NEWS RELEASE

Inspire Medical Systems, Inc. Announces Presence at SLEEP 2026 and Publication of PREDICTOR Study

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Highlights New Clinical Data, Technology Advancements, and Cardiovascular Outcomes Research

MINNEAPOLIS, June 16, 2026 (GLOBE NEWSWIRE) -- Inspire Medical Systems, Inc. (NYSE: INSP), a medical technology company focused on innovative, minimally invasive solutions for patients with obstructive sleep apnea (OSA), today announced its participation in SLEEP 2026, the 40th annual meeting of the Associated Professional Sleep Societies (APSS), taking place June 14–17 in Baltimore, Maryland.

SLEEP is the premier global forum for sleep medicine and research, jointly hosted by the American Academy of Sleep Medicine (AASM) and the Sleep Research Society (SRS).

Advancing Innovation and Clinical Evidence

“We are pleased to return to SLEEP and showcase the continued evolution of the Inspire platform, including the Inspire V system, alongside compelling new clinical data demonstrating real-world effectiveness,” said Tim Herbert, Chairman and Chief Executive Officer. “Our long-standing partnership with SLEEP reflects our commitment to advancing physician education and improving outcomes for patients with OSA worldwide.”

At Booth #525, attendees can explore:

- The Inspire V system and recent technology advancements
- Clinical evidence supporting closed-loop therapy detailing respiratory sensing and inspiratory overlap
- The Inspire SleepSync™ remote patient management platform
- Resources for establishing and scaling Inspire programs

New Clinical Insights: Hypoxic Burden and Cardiovascular Outcomes

Multiple presentations at SLEEP 2026 will highlight the growing body of evidence supporting Inspire therapy, particularly in improving cardiovascular risk markers. Separately, Inspire will highlight additional research at its exhibit booth, including recent peer-reviewed articles on hypoxic burden and cardiovascular outcomes, which complement these presentations and are not being presented as part of the SLEEP 2026 program.

The first article from **Dr. Xu**[1] is a secondary analysis from the STAR trial that demonstrated:

- Significant reductions in hypoxic burden, a key physiologic measure of oxygen desaturation linked to OSA risk
- Improvements in daytime sleepiness that correlate with hypoxic burden reduction, independent of AHI or arousal index changes
- Meaningful hypoxic burden improvements in at least 50% of AHI non-responders, supporting its role as a complementary biomarker
- Hypoxic burden is a measure of the total impact of oxygen desaturation events during sleep, integrating the depth, duration, and frequency of these events to quantify sleep apnea severity

These findings reinforce hypoxic burden as an emerging and clinically relevant endpoint and align with a growing number of studies evaluating cardiovascular outcomes in patients treated with Inspire therapy versus Continuous Positive Airway Pressure (CPAP) and untreated populations.

1 – Xu et al, Hypoglossal Nerve Stimulation and Hypoxic Burden in Patients with Obstructive Sleep Apnea - A Secondary Analysis of the STAR Trial; JAMA Otolaryngology Head Neck Surg. doi:10.1001/jamaoto.2026.1049 Published online May 21, 2026

The second article from **Dr. Nayak**[2] compared clinical outcomes between HNS and CPAP in OSA patients using data from the TriNetX database and compared a matched group of 3,525 patients in each group (CPAP and Inspire therapy).

- OSA is linked to cardiovascular, metabolic, and neuropsychiatric morbidity
- The hypoglossal nerve stimulation cohort had significantly lower odds of stroke, myocardial infarction, atrial fibrillation/flutter, hypertensive crisis, pulmonary embolism, ventricular tachycardia, COPD exacerbation, acute kidney injury, hospitalization, acute heart failure, and others
- Hypoglossal nerve stimulation may offer systemic benefits and reduce healthcare burden compared to CPAP

2 – Nayak et al, Clinical Outcomes of Hypoglossal Nerve Stimulation Versus Continuous Positive Airway Pressure in Obstructive Sleep Apnea; OTO Open 2026, Vol. 10(2):e70240 April-June 2026

PREDICTOR Study Publication

Inspire also announced the publication of the **PREDICTOR study**[3], which identified body mass index and neck circumference as predictors of complete concentric collapse. These findings suggest that many patients may be screened for Inspire therapy eligibility without requiring drug-induced sleep endoscopy (DISE), potentially reducing diagnostic burden, time to treatment, and healthcare costs.

