

Hypoglycaemia monitor for diabetics wins award

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Hypoglycaemia monitor from AIMEDICS for diabetes patients wins BioSpectrum award



AIMEDICS, an Australian medical device company, has come up with a device that help people with insulin-dependent diabetes mellitus (IDDM) by detecting and preventing sleep-time hypoglycemic attacks.

The device, winner of BioSpectrum Asia Pacific Bioscience Industry Product of the Year 2012, is non-invasive and functions as a nocturnal hypoglycemia monitor and alarm to provide safer sleep to people with type 1 diabetes aged between 10 and 25 years.

People with type 1 diabetes require daily insulin injections to manage their condition. This has a short term complication of hypoglycaemia (low blood glucose levels). If undetected and not treated, hypoglycaemia can lead to seizures, comas and hospitalization. People with type 1 diabetes have between a 14-to-50 percent chance of experiencing hypoglycaemia at night, and only a few are identified. At night, people with type 1 diabetes are at increased risk of undetected hypoglycaemia as they are asleep and their autonomic responses are reduced. According to reports, between two and four percent of people with type 1 diabetes die due to hypoglycemia.

AIMEDICS has been working on this since its establishment in 2001. The company's work was based on the research and patents of two inventors from the University of Technology Sydney (UTS). AIMEDICS upgraded and developed the original technology concepts into the clinically-tested HypoMon product with investments and funding from Biotechnology Innovation Fund, New South Wales Government, Juvenile Diabetes Research Foundation (through UTS) and the Australian Government.

The HypoMon product has had two major iterations since it was transferred from academia in 2001. During that period, AIMEDICS developed a world leading database in hypoglycemia. AIMEDICS has a significant beta release program in Australia. This has seen many users of HypoMon provide product feedback which has led to its improvement.

The HypoMon System costs \$3,000 and includes a monitor, transmitter, belt and a sensor. The components cost \$100 for the HypoMon belt and \$150 for the HypoMon sensor. The HypoMon monitor and transmitter are warranted for 12 months from purchase. The belt and sensor are warranted for three months from purchase.

In July 2011, HypoMon received an Australian International Design Award in recognition of design and innovation excellence. Reacting to this, Mr Victor Skladnev, CEO, AIMEDICS, says, "HypoMon went through a vigorous assessment by a panel of Australian and international experts amidst strong competition. "This award is an acknowledgement of our significant, ongoing and relevant investment in the HypoMon technology," says Mr Martin Greenberg, chairman, AIMEDICS.

The HypoMon technology has real clinical application and a strong business model. These positive points and a strong management team allowed AIMEDICS to present a good case to the government, private equity and diabetes consumer organizations to support research and development initiatives. The HypoMon technology received an award of \$1.9 million from Australian Ministry for Innovation, Industry, Science and Research to help reduce the risk of nocturnal hypoglycaemia. The grant allows AIMEDICS to capitalize on the market opportunity and maintain the company's great growth momentum.

Besides a grant from the Australian government, HypoMon obtained CE certification and AIMEDICS received ISO13485 accreditation which proved its quality and safety.

HypoMon is creating a new market for non-invasive and accurate detection of nocturnal hypoglycaemia which has a market demand. Plus, it positions AIMEDICS as the leader in this new market space. HypoMon has already developed its community in the UK, Australia and in other countries through many leading organizations and associations. In the UK, organizations such as Juvenile Diabetes Research Foundation, Diabetes UK, Children with Diabetes UK, INPUT, Insulin Pumpers UK, Association of Children's Diabetes Clinicians, The British Society for Paediatric Endocrinology and Diabetes, and in Australia, many organizations such as Diabetes Australia, JDRF Australia, the Australian Diabetes Society, the Australian Diabetes Educators Association, and global bodies like The International Diabetes Federation, The American Diabetes Association, and Hypoglycaemia Support Foundation have became the HypoMon community.

Sharing his thoughts on the future plans for the product, Mr Victor Skladnev says, "In addition to the standalone HypoMon, the technology has application in the closed loop artificial pancreas program. Specifically, fusing the data of HypoMon and continuous glucose monitoring increases the performance for detecting hypoglycaemia. Thus, insulin pumps could incorporate this hypoglycaemia information to provide a true nocturnal closed loop system that would satisfy different regulatory bodies."

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Selection criteria