

# Brain and Genetic Predictors of Individual Differences in Pain and Analgesia (Pain Genetics)

NCT03781570

Statistical Analysis Plan

2/13/2024

### Statistical analysis plan

Our main statistical analysis will be focused on participants' thermal pain ratings in the placebo compared to the control condition (conditions are within participant). We will report the mean and standard deviation of the difference in pain rating for control minus placebo, across participants. We will test for significant differences with a mixed-effects model, controlling for the stimulus intensity, and using the standard a-priori statistical threshold of  $\alpha = 0.05$ . To account for the familial structure of the dataset (which includes monozygotic and dizygotic twin pairs), we will include familial random effects in the model, modelled separately for monozygotic and dizygotic twins.