

# PDGAN Additional Information

Parkinson's Disease Background

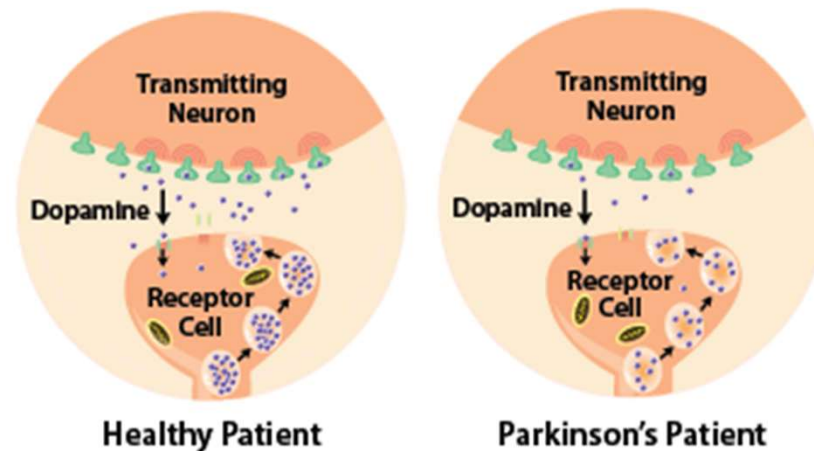
# What is Parkinson's Disease?

Parkinson's Disease is the second most common neurodegenerative disorder.

- Affects Movement and Memory
- There is no cure but symptoms can be treated if detected in early stage
- Typically starts with an undetectable tremor, but if detected late, Parkinson's Disease is unable to be treated

# Causes of Parkinson's Disease

- Parkinson's Disease is caused by a loss of dopamine production.
- When dopamine levels decrease, it causes abnormal brain activity, leading to symptoms of Parkinson's disease.



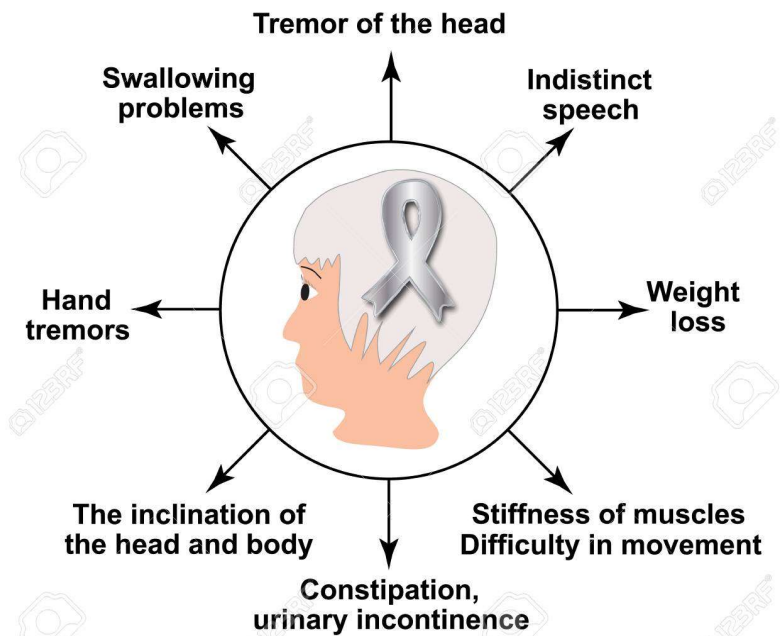
# Symptoms of Parkinson's Disease

Symptoms of Parkinson's Disease include:

- Tremors
- Bradykinesia (Slowed Movement)
- Speech & Writing Changes
- Impaired Posture and Balance

Many of these symptoms may seem common, but could indicate bigger problems like Parkinson's.

## SYMPTOMS OF PARKINSON'S



# Medication

There are many medications to mitigate the symptoms of Parkinson's Disease.

**Levodopa** is a chemical that converts to dopamine when it passes into the brain.

**Dopamine agonists** mimic dopamine in the brain. Not as strong as Levodopa, agonists lose their potency slower.

**COMT inhibitors** prolongs the effects of levodopa by blocking enzymes that break down dopamine.

# MRI's Use in Parkinson's Disease

Many researchers hypothesized the use of anatomical and functional MRIs to detect Parkinson's Disease ***before*** symptoms develop.

