

Reporting Adult-Onset Genomic Results to Pediatric Biobank Participants and Parents

(PRoGRESS)

NCT03832985

October 31, 2025

Statistical Analyses Plan

Parents who completed the baseline survey of primary outcomes including Hospital Anxiety and Depression Scale, quality of life, and family function were included for the analyses. Primary outcomes were assessed at baseline and each follow-up time point and compared across groups. We first summarized each outcome at baseline and follow-up times using descriptive statistics (mean, standard deviation, median, range, frequency) and visualizations with line plots and bar charts to assess distributional changes over time.

For partial missingness in the survey, we imputed missing items using a within-subject mean imputation approach. Specifically, if no more than 20% of survey items were missing and the missing items were missing at random within-subject, the missing items were imputed using the average of non-missing items from the same individual's responses. Cronbach's alpha was computed on the imputed dataset. Sensitivity analyses were performed using listwise deletion to compare the Cronbach's alpha.

For continuous outcomes, analysis of covariance (ANCOVA) was used to evaluate differences in the changes in scores from baseline to follow-up across groups, while adjusting for the baseline score. For categorical outcomes, percentages of participants meeting the clinical cut-offs were summarized at baseline and follow-up for each group. Analysis of variance (ANOVA) approach was used to test whether the slope of change in proportion differed significantly across groups. Statistical analyses were performed in RStudio (Version 2023.12.0). P-values of less than 0.05 were considered statistically significant