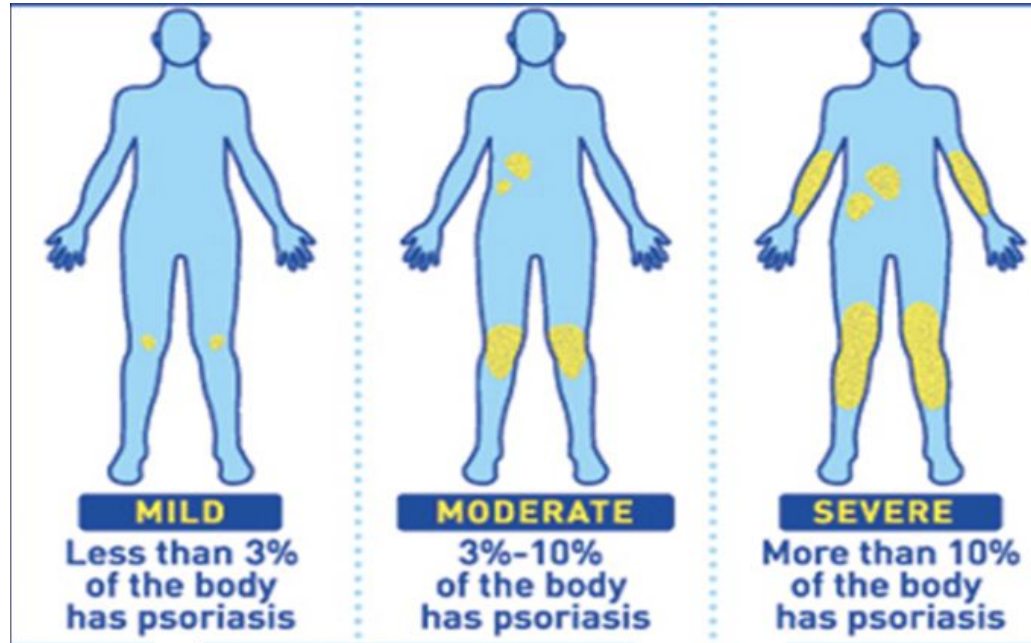
Inverse psoriasis

Psoriasis Epidemiology

- Can affect any part of the skin
- Waxes and wanes over years
- The cause isn't fully understood
- Genetics and environmental factors
- Associated with comorbidities



Psoriasis Treatment Strategy



↓
Topical therapy

Ultraviolet light therapy
Oral medications
Biologics

Prevalence and Severity of Diagnosed Psoriasis Differ by Race/Ethnicity



<u>Race/Ethnicity</u>	<u>Prevalence¹</u>
White	2-4%
Black ²	1.3-1.9%
Hispanic ³	1.6-1.9%
Asian ³	2.5%
Other	1.4%

Gelfand JM et al. J Am Acad Dermatol. 2005;52:23.
Kerr GS et al. Clin Rheumatol. 2015;34:1753.
Armstrong AW et al. JAMA Dermatol. 2021;157:940.
Abrouk M et al. J Am Acad Dermatol. 2017;77:180.

Impact of Psoriasis on Quality of Life

Mental Functioning

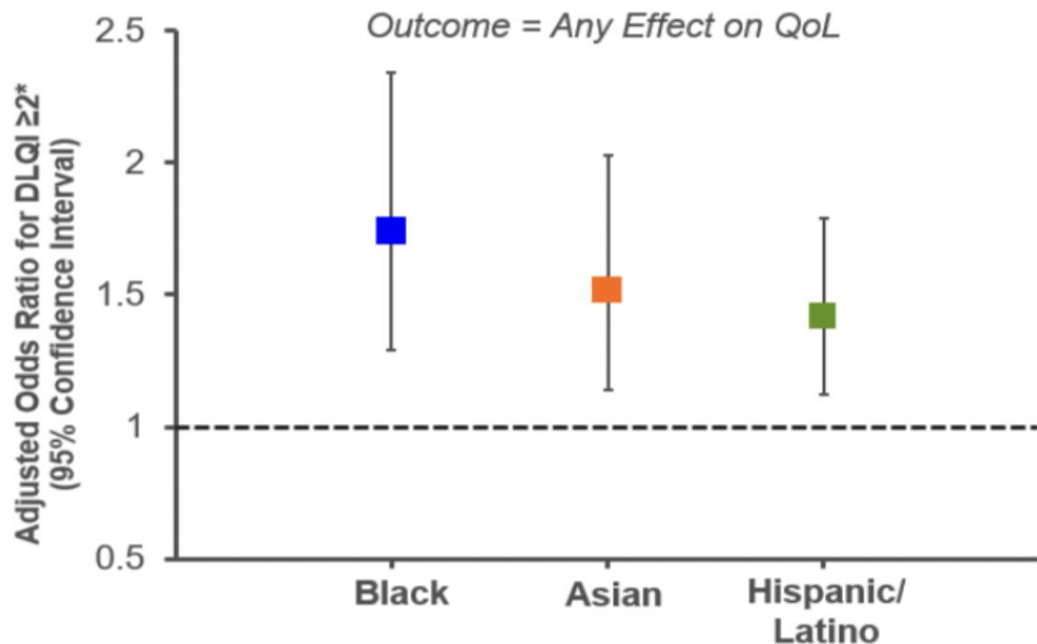
Healthy adults	53.43
Diabetes type 2	51.90
Myocardial infarction	51.67
Congestive heart failure	50.43
Psoriasis	45.69
Chronic lung disease	44.47
Depression	34.84

