



# Corpison

## Auditory displays for vital signs monitoring

**Audible displays  
that support  
faster detection of  
clinically  
significant events**

**Corpison is  
actively seeking  
commercial  
partners who are  
interested in  
licensing the  
technology**

### CONTACT

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### Overview

Corpison has developed a suite of auditory displays for patient vital signs monitoring in the critical care environment. The auditory displays reduce the dependence on visual monitors, support faster detection of clinically significant events, and help anaesthesiologists maintain peripheral awareness of patient status.

The sound generated by the system is rhythmic and a change in the pitch or rate, which is correlated to a change in the patient's vital signs, draws the practitioner's attention. The information provided by the Corpison technology can then support continuous diagnosis of the patient. This is significantly superior to traditional audible alarms.

### The Technology

The Corpison technology was invented by Professor Penelope Sanderson and Assoc. Professor Marcus Watson at the University of Queensland's Key Centre for Human Factors and Applied Cognitive Psychology and has been developed in collaboration with leading anaesthesiologists and intensivists.

The team has initially focused on two key patient monitoring parameters; respiration and blood pressure:

- The respiratory display produces a synthesised continuous auditory display based on end-tidal CO<sub>2</sub>, cumulative tidal volume and flow rate during inhalation and exhalation.
- The blood pressure display produces a synthesised "earcon" auditory display based on systolic and diastolic blood pressure.

### Clinical Trial Results

The effectiveness of the Corpison sonification technology was compared with traditional visual displays in a trial in the full scale simulator at Royal Adelaide Hospital in April 2006.

Anaesthesiologists in the trial were required to supervise the activity of a more junior anaesthetist while being placed in a high workload situation. Three different life threatening scenarios were simulated in a 22 minute period.

	Visual	Corpison
<b>Detected Events</b>	52%	90%
<b>Rated Ease of use</b>	2.7	4.3

The above table highlights preliminary results from the trial. Compared with detections in the Visual condition, participants detected significantly more events using the Corpison system. In addition, the average time for the anaesthesiologist to detect an event was reduced using the Corpison system.

### IP position

Corpison's auditory display technology is protected through a family of patents with strategic worldwide coverage.

### The Opportunity

The Corpison auditory displays are poised to change the way data is delivered in the critical care environment. The technology is ready for patient trials and Corpison is actively seeking commercial partners who are interested in licensing the technology. For enquires, and to organise for a technology demonstration, please contact Michael Stevens.

