



TASK FORCE[®] MONITOR

> the non-invasive
diagnosis system

SYNCOPE ASSESSMENT
STATE-OF-THE-ART



CNSystems
The Brain & Heart Company

THE TASK FORCE® MONITOR

THE STATE-OF-THE ART DIAGNOSIS SYSTEM

FACTBOX

- > The 1 year mortality from syncopal events is over 20%.
- > About 40% of syncopes are neurally-mediated or orthostatic syncopes.
- > Head up tilt testing (HUT) is the gold standard procedure for syncopal patients.
- > Performing a HUT, only the synchronized recording of ECG and beat-to-beat blood pressure provides the physician with the information needed for a comprehensive and detailed diagnosis ...
- > In at least 10% of syncope patients during a HUT, the cause of disease still remains unknown due to the missing information about autonomic regulation, inotropy (stroke volume) and total peripheral resistance ...

The Task Force® Monitor provides all necessary hemodynamic information for fast and accurate diagnosis.

- > It is the only system available that provides all relevant hemodynamic parameters – synchronized!

Additional information:

- > complete synchronized hemodynamics including inotropy, stroke volume, total peripheral resistance
- > autonomic regulation
 - heartrate variability
 - blood pressure variability
 - baroreceptor sensitivity
- > The Task Force® Monitor is the state-of-the-art diagnostic tool for syncope assessment!



SYNCOPE IS FREQUENT ...

- > 6% of hospital admissions
- > 3-5% of emergency admissions
- > 40% of whole population



TASK FORCE® MONITOR

the non-invasive diagnosis system

THE TASK FORCE® MONITOR PROVIDES COMPLETE SYNCHRONIZED HEMODYNAMICS

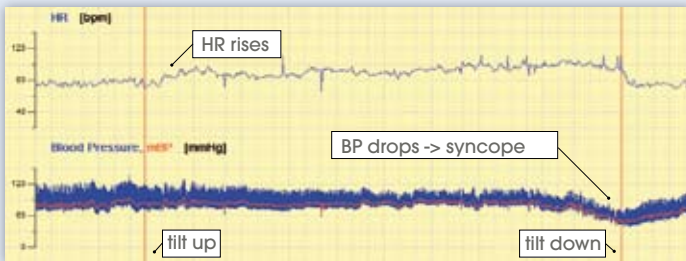
- > ECG: high resolution 3-channel-ECG (6 channel display)
- > blood pressure: continuous non-invasive arterial blood pressure (CNAP™)
- > cardiac output: continuous non-invasive cardiac output (CNCO) & stroke volume
- > total peripheral resistance
- > autoregulation: comprehensive view, based on heart rate and blood pressure variability and baroreceptor sensitivity

ALL DATA AVAILABLE

- > beat to beat, time synchronized and in real time
- > derived from 4 independent measuring methods

THE TASK FORCE® MONITOR ENABLES THE MEASUREMENT OF HEART RATE AND BLOOD PRESSURE WITHOUT ANY INTERRUPTION THROUGH RECALIBRATION (e.g. ASYSTOLIES)

SYNCOPE VASIS I



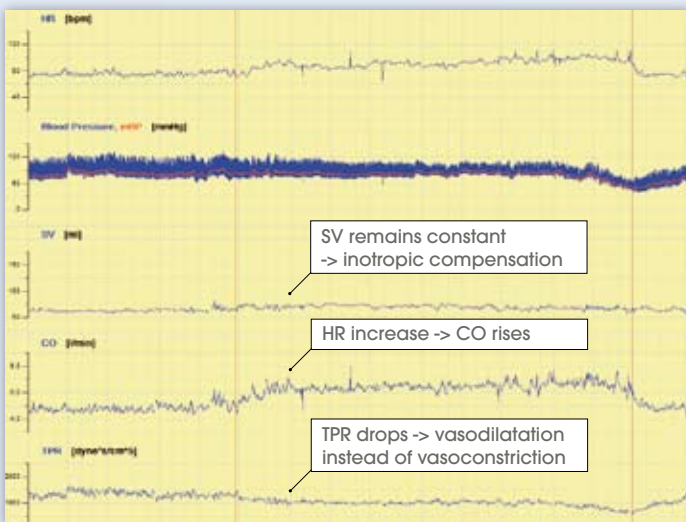
Measurement according to International Guidelines:

- > heart rate rises
- > blood pressure drops → syncope

Figure 1: Trend view of patient with a syncope Vasis Class I during HUT

A diagnosis based only on heart rate and blood pressure is in some cases insufficient. Additional information is needed to understand the full mechanism of blood pressure regulation of the patient and to obtain a precise diagnosis:

SYNCOPE VASIS I



Task Force® Monitor measurement according to International Guidelines:

- > heart rate rises
- > blood pressure drops → syncope

PLUS ADDITIONAL INFORMATION

- > inotropic compensation → stroke volume remains constant
- > cardiac output rises
- > vasodilatation → total peripheral resistance drops

Figure 2: Trend view of patient with a syncope Vasis Class I during HUT



SYNCOPE PRODUCT LINE

> the non-invasive diagnosis system

All parameters provided beat-to-beat, non-invasively and in real time

CONFIGURATION / PRODUCT FEATURES	TFM 3040i	TFM 3030i	CNAP™ 500at
CNAP™ – continuous non-invasive arterial blood pressure > high fidelity blood pressure waveform > real time beat-to-beat systolic, diastolic and mean blood pressure, pulse rate > continuous without any interruption (e.g. asystoly, recalibration)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
additional NBP – oscillometric blood pressure > automatic zeroing with pressure on large artery (upper arm) > absolute accuracy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ECG – high resolution 3-channel > 6-channel display > synchronized with blood pressure for enhanced classification according to guidelines* * VASIS classification based on synchronized HR and synchronized blood pressure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CNCO – continuous non-invasive cardiac output > real time beat-to-beat cardiac output and stroke volume > complete hemodynamic profile including total peripheral resistance, thoracic fluid content* * for the complete list visit www.cnsystems.at	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ANS – Autonomic Nervous System > autoregulation of blood pressure > heart rate and blood pressure variability > baroreflex sensitivity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
easy to use syncope-diagnosis-aiding software > Calliper: evaluate time intervals and relative changes in parameters directly (e.g. asystolies, blood pressure drops, VASIS classification) > fully functional ECG: real time ECG paper, amplitude gain (mm/mV), time scale (mm/s) > flexible intervention- and comment markers with real time statistics > diagnosis editor with freely configurable templates	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Print report / export of data > flexible print reports including hemodynamic trends and statistics > real time ECG paper (also synchronized with blood pressure) > export of data: > patient signals, beat-to-beat, statistics > ASCII (TXT), Matlab®, XML	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Respiration* > waveform and respiration rate * derived from CNCO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analog output – providing continuous blood pressure waveform	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
adjustable alarms	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
integrated printer > thermal, 58 mm > blood pressure waveform, numerical and graphical trends	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
internal battery (2 hours operating time)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For detailed technical specification and safety standards visit our website www.cnsystems.at or ask for the technical specification sheet.



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