3 – Weiner et al, Anthropometric Measurements Inform Complete Concentric Collapse Status in Patients with Obstructive Sleep Apnea; OTO Open 2026, Vol. 10(2):e70245 April-June 2026

Key Data Presentations

Sessions of Interest

- June 16 | 10:00 – 10:45 AM | Room 341
  Target Trial Emulation of Hypoglossal Nerve Stimulation and Cardiovascular Outcomes
- June 16 | 11:45 AM – 12:45 PM | Holiday Ballroom 4–5
  Long-Term Cardiovascular Outcomes Following HGNS Therapy

Highlighted Poster Presentations

10:00 a.m. to 11:45 a.m. Tuesday, June 16, Exhibit Hall G

- **Next-Generation Hypoglossal Nerve Stimulation Therapy for the Treatment of Obstructive Sleep Apnea: Final Study Results**
  - 44 participants enrolled and successfully implanted with no device revisions or explants
  - Inspire V implant times decreased by 20.4% compared to the Inspire IV system
  - Respiratory sensing as demonstrated by Inspiratory Phase Overlap demonstrated superiority to the Inspire IV system at 87.1% vs. 79.4%
  - Mean AHI decrease of 25.5 events per hour from median AHI of 34.4 at baseline to 8.4
  - Mean adherence at 5.9 hours of usage per night
- **Evaluation of a Next-Generation Unilateral Hypoglossal Nerve Stimulation with Respiratory Sensing**

Platform: Data from the Limited Market Release

- Retrospective review of 41 patients implanted with Inspire V during a limited market release
- Mean nightly therapy usage of 6.21 hours per night over the 30 days following in-lab post-titration sleep study
- 97.6% of patients self-reported experiencing benefit from Inspire therapy

- **Comprehensive Assessment of a 5,000 Patient Longitudinal Hypoglossal Nerve Stimulation Registry: Final Results of the ADHERE Registry**
  - The ADHERE registry was designed to enroll 5,000 participants implanted with a hypoglossal nerve stimulation device throughout the U.S. and Europe
  - Baseline information included demographics, medical history, sleep study results, and daytime sleepiness using the Epworth Sleepiness Scale (ESS)
  - Post-titration sleep studies show a 62% median decrease in AHI
  - Significant improvement in daytime sleepiness with ESS score of 6 at post-titration and final follow-up
  - 6.4 hours per night mean therapy usage at post-titration and 5.8 hours per night at final visit
  - 90% of physicians saw improvement in their patients

- A Target Trial Emulation of Hypoglossal Nerve Stimulation Therapy for OSA and Cardiovascular Outcomes – Late breaking abstract

  - Independent study using the Definitive Healthcare Atlas database in which 4,388 Inspire therapy patients were matched up with adherent CPAP patients, non-adherent CPAP patients, and those who remained untreated
  - Compared to untreated patients, Inspire therapy was associated with the reduction of 8 of 9 MACE diagnoses while CPAP therapy was associated with the reduction of 6 of 9 MACE diagnoses
  - Inspire therapy is estimated to reduce the risk of MACE diagnoses compared to CPAP therapy and no treatment

- **Real World Comparison of Patient Compliance and Efficacy Using Continuous Positive Airway Pressure versus Hypoglossal Nerve Stimulation**
  - Independent retrospective study examined 45 patients from 2016 to 2024 with moderate to severe OSA initially treated with CPAP who later transitioned to Inspire therapy
  - Inspire therapy adherence was demonstrated to exceed CPAP adherence at 93% at 30 days as compared to 56% for CPAP and 91.7% at 90 days as compared to 56% for CPAP
  - Inspire therapy demonstrated approximately 65% greater median disease alleviation than CPAP, primarily through improved adherence over 90 days

- Superior adherence may improve long-term cardiovascular and quality-of-life outcomes

About AASM

The **American Academy of Sleep Medicine** is the only professional society in the U.S. dedicated exclusively to the medical subspecialty of sleep medicine. The AASM improves sleep health and promotes high quality, patient-focused care through advocacy, education, evidence-based research, and practice standards.

About SRS

The **Sleep Research Society** is an organization for scientific investigators who educate and research sleep and circadian science. The SRS serves its members and the field of sleep research through training and education, and by providing forums for the collaboration and the exchange of ideas.

About Inspire Medical Systems

Inspire is a medical technology company focused on the development and commercialization of innovative, minimally invasive solutions for patients with obstructive sleep apnea. Inspire's proprietary Inspire therapy is the first FDA, EU MDR, and PDMA-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**.

Safe Harbor for Forward-Looking Statements and Additional Disclosure Considerations

This press release contains forward-looking statements, including statements regarding potential clinical outcomes, the interpretation of clinical data and the expected adoption and use of Inspire therapy. Forward-looking statements involve inherent risks and uncertainties, and important factors could cause actual results to differ materially from those anticipated, including the factors identified in our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, and as such factors may be updated from time to time in our filings with the SEC, which are accessible on the SEC's website at **www.sec.gov** and the Investors page of our website at **www.inspiresleep.com**.

The clinical studies and publications referenced in this press release vary in design, patient populations, endpoints, and methodologies. As a result, outcomes across studies are not directly comparable, and findings from observational or retrospective analyses may not establish causation. Certain statements also involve comparisons to alternative therapies; such comparisons are based on individual study findings and should be interpreted with caution. These data should be considered in the context of the limitations of each study and the broader body of clinical evidence.

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