# Report Biomarkers

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#### Abstract

Abstract: 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 future