

Press Release



TechDoctor and ASKA Pharmaceutical Launch Joint Research on Dysmenorrhea in Cooperation with Healthcare App "4MOON"

TOKYO, September 24, 2024 – ASKA Pharmaceutical Co., Ltd. (Head Office: Minato-ku, Tokyo/ President, Representative Director: Sohta Yamaguchi, hereinafter "ASKA"), a subsidiary of ASKA Pharmaceutical Holdings Co., Ltd. (TSE:4886, hereinafter "the Company"), and TechDoctor, Inc. (Head Office: Chuo-ku, Tokyo/ President: Kazumichi Minato, hereinafter "TechDoctor") announced that the companies launched the joint research on dysmenorrhea in cooperation with the healthcare app: 4MOON. Please see the attached for details.

The impact of this matter on the business performance of the Company for FY2024 will be immaterial.

Media Contacts

ASKA Pharmaceutical Holdings Co., Ltd.

Corporate Planning Department

Tel: +81-3-5484-8366

Email: kouhou@aska-pharma.co.jp

**TechDoctor and ASKA Pharmaceutical Launch Joint Research
on Dysmenorrhea in Cooperation with Healthcare App "4MOON"**

**Leveraging data from wearable devices to grasp the actual status of menstrual symptoms
and to evaluate the severity of dysmenorrhea and other symptoms in the future**

TOKYO, September 24, 2024 – TechDoctor, Inc. (Head Office: Chuo-ku, Tokyo/ President: Kazumichi Minato, hereinafter "TechDoctor") and ASKA Pharmaceutical Co. Ltd., (Head Office: Minato-ku, Tokyo/ President, Representative Director: Sohta Yamaguchi, hereinafter "ASKA") announced that the companies launched the joint research on dysmenorrhea in cooperation with the healthcare app: 4MOON.

This research will be conducted with the cooperation of users of 4MOON, a health care application provided by 4MEEE INC. (Head Office: Shinjuku-ku, Tokyo/ President: Kazuya Oku, hereinafter "4MEEE"). By utilizing data collected from wearable devices to accurately grasp the actual physical and psychological symptoms associated with menstruation, the research aims to develop a digital biomarker[1] that quantitatively indicates the severity of dysmenorrhea and other symptoms in the future.

Background and Objectives of the Research

The physical and psychological symptoms associated with menstruation are a serious problem for many women around the world. It is reported that approximately 70% of women in their 20s and 30s suffer from some kind of menstrual disorder [2]. Dysmenorrhea [3], whose main symptoms are severe lower abdominal pain and back pain that begin during or just before menstruation, can interfere with daily life, work, and schoolwork. However, these symptoms vary greatly from person to person, making it difficult to grasp their actual condition accurately. TechDoctor and ASKA aim to grasp the reality of symptoms related to menstruation and evaluate them quantitatively by leveraging data on exercise, sleep, pulse, etc., that can be collected from wearable devices. Through this initiative, the companies will support patients suffering from dysmenorrhea and their premenstrual patients by providing appropriate treatment opportunities and improving their quality of life.

Outline of the Research

TechDoctor and ASKA will conduct this research in cooperation with the healthcare app "4MOON". Applicants will be recruited from app users and asked to wear a wearable device and answer a questionnaire. By combining data collected from the wearable device with self-reported information on menstruation, the impact of various symptoms on daily life will be understood and evaluated objectively and quantitatively.

Outlook

The findings obtained through this research are the first step toward a better understanding of the symptoms associated with menstruation. Furthermore, these data will be used to quantitatively evaluate and develop new solutions for dysmenorrhea and a variety of other conditions. By utilizing wearable devices, it is expected that symptoms can be monitored with unprecedented accuracy and more personalized care and treatment can be provided.

TechDoctor and ASKA will continue to focus on joint research in order to contribute to solving women's health issues.

About ASKA Pharmaceutical Co., Ltd.

Since its foundation in 1920, ASKA has concentrated its management resources in three core areas of internal medicine, obstetrics and gynecology, and urology, based on its corporate philosophy: "Contribute toward the improvement of people's health and progress in medicine through the development of innovative products." Under the Medium-Term Management Plan 2025, ASKA has set a goal to "become a Total Healthcare Company with a Strong Foundation as a Specialty Pharma Company." As a leading company in the obstetrics and gynecology field, ASKA is committed to contributing to the resolution of women's health issues through its business activities.

URL: <https://www.aska-pharma.co.jp/english/>

About 4MEEE Inc. and the healthcare app "4MOON"

4MOON is an all-in-one health app that can record over 120 items, including menstrual cycle management, pregnancy activity support, diet record, schedule management, meal management, diary, bowel movement, today's mood, symptoms, sleep time, etc.

Users can customize the functions and record items to their liking and use it as their own personal health app for free.

A woman's body changes every day depending on the menstrual cycle. 4MOON supports all women to get along well with their mind and body every day by acquiring the "habit of recording".

Company name: 4MEEE inc.

URL: <https://4meee.jp/>

About TechDoctor, Inc.

TechDoctor, Inc. is driven by the vision of 'The future of improved health through data.' The company specializes in providing *SelfBase*, a digital biomarker development platform designed for the medical, pharmaceutical, and food-related industries, as well as research institutions. TechDoctor transforms everyday data collected from wearable and other devices into actionable insights for advancing data-driven healthcare. The mission is to deliver personalized medical care while fostering a supportive community where individuals can care for one another.

URL: <https://www.technology-doctor.com/en>

[1] What is a digital biomarker (dBM)?

It is an objective indicator that leverages data from wearable devices and other digital devices to objectively confirm the presence or absence of disease, its progression, and medium- to long-term changes due to treatment or intervention.

Thus far, data collected at medical institutions consisted mainly of "point data." However, advances in digital technology have enabled us to obtain long-term, continuous "line data" on a daily basis without any burden. If data on exercise, sleep, pulse, and other aspects of daily life outside of medical facilities can be obtained, changes in health conditions can be understood in more detail, and optimal care tailored to each individual (personalized medicine) will become possible.

Reference

[2] Working Women's Mental and Physical Health Support Site, Ministry of Health, Labour and Welfare
<https://www.bosei-navi.mhlw.go.jp/health/menstruation.html> * Japanese version only

[3] Health Care Lab, Office for the Promotion of Women's Health, Ministry of Health, Labour and Welfare
<https://w-health.jp/monthly/dysmenorrhea/> * Japanese version only

Inquiries

TechDoctor Inc.

E-mail: pr@technology-doctor.com

ASKA Pharmaceutical Co., Ltd.

Corporate Planning Department

E-mail: kouhou@aska-pharma.co.jp