CILcare expands its Scientific Advisory Board to accelerate its research projects in synaptopathy, an early marker of age-related diseases

<u>Montpellier, France, March 13 2023</u> – CILcare, a company specialized in the R&D of novel therapies for hearing disorders, has the immense pleasure of welcoming four renown researchers in the field of hearing to its Scientific Advisory Board (SAB): Keith Darrow, Stéphane Maison, Aimo Kannt, and Dona Jayakody. Presided by Yves Cazals, formerly employed at the INSERM institute, specialists in psychoacoustics and the treatment of auditory pathologies, CILcare's SAB will contribute to the development of its synaptopathy pipeline, an early marker of neurocognitive and inflammatory diseases such as Alzheimer's and Type 2 Diabetes.

The SAB is a key strategic resource for CILcare, allowing the company to secure the long-term development of its drug candidates in hearing disorders and more specifically, cochlear synaptopathy.

CILcare is extremely pleased to welcome to its SAB:

- **Dr. Keith Darrow**, Director and founder of *Hearing and Brain Centers of America and Excellence in Audiology*. A neuroscientist, clinical audiologist, and author, he is specialized in the links between hearing loss and dementia as well as other cognitive disorders. His best-selling book, "Stop living in isolation", published in 2017, underlines the importance of an early hearing loss and tinnitus diagnosis.
- **Dr. Stéphane Maison**, Professor in otorhinolaryngology at Harvard University and Principal Investigator at the Mass Eye & Ear hospital in Boston. He has devoted over twenty years to researching and exploring the underlying mechanisms of sensorineural deafness and is actively working on cochlear synaptopathy. This "hidden deafness", characterized by a difficulty in understanding conversations in a noisy environment, is one of the early warning signs of age-related hearing loss.
- **Dr. Aimo Kannt**, Director of the Research Department of the Fraunhofer Institute (*Institute for Translational Medicine and Pharmacology*), based in Frankfurt. His research focuses on the identification and development of active molecules based on molecular signals taken from patients, to treat inflammatory diseases, including neurodegenerative diseases and diabetes. Aimo Kannt led metabolic and cardiovascular disease research projects for almost twenty years at Sanofi.
- **Dr. Dona Jayakody**, Researcher and Clinical Audiologist at the Ear Science Institute Australia, a fundamental medical research center with the aim of developing the prevention, diagnostics, and treatment of hearing deficiencies. The goal of her research is to elucidate the causes of hearing loss linked to dementia. Co-investigator in numerous international clinical trials, her work involves finding methods of evaluating hearing in order to predict the risk of cognitive decline and neurodegenerative diseases.

CILcare would like to warmly thank these four new members who will join the Scientific Counsellors who have been with the team since the beginning:

- **Dr. Yves Cazals**: “I am extremely pleased to preside over CILcare’s Scientific Advisory Board”, states Yves Cazals. “I am convinced that CILcare is perfectly placed to deploy their new strategy for developing their drug candidate pipeline to treat early signs of hearing loss and neurodegenerative disorders linked to aging. I look forward to working with the new Board members and contributing to the preclinical and clinical asset development strategy.
- **Dr. Richard Salvi**, Professor at Buffalo University and internationally renown Scientist for his work of the auditory system and its pathologies.

Celia Belline, CEO of CILcare, adds: “We are delighted to strengthen our SAB with worldclass specialists in Auditory Science. Their deep knowledge of physiopathology, diagnostics, clinical applications, diabetes, and cognition will allow us to position CILcare as a leader in terms of innovation and research into synaptopathy and associated diseases.”

Until recently, it was thought that auditory deficiencies were caused by damage to hair cells. These defects can in part be offset by hearing aids, which allow an increase in volume to help compensate for faulty hair cells. The discovery of synaptic and neuronal alterations, which transmit the hair cells’ signals to the brain, have allowed to demonstrate other causes of auditory disorders that affect people who are hard of hearing; these patients can hear but not necessarily comprehend when in a noisy environment. Furthermore, their audiograms show ‘normal’ results after a visit to their ENT doctor or audiologist. There may not be a loss of hearing, but rather a deficit in intelligibility; this means that the capacity to understand what is being said is impacted, especially in noisy environments.

The mechanisms of synaptopathy are the subject of many global research projects, as synaptopathy is an early sign of hearing loss, which affects one in four persons over the age of 45. These processes accelerate with age, exposure to noise, the intake of ototoxic medication, and the presence of neurocognitive and inflammatory diseases. In instances of Type 2 diabetes, in over 50% of patients with auditory deficiencies, these deficiencies are mainly attributed to synaptopathy. In cases of cognitive decline, hearing loss is the 3rd leading risk factor towards developing Alzheimer’s, a disease for which synaptopathy is particularly prominent. Representing a major public health issue, this silent epidemic has been highlighted by the WHO, pushing States into action. At the latest World Hearing Day on March 3rd, awareness was raised specifically on this topic.

CILcare’s SAB will help develop a pipeline of innovative drug candidates and an unprecedented clinical approach for treating synaptopathy, led by CILcare. Bearing knowledge of patient populations in which this disease appears earlier and more intensely, using technological advances in measuring hearing to detect the disease, the SAB will allow CILcare to define digital auditory signatures of affected patients, in particular subpopulations with societal diseases such as type 2 diabetes and cognitive decline.

About CILcare:

CILcare is a biotech company founded in 2014 specialized in the research and development of novel therapies for hearing disorders. Based in Montpellier, France, and Boston, MA, CILcare has become a privileged partner for the pharmaceutical, biotech and medtech

industries in preventing and treating hearing disorders and tinnitus. CILcare has developed a Smart R&D Platform to assess drug candidates (small molecules, biologics, gene therapies, cell therapies) in the field of auditory diseases. This platform, operated from CILcare's labs in Montpellier and Boston, relies on a unique expertise in preclinical development (screening, pharmacokinetics, pathological models, histology, tolerance, regulatory toxicology) and on the ability to translate generated data into a clinical development strategy. The establishment of digital auditory signatures, which are based on the analysis of auditory tests, allows to put forward the auditory profiles of characterized subpopulations and to subsequently define therapeutical strategies.

Contact

Marie Peytavy-Izard, Marketing & Business Development Director:
marie.peytavy@cilcare.com