Physical Functioning

Healthy adults	55.26
Depression	44.96
Arthritis	43.15
Myocardial infarction	42.64
Chronic lung disease	42.31
Diabetes type 2	41.52
Psoriasis	41.17
Congestive heart failure	34.50

Quality of Life Impact of Psoriasis Differs by Race/Ethnicity

<u>Race/Ethnicity</u>	<u>Dermatology Life Quality Index</u> <u>Mean (SD)*</u>
White (N=8,338)	5.6 (6.1)
Black (N=404)	8.3 (7.6)
Asian (N=436)	7.9 (7.4)
Hispanic (N=668)	9.0 (7.6)

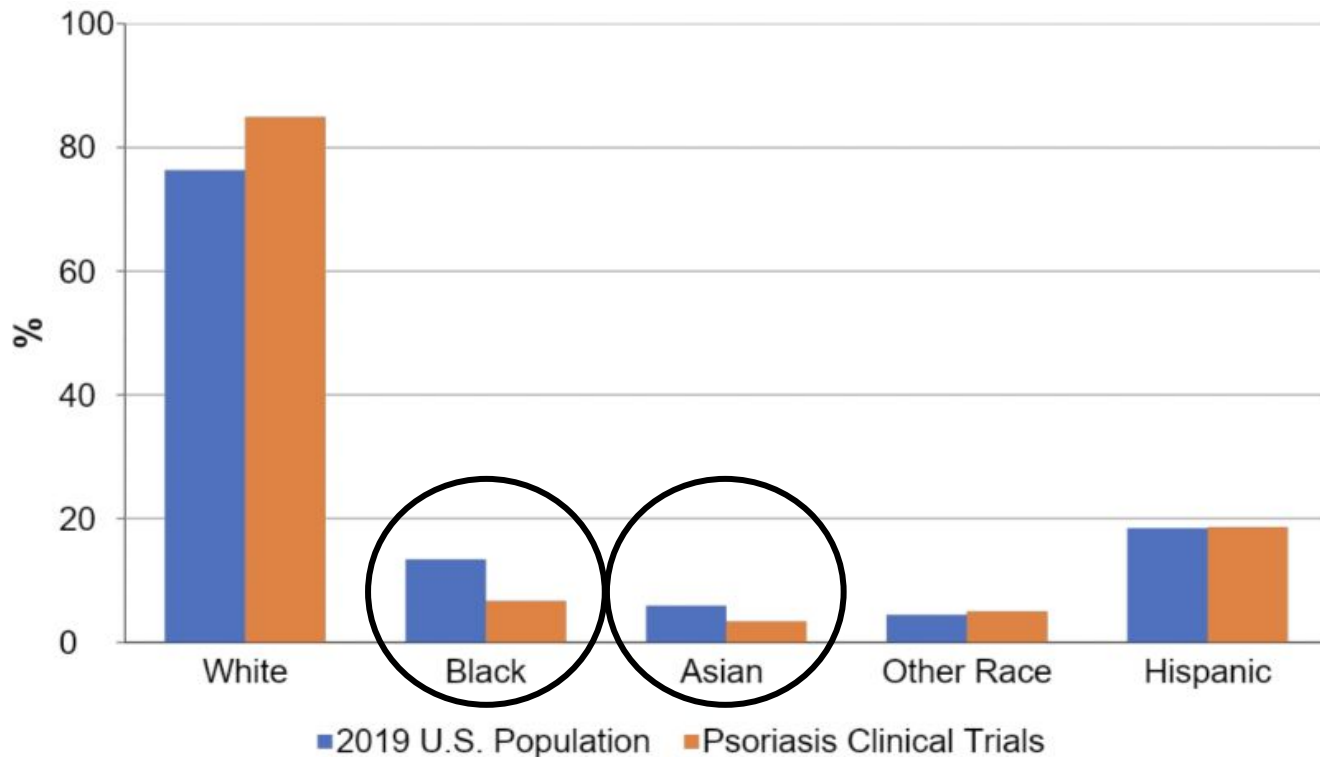


Reference = White

*Adjusted for age, sex, education, employment, region, income, marital status, insurance, smoking, alcohol use, medical history, psoriasis history (type, duration, treatment), body mass index, psoriasis severity (body surface area, Physician Global Assessment), Hospital Anxiety and Depression Scale.

