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# BD Launches Next Generation Hemodynamic Monitoring Solution Providing Clinicians with AI-Driven Clinical Decision Support

***HemoSphere Alta™ Advanced Monitoring Platform with Predictive, Smart Algorithms Helps Clinicians Proactively Address Instability in Blood Flow and Pressure in Critical Situations***

FRANKLIN LAKES, N.J., April 21, 2025 /PRNewswire/ -- BD (Becton, Dickinson and Company) (NYSE: BDX), a leading global medical technology company, has launched a new advanced hemodynamic monitoring platform with predictive, artificial intelligence (AI) based algorithms that can help clinicians proactively address blood pressure instability and optimize blood flow to help avoid potential life-threatening situations during procedures.



HemoSphere Alta™ platform is the company's most advanced hemodynamic monitoring technology available and is the first major product launch from the Advanced Patient Monitoring business since its acquisition by BD. The new product advances BD's leadership in smart, connected care technologies that use clinical data and AI to help clinicians improve patient outcomes and optimize clinical workflows.

One of the key innovations is the new Cerebral Autoregulation Index (CAI), a first-of-its-kind parameter that indicates whether the brain is likely to maintain stable blood flow despite changes in blood pressure and offers personalized insights into a patient's blood pressure

requirements. Clinicians can access CAI when using a noninvasive ForeSight IQ™ Sensor, placed on the patient's forehead, combined with an Acumen IQ™ Sensor, connected to the patient's arterial line. The HemoSphere Alta™ platform also includes the Acumen Hypotension Prediction Index (HPI)™ software that predicts when a patient could have a low blood pressure event, which has been demonstrated to reduce the depth, duration and severity of hypotension in several large multicenter studies.

"Research over the past two decades has demonstrated the wide variability of the lower limit of cerebral blood flow autoregulation between individuals, as well as the risk for patient morbidity and mortality when blood pressure is maintained below this threshold," said Dr. Charles Hogue, chairman of the Department of Anesthesiology at Northwestern University Feinberg School of Medicine in Chicago. "The availability of the novel Cerebral Autoregulation Index provides clinicians with a tool to detect conditions of impaired autoregulation and can help identify a patient's lower limit of autoregulation. This, in combination with Hypotension Prediction Index technology and other advanced software and algorithms on the HemoSphere Alta™ platform allows us to both customize and predict patients' low blood pressure."

The new monitor also features an improved design to streamline the user experience, including a larger 15" high-resolution, customizable touchscreen display, split-screen views and is designed to minimize disruptive pop-ups. Voice and gesture command features help maintain sterility and allow for hands-free interaction with the monitor, such as silencing alarms and switching views. These improvements offer a more intuitive and efficient interface.

"HemoSphere Alta™ marks the latest milestone in our continuum of connected care innovations by redefining the clinician experience with more efficient workflows and increased usability," said Tim Patz, president of BD Advanced Patient Monitoring. "These AI-driven enhancements of advanced algorithms and machine learning provide clinicians with more insights and clinical decision support to help improve the quality of care for their patients."

With the recent acquisition of Advanced Patient Monitoring, BD continues to advance its collaboration with clinicians to develop advanced patient monitoring solutions that help improve the quality of care for patients around the world. For more information about HemoSphere Alta™, visit [bd.com/HemoSphereAlta](https://bd.com/HemoSphereAlta).

## **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 more than 70,000 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](https://bd.com) or connect with us on LinkedIn at [www.linkedin.com/company/bd1/](https://www.linkedin.com/company/bd1/), X (formerly Twitter) [@BDandCo](https://twitter.com/BDandCo) or Instagram [@becton\\_dickinson](https://www.instagram.com/becton_dickinson).

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