



British Embassy
Tokyo

Health Innovation East



3rd UK Digital Health Innovation Webinar

Department for Business and Trade, British Embassy Tokyo and British Consulate-General Osaka will run the third Digital Health Innovation Webinar to present five UK digital health companies. (Details of the presenting companies can be found on page 2 onwards.)

In July last year, Hiroshima Accord is signed between the UK and Japan at the G7 Summit held in Hiroshima. This agreement has further advanced UK-Japan relations and is strengthening cooperation between the two countries in many key areas, including science and innovation. Through this webinar, we hope to showcase the strengths of UK digital health and encourage collaboration to overcome healthcare challenges shared both in Japan and the UK.

For the keynote speech, we invite Dr Lei Liu, Innovation Partnership Director of AstraZeneca KK i2.JP and Mr Rodney Kelly, Senior Advisor of Health Innovation East to present their activities and how they aim to develop digital health sector through UK-Japan collaboration.

One to one meetings with the UK companies presenting will be set up at a later date on request. Please contact us at DBT Japan Life Sciences Team if you would like to arrange this.

Date: Tuesday, 18 June 2024, 9:00 UK time /17:00 Japan Time
Online seminar via TEAMS (in English)

Organizers: Department for Business and Trade, British Embassy Tokyo and British Consulate-General Osaka, Health Innovation East, supported by AstraZeneca KK i2.JP

Cost: Free

Registration: <https://survey.zohopublic.com/zs/3iCOOd>

(Please register your name, organisation, department, title, email address in English, and state NA for the questions in Japanese.)

Running order

UK time	JP time	Speakers
09:00	17:00	Opening remarks
09:03	17:03	AZ i2.JP
09:13	17:13	Health Innovation East
09:23	17:23	AI Sentia
09:30	17:30	Charco Neurotech
09:37	17:37	Dynamic Metrics Limited (GaitSmart)
09:44	17:44	Green Cross Medico Ltd (Airglove)
09:51	17:51	Tidal sense
09:58	17:58	End

Contact: Life Sciences Team at DBT Japan LS.Japan.trade@fco.gov.uk

<Notes>

- Ensure in advance that you can use TEAMS and your connection environment. Please note that the broadcast may be unstable due to communication conditions.
- The organisers are not responsible for any issues arising from the use of TEAMS. (<https://learn.microsoft.com/en-us/microsoftteams/security-compliance-overview>).
- The information given to register for the webinar will be managed based on the organiser's personal information protection policy
- Presentation materials will be shared for those agreed by the speakers.



Speakers' Company Profile (In order of presentation)

1. AstraZeneca i2.JP (Keynote speaker)

<https://www.i2jp.net/>

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development, manufacturing, marketing and sales of prescription medicines, mainly in Oncology, Rare Diseases, and Bio Pharmaceuticals, including Cardiovascular, Renal and Metabolism, and Respiratory & Immunology.

In 2020, AstraZeneca Japan launched an open innovation network, "Innovation Infusion Japan (i2.JP)," which connects more than 400 startups, healthcare professionals, local governments, academia, and private companies, to realize "patient-centricity" in healthcare and its currently working to solve problems in the healthcare field through co-creation.

2. The Health Innovation Network (Keynote speaker)

<https://thehealthinnovationnetwork.co.uk/>

The Health Innovation Network (HIN) in the UK is a non-profit government-affiliated entity, fully funded by the Office for Life Sciences and the NHS, with 15 entities covering the whole of England and a headcount of over 900 staff.

Based in Cambridge, UK, the Health Innovation East (HIE), part of the Health Innovation Network, acts as a link in a dynamic healthcare ecosystem connecting leading academic institutions, advanced research facilities, and the healthcare system in the region. With a mission to foster collaboration and implement innovative solutions in healthcare across Eastern England, HIE works closely with healthcare providers, industry partners, academia, and the public to identify and support innovative initiatives that improve patient outcomes, enhance efficiency, and promote sustainability in healthcare delivery.

One notable international program led by HIN is the Global Innovation Exchange (GIE). This program aims to bridge the gap between UK healthcare innovations and global markets, while facilitating the introduction of global innovations into the UK healthcare system.

Through GIE, HIN creates opportunities for collaboration, knowledge exchange, and market access for healthcare innovators through developing strategic partnerships and sourcing commercial opportunities for its cohort of innovators, ultimately driving positive impacts on a global scale.

3. AI SENTIA

<https://aisentia.com/aisentia-technology/>

AiSentia will revolutionize radiology – delivering safer, faster, more equitable and sustainable healthcare. We will achieve our mission with our transformative technology, CT-Digital-Contrast.

Today, if you get a Contrast CT: a needle is first inserted into your arm, a non-contrast scan is done to calculate the correct timing for contrast injection. You're scanned a second time, synchronised to that injection. This process puts you at risk of anaphylactic shock and/or kidney damage. These life-threatening complications are costly and difficult to manage when they occur. AiSentia revolutionizes this process with CT digital contrast – delivering safer, faster, more equitable and sustainable healthcare.

The leadership of AiSentia bring decades of medical, commercial, and technical experience. They successfully conducted a pilot study with the NHS demonstrating that Radiologist supported CT-Digital-Contrast – sensitivity/specificity >90%. They engaged with the FDA to ensure our product development trajectory aligns with requirements – SaMD 510(k) CADt and

CADe trajectory aligned. They built a global network of early adopters – 14 hospitals providing >1 million CT scans powering our AI.

AiSentia's platform technology is backed by a strong IP portfolio (WO/2021/038203; WO/2021/038202), pre-seed funding (NLC Europe's most active MedTech investor), and prestigious grants (Horizon).

