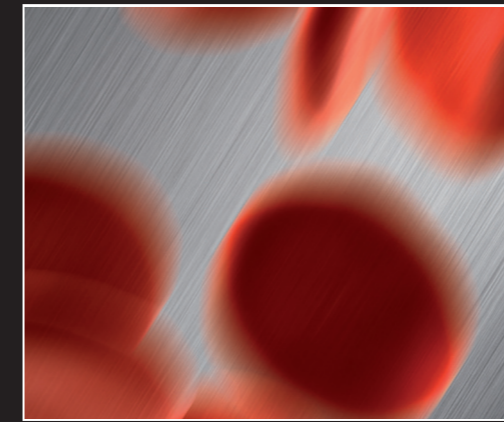


About the Company

Cheetah Medical is a leader in non-invasive Cardiac Output and Hemodynamic monitoring. Cheetah's NICOM[®] system has been used in a broad range of clinical settings that include Fluid Optimization for high-risk ICU and OR patients, quick differential diagnosis in the Emergency Department, Hemodialysis monitoring and Exercise Cardiac Output (ECO[®]) for heart failure patients. Importantly, this unique and proprietary technology has been proven to provide accurate and reliable measurements of Cardiac Output, even during patient movement and across a variety of body types, providing non-invasive, accurate, continuous and real-time information.



NICOM[®]

Accurate • non-invasive

• continuous • cardiac output
& hemodynamic monitoring

Every Beat • Every Patient • Everywhere

CLINICAL APPLICATION AND DATA VALIDATION

Cheetah's BIOREACTANCE technology has been validated in the United States and Europe on hundreds of hemodynamically challenged patients in a variety of clinical settings, in the presence of significant environmental factors.

References:

1. Raval NY, Squara P, Cleman M, et al. Multicenter Evaluation of Noninvasive Cardiac Output Measurement by Bioreactance Technique. J Clin Monit Comput. 2008;22(2):113-9
2. Squara P, Denjean D, Stagnasie P, et al. Noninvasive cardiac output monitoring (NICOM): a clinical validation. Intensive Care Med. 2007;33(7):1911-1914
3. Marque S, Cariou A, Chiche JD, et al. Comparison between Flotrac-Vigileo, and Bioreactance, a totally noninvasive method for cardiac output monitoring. Crit Care. 2009;13(3):R73
4. Squara P, Rotcajg D, Denjean D, et al. Comparison of monitoring performance of Bioreactance vs. pulse contour during recruitment maneuvers. Crit Care. 2009;13(4):R125
5. Squara P, Ceconi M, Rhodes A, et al. Tracking changes in cardiac output: methodological considerations for the validation of monitoring devices. Intensive Care Med. 2009; 35(10):1801-8
6. Benhomar B, Outattara A, Brusset A, et al. Use of transthoracic Bioreactance during passive leg raise test to determine fluid Responsiveness. European Society of Intensive Care Medicine, 2009
7. Gan TJ, Soppitt A, Maroof M, et al. Goal-directed Intraoperative Fluid Administration Reduces Length of Hospital Stay after Major Surgery. Anesthesiology 2002; 97:820-826
8. Pearse R, Dawson D, Fawcett J, Rhodes A, et al. Early goal-directed therapy after major surgery reduces complications and duration of hospital stay. A randomised, controlled trial. Crit Care. 2005;9(6):R687-693
9. Hicks CW, Benoit J, Kolattukudy S, et al. Hemodynamic Changes in Patients with Sepsis. Society of Academic Emergency Medicine, 2009
10. Benoit J, Hicks C, Kolattukudy S, et al. Hemodynamic Changes As A Diagnostic Tool for Acute Heart Failure. Academic Emergency Medicine 2009;16(s1):S11
11. Kossari N, Hufnagel G, Squara P. BIOREACTANCE: A New Tool for Cardiac Output and Thoracic Fluid Content Monitoring During Hemodialysis. Hemodial Int. 2009 Sep 16
12. Khan FZ, Salahshouri P, Matsouva D, et al. Correlation of novel non-invasive bioreactance based haemodynamic measurements with pulsed Doppler of the transmitral inflow for optimization of AV intervals in cardiac resynchronization therapy. Heart Rhythm 2009 Vol 6, Issue 5S PO 03-134
13. Khan FZ, Read PA, Salahshouri P, et al. Comparison of Doppler echocardiography with non invasive cardiac output monitoring based on bioreactance for AV and VV delay optimization in patients undergoing cardiac resynchronization therapy. Europace Journal 2009, 11(Supplement 2), A1014.
14. Lang CC, Karlin P, Haythe J, et al: Peak cardiac power output, measured non-invasively, is a powerful predictor of outcome in chronic heart failure. Circulation. In press
15. Maurer M, Burkhoff D, Maybaum S, et al. A multicenter study of noninvasive cardiac output by bioreactance during symptom-limited exercise. J Card Fail. 2009;15(8):689-99
16. Burkhoff D, Squara P, and Keren H. Evaluation of a Noninvasive Continuous Cardiac Output Monitoring System Based on Thoracic Bioreactance. Am J Physiol Heart Circ Physiol. 2007 ;293(1):H583-9

