

# Quality-of-life improvement is associated with some personality dimensions in fluctuating Parkinson's Disease patients after continuous subcutaneous apomorphine infusion

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## AIMS

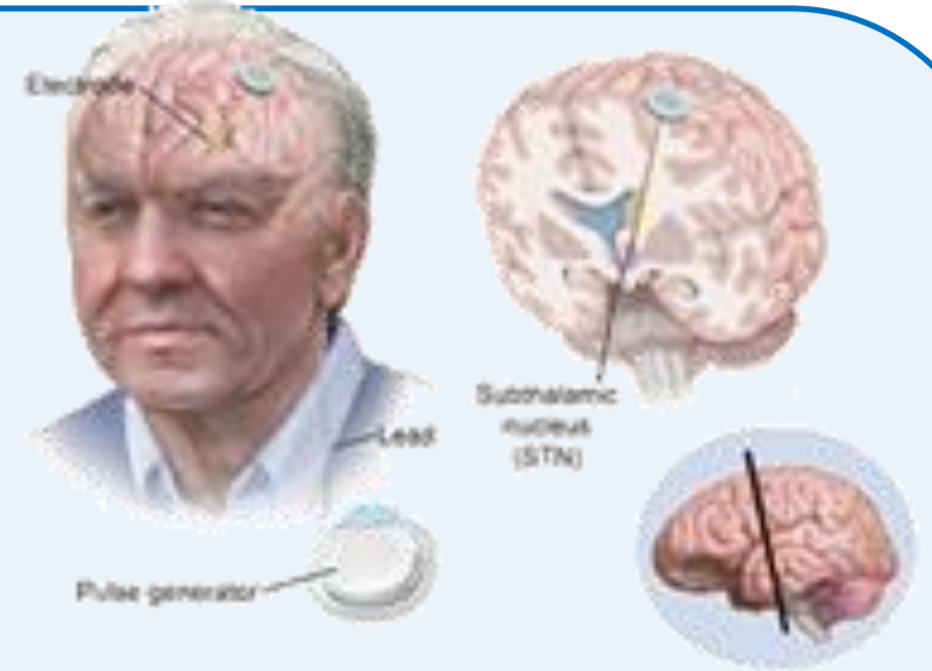
To evaluate associations between Quality of Life (QoL) amelioration after six months of Continuous Subcutaneous Apomorphine Infusion (CSAI) and personality dimensions in fluctuating Parkinson's Disease (PD) patients

→ HEALTHCARE PERSONALIZATION

## BACKGROUND

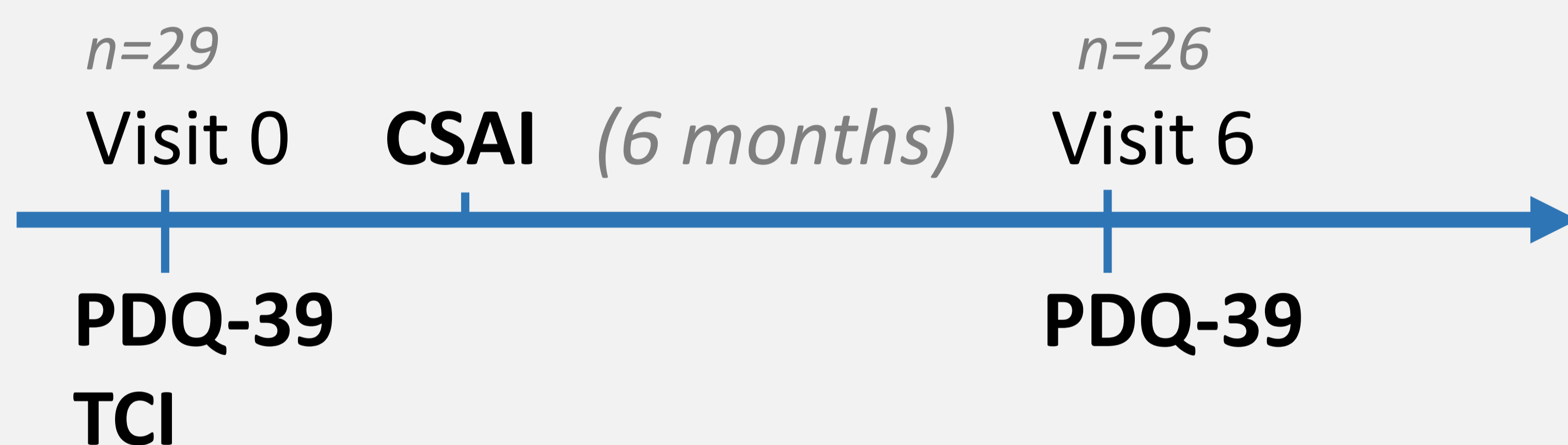
Our previous study has shown associations between some personality dimensions and QoL amelioration after 1 year of DBS-STN in PD<sup>1</sup>:

**High Novelty Seeking + Cooperativeness = best QoL amelioration after 1 year of DBS-STN**



→ Aim: to evaluate these associations with another treatment of second line (CSAI) to look for specificity in different treatments responses.

## METHODS - PSYCHO-PERF study



TCI\* → Personality evaluation  
 PDQ-39\*\* → % QoL evolution  
 Linear regression models

\*Temperament and Character Inventory  
 \*\*Parkinson's Disease Questionnaire-39

## RESULTS

Before treatment, positive association was found between PDQ-39 scores and Harm Avoidance scores (FDR-corrected  $p.value = 0.05$ ):

**Low Harm Avoidance = best QoL before CSAI**

After CSAI, negative association was found between % of PDQ-39 scores evolution and Reward Dependence scores (FDR-corrected  $p.value < 0.05$ ):

**High Reward Dependence = best QoL amelioration**

## CONCLUSIONS



TCI dimension : **high Reward Dependence** =

**BEST QUALITY OF LIFE IMPROVEMENT**  
 after 6 months of CSAI

→ appreciate clinical management : manipulations linked to CSAI establishment + reinsurance thanks to the daily presence of the device

→ better social adjustment to the CSAI ?

In clinical practice:

- Better prepare and accompany PD patients before and during CSAI establishment through **specific therapeutic educational programs**
- Use of personality dimensions for the **choice of orientation** between different second line treatments (since different association was found compared to QoL amelioration after DBS-STN)

QoL = Quality of Life ; CSAI = Continuous Subcutaneous Apomorphine Infusion ; PD = Parkinson's Disease; DBS-STN = Deep Brain Stimulation of the Sub-Thalamic Nucleus