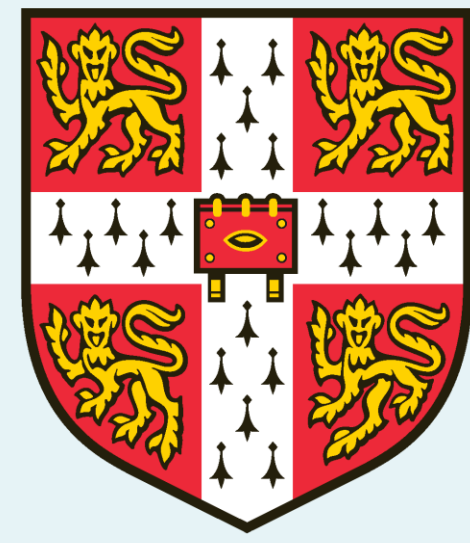




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# Socioeconomic Deprivation and Survival in Syndromes Related to Frontotemporal Lobar Degeneration

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## Introduction

Socioeconomic deprivation is a well-established determinant of dementia risk, morbidity, and mortality. Whether this also affects survival in people with a specific diagnosis of frontotemporal lobar degeneration (FTLD) remains poorly understood, particularly the relative contribution of individual-level characteristics compared with area-level deprivation measures.

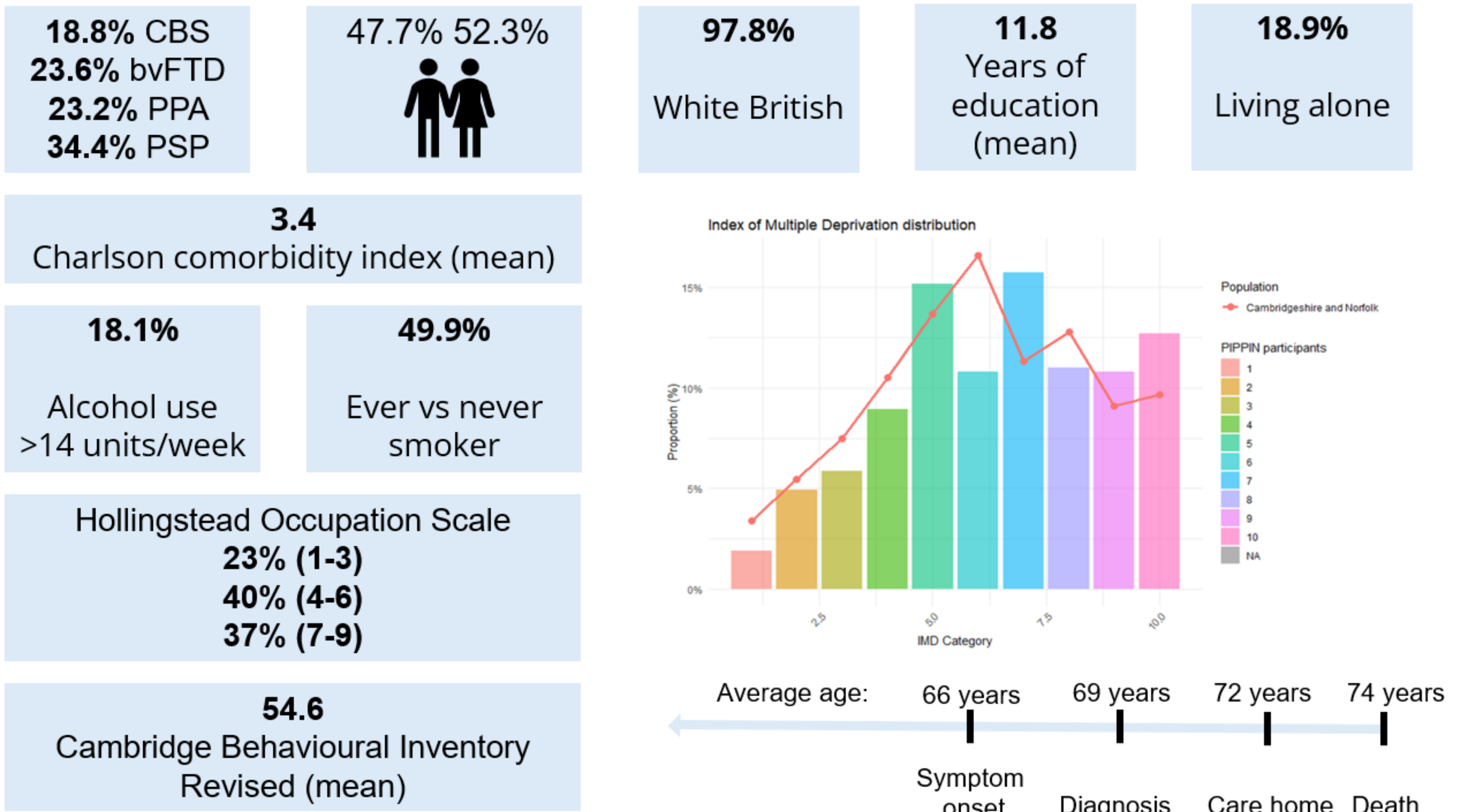
## Methods

We studied a population-based cohort of 474 individuals with FTLD-related syndromes; corticobasal syndrome (CBS), behavioural variant frontotemporal dementia (bvFTD), progressive supranuclear palsy (PSP), and primary progressive aphasia (PPA), from the PiPPIN study.