USA

Cheetah Medical, Inc.
2828 SW Corbett Avenue
Portland, Oregon 97201
USA
Tel: (+1) 503-241-5405
Fax: (+1) 503-345-6890

EUROPE

Cheetah Medical (UK) Ltd
1 Irmarr House, 59 Cookham Road
Maidenhead
Berkshire SL6 7EP
United Kingdom
Tel: (+972) 5430 22388
Fax: (+44) 1628 788802

ASIA

Cheetah Medical, Inc.
38 Habarzel Street, Floor 1
Ramat Hachayal
Tel Aviv, 69710
Israel
Tel: (+972) 3 644 0288
Fax: (+972) 3 725 4848

DISTRIBUTOR

In order to find the distributor closest to you, please enter the distributors' section on our website at this address:
www.cheetah-medical.com/distributors.html

For service or warranty needs contact: Cheetah Service Center 2828 SW Corbett Avenue, Suite 214 C, Portland OR 97201 USA
Toll Free: 1-866-751-9097 **Fax:** 1-916-367-6717 **Email:** service@cheetah-medical.com **Web-site:** www.cheetah-medical.com
For product inquiries inside the US: cheetah-us@cheetah-medical.com **Worldwide:** cheetah@cheetah-medical.com

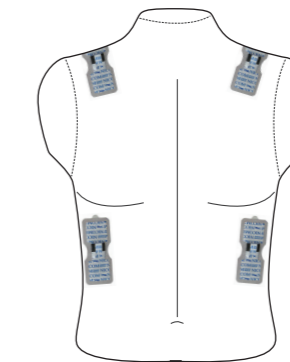
Cheetah NICOM[®] The Non-Invasive Cardiac Output Monitor that gives you the accuracy you demand with the flexibility you desire.

The Cheetah Reliant is FDA cleared for market in the USA and CE cleared for marketing in the European Union. BIOREACTANCE[®], NICOM[®] and ECO[®] are trademarks of Cheetah Medical LTD. Copyright 2009 Cheetah Medical Inc.
Code: Brochure-Eng Rev.02 October 1, 2009



NICOM ADVANTAGES

- Non-invasive and continuous
- Highly accurate: Only noninvasive system whose FDA predicate is Pulmonary Artery Catheter CCO
- Cost effective
- High motion tolerance
- Flexible BIOREACTANCE sensor placement
- Quick and easy application
- Compact & portable



NICOM FOR ACCURATE, NON-INVASIVE HEMODYNAMIC & CARDIAC OUTPUT MONITORING

Cheetah Medical's NICOM Reliant monitor accurately and noninvasively measures Cardiac Output (CO) and other key hemodynamic parameters in continuous fashion:

Cardiac Index (CI) • Heart Rate (HR) • Stroke Volume (SV) • Stroke Volume Variation (SVV) • Stroke Volume Index (SVI) • Noninvasive Blood Pressure (NIBP) • Total Peripheral Resistance (TPR) • Total Peripheral Resistance Index (TPRI) • Cardiac Power (CP) • Cardiac Power Index (CPI) • Thoracic Fluid Content trend (dTFC)

CLINICAL APPLICATIONS

Based on the unique and proprietary BIOREACTANCE[®] Technology which combines a continuous non-invasive approach with key advantages of accuracy and precision, the Reliant system empowers clinical decisions across multiple settings. The main applications enabled by NICOM are:

