BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Ã¢â?¬Å?Keep investing in expanding manufacturing capacity is our commitment to customersÃ¢â?¬Â•

August 3, 2021 | Opinion | By Ankit Kankar | ankit.kankar@mmactiv.com

Responding to the increased demand for products that are used in emerging modalities such as gene therapy, and are currently in high demand for the manufacture of COVID-19 vaccines and therapies, Cytiva is investing $1.5 billion over two years to meet growing demand for biotechnology solutions. Investment follows five strategic acquisitions made by the companies this year and is in addition to Cytiva's continuing capacity investments estimated at $500 millio through 2022. With this announcement, Cytiva is enhancing the global supply chain so customers in Asia-Pacific region should feel the benefit. Francis Van Parys, Vice President, Asia-Pacific, Cytiva, South Korea reveals more during a conversation with BioSpectrum Asia.



What are the new initiatives being planned for the APAC market? Are there any launches or announcements in the pipeline in 2021?

I would love to share our latest ongoing strategic growth plan - Cytiva and Pall Corporation will expand manufacturing capacity and services across geographies for global life sciences customers. The investment, already underway, includes new sites, expansion at existing factories, and is additional to previously announced investments. It follows five acquisitions made by the companies so far this year.This investment also addresses some of the key challenges

highlighted in the Global Biopharma Resilience Index, conducted by Longitude, a Financial Times company, and published by Cytiva in March 2021. These include hiring and training talent, R&D collaboration, supply chain resilience, manufacturing models, as well as government policy and regulation.

The index shares the perspectives of 1,100 industry experts in 20 countries – nearly half of them in the Asia-Pacific region— on current biopharma needs in five areas: supply chain, talent, government policy, collaboration and manufacturing agility. The index further serves as a consistent guide for us to ascertain areas for evaluation, and determine which aspects of the industry require the most support.

The Asia-Pacific region is incredibly diverse and demands equally diverse solutions. Each country in the region faces its own set of difficulties, pertaining to governmental support, economic growth and innovative capabilities. Accordingly, Cytiva is accelerating solutions that leverage on regional advantages and circumvent geographic shortcomings. Looking into our pipeline – From the biopharma resilience index, we see manufacturing in-region for-region is a growing trend because our customers require more flexibility and adaptability. Therefore, we are looking forward to having more "in-region, for region" efforts and results in the Asia-Pacific to help our customers improve the manufacturing resilience.

Furthermore, a significant part of our localized support is talent development. Cytiva built its Fast Trak centers and Experience labs in China, South Korea, India, Japan and Singapore. These facilities are intended to provide hands-on training for thousands of professionals each year, empowering them with the skills they need to drive this industry forward. We offer world class courses on the technologies and equipment in both upstream and downstream biomanufacturing – key to discovery research organizations, as well as mature biopharmas.

By understanding the APAC region's varied environments and tailoring our approaches, we are well-positioned not only to enrich the talent pools of countries, but also contribute to each nation's biopharmaceutical aspirations and goals.

Please share more details on the recent sustainability plans being set by Cytiva.

Sustainability is integral to the state of global health and business, and remains a cornerstone of Cytiva's commitment to creating innovative medicines. On May 13th, 2021, we released our global sustainability plan, "Designing in Sustainability", with the aim of building the foundation for a resilient company and to create long-lasting positive impact across multiple facets of society. The plan includes 2025 targets to increase inclusion and diversity, reduce energy and emissions, optimize plastics, packaging, and water use. Thus far, we have seen a 1.2 per cent absolute reduction of CO2 emissions, and 6.5 per cent reduction of water consumption despite increases in demand and deliveries. Looking ahead to 2025, we target 100 per cent of sites to be exclusively powered by renewable electricity, and are committed to ensuring that 50 per cent of single-use products are acceptable for recycling. Within the past six months, 20 per cent of Cytiva's suppliers have completed a sustainability assessment, and more are expected to do so in the future. Cytiva is also a founding member of the Bio-Process Systems Alliance (BPSA), which specializes in improving single-use product manufacturing, and has aligned its goals with the United Nations Global Compact, so as to contribute positive change and ensure a sustainable future.

Beyond our own borders, Cytiva has partnered with TerraCycle, a creative social enterprise that repurposes common non-recyclable materials, to reuse previously un-recyclable plastic syringe filters. We have also begun collaborating with the Biomedical Science Careers Program (BSCP) to increase access to scientific education, and invested $3.8 million via the Innovation Accelerator into projects aimed at reducing single-use waste and implementing sustainable manufacturing practices. The success of such projects indicates that sustainable practices are necessary for a company to be resilient.

What are the key plans behind the recent acquisitions made by Cytiva?

In the first half of 2021, we have successfully completed five strategic acquisitions to build capacity and the therapeutic development workflow to advance and accelerate the work of our customers. On 1 June 2021, Danaher announced its acquisition of Precision NanoSystems (PNI). The Canada-based company has long been a renowned global leader in the development and manufacturing of lipid nanoparticles for the delivery of genetic medicines, including mRNA. mRNA technology has seen wide uses in recent years, most significantly as a component in COVID-19 vaccines, and the overall mRNA therapeutics market is growing rapidly at an accelerated pace. We believe that the work done by PNI in the area of mRNA therapies, particularly through its Genetic Medicine Toolkit which enables rapid development and increased efficacy

of genetic medicines, will be an invaluable addition to Cytiva in advancing our therapies and improving our patients' lives. Given its trajectory, mRNA technology shows great promise as a mode of treatment for other conditions such as cancer and genetic diseases, which have not yet found effective therapeutics.

On June 29, 2021, Cytiva announced the acquisition of Intermountain Life Sciences, a manufacturer of high-purity water, buffers, and liquid cell culture media. Cytiva sees the demand for buffers and cell culture media has grown substantially in recent years, we will use Intermountain's manufacturing site in Utah to rapidly boost its liquid cell culture production by millions of liters.

All of those initiatives are about evolving and accelerating deliveries to our customers.

How do you foresee the growth of lab automation & digitized R&D in the coming years?

As the mechanisms for manufacturing and bioprocessing evolve, companies must be invested in improving efficiency and overcoming pitfalls. Laboratories and manufacturing facilities across the globe are beginning to embrace the potential of digital solutions in managing huge amounts of data, through mechanisms such as digitalized laboratory informatics systems and AI-based data analysis algorithms. By leading the trend in automation and digitizing lab processes, we hope to improve our methods of manufacturing and production that yield more efficient results while reducing time and costs that have accompanied traditional methods.

The process of integration has already begun: Cytiva recently acquired German scientific software maker GoSilico, which accelerates process development through simulations. Unlike traditional methods which can take up to approximately 13 weeks, GoSilico's simulation software produces a robust solution within about 1 week, and reduces experiment material use, while ultimately allowing for more confident decision-making. Cytiva has also collaborated with Multiply Labs to develop a robotic manufacturing system that will automate parts of the cell therapy manufacturing workflow. Advanced robotics and digital solutions mark the future of biopharma's processes, from optimizing process development to automating manufacturing systems.

Ankit Kankar

(ankit.kankar@mmactiv.com)