

## PARKINSON'S DISEASE FACTS

### > A progressive disease

that is caused mainly by the loss of brain cells responsible for the production of a brain chemical, called dopamine, along with involvement of at least three other chemicals (serotonin, acetylcholine and noradrenaline).

### > Varying Symptoms

are experienced by patients and do not include only the common tremor and other motor symptoms. In fact, the early ones are constipation, reduced ability to smell, sleep problems, depression and pain.

### > No definite early detection

laboratory tests have been established for Parkinson's. The very early symptoms (movement and not movement-related) are often missed.

### > No cure

has been found to reverse Parkinson's disease. Patients usually receive medication to minimise motor symptoms and manage symptoms not related to movement.

### > 55+ years

is usually the age of Parkinson's disease onset. Young-onset is rarer (around 10% of cases).

## i-PROGNOSIS OBJECTIVES

### A/ Build early detection tests

for Parkinson's disease based on users' interaction with everyday technology.

### B/ Design interventions

to sustain the quality of patients' life over the course of Parkinson's disease.

### C/ Empower people

to affect policies and reduce hospitalisation.

Learn more on [www.i-prognosis.eu](http://www.i-prognosis.eu)

## 11 Organisations from 6 EU countries for 4 years (2016-2020)

### GREECE

Aristotle University of Thessaloniki  
(Coordinator)  
[www.auth.gr](http://www.auth.gr)  
Centre for Research and Technology Hellas  
[www.certh.gr](http://www.certh.gr)  
Microsoft Innovation Center Greece  
[www.microsoft.com/el-gr/mic](http://www.microsoft.com/el-gr/mic)  
COSMOTE Mobile Telecommunications S.A.  
[www.cosmote.gr](http://www.cosmote.gr)

### BELGIUM

Age Platform Europe  
[www.age-platform.eu](http://www.age-platform.eu)

### GERMANY

Technische Universität Dresden  
[www.tu-dresden.de](http://www.tu-dresden.de)  
Fraunhofer-Gesellschaft  
[www.fraunhofer.de](http://www.fraunhofer.de)

### PORTUGAL

Faculdade de Motricidade Humana  
[www.fmh.ulisboa.pt](http://www.fmh.ulisboa.pt)  
PLUX Wireless Biosignals S.A.  
[www.plux.info](http://www.plux.info)

### SWEDEN

Karolinska Institutet  
[www.ki.se](http://www.ki.se)

### UNITED KINGDOM

King's College London  
[www.kcl.ac.uk](http://www.kcl.ac.uk)



Intelligent Parkinson  
early detection  
guiding novel  
supportive  
interventions

[www.i-prognosis.eu](http://www.i-prognosis.eu)



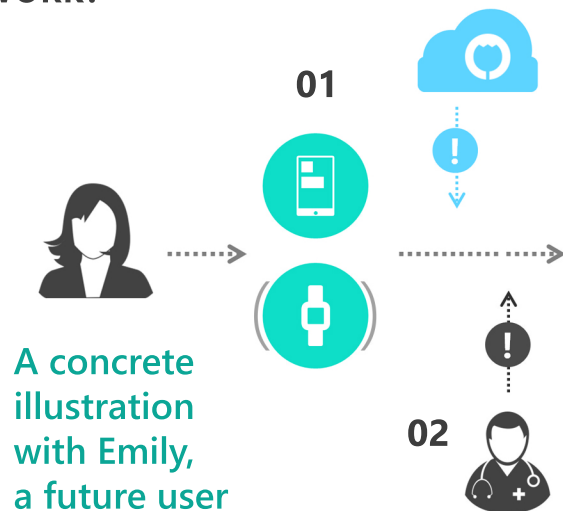
i-PROGNOSIS is a European Research project that will source data from a large community of people to build Parkinson's early detection tests. It will also design interventions to sustain the quality of patients' life.

**CONTACT**  
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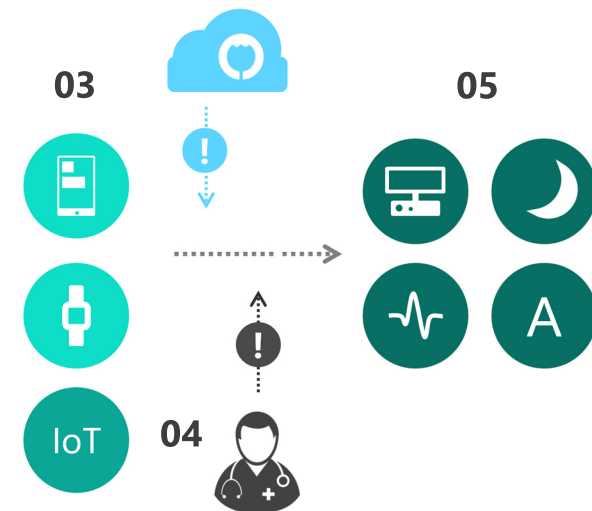
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690494.










## HOW WILL i-PROGNOSIS FINALLY WORK?



A concrete illustration with Emily, a future user

- 01** Emily will install the i-PROGNOSIS app on her smartphone. As soon as Emily gives her consent, i-PROGNOSIS will start capturing interaction data.
- 02** If i-PROGNOSIS detects a change in Emily's behaviour and if validated by her doctor, a second stage will follow with her consent.
- 03** The second stage will allow for collecting additional and more specific data thanks to smart connected everyday objects.
- 04** If the change in the behaviour is confirmed by i-PROGNOSIS, Emily and her doctor will be informed and her health status will be evaluated against the risk of Parkinson's disease.
- 05** If Emily desires it and if relevant, i-PROGNOSIS in collaboration with the doctor will provide her with supportive interventions to sustain her quality of life.



-  Smartphone: data gathered through typing, voice recording or photos to help detecting minor tremor, voice deterioration and gradual depression.
-  Smartwatch: data to help monitoring sleep and detecting lack of activity and minor tremor.
-  Connected objects (Internet of Things - IoT): data collected through a smart belt or a plate scale to identify constipation or diet deterioration.
-  The Cloud: a virtual space where all i-PROGNOSIS data will be securely stored.
-  i-PROGNOSIS will not replace, but assist your doctor!
-  Interventions monitoring by the user's devices (smartphone / smartwatch and IoT).
-  Assistive interventions including walking guidance and phone voice correction.
-  An intervention during night to enable peaceful sleep, using sounds.
-  Electronic games to assist with physical exercise, handwriting, diet improvement, and better control of emotions.

Ready to participate into this ambitious project and help improving early detection of Parkinson's disease?

# Join the i-PROGNOSIS community!

Learn more about our aims and how you can help on:

WEBSITE [www.i-prognosis.eu](http://www.i-prognosis.eu)  
TWITTER [@i\\_PROGNOSIS](https://twitter.com/i_PROGNOSIS)  
FACEBOOK [EU i-PROGNOSIS](https://www.facebook.com/EU-i-PROGNOSIS)