Area-level deprivation was quantified using the Index of Multiple Deprivation (IMD) and its seven subdomains. Individual-level factors included occupation, education, living status, comorbidity burden, and lifestyle factors (alcohol consumption and smoking).

Cox proportional hazards models assessed predictors of outcomes for absolute survival (time to death) and independent survival (time to care home admission/death).

## Demographic and Clinical Characteristics



## Results

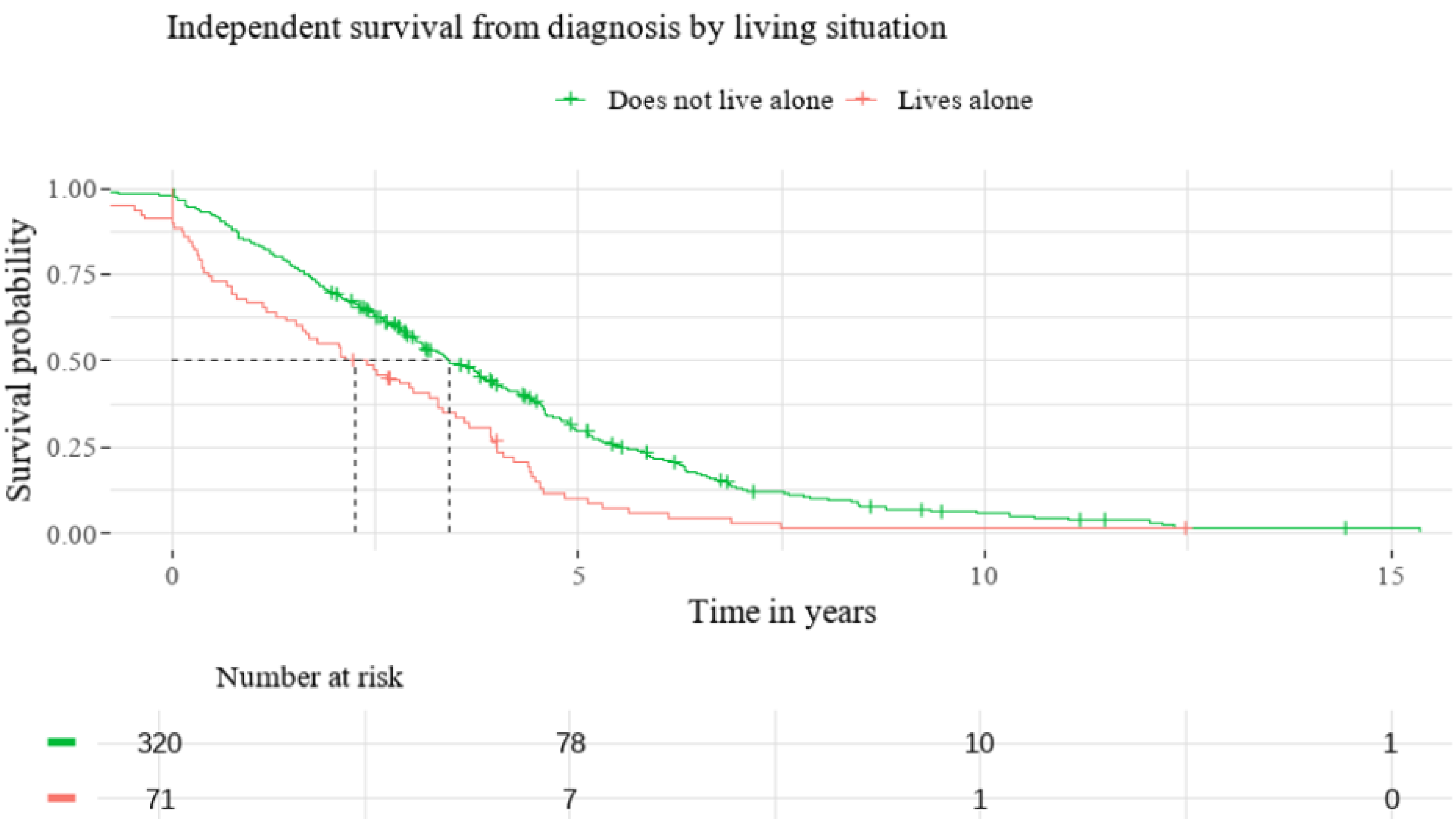


Figure 1. Kaplan-Meier curve illustrating the living situation effect on survival in people with frontotemporal lobar degeneration syndromes in the PiPPIN study: independent (from diagnosis  $p < 0.001$  (image above); from symptom onset  $p < 0.001$ ) and absolute (from diagnosis  $p = 0.01$ ); from symptom onset  $p < 0.001$ ) –  $p$ -values reported for univariate analyses of living status.

