

Abstract

In this single institution retrospective cohort study of cutaneous T-cell lymphoma (CTCL), we characterized diagnostic delay (time from symptom onset to diagnosis), stage at diagnosis, and biopsy burden, and tested for sociodemographic disparities. Among 272 patients, median diagnostic delay was 650 days and varied sharply by CTCL subtype, while insurance, race, income, rurality, age, and sex showed no significant association with delay, stage, or biopsy count after adjustment for subtype. This poster reflects an expanded cohort (n = 272) collected since our Virginia Dermatology Society 2026 abstract (n = 52).

Background and Methods

Cutaneous T-cell lymphoma (CTCL) frequently mimics benign inflammatory dermatoses such as eczema and psoriasis and typically has an indolent presentation. Prior series report a median diagnostic delay of approximately three years for early-stage mycosis fungoides. Racial and socioeconomic disparities have been documented in CTCL diagnosis and incidence, though findings on demographic predictors of delay specifically have been mixed.

Methods

Design: Retrospective chart review of CTCL patients at a single academic institution (N = 272).

Variables: Demographics, insurance status, zip code derived rurality and area level median household income, CTCL subtype, stage at diagnosis, and biopsies to diagnosis.

Analysis: Kruskal-Wallis and Fisher's exact tests for bivariate screening, then multivariable linear (log diagnostic delay), logistic (stage), and negative binomial (biopsy count) regression adjusting for CTCL subtype.

Objectives and Cohort Overview

To characterize diagnostic delay, stage at diagnosis, and biopsy burden in our CTCL cohort, and evaluate their association with CTCL subtype and sociodemographic factors.

Our cohort included 272 patients with a median age of 69 years, a median diagnostic delay of 650 days, and a median of 2 biopsies to diagnosis. Most patients had mycosis fungoides (226, 83%), with smaller numbers of Sézary syndrome (9, 3%) and other subtypes (36, 13%). Of the 219 patients with staging data, 181 (83%) were early stage and 38 (17%) were late stage. Insurance coverage was public for 162 patients (60%), private for 101 (37%), and 7 (3%) were uninsured. Patients identified as white in 193 cases (71%), Black in 61 (22%), and another race in 16 (6%). Most patients lived in urban settings (215, 79%), with 13 (5%) suburban and 44 (16%) rural.

