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"We will reduce the cost of nucleic acid extraction"

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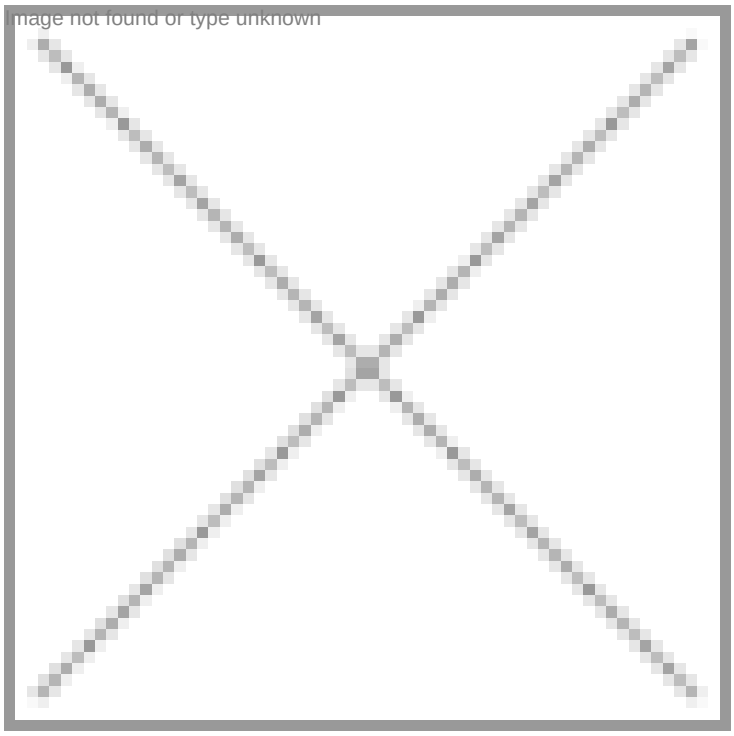

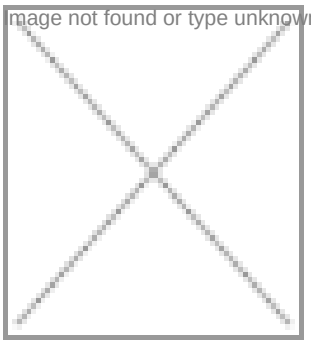

Mr Hideji Tajima
President, PSS Bio, Japan

PSS Bio is one of the leading manufacturers of Automated Nucleic Acid Extraction systems and supplies themon an Original Equipment Manufacturer (OEM) basis to Qiagen, Rocheand Invitrogen. The company recentlyhad a technical collaboration with Mumbai-based Biotron Healthcare, for producing magnetic-based NucleicAcid Extraction kits. In an interview with BioSpectrum, Mr HidejiTajima, president of PSS Bio, Japan, talks about the collaboration and the ways in which it will reduce the cost of extraction, and also speaks about the company's plans for India.

Q Can you please throwlight on the technical collaboration with Biotron Healthcare for the magneticbased-Nucleic Acid Extractionkits?

After successful technology transfer processes such as training, trial run and validation run, the NucleicAcid Extraction

reagent production is started in March 2011. The facility will produce dedicated DNA/RNA extraction reagents for the automated instrument of 12GCPlus and all-round Nucleic Acid Extractionreagent for manual use. The production capacity is expandable based on the market need. It would be carried out in the clean rooms, installed at the Mumbai facility in India. Also, to ensure high quality, molecular labs with state-of-the-art equipment have been set up.

Q How will these NucleicAcid Extraction systems reduce the costs of extraction?How different are these systems from other such extraction systems?

The automated Nucleic Acid Extraction system can handle up to 12 samples within 40-90 minutes andcan function as a fully walk away system after setting the samples and reagents. This would take two-to-threehours if carried out in a conventional manual method.

The 12GCPlus can show highly reproducible Nucleic Acid Extractionperformance that can contribute tost and ardization of the Nucleic Acid Extraction procedure. One of theadvantages of the 12GCPlus is that it uses magtration technology for separating, mixing and collecting the magnetic beads for extraction. Compared to other extraction procedures, the magtration system, which is a patented technology by PSS, can provide nucleic acids of better quality that have high purity (less contamination by other chemicals) and high yield.

Q What market opportunities does India have tooffer as far as these automated extraction kits are concerned?

Biotron can directly supply the reagents manufactured in Mumbai to Indian customers and can directly access customers' responses. It is critical for Biotron to understand its customers' need and incorporate their request for not only further enhancement of quality but also for considering new products in timely manner. But, at the same time, the runningcost of extractions on any automated platform is higher than the manual costs. The labs, especially in India, are thus unable to see the value in going for automation. Through this new arrangement we aim to bring down the costs of extraction on automated platforms, considerably, and hence increase the automation platforms in India in the life sciences segment and molecular diagnostics segment.

Q Which are the exporting destinations for the kits produced at the new facility? Will the company venture into similar technical collaborations in the APAC region?

The automated nucleic acid extraction method has just started in India and in South East Asian countries. However, the per-test-price of dedicated reagent for the instrument is an issue that is causing hindrance in the proliferation of the automation in the APAC region, similar to problemsin India. The reagents for Automated Extraction will pave the way for the kind of automation that will supersede the time consuming and labor intensive conventional nucleic acid extraction method.

Q What are some of the issues PSS Japan faces in India?

PSS has developed and manufactured small-to-large scale instruments for various needs of customers. We expect to hear a lot from our customers in India, regarding what they would like to have in their automation system. We could offer the instrument that will meet the Indian customer's requirement.

Q What are the plans for PSS Japan in India andhow will the company take its partnership with Biotron forward?

The prevalance of various infectiousdiseases including HIV, HBV, HCV, along with cholera, malaria, denguefever, tuberculosis and tetanus is not restricted only to India, but is a problem that exists in many other Asian countries. To identify disease-causing germs rapidly and precisely, the need of genetic diagnostic technology is indispensable. However, as the genetic diagnostics require complicated skillful technique, it has not successfully spread even in the advanced nations such as the US, Europe and Japan.

PSS is hoping to start the evaluation of fully-automated genetic diagnostics systems in India, a country where the importance of genetic diagnosticsis deeply recognized. In that context, PSS and Biotron are looking for partnerships with institutions like hospitals, blood banks and reference laboratories in India.

Nayantara Som in Mumbai