

Chugai, Biofourmis to develop objective assessment of pain using AI technology

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The partnership leverages Biofourmis' Biovitals® platform for pain management in patients with endometriosis which can assess pain using biosensors and artificial intelligence (AI)-based algorithms



Japan's Chugai Pharmaceutical Co., Ltd. and Biofourmis, a Boston-based digital therapeutics company, have announced that they have partnered to develop a digital solution for the objective assessment of pain associated with endometriosis.

Pain is one of the main symptoms of endometriosis and therapeutically important. The severity of pain may vary from day-to-day, and it can be a major issue that affects patients' quality of life. However, because pain can be a subjective symptom, patients often have difficulty quantifying their level of pain when communicating with healthcare professionals and family members.

The partnership leverages Biofourmis' Biovitals® platform to co-develop a novel digital technology for the objective assessment of pain using biosensors and artificial intelligence (AI)-based algorithms. The solution will be validated in a global, multi-center observational study enrolling more than 120 endometriosis patients.

Biofourmis has demonstrated its ability to discover, develop and clinically validate multivariate digital biomarkers across multiple therapeutic areas. The digital solution for managing patients with endometriosis in an ambulatory setting will include a wearable, clinical-grade biosensor to capture physiology biomarkers and a patient-facing mobile app to monitor symptoms, with a gamification engine for patient engagement. The AI-based technology will provide a continuous quantification of pain by applying analytics to physiology biomarkers. The platform will also include a clinician-facing web dashboard for remote review and intervention.

"Through this partnership, Chugai is demonstrating a better understanding of the real-life needs of patients by developing innovative solutions for society, as outlined in the CHUGAI DIGITAL VISION 2030," says Satoko Shisai, Chugai's Vice President, Head of Digital & IT Supervisory Division.

Kuldeep Singh Rajput, CEO, and founder of Biofourmis said: "Digital solutions can deliver faster, more reliable insights to clinicians to aid interventions while increasing engagement and improving outcomes for patients and lowering healthcare

costs for all stakeholders."