Figures

Figure 1. Diagnostic delay by CTCL subtype

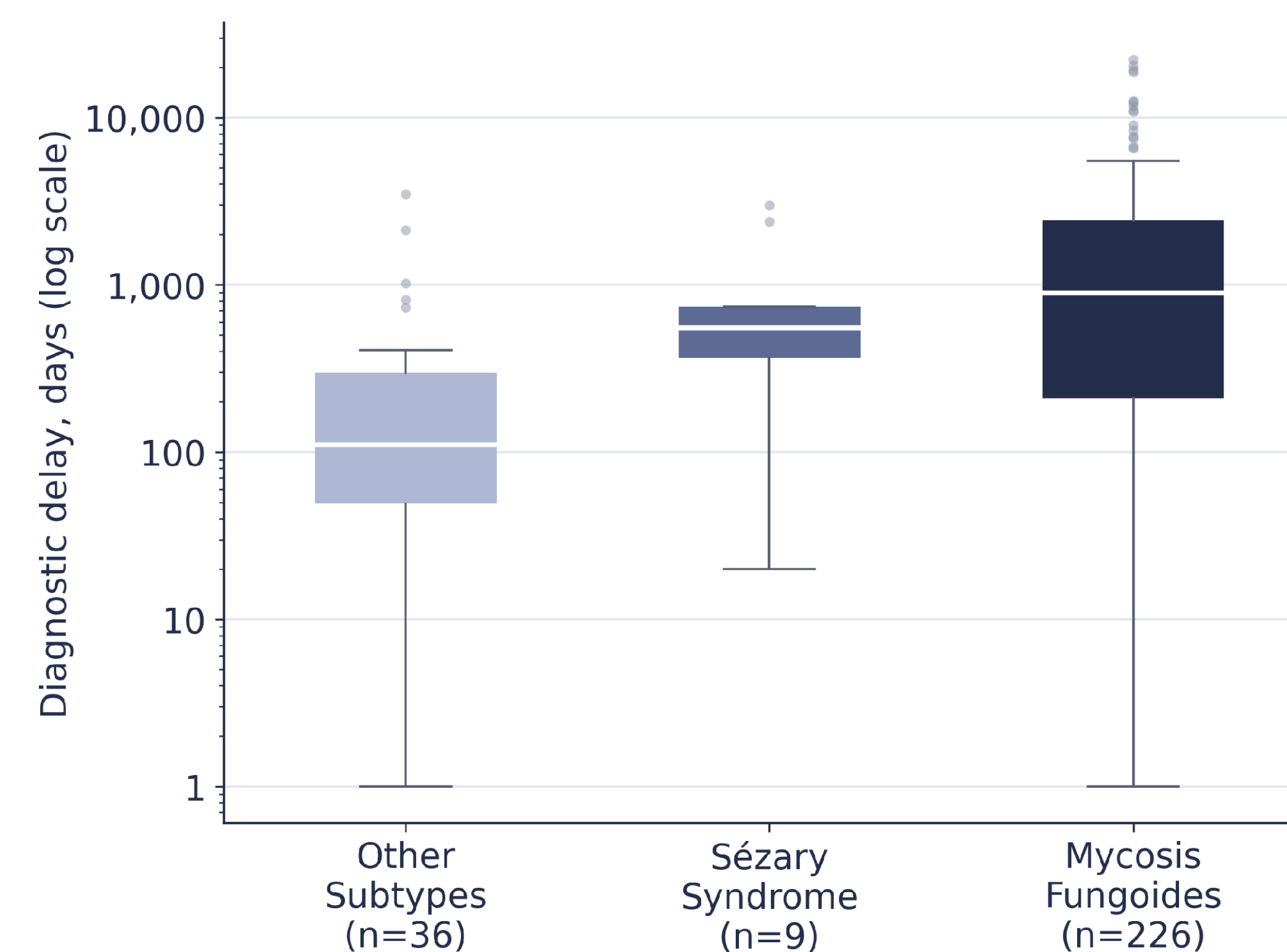


Figure 2. Stage