

BD deploys AI to build next generation hemodynamic monitoring solution

April 22, 2025 | News

Voice and gesture command features help maintain sterility and allow for hands-free interaction with the monitor



American medical technology firm BD (Becton, Dickinson and 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 optimise 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 optimise 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.