

# FOR IMMEDIATE RELEASE

## FROST & SULLIVAN LAUDS CLEVEMED FOR KINESIA™, A REVOLUTIONARY MOBILITY DISORDER MONITORING SYSTEM

**Palo Alto, Calif. - March 12, 2008** - Based on its recent analysis of the mobility disorder monitoring systems market, Frost & Sullivan recognizes Cleveland Medical Devices Inc. (CleveMed) with the 2008 North American Product Innovation of the Year Award.

This Award highlights CleveMed's development of [Kinesia™](#), a quantitative motor assessment system for monitoring the upper extremity motor symptoms of movement disorders, such as Parkinson's disease and essential tremor. The device, worn on the wrist and finger of the patient, monitors three dimensional motion and electrical muscle activity and can be used to quantify the severity of movement disorder symptoms such as tremor and bradykinesia.

"As a product, Kinesia represents a unique and unprecedented approach to unifying diagnostic and sensing technology to monitor mobility disorders," says Frost & Sullivan Research Analyst Abhishek Dutta. "By doing so, the device further provides a standardized platform to facilitate efficient neurodiagnostic monitoring of the disease or disorder."

Currently, subjective rating scales are used by clinicians to rate movement disorder symptom severity which can cause high variability in assessment. A clinician can use Kinesia along with these rating scales as a standardized platform to compare changes in symptoms from visit to visit, helping to minimize the variability in clinical assessment. The device can also be used in a home monitoring application which would provide clinicians the opportunity to view symptom fluctuations in a more continuous fashion, allowing optimization of patient medication timing and dosage. In addition, Kinesia is suited for pharmaceutical drug development and efficacy trials as well as evaluating deep brain stimulation as a treatment for movement disorder symptoms.

"We are honored to accept this award from Frost & Sullivan. It punctuates the large clinical market need for technology to quantify and track movement disorders motor symptoms in light of rapidly expanding research and treatment modalities," said [Joseph P. Giuffrida](#), PhD, Director of CleveMed's [Division of Movement Disorders](#). "Kinesia is being developed as a standardized platform to measure motor symptoms. Our goal is that this technology will ultimately benefit the large population affected by diseases such as Parkinson's and essential tremor."

The technology used to create Kinesia is unique from other motion monitoring devices currently on the market such as actigraphy devices and tremor monitors. While these technologies use limited sensing technology, Kinesia allows a clinician to monitor the natural three-dimensional movements and rotations of the upper extremity. It is the first device of its kind to include accelerometers, gyroscopes

and electromyography (EMG) capability in a wireless device that weighs less than a quarter pound and is smaller than a deck of cards.

Comprised of two compact, [patient-worn components](#) - the Finger Sensor and the Wrist Module - the Kinesia system allows for objective and continuous monitoring of movement disorder symptoms without sacrificing size, portability and comfort. The Finger Sensor houses the motion sensors while the Wrist Module incorporates a Bluetooth® radio for wireless data transmission, a memory card that stores up to 12 hours of data and an optional input for two channels of EMG. Also a part of the Wrist Module is a push-button patient diary for tracking medication times and symptom fluctuations.

The unit wirelessly transmits data to a computer where it can be displayed, stored and analyzed. Included in the [Kinesia software](#) is a database of automated upper extremity tasks. In this section, patients are guided by video through a series of evaluation tasks normally completed during a movement disorder exam. Data is then saved behind the scenes for later review and analysis. This can be useful for in-clinic exams, home use or automating pharmaceutical trials.

Kinesia is poised to greatly improve the monitoring of movement disorder symptoms. The industry is by and large going to hugely benefit from this innovative product as this proprietary compact, noninvasive, wireless and wearable patient monitoring system aids in quantifying the severity of movement disorder symptoms.

In recognition of the novel technical capabilities and innovative unique features of the Kinesia system, Frost & Sullivan presents the 2008 Product Innovation of the Year Award to CleveMed.

Each year, Frost & Sullivan presents this Award to the company that has demonstrated excellence in new products and technologies within its industry. The recipient company has shown innovation by launching a broad line of emerging products and technologies.

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.

#### **About CleveMed**

CleveMed was founded with the goal of developing innovative telemetry devices for a variety of medical applications. Today, CleveMed is developing and pioneering the use of novel wireless monitoring systems for high growth neurology and rehabilitation applications, including [movement disorders](#), [sleep disorders](#) and brain monitoring. Through these innovations, CleveMed has developed a growing range of products that address the needs of the medical, research and academic communities. For more information, please visit [www.CleveMed.com](http://www.CleveMed.com)

Kinesia was developed through support provided by Small Business Innovation Research grants from the National Institutes of Health, National Institute of Neurological Disorders and Stroke and commercialized with support provided by the Ohio Research Commercialization Grant Program from the State of Ohio.

### **About Frost & Sullivan**

Frost & Sullivan, the Global Growth Consulting Company, partners with clients to accelerate their growth. The company's Growth Partnership Services, Growth Consulting and Career Best Practices empower clients to create a growth-focused culture that generates, evaluates and implements effective growth strategies. Frost & Sullivan employs over 45 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 30 offices on six continents. For more information about Frost & Sullivan's Growth Partnerships, visit <http://www.awards.frost.com>

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