<u>Pre-Analysis Plan Amendment:</u>
The impact of refractive error correction on harvest workers
in the Guatemalan coffee sector
21 January 2025

1. We plan to include an additional refractive error, astigmatism, in the heterogeneous effect / subgroup analysis. We did not anticipate the prevalence of astigmatism to be as significant as it was, so its inclusion as a group is necessary to ensure all refractive error diagnoses are reflected in our results. The updated groups are as follows:
   a. Individuals with presbyopia/ hyperopia
   b. Individuals with myopia
   c. Individuals with both myopia and presbyopia/ hyperopia
   d. Individuals with astigmatism (with or without another refractive error)

2. There is a typographical error in the original ANCOVA formula. Time period (day) fixed effects are included (later removed in lieu of farm-specific cubic time trends in amendment 1), but this was intended to be a separate specification listed as a robustness check. ANCOVA uses a single baseline and endline average observation for each participant rather than daily observations, so the pre-specified equation cannot be estimated.

   The equation is updated as follows:

$$\bar{Y}_{i,POST} = \beta_0 + \beta_1 \bar{Y}_{i,PRE} + \beta_2 Treatment_i + \beta_3 Age_i + \beta_4 Female_i + \epsilon_{i,t}$$

   where $\bar{Y}_{i,POST}$ represents the average harvest weight over the post-treatment period for each individual, $\bar{Y}_{i,PRE}$ is the average harvest weight over the pre-treatment period, $Treatment_i$ is a dummy variable equal to 1 if the individual is assigned to the treatment group with β_2 estimating the intent-to-treat (ITT) effect, Age_i and $Female_i$ are demographic controls, and $\varepsilon_{i,t}$ is the error term.