Press Release

For Immediate Publication

AEVICE HEALTH AND NUHS LAUNCHES STUDY TO DETECT LUNG SOUND ABNORMALITIES USING WEARABLE RESPIRATORY MONITOR IN PAEDIATRIC PATIENTS

- *Held at National University Hospital (NUH), the study will validate the use of a wearable respiratory monitor, the AeviceMD, to detect lung sound abnormalities, such as wheezing.*
- *The study builds on Aevice Health's research collaboration with A*STAR Singapore to develop a predictive model for asthma attack among children.*

Singapore, 27 October 2021 — Aevice Health, Singapore-based MedTech company dedicated to improving the lives of 545 million people with chronic respiratory disease, and the National University Health System (NUHS) today announced the launch of a study to use a novel respiratory monitor to detect lung sound abnormalities. The study, coordinated and facilitated by the NUHS Centre for Innovation in Healthcare (CIH), will investigate the use of Aevice Health's proprietary wearable – the AeviceMD – in detecting wheezing in paediatric patients with breathing difficulties at the National University Hospital (NUH). Recruitment of study participants begun in September 2021 and the study is expected to conclude by the second quarter of 2022.

Wheezing is one of the key signs of respiratory diseases such as asthma, and asthma is one of the most prevalent chronic diseases of childhood. It is estimated to affect 14% of children worldwide. In Singapore, the disease affects about one in five children[1]. Many studies have shown that the chronic disease can be difficult to manage in children due to their inability to verbalise their symptoms or even realise that they are experiencing an exacerbation[2]. This could lead to under-diagnosis, under-treatment and inadequate control of the disease[2].

The AeviceMD is a wearable respiratory monitor that detects and records chest sounds remotely and continuously. The chest sounds are then analysed and translated into heart rate and respiratory rate measurements, while abnormalities such as wheezing are flagged. Barely bigger than a US half-dollar coin and weighing less than 10 grams, the AeviceMD combines extremely comfortable and child-friendly form factor with highly accurate, longitudinal patient data to provide a new standard for remote patient monitoring.

"Aevice Health has developed a device that could allow the remote assessment of lung sounds in patients presenting with respiratory illnesses. The ability of the device to quantify wheeze and capture other lung sounds remotely will be studied in an upcoming clinical trial. It can potentially enhance remote patient monitoring and may be useful in situations such as the

---

[1] Asthma (Common Childhood Illnesses), Health Hub Singapore
[2] Challenges in the treatment of asthma in children and adolescents

current COVID-19 pandemic where there is a need to minimise contact with patients. This ability to detect abnormal lung sounds may also find usefulness in homes to identify wheezing early in children and allow for prompt attention by the caregiver." said Dr Michael Lim, Principal Investigator of the study and Senior Consultant, Division of Padiatric Pulmonary Medicine and Sleep, Department of Paediatrics, Khoo Teck Puat – National University Children's Medical Institute, NUH.

"Currently, there is no widely adopted solution in market that is able to objectively identify and analyze lung sound abnormalities continuously and remotely in patients. This study will further validate AeviceMD's value to providers and patients by empowering the detection of lung sound abnormalities objectively, continuously, and remotely to further bridge the gap between providers and clinicians," said Adrian Ang, Chief Executive Officer of Aevice Health.

Concurrently, the company is working towards conducting research and development on a predictive model for asthma attack among children using continuous measures from a wearable device. The study, a collaboration with partners in Singapore, will potentially unlock insights into how clinicians and researchers can use continuous measurement of physiological signals to detect early signs of asthma attacks.

"This study, alongside our research collaboration on the predictive model, will have a significant and profound impact on the way we understand chronic respiratory disease. The use of AeviceMD as a novel remote respiratory monitor can unlock insights beyond the hospital for providers to better understand factors leading up to an exacerbation to allow for more tailored and patient-centered outcomes. We are excited by how the use of the AeviceMD can enhance the way chronic respiratory disease is being treated and understood," Ang added.

Earlier in July, Aevice Health announced its Pre-Series A funding from investors Toho Holdings Co Ltd, Pureland Group Venture, Silicon Solutions Partners, AIP Ventures, and SEEDS Capital, the investment arm of government agency Enterprise Singapore. Part of the funding will be used to power the study as part of the company's and its investors' commitment to improve the management and understanding of chronic respiratory disease.

###

About Aevice Health

Aevice Health Pte Ltd is a Singapore-based MedTech spin-off from Nanyang Technological University at the forefront of addressing chronic respiratory disease, one of the generation's biggest healthcare challenges.

The company's non-invasive wearable devices enable the early detection of cardiopulmonary abnormalities remotely and in real-time, so that patients can receive fast and targeted care from the ease of their homes. Clinicians can also gain insights into their patients' health and track their responses to treatment plans easily from the Aevice analytical platform.
In Aevice Health, our mission is to drive medical innovations that transform healthcare, improve outcomes and empower lives.

More information about the company can be found at www.aevice.com.

About NUHS CIH

The NUHS Centre for Innovation in Healthcare (CIH) is one of six NUHS Centres of Excellence (CoEs) location at Alexandra Hospital. It aims to develop and implement new models of care, incorporating smart technologies as well as innovations in research and training to meet present and future national healthcare needs. CIH actively facilitates inter-disciplinary research, innovation and enterprise across science, engineering and other disciplines and provides a one-stop ecosystem to testbed solutions including new devices, technologies and work processes, at scale.

About National University Hospital

The National University Hospital is a tertiary hospital and major referral centre with over 50 medical, surgical and dental specialties, offering a comprehensive suite of specialist care for adults, women and children. It is the only public hospital in Singapore to offer a paediatric kidney and liver transplant programme, in addition to kidney, liver and pancreas transplantation for adults.

The hospital was opened on 24 June 1985 as Singapore's first restructured hospital. Each year, the Hospital attends to more than one million patients.

As an academic health institution, patient safety and good clinical outcomes are the focus of the Hospital. It plays a key role in the training of doctors, nurses, allied health and other healthcare professionals. Translational research is pivotal in the Hospital's three-pronged focus, and paves the way for new cures and treatment.

A member of the National University Health System, it is the principal teaching hospital of the NUS Yong Loo Lin School of Medicine and the NUS Faculty of Dentistry.

For media enquiries, please contact:
Janelle Low
Aevice Health Pte Ltd
Email: janellelow@aevice.com

Yvonne Lee
National University Health System

Email: Yvonne_Lee@nuhs.edu.sg

Media Contact from NUH
Justine LAI

Assistant Manager, Group Communications Office

National University Health System

Mobile: 97380669

Email: justine_lai@nuhs.edu.sg