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Lighting the way with diagnostics

News Release

May 18, 2021
Sysmex Corporation

# Sysmex Relocates its PCR Testing Laboratory to its Research and Development Center for Expanded Functions

Sysmex Corporation (HQ: Kobe, Japan; Chairman and CEO: Hisashi Ietsugu) announced today the relocation of its COVID-19 PCR testing laboratory, the first such facility in Japan established in June 2020 within the Kobe Biomedical Innovation Cluster through public-private partnerships, to its Research and Development Center in Nishi-ku, Kobe. The laboratory commenced operation on May 17, 2021. While working to develop a system capable of responding to possible contingencies, such as outbreaks and pandemics of emerging infectious viral diseases, Sysmex will further utilize its Research and Development Center, where its advanced technology may be applied in a clinical setting, thus contributing to the advancement of personalized medicine.

In Japan, the spread of COVID-19 shows no sign of waning, with the number of new cases and the rate of positive test results remaining high. For the sake of preventing the further spread of the virus, PCR testing is being conducted proactively in Kobe.[1]

In June 2020, the City of Kobe, Sysmex, and SRL, Inc. (present H.U. Frontier Inc.) jointly configured and began operating Japan's first PCR testing system established through public-private partnerships at the Sysmex BMA Laboratory within the Kobe Biomedical Innovation Cluster. So far, the facility has conducted over 20,000 PCR tests to assist Kobe City's policy of aggressively administering PCR testing and to serve as a private testing center to conduct PCR testing for businesses, medical institutions, and other organizations on a contract basis.

To increase the number of PCR tests and expand the functions of the facility, Sysmex has relocated its PCR testing laboratory to its Research and Development Center in Nishi-ku, Kobe, commencing operations on May 17, 2021. With the introduction of the automated PCR testing robot system,[2] jointly developed with Kawasaki Heavy Industries, Ltd. and Medicaroid Corporation, scheduled for July 2021, the daily capacity of PCR tests will be increased to 1,500. With input from the experience and know-how gained at the Sysmex BMA Laboratory, the new facility comes with heightened functionality, including contamination prevention, higher precision and quality, and a reduction in infection risk for testing staff members through standardization of the testing process. Furnished with equipment capable of meeting Biosafety Level-3,[3] this brand-new laboratory can respond to possible contingencies such as outbreaks and pandemics of emerging infectious viral diseases.
Furthermore, by concentrating the NCC Oncopanel[4] and other clinical cancer gene testing[5] for genomic medicine and regenerative medicine, as well as other lab assay functions, Sysmex aims to make the most of the Research and Development Center as a hub for the clinical application of its advanced technologies.

Going forward, Sysmex will remain committed to increasing the QOL of patients, standardizing healthcare, and developing personalized medicine through the provision of highly valuable testing.

**Overview of the PCR testing system**

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| Address: | 1-1-2 Murotani, Nishi-ku, Kobe, Hyogo (within the Sysmex Research and Development Center) |
| Floor space: | 412m$^2$ |
| Responsibilities: | Proactive PCR testing on behalf of the Kobe City Government and contract testing for businesses, medical institutions, and other organizations as a private testing center |
| Start of operations: | May 17, 2021<br>The automated PCR testing robot system will become operational in July 2021. |

**Reference**

Press release dated May 18, 2020: "The City of Kobe, Sysmex, and SRL Configure and Begin Operating a PCR Testing System for COVID-19 within the Kobe Biomedical Innovation Cluster"
https://www.sysmex.co.jp/en/news/2020/pdf/200518.pdf

**Terminology**

1 Proactive PCR testing:
PCR testing conducted exclusively for the Kobe City Government. To be administered to individuals who are not deemed to have had close contact with infected individuals but whose health needs to be monitored when a COVID-19 cluster has occurred at medical institutions, welfare facilities, schools/preschools, and other facilities, or workers at restaurants serving alcohol who may have come in contact with customers suspected of being infected with COVID-19.

2 Automated PCR testing robot system:
A PCR testing system using robots that was developed and commercialized by Medicaroid with support from the Kobe City Government in its development and social implementation. By using robots to automate the pretreatment process for PCR testing, the system improves analytical and sample handling capabilities and reduces the infection risk and workload for testing staff by decreasing their contact with samples.

3 Biosafety level:
The Laboratory Biosafety Manual published by the WHO encourages countries to classify four risk groups of bacteria, viruses, and other infective microorganisms/pathogens according to their relative hazard levels. Each risk group is assigned a different biosafety level, according to which laboratories and facilities that process such samples are classified. Level 1 is the lowest, and level 4 is the highest. The higher the level, the higher the risk factor of the microorganisms and pathogens that the laboratory or facility is equipped to handle.

4 NCC Oncopanel:
A testing system for solid tumor analysis. By obtaining a comprehensive cancer genomic profile of tumor tissue, the system analyzes abnormalities in patients' cancer-specific genes to provide useful information for determining treatment methods, including accurate

diagnoses and the selection of anti-cancer drugs.

5 Clinical cancer gene testing:
In recent years, the analysis of a patient’s cancer-specific gene abnormalities by obtaining a tumor’s genomic profile has become a focus in cancer treatment. Such testing is used to provide information that is useful in determining treatment methods, including diagnosis, treatment and the selection of anti-cancer drugs.

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