

## Ambulatory Central Aortic Systolic Pressure (CASP)- an index for Arterial Stiffness -- ? a Dream come true.

### Abstract:

24hr Ambulatory BP has been shown to be one of the strongest risk factors in strokes and CVS events especially in the last decade. The **macroscopic** picture, the night BP in particular is becoming a very important parameter to monitor.

During this time, the concepts of arterial stiffness and pulsology have been resurrected with studies like CAFÉ, REASONS and STRONG HEART. In particular, the Central Aortic Systolic Pressure (CASP) is taking center stage amongst other indices like Augmentation Index, Central Pulse Pressure (CPP), etc. The pulse waveform really provides the **microscopic view** of the story.

Whilst the measurement of CASP in these studies were spot measurements in that one instance, the predictive and prognostic values have been shown to be of great clinical significance. The direct impact of this goes beyond just a change of drug therapy for the patients.

What more, if the CASP can be measured and tracked over 24hrs? It would be a culmination of both the macro- and the microscopic analyses not seen before.

HealthSTATS International Pte Ltd has developed a unique and novel technology which has resulted in a wrist-worn ABPM device that is capable of capturing the arterial pulse waveform of the radial artery over 24 hrs. It is easy to use in a typical clinic setting, with minimal set up.

The data collected is then used to generate the following:

1. 24hr ABPM pattern, with heart rate pattern.
2. CASP reading at the start of the session (by A-Pulse software).
3. **24hr CASP pattern for each of the valid intervals.**

The device has obtained separate FDA approvals, CE MDD, SFDA, TGA amongst others, for use as ABPM device and CASP monitor. They are both patent-granted worldwide and have received numerous global technology awards including the Technology Pioneer Award of the World Economic Forum 2007.

The device has also cleared the KFDA last year and will be available in Korea in the later part of 2009.

24hr CASP is truly a dream come true.

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