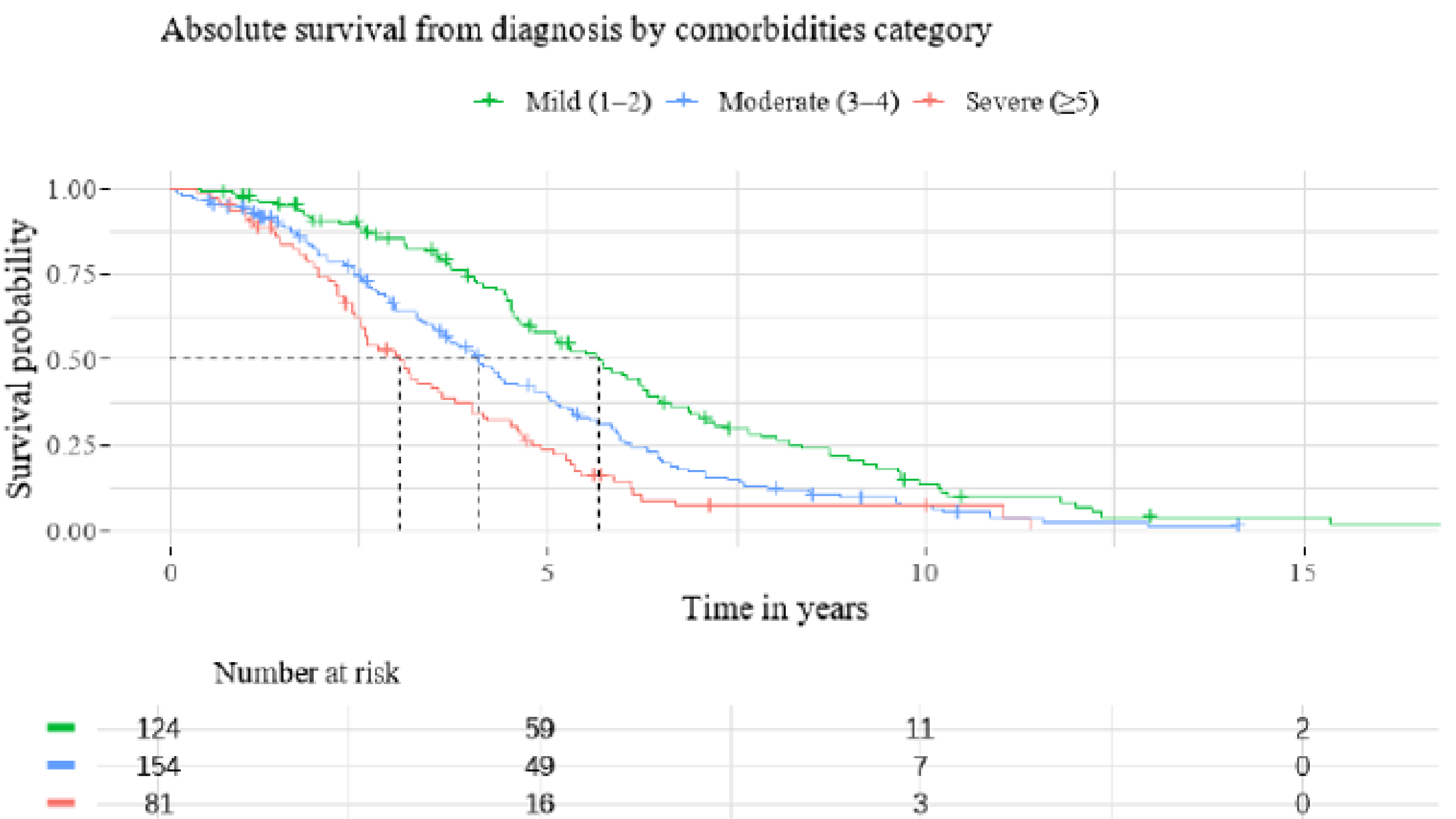


Figure 2. Kaplan-Meier curve illustrating the comorbidities' effect on survival in people with frontotemporal lobar degeneration syndromes in the PiPPIN study: absolute (from diagnosis  $p < 0.001$  (image above); from symptom onset  $p < 0.003$ ) and independent (from diagnosis  $p = 0.031$ ; from symptom onset  $p = 0.063$ ) –  $p$ -values reported for univariate analyses of comorbidity score (Charlson Index).

## Results

- Area-level deprivation was not associated with survival, except for the income domain associated with independent survival. In contrast, individual-level factors emerged as consistent predictors.
- Living alone was associated with a 41–80% increased risk of death and a 53–80% increased risk of care home admission or death.
- Higher comorbidity burden, measured by the Charlson Index, increased the risk of care home admission or death by 11–15%.
- Advancing age was associated with poorer outcomes across all models. As per FTLD subtype, individuals with PPA had the most favourable survival, while those with PSP had the poorest outcomes.

## Discussion

We identified that individual-level clinical and social vulnerability factors, particularly living alone, age, specific FTLD diagnosis, and comorbidities, are primary drivers of survival outcomes in FTLD syndromes, outweighing the influence of neighbourhood-level deprivation. These findings argue for personalised care models that directly address modifiable individual risks.

## Acknowledgements

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