- Fluid optimization in critical care, anesthesia and emergency medicine
- Differential diagnosis of acute hemodynamic states such as shock, shortness of breath, sepsis and obstetric complications
- Drug titration, especially in patients requiring treatment with cardiac agonists and vasopressors
- Hemodynamic optimization of critical care and perioperative resuscitated patients
- Intraoperative fluid management and early warning signal for impending hemodynamic instability
- Monitoring and management of heart failure patients via stress testing and pacemaker optimization

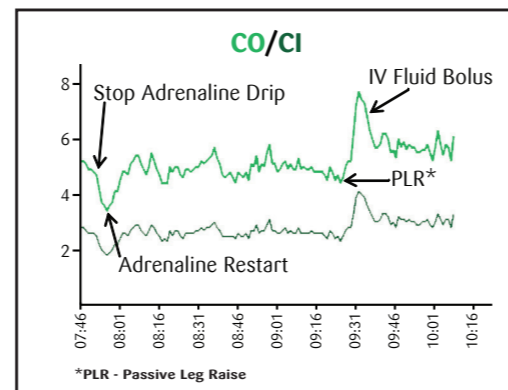


The **NICOM Technology** has been used in multiple inpatient settings including intensive care, emergency room, perioperative care, hemodialysis monitoring as well as in the cardiology office for heart failure monitoring, pacemaker optimization and measurement of exercise cardiac output (ECO®).

IN-PATIENT HOSPITAL

• Intensive Care Unit (ICU) and Cardiac Care Unit (CCU)

Continuous monitoring of CO, SV, SVV, TPR and other hemodynamic parameters is an essential component of fluid resuscitation, vasoactive drug titration and hemodynamic monitoring. In two series of over 100 ICU patients, the NICOM system demonstrated accuracy, precision, and responsiveness for CO monitoring in patients experiencing a wide range of circulatory situations showing very good correlation compared to the Pulmonary Artery Catheter (PAC)¹⁻². Later studies demonstrated equal or superior performance of NICOM, which is based on a central thoracic signal, as compared to invasive, peripheral pulse contour-based monitoring devices³⁻⁴. The validation protocol employed in the NICOM studies has been heralded as the primary example of CO monitoring validation methodology⁵. The system's accuracy to predict fluid responsiveness was highlighted in a large study of 70 critical care patients⁶.



Continuous hemodynamic monitoring: Drug titration and determination of fluid responsiveness.

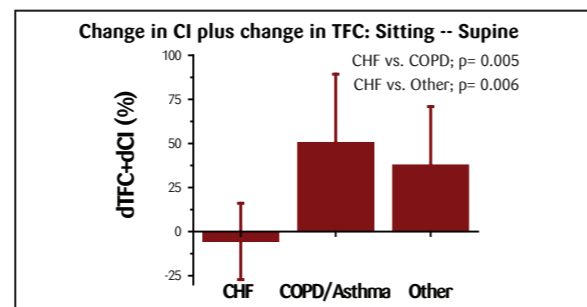
The system's **precision and quick responsiveness** make it a powerful tool for routine bed-side decision making, for example to **determine fluid responsiveness state**, to select and refine appropriate agonist and pressor medication, to monitor fluid removal in renal failure cases and assess the impact of positive pressure ventilation on CO and perfusion. Using the Reliant noninvasive system may also **obviate the need for invasive lines**, thus enabling reduction in Blood Stream Infections (BSI). Given that catheter related BSI carries a significant mortality relative risk ratio as well as staggering economic costs, adoption of a noninvasive monitoring platform can directly contribute to patient safety and improved economic utilization in critical care.

• Peri-Operative Hemodynamic Monitoring

Peri-operative complete hemodynamic monitoring including CO, SVV, NIBP and TPR enables fine-tuning of fluid management and an early warning signal in case of acute hemodynamic decompensation. Use of flow-based parameters in the perioperative setting within Goal Directed Therapy (GDT) has been shown to improve outcomes and reduce length of stay⁷⁻⁸. NICOM provides a noninvasive, cost-effective solution to accomplish such advanced approaches, without the need for invasive probes or for specialized, time-consuming set-up procedures that can impact perioperative efficiencies and disposable costs.

• Emergency Department

The NICOM system's quick, non-invasive and motion tolerant features enable routine utilization of hemodynamic monitoring in the emergency department that was not possible before. NICOM has been used for differential diagnosis of shortness of breath and pre-sepsis, for hemodynamic differential diagnosis, fluid optimization and treatment monitoring of acute events such as cardiogenic shock and trauma in the emergency department⁹⁻¹⁰.



