BD and Mitsubishi Gas Chemical have signed a letter of intent (LOI) to discuss a partnership agreement to explore new ways to advance biologic drug delivery

Companies to work together with the aim of optimizing advanced technologies for use in prefillable syringes

FRANKLIN LAKES, N.J. (May 18, 2022) – BD (Becton, Dickinson and Company) (NYSE: BDX), a leading global medical technology company, and Mitsubishi Gas Chemical Company, Inc. (MGC), a R&D-oriented chemical manufacturer based in Tokyo, Japan, today announced that they have entered into an agreement to investigate further development of OXYCAPT™ - an innovation from MGC that integrates the best of plastic and glass for plastic syringes.

Together, the companies will look into applying the OXYCAPT™ technology to the next generation of prefillable syringes (PFS) for advanced biologic pharmaceuticals.

BD has been working for decades to optimize the performance of PFS, which improves the delivery of drugs and vaccines. Today, BD is the world leader in supplying PFS to the biopharmaceutical industry – with more than 70 percent of the top 100 biopharmaceutical companies utilizing our devices. BD is proud to manufacture both glass and plastic PFS to meet the unique needs of drugs.

"The biopharmaceutical industry continues to rely on PFS for the effective, reliable and consistent administration of medications," said Bruno Baney, Vice President, R&D BD Medical – Pharmaceutical Systems. "As our customers continue to grow their drug pipelines we are constantly exploring solutions to deliver newer compounds in robust, stable, and ready-to-administer formats. This agreement will further help us do so – as MGC's experience in providing technical innovation in materials will serve as a strategic complement to our legacy of supporting the latest innovations in drug delivery for our customers."

MGC has developed the OXYCAPT™ multilayer structure applied on silicon free plastic syringe barrels to provide high breakage resistance, oxygen and vapor barrier, low protein adsorption, very low extractables, high UV barrier and pH stability.

"Since launching OXYCAPT $^{\text{TM}}$, more and more pharmaceutical companies have been interested in applying it to their biologics or regenerative medicines such as gene/cell therapies", said Ko Kedo, an executive officer of R&D division. "As we have looked for a strategic partner to enhance presence of OXYCAPT $^{\text{TM}}$ in the pharmaceutical industry, the partnership with BD will be an ideal solution for MGC. We believe this agreement will make it possible for customers to choose the best syringes for their drugs."

Some pharmaceutical compounds based on technologies such as mRNA, viral vectors, or innovative antibodies may face specific stability or integration with device challenges when packaged and administered in glass PFS. Through this partnership, BD and MGC will explore practical solutions for delivering newer biologic compounds. Both companies share a commitment to advancing sustainability and reducing carbon footprint.

About BD

BD is one of the largest global medical technology companies in the world and is advancing the world of health by improving medical discovery, diagnostics and the delivery of care. The company supports the heroes on the frontlines of health care by developing innovative technology, services and solutions that help advance both clinical therapy for patients and clinical process for health care providers. BD and its 75,000 employees have a passion and commitment to help enhance the safety and efficiency of clinicians' care delivery process, enable laboratory scientists to accurately detect disease and advance researchers' capabilities to develop the next generation of diagnostics and therapeutics. BD has a presence in virtually every country and partners with organizations around the world to address some of the most challenging global health issues. By working in close collaboration with customers, BD can help enhance outcomes, lower costs, increase efficiencies, improve safety and expand access to health care. For more information on BD, please visit bd.com or connect with us on LinkedIn at www.linkedin.com/company/bd1/ and Twitter @BDandCo.

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About Mitsubishi Gas Chemical

Mitsubishi Gas Chemical (MGC) is a R&D-oriented chemical manufacturer with diverse operations, producing everything from basic chemicals that sustain industries to specialty chemicals that directly connect with user needs. For five decades we have contributed to positive change in industry and society by responding to customer needs and social issues arising with the changing times, combining our unique technologies and production-floor creativity to continuously deliver new value. In 2019, MGC launched an innovative product named OXYCAPT™ as an alternative to glass containers for pharma industry. For more information on MGC and OXYCAPT™, please visit https://www.mgc.co.jp/eng/.

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https://news.bd.com/2022-05-18-BD-and-Mitsubishi-Gas-Chemical-have-signed-a-letter-of-intent-LOI-to-discuss-a-partnership-agreement-to-explore-new-ways-to-advance-biologic-drug-delivery