Last year, more than 300 million CT scans were performed in the world that number will double by 2034. Healthcare systems are struggling to cope today, we need a revolution in radiology to meet that challenge tomorrow – one that delivers safer, faster, more equitable and sustainable healthcare – CT-Digital-Contrast.

Looking for partnerships in the Japanese market.

4. CHARCO NEUROTECH

<https://charconeurotech.com/>

The CUE1 is a non-invasive, wearable, medical device which utilises focused vibrotactile stimulation in conjunction with cueing to alleviate movement-based symptoms for people with Parkinson's such as stiffness, slowness, and freeze-of-gait. The device can also provide medication reminders and symptom tracking with the CUE mobile application.

There are over 3,200 users of the device to date. Initial testing with 159 participants of MDS-UPDRS III score measurements at baseline and 20-minutes post-intervention showed an average point reduction of 7.26 which is clinically significant. 91% of participants displayed a reduction in their motor symptom severity, with 74% showing clinically significant improvement. Clinical trials are currently running to gather further efficacy and safety data in the UK through Queen Mary University of London and Addenbrooke's Hospital in Cambridge, and in Japan through Kyorin University Hospital and Sagami Hospital.

The CUE1 is registered with the MHRA in the UK and has a CE mark. It is on the path for regulatory approval in South Korea (MFDS) and the US (FDA). In March 2024, the device was accepted into the NHS framework in the UK under the newly opened neuromodulation category, marking the initial steps of wider acceptance in the NHS. The company recommenced sales with the CUE1+, an improved version of the CUE1 with the same mechanism of action, in April 2024.

Looking to expand further into the Japanese market.

5. DYNAMIC METRICS LIMITED (GAITSMART)

<https://www.gaitsmart.com/>

GaitSmart is used to improve musculoskeletal health in adults of all ages. Over 10 years of research and 30 published papers demonstrate it is as accurate as the optical gait laboratory and sensitive enough to identify and quantify MSK issues. The fully automated digital assessment delivers a data driven personalised patients exercise plan to address issues and support rehabilitation/ compliance. It is currently in use in the NHS and Private sector.

DML's papers address MSK conditions, including hip and knee osteoarthritis, joint replacement and Sarcopenia. In addition to cost effectiveness vs existing care, it provides an objective gait analysis removing the subjectivity of a physiotherapist's gait assessment and improves the choice of intervention.

GaitSmart's four session rehabilitation programme has been proven to help people of all ages, from joint replacement through to falls prevention. Our papers demonstrate effectiveness in older people at risk of falls and people who have undergone joint replacement: gait speed, gait kinematics, quality of life and confidence in walking all improve.

DML developed and owns all IP for GaitSmart and is certified to ISO9001 and ISO13485. GaitSmart is a Medical Device Class 1a and approved for use in the UK, EU, US and Canada. We understand our existing certification would form the basis of the application for Asia.

GaitSmart is seeking partnerships and investors in Japan to access the market.

6. GREEN CROSS MEDICO LTD (Airglove)

<https://www.greencrossmedico.com/products/airglove/>

Airglove was developed to revolutionise the current approach to cannulation to enable efficient venepuncture in difficult intravenous access for patients (DIVA). Airglove makes it easier to access a vein for blood sampling, and for the delivery of intravenous therapies. Our competitive advantage is no other device warms the whole arm.

A patient service evaluation at Maidstone & Tunbridge Wells NHS Trust provided evidence as to the efficacy, patient comfort, ease of use and operator preference of Airglove. Airglove achieved 87.5% first time successful cannulation. Independent health economics shows saving of over £31.1m over 3 years in oncology alone with Airglove now in use in over 140 NHS hospitals across 11 clinical areas.

Airglove V2 design is ready for commercial production and is CE marked under the current Medical Device Directive (MDD). We have submitted a 513g to FDA and will follow up with a Pre-sub meeting.

Airglove is patented including US and we are in the process of completing investment by May 2024 with experienced U.K./International investors, headed up by Mass Informatics Ltd., and Scottish Enterprise.

We would like to launch Airglove in Japan for use in Public and Private Healthcare sectors. We would like to have the support of Japan to access hospitals/clinics to assist with DIVA patients and patients with stage 1&2 Peripheral Arterial Disease.

7. TIDALSENSE

<https://tidalsense.com/>

TidalSense is revolutionizing respiratory diagnostics through its N-Tidal Diagnose (NTD) medical device, offering faster and more accurate COPD diagnoses than current methods. Integrating a highly sensitive carbon dioxide sensor and a diagnostic AI algorithm, NTD provides definitive results within 5 minutes, marking the first AI application in COPD diagnostics.

Through five clinical studies in the UK, encompassing over 2.5 million patient breaths across diverse demographics and conditions, TidalSense has demonstrated the efficacy of its approach. Notably, NTD's submission for EU MDR 2a classification (certification expected Q4 2024) reports a diagnosis accuracy of 90.1% (compared to 73.3% for spirometry) and a severity accuracy of 94.2%(compared to 46.8%).

With over £7.5 million in equity investment and £7 million in non-dilutive grant funding, TidalSense is positioned for growth. Now raising series A funding, TidalSense invites investors from the Asia Pacific region. Its hardware medical devices, are regulated and have been used in the UK, US, and Europe, have been integral to various research and development programs collaborating with leading pharmaceutical companies.

TidalSense holds four key patents, with one granted across Europe and Japan and pending approval in the US. Three patents have been filed on AI technology.

Recognizing an opportunity for expansion, TidalSense seeks an operational partner to facilitate diagnostic testing delivery in Japan.