

Note: The information given in this document is still preliminary until partner contracts and funding allocations are finalised.



Project Information

Project Short Name	HELP
Project Full Name	Home-based Empowered Living for Parkinson's Disease Patients
Project Reference	aal-2008-1-022
Coordinator	Luis Pablo del Arbol Perez
Organisation	Telefonica Investigacion y Desarrollo, Sociedad Anónima Unipersonal
Address	Emilio Vargas 6 28043 Madrid
Country	Spain
E-Mail	lpap@tid.es
Web site	

Background of the Project

PD is a slowly progressive disorder of the central nervous system. It originates from a deficiency in the release of dopamine owing to cell destruction in part of the brain stem. PD comprises as cardinal features bradykinesia (slow movement), muscular rigidity, resting tremor and postural instability. Patients experience blockade episodes in which they actually "freeze" and are not able to perform any physical activity during up to one hour. Patients can experience depression, sleep disturbances, dizziness and problems with speech, swallowing and sexual functioning. PD impairs quality of life and generally devastates the patients and their families.

While there is no cure, therapies are aimed at minimizing symptoms and maximizing function and quality of life.

As a result, intensive supportive care is needed, demanding the allocation of enormous resources besides the strictly medical ones. This makes necessary an alternative way to face PD, not only in managing patients at an individual level, but also in optimizing cost effectiveness of health care plans.

Visions and Objectives of the Project

The overall objective of the proposed project is to integrate a system to dynamically monitor and treat PD, composed of (a) a non-invasive intra-oral continuous anti-PD drug delivery device, (b) a pump to deliver on-demand rescue medication to the subcutaneous tissue in order to relieve blockade episodes, (c) a PAN (Personal Area Network) to gather user's environment information to detect blockades, (d) a telecommunication and services infrastructure to analyze and transfer information both from the user to an automated system (most of the times) or a point-of-care (for the regular follow-up and emergencies) and in the opposite direction and (e) a remote point-of-care unit to supervise the patients. Such a system will be able to administer drug therapy in a controlled and either continuous or on-demand basis, to control disease progression and to mitigate PD symptoms. Such a system will fulfill the so far unmet needs derived from the above mentioned drawbacks. It will thus improve the quality of life of elderly people suffering from PD and reduce co-morbidity, and by doing so, enable the users to conduct an independent life at their homes.

Project Partners and Funding

Full name	Short name	Country Code	Type of Organization	Final granted budget in EUR
Telefonica Investigacion y Desarrollo Sociedad Anonima Unipersonal	TID	ES	Telecommunications operator	319.828
Technical Research Center for Dependency Care and Autonomous Living	CETpD	ES	Research organization	349.085
Hahn-Schickard-Gesellschaft für angewandte Forschung e.V.	HSG	DE	SME	463.784
Nevet Ltd	MACC	IS	Medical Institution	
Mobile Solution Group GmbH	MSG	DE	SME	291.932
SALIWELL Ltd	SALI	IS	SME	148.282
Fundación Hospital Comarcal Sant Antoni Abat	ABAT	ES	Medical Institution	265.899
Telecom Italia S.p.A.	TIL	IT	Telecommunications operator	253.000
University and Hospital of Palermo	UPAL	IT	Medical Institution	273.000
Maccabi Group Holdings Ltd.	MACC	IL		180.000
			Total	2.544.811