

Applications and Markets

Integrated Systems and Stand-Alone Products

As the Critical Care environment becomes more complex it is likely that users will require a high degree of system integration. Probe Scientific envisages the MicroEye[®] system becoming integrated into 'bed-head arrays' that provide Clinicians with vital information in a single efficient and effective location. The company has initiated developments to bring this about, and is looking to work with leading providers of vital signs systems.

There are opportunities where the complexity and cost of an Integrated Solutions may be unnecessary and Probe Scientific will ensure that cost effective systems are developed to meet demand. One likely application is in the care of unstable or brittle diabetics. The company is working with a world-leading institution which specialises in diabetic care and have developed procedures to hold blood glucose concentrations stable (i.e. Clamped) within desired limits using concomitant insulin administration and glucose infusion. This highly effective closed-loop "artificial pancreas" is currently limited by the nature of the ancillary equipment needed. Together Probe Scientific and collaborating partners, using novel technologies like the MicroEye[®] device will work to develop miniaturised components that can be used by diabetics whether they are within a Care environment, at home or at work.

The market for glucose monitoring has been developing over the last twenty years and is expanding rapidly because of the demographics relating to population growth and life-style changes. WHO estimates that 366 million people worldwide will suffer from diabetes in 2030, compared to 171 million in 2000.

Probe Scientific's technologies and its MicroEye[®] platform is not limited to glucose monitoring but can be used for an array of other vital biochemical and pharmacological markers.