Sildenafil Provides Small Benefit for Idiopathic Pulmonary Fibrosis Patients

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Denver, CO — Sildenafil failed to significantly increase exercise capacity, but did improve arterial oxygenation, shortness of breath and quality of life in patients with advanced idiopathic pulmonary fibrosis (IPF), in the first randomized trial of the medication for IPF. The study is published in the August 12, 2010, issue of the New England Journal of Medicine.

“While the study did not meet the primary end point of improved distance in the six-minute walk, the secondary findings on improved quality of life and better oxygenation are encouraging,” said pulmonologist Marvin Schwarz, MD, of National Jewish Health and University of Colorado, and one of the authors of the paper. “It is quite clear that these outcomes require more study.”

IPF is a progressive and fatal scarring of the lungs for which there is no approved treatment. Sildenafil is manufactured by Pfizer under the brand names Viagra and Revatio. Researchers thought sildenafil might help IPF patients by increasing blood flow to the lungs and thus improving gas exchange.

Researchers from 14 IPF centers randomized 180 IPF patients to receive oral sildenafil, 20 mg, three times daily, or placebo for 12 weeks. All patients received sildenafil in a second 12-week period.

The difference in the primary outcome was not significant, with 10 percent of patients in the sildenafil group and seven percent in the placebo group improving 20 percent or more in the distance they covered in a six-minute walk.

However, gas exchange, including arterial blood oxygen and carbon monoxide diffusion capacity did showed small but significant improvements. Patients also scored higher on three tests measuring quality of life and shortness of breath.

“There are no current therapies that improve survival in IPF patients, but clearly quality of life and degree of dyspnea are important,” said Dr. Schwarz.

National Jewish Health is known worldwide for treatment of patients with respiratory, cardiac, immune and related disorders, and for groundbreaking medical research. Founded in 1899 as a nonprofit hospital, National Jewish remains the only facility in the world dedicated exclusively to these disorders. Since 1998, U.S. News & World Report has ranked National Jewish the #1 respiratory hospital in the nation.

National Jewish Health is the leading respiratory hospital in the nation. Founded 120 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the media resources page.

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