



FOR IMMEDIATE RELEASE

Inspire Medical Systems, Inc. Announces Presentation of Clinical Efficacy Data for Inspire Therapy for Treatment of Obstructive Sleep Apnea at Annual ENT Surgeon Conference

Data Include Treatment Effect of Inspire Therapy in Medicare-aged Population Compared with Younger Patients

MINNEAPOLIS, October 17, 2018 -- Inspire Medical Systems, Inc. (NYSE: INSP) ("Inspire"), a medical technology company focused on the development and commercialization of innovative and minimally invasive solutions for patients with obstructive sleep apnea (OSA), announced today that physicians presented updates from multiple clinical trials evaluating Inspire therapy for the treatment of OSA at the American Academy of Otolaryngology – Head Neck Surgery (AAO-HNSF) Annual Meeting and OTO Experience 2018, which took place from October 7 - 10, 2018, in Atlanta, GA.

Dr. Sean Evans and Dr. Kirk Withrow from the University of Alabama at Birmingham reported on a study comparing the effect of Inspire therapy on Medicare-aged patients and younger patients in a cohort of 600 patients. The study included 365 patients younger than 65 years and 235 patients who were 65 years or older. The data demonstrated that both groups experienced a statistically significant reduction in their Apnea Hypopnea Index (AHI) following 12 months of Inspire therapy. The Medicare-aged population had a mean AHI of 7.6 events per hour, as compared to an AHI of 11.9 events per hour for the younger population. Both groups also experienced a statistically significant improvement in their quality of life. In addition, the average utilization of the Inspire therapy was 6.0 hours per night in the Medicare-aged population and 5.4 hours per night in the population of patients under 65 years of age. This is the first study that specifically addressed the safety and efficacy of Inspire therapy in a Medicare-aged population. The manuscript of this clinical evidence has been submitted to a leading medical journal for publication.

As previously announced, Inspire hosted an educational symposium on Monday, October 8, 2018, entitled *Inspire Leadership Forum: ENT Best Practices for Optimal Patient Outcomes*. The symposium, led by some of the country's leading Inspire implant ENT surgeons, included presentations on a state-of-the-art implant technique, post-implant patient management best practices, key considerations for incorporating Inspire therapy into an ENT practice, and experiences from private practice and academic settings. In addition, Dr. Maurits Boon from Thomas Jefferson University provided updated results from the ADHERE registry, which now includes 674 patients. In this study, the median reductions in AHI over 12 months was 34.0 to 7.9 events per hour. Further, meaningful utilization of the Inspire system of 5.9 hours per night was observed, and patients experienced a statistically significant improvement in quality of life measurements. Finally, results from the ADHERE registry questionnaire indicated that 94% of patients would choose Inspire therapy again.

Also, at the educational symposium, Drs. Christopher Larson from Kansas University Medical Center and Ron Hanson from the St. Cloud Ear, Nose and Throat in Minneapolis, MN, discussed how they have integrated Inspire therapy into their respective practices.

A copy of Inspire's presentation materials used at this Leadership Forum are available on the Investor Relations page of Inspire's website at <https://investors.inspiresleep.com>.

Finally, at this conference, Inspire conducted an implant training program, *Inspire Implant Training: Accessing the Hypoglossal Nerve and Placing the Stimulation Lead*, for ENT surgeons interested in bringing Inspire therapy to their hospital to treat sleep apnea patients. Eight surgeons with considerable Inspire implant experience led the sessions that introduced the therapy to 57 ENT surgeons.

Inspire therapy was also included in multiple physician presentations throughout the conference. These presentations highlighted multiple independent clinical investigations of Inspire therapy currently being conducted in the United States and Europe.

About AAO-HNSF

The AAO-HNS ("the Academy") is the world's largest organization representing specialists who treat the ear, nose, throat, and related structures of the head and neck. The Academy represents approximately 12,000 ENT surgeons who diagnose and treat disorders of those areas. The medical disorders treated by the Academy physicians are among the most common that afflict all Americans, young and old. They include chronic ear infection, sinusitis, snoring and sleep apnea, hearing loss, allergies and hay fever, swallowing disorders, nosebleeds, hoarseness, dizziness, and head and neck cancer. For more information, please visit www.entnet.org.

About Inspire Medical Systems

Inspire is a medical technology company focused on the development and commercialization of innovative and minimally invasive solutions for patients with obstructive sleep apnea. Inspire's proprietary Inspire therapy is the first and only FDA-approved neurostimulation technology that provides a safe and effective treatment for moderate to severe obstructive sleep apnea.

For additional information about Inspire, please visit www.inspiresleep.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "future," "outlook," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential," "continue," or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words.

These forward-looking statements are based on management's current expectations and involve known and unknown risks and uncertainties that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, estimates regarding the annual total addressable market for our Inspire therapy in the U.S. and our market opportunity outside the U.S., future results of operations, financial position, research and development costs, capital requirements and our needs for additional financing; commercial success and market acceptance of our Inspire therapy; our ability to achieve and maintain adequate levels of coverage or reimbursement for our Inspire system

or any future products we may seek to commercialize; competitive companies and technologies in our industry; our ability to expand our indications and develop and commercialize additional products and enhancements to our Inspire system; our business model and strategic plans for our products, technologies and business, including our implementation thereof; our ability to accurately forecast customer demand for our Inspire system and manage our inventory; our ability to expand, manage and maintain our direct sales and marketing organization, and to market and sell our Inspire system in markets outside of the U.S.; our ability to increase the number of active medical centers implanting Inspire therapy; our ability to hire and retain our senior management and other highly qualified personnel; our ability to commercialize or obtain regulatory approvals for our Inspire therapy and system, or the effect of delays in commercializing or obtaining regulatory approvals; FDA or other U.S. or foreign regulatory actions affecting us or the healthcare industry generally, including healthcare reform measures in the U.S. and international markets; and our ability to establish and maintain intellectual property protection for our Inspire therapy and system or avoid claims of infringement. Other important factors that could cause actual results, performance or achievements to differ materially from those contemplated in this press release can be found under the captions “Risk Factors” and “Management's Discussion and Analysis of Financial Condition and Results of Operations” in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, as such factors may be updated from time to time in our other filings with the SEC, which are accessible on the SEC’s website at www.sec.gov. These and other important factors could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management’s estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, unless required by applicable law, we disclaim any obligation to do so, even if subsequent events cause our views to change. Thus, one should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this press release.

Investor and Media Contact:

Bob Yedid
LifeSci Advisors
bob@lifesciadvisors.com
646-597-6989