at diagnosis by CTCL subtype

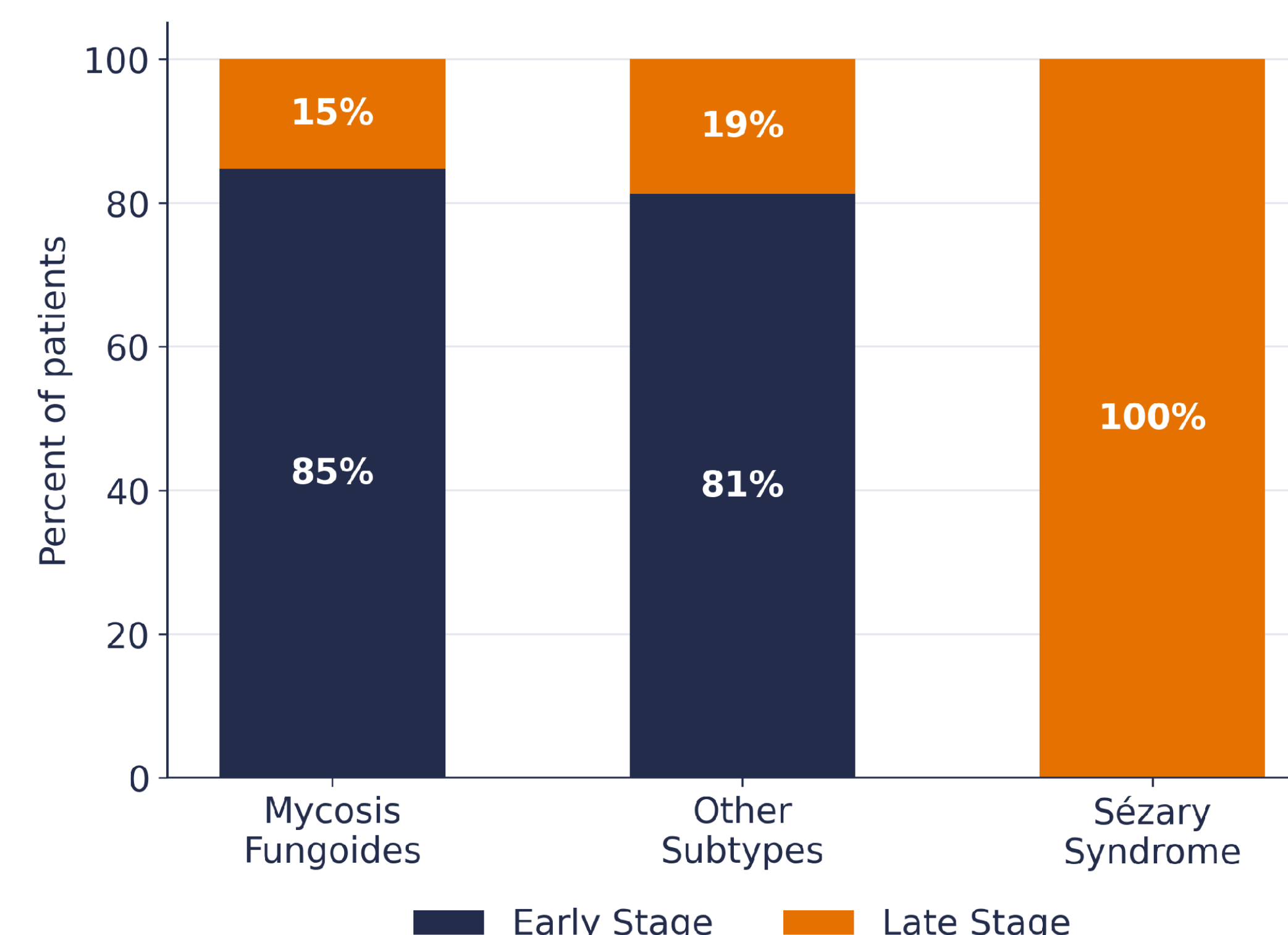
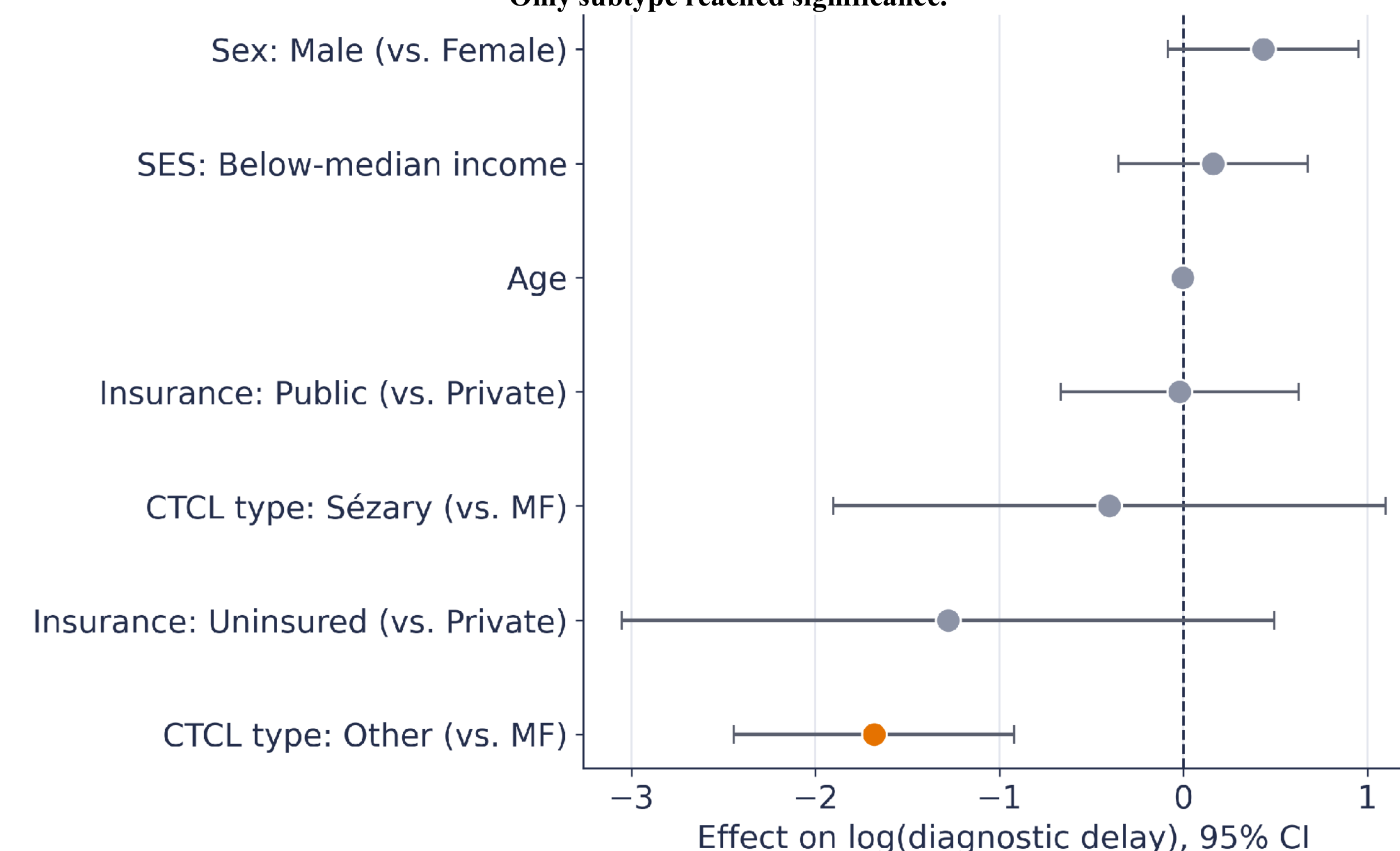


