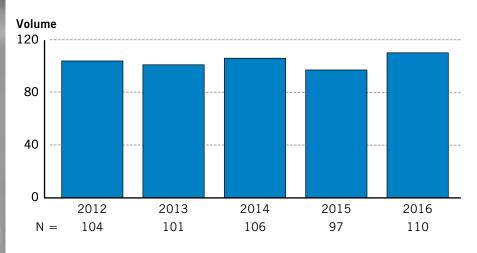
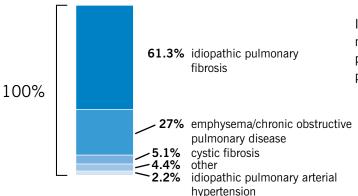
# Lung and Heart-Lung Transplant

Cleveland Clinic performed 518 lung transplants from 2012 through 2016 and is one of the world's busiest centers. Cleveland Clinic surgeons performed 110 lung transplants in 2016 for patients from all over the country.

**Lung Transplant Procedure Volume** 2012 – 2016



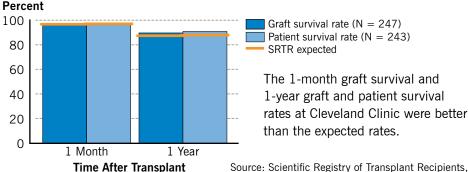
Primary Disease of Lung Transplant Recipients (N = 137) 2016



Idiopathic pulmonary fibrosis was the most common primary disease among patients who had lung transplant procedures at Cleveland Clinic in 2016.

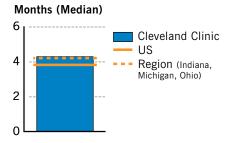
Source: Scientific Registry of Transplant Recipients, July 2017. srtr.org

# Lung Transplant 1-Month and 1-Year Survival January 2014 – June 2016



Source: Scientific Registry of Transplant Recipients, July 2017. srtr.org

### Wait Time for Lung Transplant January 2011 – June 2016



The wait time for a lung transplant at Cleveland Clinic was slightly higher than other programs in the region (4.3 vs 4.2 months) and the US as a whole (3.8 months). Most patients receive a transplant very quickly, but many patients at Cleveland Clinic have conditions that make it difficult to find suitable organs, thereby increasing the median wait time.

Source: Scientific Registry of Transplant Recipients, July 2017. srtr.org

## Wait-List Mortality 2016

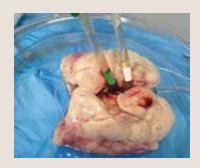


Cleveland Clinic strives to offer life-saving lung transplantation to as many patients as possible, and to achieve the best outcomes possible for patients waiting for the procedure. Because of an aggressive posture toward evaluating and listing extremely sick and high-risk candidates, Cleveland Clinic's wait-list mortality rate in 2016 was slightly higher than the national average.

Source: Scientific Registry of Transplant Recipients, July 2017. srtr.org

### **Ex Vivo Lung Perfusion**

The majority (about 80%) of lungs donated for transplant are not usable due to infection, damage, or excess fluid. However, ex vivo lung perfusion allows many of these lungs to be converted to lungs that are transplantable, allowing more lives to be saved. Ex vivo perfusion was pioneered by Cleveland Clinic surgeons. The technique involves attaching the lungs outside of the body to a machine that perfuses them with a solution that helps remove excess water while they are being ventilated. If lung function improves, the lungs can be transplanted.1



#### Reference

 Cypel M, Yeung JC, Liu M, et al. Normothermic ex vivo lung perfusion in clinical lung transplantation. N Engl J Med. 2011 Apr 14;364(15):1431-1440.