NEWS RELEASE

Media Contact:
Angela Pennington
303.399.4109
apennington@mdmcgroup.com

New Way to Use High Resolution CT Scan Shows Mechanism of Bronchial Valve Treatment in Patients with Severe Emphysema

Study Sponsored by Spiration Inc., Presented at the American Thoracic Society 2007 International Meeting May 18-23, San Francisco -

San Francisco | MAY 23, 2007 | Results of a Computed Tomography (CT) Study presented today at the Annual American Thoracic Society (ATS) 2007 International meeting, elucidate the novel mechanism of action of bronchial valve treatment. The valves were supplied by Spiration, Inc. and were implanted in patients participating in a U.S. Pilot investigational study. CT scans are often used in evaluation of emphysema but this study combined modern high resolution imaging with volumetric software analyses before and after treatment. The researchers found these patients with severe emphysema have improvement in health status because the valves redirect significant amounts of the inspired air to healthier lung tissue.

Traditionally, patients with severe emphysema undergo pulmonary function tests to assess their lung function. While these tests remain useful, they cannot measure changes that happen between different parts of the lungs. The study results presented today by Dr. P. Nasute Fauerbach of Vancouver General Hospital, showed that by combining advanced CT scanning and analyses, they can now accurately identify the anatomic definitions within the lung, providing the detailed analyses needed to better understand the ways bronchial valve treatment works.

“By applying advanced CT technology to images before and after the valve procedures, we can now accurately pinpoint the changes in inspired air volumes and understand the redirection of air from the diseased portions of the lung to the less affected areas,” said Dr. Harvey O. Coxson, Vancouver General Hospital.

“The use of this technology allows us to validate the improvements in health status that the patients have been reporting after a bronchial valve treatment,” said Dr. Steven Springmeyer, Medical Director, Spiration, Inc.

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The CT Study data showed:

- Decrease in volume of the treated upper lobes in 82% of patients measured after 3-months of treatment and 87% after 6-months
- Decrease in upper lobe volume averaged 10% of the lobe and correlated to a similar increase in volume in the untreated lobes.
- These volume changes were compared with patient reported outcomes and the two separate measures showed significant agreement among the majority of responders to valve treatment.

"We are extremely pleased with the results presented today as it further defines for us the appropriate measures of lung function before and after bronchial valve treatment," said Rick Shea, President and Chief Executive Officer, Spiration Inc. "The key findings from this study will be incorporated as an important outcome measurement for our ongoing investigations with our IBV® Valve System."

About the Study:

The purpose of the CT Study, which consisted of retrospective and prospective analyses of data on 55 patients from the U.S. Pilot investigational study, was to correlate the patient reported disease specific health status with CT measurements of regional lung volume in patients who underwent treatment with bronchial valves. The CT Study population included patients from ages 46-79 with severe predominantly upper-lobe emphysema. The patients in the study were implanted with a median of 6 bronchial valves in the airways leading to the most severe emphysema. Two had unilateral and 53 had bilateral upper-lobe valve treatment. Once in place, the bronchial valves limited the airflow to those diseased areas of the lung and in turn channeled air to healthier areas.

The U.S. Pilot Study protocol included testing by spirometry, lung volumes, DLCO and St. George's Respiratory Questionnaire that was conducted prior to bronchial valve placement and then again at 1, 3 and 6 months. CT scans were obtained in all 55 subjects at baseline and then again at 1, 3, or 6 months post implant to assess the change in lung volume. It was through the use of CT technology that the investigators were able to confirm that the re-direction of air from the bronchial valves improved the patient's health status.

This CT Study was supported by Spiration, Inc. The IBV® Valve System, used in the study, is CE Mark approved in Europe and is currently under investigation in the U.S. as part of the IBV® Valve Trial.

About Spiration, Inc.

Spiration Inc. (Redmond, Washington) develops and delivers novel technology designed to benefit patients with severe and chronic conditions of the lung. Spiration Inc. has been capitalized by a solid group of investors including: Three Arch Partners, New Enterprise Associates, Versant Ventures, New Leaf Ventures, InterWest Partners, Investor Growth Capital, Boston Scientific Corporation and Olympus Medical Systems

Corporation. Founded in 1999, the company is headquartered in Redmond, Washington. For more information, visit the company's website at www.spirationinc.com

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