

# Report progetto Biomarkers

Benedetta Corso, Letizia, Dalila Dattoli

May 30, 2024

## Abstract

Abstract da scrivere: introduce rationale of investing brain dopamine function and potential brain asymmetry in PD

## 1 Introduction

- Literature evidenced investigating brain dopamine lat in PD - aims of the study, based on literature evidences, formulate and motivate study hypotheses

## 2 Material and Methods

- Dataset:
  - Provide a summary of the dataset (refers to data files and PPMI portal). Please note that only individual with baseline DAT imaging where included.
  - The main target regions are Caudate and Putamen, quantified as Signal Binding Ration (i.e. DATSCAN PUTAMEN L/R and DATSCAN CAUDATE L/R)
- Research methods:
  - Provide a description of the methodology used to answer the research questions.
  - Provide an extensive and motivated description of statistical analysis plan, including the metrics used to assess the biomarker performances

## 3 Results

- A clear and concise description of the statistical results providing answers to the research questions
- A sensitivity analysis of the results to covariates, group matching and data quality (e.g. missing data, data miss balance)

## 4 Discussion

- Direct answers to the research questions
- An overview of the limitations of the study

- A list of possible suggestions to improve the study in case someone will repeat it in futur