



ALUNG'S HEMOLUNG FACT SHEET

- COPD (chronic obstructive pulmonary disease) affects 30 million Americans and is the third leading cause of death in the U.S. behind cancer and heart disease.
- Acute exacerbations, defined as a sudden worsening of COPD symptoms, are a major cause of morbidity and mortality in COPD patients.
- For patients with severe exacerbations, high levels of carbon dioxide can result in respiratory failure and the need for intubation and mechanical ventilation as life saving measures.
- Unfortunately, mechanical ventilation is associated with many side effects, and in-hospital mortality remains as high as 30%.
- ALung's Hemolung Respiratory Assist System (RAS) is a dialysis-like alternative or supplement to mechanical ventilation.
- ECCO2R therapy with the Hemolung RAS allows carbon dioxide to be removed from the blood independently of the lungs with the aim of facilitating the avoidance or reduction of intubation and invasive mechanical ventilation.
- The Hemolung RAS removes carbon dioxide and delivers oxygen directly to the blood, allowing the patient's lungs to rest and heal.
- **Caution:** The Hemolung RAS is an investigational Device and limited by United States law to investigational use.

ABOUT ALUNG

- Alung Technologies, Inc. is a privately-held Pittsburgh-based developer and manufacturer of innovative lung assist devices.
- ALung was founded in 1997 by Dr. William Federspiel, Professor of Bioengineering at the University of Pittsburgh, and the late Dr. Brack Hattler, a renowned cardiothoracic surgeon.

- Dr. Federspiel and his team at the University's Medical Devices Laboratory, part of the McGowan Institute for Regenerative Medicine, developed the original Hemolung technology which was subsequently licensed by ALung for commercial development.
- The Hemolung RAS has been approved outside of the United States since 2013 and is commercially available in major European markets.
- ALung is backed by Philips, UPMC Enterprises, Abiomed, The Accelerator Fund, Allos Ventures, Birchmere Ventures, Blue tree Ventures, Eagle Ventures, Riverfront Ventures, West Capital Advisors, and other individual investors.
- ALung Technologies is the only company that has been engaged in two landmark pivotal clinical trials regarding the treatment of patients with acute respiratory failure.
- One study, called the UK REST Trial, concluded with 412 patients enrolled over 40 sites including 204 therapies run on the Hemolung Respiratory Assist Systems (RAS). Located in the United Kingdom, the study was funded by the UK National Institute for Health Research (NIHR) and focused on patients with acute respiratory syndrome (ARDS). The REST Trial, which launched in 2015, was the first and largest randomized pivotal ECCO2R clinical trial ever conducted. More information will be available as the trial data is analyzed and published by the REST Trial investigators.
- A second study, called the VENT-AVOID Trial, is a U.S.-based clinical trial to validate the safety and efficacy of the Hemolung RAS for the treatment of adults with severe acute exacerbation of chronic obstructive pulmonary disease (COPD). The U.S. FDA's approval of its Investigational Device Exemption (IDE) makes ALung's VENT-AVOID Trial the first pivotal trial of ECCO2R for treating patients with COPD exacerbations. Forty-five hospitals will enroll up to 180 patients in the trial, which was launched in 2017.

For more information about ALung and the Hemolung RAS, visit www.alung.com