Differential diagnosis of shortness of breath - Heart Failure vs. Non Heart Failure in the Emergency Department¹⁰.

• Dialysis Clinic

The NICOM System has been used in patients undergoing hemodialysis due to acute or chronic renal failure to provide real-time, continuous monitoring of CO, TPR, SV and Thoracic Fluid Content trends (dTFC)¹¹. Information provided by the NICOM System can provide early warning of impending hemodynamic decompensation, optimize dry patient weight management and may lead to efficiencies in care as a result.

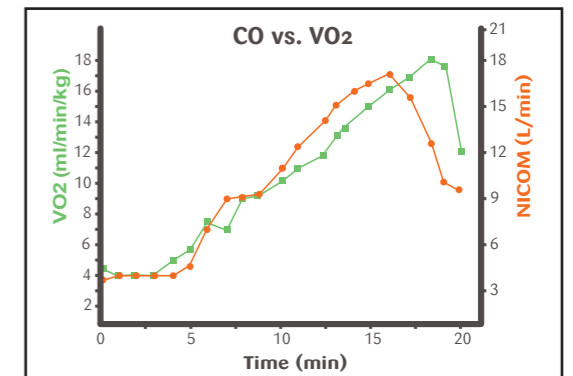
PHYSICIAN PRACTICE

• Pacemaker Optimization

In heart failure patients treated with a biventricular pacemaker (CRT), NICOM has been used to determine the optimal pacemaker AV delay and VV delay settings. The real-time, non-invasive insight enables fine-tuning of the CRT to optimize stroke volume and cardiac output¹²⁻¹³. The test is simple to perform, reimbursed under existing coverage codes and can be completely performed by a nurse or technician, without the need for echocardiography and other ancillary tests.

• Stress Testing

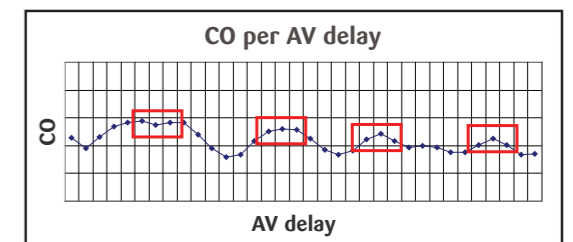
Measurement of oxygen consumption (VO₂) during rest and peak cardiopulmonary stress testing (CPX) has been considered the most significant prognostic indicator for CHF. However, recent literature indicates that Peak CP and Peak CO response to stress carry more prognostic information than VO₂¹⁴. Further more, a multicenter clinical study has shown that using the NICOM System to capture continuous CO and CP response to stress closely tracks VO₂ as well as previous results employing invasive CO using the Fick method during stress testing. This technique might therefore be useful for indexing disease severity, prognostication and for tracking responses to treatment in clinical practice and in clinical trials¹⁵.



CO vs. VO₂ monitoring during stress test¹⁶

• Chronic Heart Failure Management

The NICOM System enables highly accurate, real-time, continuous and robust measurements of CO which can be used to better understand the patient's disease status and response to treatment. For example, lit has been shown that dynamic measurements of CO and other parameters using NICOM can differentiate between heart failure and chronic pulmonary disease (COPD)¹⁰. Thus, the system may be used to uncover disease escalation and volume overload.



CRT parameter optimization: CO response to AV delay

THE POWER BEHIND THE NICOM SYSTEM: BIOREACTANCE TECHNOLOGY

The Cheetah Reliant NICOM CO and hemodynamic monitor implements Cheetah Medical's unique and proprietary BIOREACTANCE® Technology. BIOREACTANCE is a novel technology platform which analyzes changes in frequency of electrical impulses as they traverse the chest. NICOM enables a highly precise, highly accurate, continuous, stable and non-invasive method to measure CO, and other parameters.

The benefit of Cheetah's robust technology which uniquely measures flow-dependent changes in frequency, is that common, unavoidable factors such as electrical noise interference, patient movement or positioning or electrode misplacement which may lead to inaccurate data, are significantly reduced or avoided¹⁶. This can be likened to the improved quality of Frequency Modulation (FM) versus the traditional Amplitude Modulation (AM).