Medication improves health of patients with pulmonary arterial hypertension

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In one of the few studies of the long-term effects of medication in the treatment of pulmonary arterial hypertension (PAH) disease, a team of researchers found the health and exercise capacity of PAH patients improved after two years of treatment with ambrisentan, according to a study published in the current edition of the *Journal of the American College of Cardiology*.

A research team led by Ronald Oudiz, MD, FACC, a principal investigator at the Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center (LA BioMed), conducted a follow-up of the studies conducted for the Food and Drug Administration's approval of ambrisentan. The researchers found 383 PAH patients treated for two years with ambrisentan had sustained improvements in their exercise capacity. The team also found a low risk of death and clinical worsening from the disease among the PAH patients treated with ambrisentan for two years.

"These are promising findings for patients who suffer from pulmonary arterial hypertension, an often fatal disease of the pulmonary circulation," said Dr. Oudiz. "Physicians and patients with PAH should consider the use of ambrisentan as part of a long-term strategy for treatment of the disease."

PAH is a disease of the pulmonary circulation often afflicting younger women and is characterized by a progressive elevation in pulmonary vascular resistance that leads to right ventricular failure and premature

death. Although the number of approved therapies for PAH has grown in the past 10 years, the disease remains rapidly progressive with a poor prognosis for most patients. Despite treatment, 25% to 50% of all patients with PAH will not survive beyond five years.

Ambrisentan is an orally active, once-daily medication currently approved for the treatment of PAH patients in the U.S. and other countries on the basis of two 12-week randomized, double-blind, placebo-controlled, multicenter efficacy trials. In these studies, the drug improved exercise capacity, along with other clinical indications of PAH disease severity, including clinical worsening.

Prior to their study, the researchers said most long-term PAH studies have focused primarily on exercise capacity and safety for up to one year, with very little description of clinical effectiveness of ambrisentan treatment.

The researchers in the current two-year study found that the two higher doses of the medication, 5 milligrams and 10 milligrams, provided a sustained benefit. The lower dosage used in the study, 2.5 milligrams, was less effective, the researchers said.

Source: UCLA Medical Center