

PRESS RELEASE

New Research Consortium Aims to Measure Progression of Alzheimer's Disease Through Use of Digital Technologies

The RADAR-AD project aims to improve the lives of people living with Alzheimer's Disease by exploring how mobile digital technologies can be used to detect and measure early signs of functional decline associated with the disease

3 May 2019, Utrecht (The Netherlands) - A new international consortium of academic and industrial leaders in the field of Alzheimer's Disease (AD) is pleased to announce the launch of "RADAR-AD" (Remote Assessment of Disease And Relapse – Alzheimer's Disease). The collaborative research program aims to develop technologies that remotely identify and measure "digital biomarkers" to assess the progression of early AD. RADAR-AD is a three-and-a-half-year public-private partnership, sponsored by the Innovative Medicines Initiative (IMI), and led by King's College London and Janssen Pharmaceutica N.V.

AD is associated with staggering costs and suffering. Costs relate particularly to the social impacts of caring for increasingly disabled people. Digital technologies, especially those afforded by the use of smartphones, wearables and home-based monitoring devices, can provide an opportunity to radically change the way in which care and assessment are undertaken in AD. Ultimately, such technologies may allow us to move from a "diagnose and treat" to a "predict and pre-empt" model of care, which would allow people with AD to live independently for longer.

"We are excited to work together with so many different partners from across Europe to discover new paths towards clinical and technological advancements so that valuable new treatments can be identified and implemented. By involving people living with Alzheimer's Disease in the design and development of the project, new solutions will be acceptable and appropriate for meeting their medical needs," comments Project Coordinator Professor Dag Aarsland from King's College London.

Despite considerable progress in our understanding of the underlying neurobiology of AD, this progress has not been translated into novel drug treatments, and the last decade has seen many disease-modifying agents fail expensively at phase 2 and 3 clinical trials. RADAR-AD provides the opportunity to identify digital biomarkers indicative of changes in functional status which would provide far greater sensitivity and better signals for future dementia trials. Better understanding of functional decline in people living with AD will also allow more customized and effective interventions, thus improving quality of life for patients.

"The RADAR-AD project will enable us to use the power of technology and data analytics to better understand and quantify the functional deficits in people living with Alzheimer's Disease," states project leader Vaibhav Narayan, Vice President Data Sciences for Central Nervous System at Janssen. "Sensitive digital endpoints for measuring and tracking functional decline will help us make faster and better decisions in Alzheimer Disease clinical trials and design and deploy customized care-giving solutions to improve lives of people living with this disease."

The RADAR-AD consortium kicked off the project in London on January 30th and 31st, with team members discussing the work at hand and how the project will move forward. Consortium partners shared their insights and how best to utilize everyone's expertise across the entire project. RADAR-AD draws on a wealth of information obtained by other projects, like [RADAR-CNS](#), that also use mobile technology to assess disease progression in central nervous system disorders.

About the RADAR-AD consortium

The ultimate goal of RADAR-AD is the development and validation of technology-enabled, quantitative and sensitive measures of functional decline in people with early stage AD. To achieve this, the consortium will select, and if needed, modify, the most relevant available devices that can sensitively measure early and clinically meaningful functional decline in people with AD. This will be done in close collaboration with patient organizations and regulators. To be successful in the relatively short project period, RADAR-AD will build on the experience and assets developed in the RADAR-CNS project, such as the [RADAR-base](#) platform. The selected devices will be validated in a cross-sectional multicenter observational clinical study of 220 individuals across the AD spectrum. The close association with RADAR-CNS and ample experience with and availability of large-scale clinical data will allow RADAR-AD to leverage experience already gained from that consortium. The project will run from January 2019 to July 2022.

RADAR-AD is a public-private partnership funded by IMI, with representation from academic institutions, small- and medium-sized enterprises, public organisations and pharmaceutical companies. The partners involved in the project are King's College London, Janssen Pharmaceutica N.V., [VU University Medical Centre](#), [The Hyve](#), [University of Oxford](#), [Karolinska Institute](#), [Dutch Medicines Evaluation Board](#), [Fraunhofer Institute for Algorithms and Scientific Computing](#), [Alzheimer Europe](#), [Lygature](#), [Takeda Development Centre Europe Ltd](#), [Novartis Pharma AG](#), [Eli Lilly](#), [Software AG](#), [Centre for Research and Technology Hellas](#), and [Altoida AG](#).

RADAR-AD will be part of a larger RADAR (Remote Assessment of Disease and Relapse) program, of which RADAR-CNS and RADAR-AD are the first two. Together, these projects form a concerted effort in developing innovative ways to use remote medical technology for the benefit of patients. The projects draw on the wealth of lessons and expertise from people active in the RADAR environment.

For more information, visit the RADAR-AD website: www.radar-ad.org

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For the media (not for publication)

As Project Coordinator of RADAR-AD, Prof. Dag Aarsland (King's College London) is available for interviews. Interview requests and other media questions can be directed towards:
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