### News Release Dated March 26, 2024

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# **JAST Starts New Product Development Using Medical Big Data**

Japan System Techniques Co., Ltd. (JAST) has started activities for the development of new products with Japan Weather Association. These activities are using the Medical Data PROVISION product development environment. The details are as per attached.

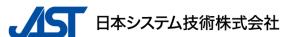
This matter will have only a negligible effect on JAST's results of operations. An announcement will be made promptly if there is any additional information that should be disclosed.



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Japan System Techniques Co., Ltd.

Japan Weather Association

#### **Background**

There is growing interest in health problems that are associated with changes in barometric pressure, temperature, humidity and other meteorological parameters. These problems are causing difficulties for many people in Japan. Many other weatherrelated health issues familiar to the Japanese, such as allergic rhinitis (hay fever) and influenza, also require attention. At the same time, uncertainties about the supply of pharmaceuticals are increasing. Causes include falling profitability due to insurance drug price cuts and other government measures to hold down the cost of drugs as well as an increasingly complex supply chain extending from production to issuing prescriptions.

To seek solutions for these problems, JAST has for years been working on co-creation programs that utilize the company's REZULT medical big data platform and the resources of partners in the corporate and academic sectors. Japan Weather Association uses services involving the weather, environment, disaster preparedness and information to contribute to public safety. By working together, JAST and the Japan Weather Association aim to develop products that will help maintain an efficient and stable supply of pharmaceutical products.

## **Objectives**

JAST and Japan Weather Association will analyze medical big data and meteorological data for the purpose of creating a model for forecasting the volume of prescriptions for specific drugs according to weather conditions. Plans also include the distribution of real-time prescription volume data and forecasting results based on this model through reports, dashboards, data marts, and other formats to meet customer needs.

### **Start of Development Program**

April 2024 or later

#### Roles of JAST and Japan Weather Association

JAST: Provision of medical big data, chiefly health insurance invoices\*, and development of a

dashboard that uses a forecasting model

Japan Weather Association: Provision of observations, forecasts and other meteorological data, studies concerning the

relationship between medical big data and meteorological data, and development of a

prescription volume forecasting model



# ■ Relationship between Prescription Volume and the Weather

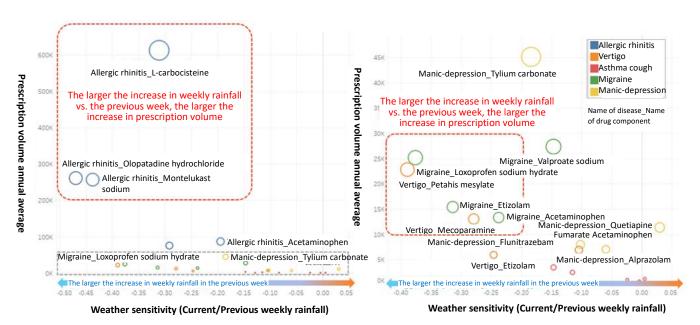


Figure: Study of relationship between prescription volume and rainfall between August and October

This study clearly showed that a larger increase in rainfall from one week to the next results in a larger increase in the volume of prescriptions for drugs often used for treating allergic rhinitis, migraines and vertigo. There are other strong seasonal correlations between prescription volumes and changes in the weather. As a result, there is clearly a relationship between the weather and diseases and the volume of prescriptions for drugs to treat these disorders.

## **■** Upcoming Activities

JAST and Japan Weather Association plan to use the start of this new business activity as an opportunity to seek new ways for the utilization of data with companies in other business sectors by using the Medical Data PROVISION product development environment. The goal is to use these activities for expanding the use of new products to more market categories in order to create new drivers of growth quickly.

### ■ The Medical Data PROVISION Product Development Environment

Medical Data PROVISION is an all-inclusive service that encompasses licensing the use of the JAST's REZULT medical big data platform, a highly secure environment for using sensitive data, and advisers with medical big data utilization expertise. JAST is using Medical Data PROVISION for co-creation programs with partners in the corporate and academic sectors.



Use this URL for more information about the Medical Data PROVISION https://www.jastlab.jast.jp/mdp/



# ■ Use this URL for more information about the REZULT medical big data platform

https://www.jastlab.jast.jp/rezult\_data/

#### **■** The Future Co-Creation Laboratory of JAST

The Future Co-Creation Laboratory of JAST is a medical big data business with the mission of using the digital transformation of health care backed by medical big data (health insurance invoice data, health check-up data and other data) to solve issues at healthcare facilities and insurance companies and organizations. This laboratory will continue to analyze information obtained from research activities in order to raise the value of JAST's data and create more ways to solve the issues of customers.

Operations of The Future Co-Creation Laboratory also contribute to accomplishing Sustainable Development Goals number three, good health and well-being, and nine, industry, innovation and infrastructure. These activities include the use of medical big data to enable people to stay healthy and the use of alliances with the academic sector for joint research and the development of products.





### **■** Profile of Japan Weather Association

Established in 1950, Japan Weather Association was Japan's first private-sector company that provides consulting services involving the weather. Activities include measures to prepare for natural disasters and minimize damage and information about the weather for operators of offshore wind power sites. Services also extend to products and electricity demand forecasting based on meteorological data, information about climate change countermeasures, and other forms of consulting. Japan Weather Association remains at the forefront of this business sector by continuing to create new ways to use meteorological data. With a team of more than 350 weather forecasters, one of Japan's largest, Japan Weather Association is dedicated to providing support to companies concerning ESG investments and SDG-related activities.

#### \* Health insurance invoices

When an individual receives a medical treatment covered by insurance, the healthcare institution sends an invoice listing the procedures and amounts due to the insurance company or organization. For medical and dental care, an invoice listing the procedures and amounts due is sent. For pharmacies, an invoice listing the drugs supplied and amounts due is sent. For nurses visiting individuals at home, an invoice listing home nursing care services and amounts due is sent. One invoice for each patient and individual healthcare institution is prepared every month. Invoices contain information about the reasons that individuals received medical care, the cost of the care and other items. JAST converts this information into a database for subsequent utilization.

### **■** Inquiries

Japan System Techniques Co., Ltd.
The Future Co-Creation Laboratory
Contact: https://www.jastlab.jast.jp/contact/

Website of The Future Co-Creation Laboratory: https://www.jastlab.jast.jp/