Revolutionizing Intensive Care Ventilation

Salvia medical used to be known among major providers and insiders primarily as an innovative development company for anesthesia ventilators, intensive care ventilators, and clinical respiratory therapy devices. All of that changed when Salvia medical presented its new ventilator family at the European Anaesthesiology Congress in Sweden in 2014. The integration of the latest EIT technology by Swisstom into a state-of-the-art intensive care device moved Salvia medical into the limelight of intensive care ventilation. Christian Hartmann has been the CEO of Salvia medical, located in the Frankfurt metropolitan area, for the past 2 years.

ICU Management: Who and what is behind Salvia medical?

Hartmann: Our company was established in 1960 to develop and produce complex measurement and control technology solutions. In accordance with the conditions of that time, our first focus was on developing clinical dialysis devices. Gradually, the synchronization of patients and machines became a higher priority as intensive care ventilation grew into a standard medical procedure. Because our company had the control technology expertise to develop optimal solutions for patient ventilation, this opened up a new business arena, which would ultimately become our exclusive specialization—ventilation and anesthesia devices. The first intensive care ventilator was specifically designed for use in neonatology and quickly became an established name in the ventilator industry of the time. Based on its former business model, Salvia medical took on the role of a reliable OEM partner to serve as the external development and production unit of virtually all major providers. Accordingly, we acquired extensive expertise in complex intensive care ventilation. The company was restructured when management changed, which led to a greater boost of our own brand in addition to conventional OEM business. By now, our products are available virtually all over the world. In many countries, they are exclusively distributed by Heinen and Löwenstein.

ICU Management: What does your slogan “Breathing like nature” express?

Hartmann: In the 1980s, ventilation-related complications were primarily associated with barotrauma. Since then, we have developed a more differentiated understanding of the complex correlations, which are now referred to as “ventilator-induced lung injury” (VILI). While the dominant companies in the area of intensive care ventilation tend to offer a broad spectrum of different solutions for all aspects of medicine, our focus is solely on developing solutions for intensive care ventilation. Our exclusive emphasis on this area, together with our long-term experience in the field, has given us the necessary in-depth understanding to develop innovative approaches for reducing VILI and for optimizing the weaning process. Some of our employees have been with us for over 25 years and are experts in their field. Given the short communication paths in a company of our size, we are able to examine medical problems from many perspectives to find solutions. Our slogan, “Breathing like nature,” therefore stands for our efforts to contribute to current and future problem solutions.
elisa 800 VIT—the first intensive care ventilator with non-invasive EIT monitoring and winner of this year’s IF Award

ICU Management: What are the benefits of integrating impedance tomography into an intensive care ventilator?

Hartmann: Although there has been much discussion about lung-protective ventilation, we have not had many options for the continuous bedside assessment of ventilation effects on patients until now. We see electrical impedance tomography (EIT) as a first step toward monitoring the individual lung status of patients with imaging technology to make statements about the adjustment of ventilation settings and the necessary positioning measures. Because the underlying technology has continuously improved since 1984, we now have user-friendly high-resolution systems that have addressed the problems of the past such as bruising, restrictive sensor belts, and lack of mapping capability. Thanks to the combination of this innovative EIT technology with the options of modern intensive care ventilators, the clinical statements are no longer restricted to regional ventilation distribution.

ICU Management: What are the future plans of Salvia medical?

Hartmann: We will continue to turn theoretical medical approaches into solutions and make them easy to use for clinicians. As our recent international IF Award clearly shows, that is absolutely compatible with outstanding design.

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