Takehita J et al. J Invest Dermatol. 2022;142(9):2528-2531.e3.

Participant Diversity is Essential to Clinical Research Studies



Sevagamoorthy A, ..., Takeshita J. J Dermatology Treat. 2022;33(8):3086-3097.

Research Question

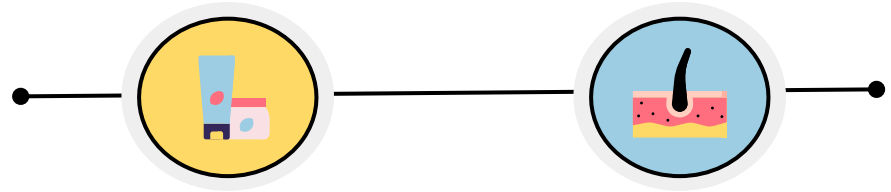
What are the patient-identified barriers to and facilitators of participation in clinical research studies among Asian, Black, and Hispanic/Latinx adults with psoriasis?

Methods

- Individual semi-structured interviews of Asian, Black, and Hispanic/Latinx adults
- Purposive sampling until we achieved data saturation
- Grounded theory approach and Nvivo software

Interviews

Hypothetical Study 1 Hypothetical Study 2



Testing a new
topical, oral or
injectable therapy

Providing a
blood and skin
sample

Results

Participant Characteristics	N (%)
Total participants	26
Age (median, IQR)	48 years (31-63)
Sex	
Male	9 (34.6%)
Female	17 (65.4%)
Race/Ethnicity	
Asian (non-Hispanic)	10 (38.5%)
Black (non-Hispanic)	8 (30.8%)
Hispanic (any race)	8 (30.8%)

Barriers

to clinical trial participation among minorities with psoriasis

Logistics

Time commitment, scheduling inflexibility, long distance from study location

Risks & side effects

Concerns about risks or side effects of study treatments

Transportation

Lack of access to reliable transportation, inability to drive

Lack of trust

In the scientific process or research team

Interview Quotes - Barriers

Logistics/time commitment:

"I live here in Philly, **I don't have a car myself**, so if it's something that is very out of the way ... after already taking public transportation..., then that's definitely something that I have to consider ...coming to and from is also going to be a **time commitment** in and of itself. So if it's something that's **super far away**, I don't know that I would even consider [the study] from a logistical standpoint."

Risk & side effects:

"If I have a **serious adverse reaction** to the drug, that would be a concern."

Lack of trust:

"if the person that is talking with me is not making me feel **safe**, is not conveying that I'm going to be-- This is how you're going to be taken care of, this is how we're going to take care of you because we are **concerned about your safety...**"

Facilitators

to clinical trial participation among minorities with psoriasis

Compensation

Adequate compensation

Altruism

And the ability to help others

Betterment of treatment

The desire to find better treatments and improve psoriasis

Knowledge

The potential knowledge to be gained about psoriasis

Interview Quotes - Facilitators

Compensation and betterment of treatment:

“Oh, just knowing that it's something that eventually will be available to other patients to **help better manage their symptoms**. And I think **reimbursement** and doing these studies is always a positive as well.”

Altruism:

“I guess wanting to make sure that people that are currently having psoriasis or **future generations** that could have it are **getting the help they need** in an efficient way, in a way that actually works and it helps them.”

Knowledge:

“I know that black and brown people aren't really considered in psoriasis studies... **Diversifying your research group will add to the findings** that I think will benefit the medicines that may come as an outcome of these studies. I think it's super duper important that we're including different groups of people, especially in this country, we're such a diversified nation.”

Conclusion

- Next steps: investigator-identified barriers to and facilitators of recruiting and enrolling Black, Hispanic/Latinx, and Asian patients
- Apply our findings to design future clinical research studies and interventions aimed at increasing participant diversity



The Future of Psoriatic Disease: A Cure for All

October 6 - 7, 2023 | Washington, D.C.



Lessons Learned

- Comprehensive insight on qualitative research
 - grounded theory approach, purposive sampling, data saturation, thematic analysis, inter-rater reliability
- Create a codebook and use NVivo software
- Significance of “adequate representation” in clinical trials and data disaggregation in subgroups
- Academic dermatology, balancing clinic and research, and furthering research skills through advanced degrees

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Thank you!
Questions?