

Geographic and Demographic Analysis of Psoriasis Clinical Trials in the United States

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INTRODUCTION

- Psoriasis, an autoimmune dermatitis, affects up to 8.5% of adults in the United States.¹
- It has been proposed that warm temperatures may exacerbate the condition of psoriasis, however research has yielded inconclusive results.²
- Limited nationwide studies have been conducted to measure geographic incidence.

METHODS

- Clinical trials were collected via Clinicaltrials.gov
- Data was mapped using county, catchment, and census.
- A Local Indicators of Spatial Association (LISA) analysis was conducted, classifying counties into five categories based on psoriasis cancer incidence rates.

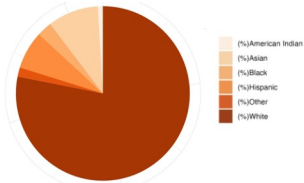
633 trials relating to psoriasis

529 trials with results

257 distinct trial with demographic and location data

RESULTS

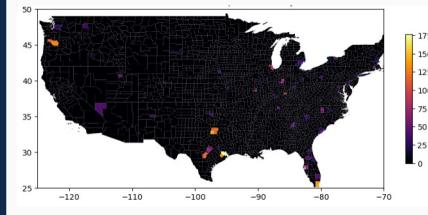
Racial Distribution across Clinical Trials



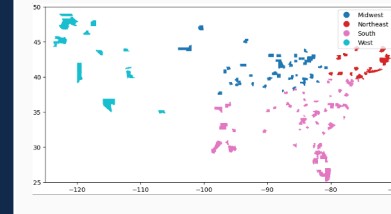
Number of Clinical Trials by Region

| Region | Trials (n) |
|-----------|------------|
| Midwest | 992 |
| Northeast | 630 |
| South | 2832 |
| West | 1538 |

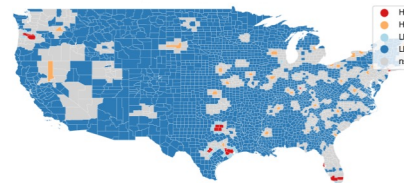
Clinical Trial Density across the US



Clinical Trial Counties by Geographic Region



Association of trial density and reported cases of per county



Key

- HH (Red)** – Significantly Higher trial density and cancer incidence
- HL (Orange)** – Significantly Higher trial density, no difference in cancer incidence
- LH (Light Blue)** – Significantly Higher cancer incidence, no difference in trial density
- LL (Dark Blue)** – Low trial density and low cancer incidence
- NS (Gray)** – No difference in cancer incidence or trial density

CONCLUSIONS

- The average enrollment per trial was 272.4 participants, 64.48% being male and 35.52% being female.
- The demographic breakdown is 83.5% White, 3% Black, 10% Asian, 1.5% American Indian, and 2% other.
- Regarding the geospatial analysis, a majority of trials were concentrated in the Southern (47%) United States followed by the West (26%), Midwest (17%), and Northeast (10%).
- Univariate LISA analysis showed that cities in Texas and Southern Florida have high incidence of psoriasis clinical trials.

DISCUSSION

The study's findings highlight a significant overrepresentation of clinical trials in the southern region with the demographic data indicating a predominance of white male participants. These disparities in trial demographics and locations limit generalizability of clinical trials.

REFERENCES

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[2] Jensen KK, Serup J, Alsing KK. Psoriasis and seasonal variation: A systematic review on reports from Northern and Central Europe-Little overall variation but distinctive subsets with improvement in summer or wintertime. *Skin Res Technol*. 2022;28(1):180-186. doi:10.1111/srt.15102

Disclosures

All authors have no relevant disclosures