Figure 3. Predictors of diagnostic delay, adjusted for CTCL subtype (multivariable linear regression, log scale). Only subtype reached significance.



Results

Among 272 patients (median age 69), median diagnostic delay was 650 days and varied sharply by CTCL subtype: 890 days for mycosis fungoides (MF), 551 for Sézary syndrome (SS), and 110 for other subtypes.

Sézary syndrome was late stage in 100% of cases, by definition (blood and leukemic involvement is part of SS staging criteria); MF and other subtypes were predominantly early stage (83% of staged patients overall).

Adjusting for CTCL subtype, diagnostic delay, stage, and biopsy count showed no significant association with insurance, race, income, rurality, age, or sex (all $p > 0.10$ in multivariable models). The wide confidence intervals for Sézary syndrome likely reflect its small sample size (n = 9) rather than a true absence of effect.

Conclusions

Conclusion: CTCL subtype, not demographics, was the primary driver of diagnostic delay and stage at diagnosis in this cohort. This suggests that delays are driven more by disease biology and clinical recognition than by access-related disparities in this population.

Limitations: single institution, retrospective design, about 20% missing stage data, and an area-level rather than individual-level SES proxy.

Future directions: prospective validation, individual level SES data, and multi site collaboration to increase power for detecting smaller disparities.

Acknowledgements & References

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References

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