

MAY 20, 2003

***IRB #2585; Title: National Emphysema Treatment Trial*****MAJOR GOVERNMENT STUDY: SURGERY IS A GOOD OPTION FOR  
SELECTED EMPHYSEMA PATIENTS**

LOS ANGELES CA (EMBARGOED UNTIL May 20, 2003 AT 12:00 P.M. EDT) – Results of a government-sponsored, long-term, 17-center study to evaluate the safety and effectiveness of lung volume reduction surgery in the treatment of advanced emphysema have been published in the *New England Journal of Medicine*. The article appears on the journal's Web site Tuesday, May 20 and in the print edition on Thursday, May 22.

A thoracic surgeon and a specialist in pulmonary medicine – both of whom served as principal investigators on the study at Cedars-Sinai Medical Center – are available to provide details and analysis. Cedars-Sinai was one of only two centers in California participating in the study.

Robert J. McKenna, Jr., M.D., Principal Investigator on the study at Cedars-Sinai, is head of thoracic surgery and surgical director of the medical center's Lung Center. He also serves as medical director of Thoracic Surgery and Trauma at Cedars-Sinai and is professor of thoracic surgery at the University of California, Los Angeles (UCLA).

A fellow of the American College of Surgeons, Dr. McKenna is a member of the Society of Thoracic Surgeons, the American Association for Thoracic Surgery and the Western Thoracic Surgical Association. He has written numerous articles on the subject of lung volume reduction surgery (LVRS).

Zab Mosenifar, M.D., Co-Principal Investigator, is an internationally renowned lung specialist and director of the Lung Center. Executive vice-chair of the Department of Medicine and professor of medicine at UCLA Geffen School of Medicine, Dr. Mosenifar directs the Division of Pulmonary/Critical Care Medicine at Cedars-Sinai.

All of the 1,218 patients with severe emphysema in the National Emphysema Treatment Trial (NETT) – which extended from January 1998 through July 2002 – underwent pulmonary rehabilitation and were randomized to receive lung volume reduction surgery or continued medical treatment.

The study showed that, compared to medical management, an operation provides some patients with

(more)

emphysema with a significant improvement in pulmonary function, exercise tolerance, quality of life, and survival. The procedure is not for all patients with emphysema. According to the results, very little difference was seen in overall mortality rates, although there was a clear survival advantage for those patients who had both upper-lobe predominant emphysema and low baseline exercise capacity after rehabilitation. This group of patients also had the greatest chance of realizing functional improvements from surgery compared to medical therapy. On the other hand, among those whose emphysema was not confined to the upper lobes and who had high exercise capacity after rehab, surgery patients had a higher mortality rate and little chance of long-term exercise improvement.

The National Heart, Lung, and Blood Institute announced in 1996 that it would launch the study with support from the agency that administers Medicare. Results of the study will likely provide guidance for physicians and surgeons as they make treatment decisions for emphysema sufferers, the majority of whom are over age 50. In the past, professionals at various medical centers have used different criteria for selecting patients deemed appropriate for surgical therapy, and success rates have been equally inconsistent.

“Careful evaluation helps to identify which patients benefit from the operation,” said Dr. McKenna, who has led several related studies at Cedars-Sinai. “The most important factor for the selection of patients is the pattern of emphysema on computed tomography (CT) and exercise capacity.”

Dr. McKenna and his colleagues have been instrumental in refining surgical techniques leading to improvements in outcomes. Through their research, for example, the minimally invasive procedure called video-assisted thoracoscopic surgery (VATS) has been shown to provide the benefits of open surgery without large incisions, long hospital stays and an ongoing recovery process.

Although there is an inherited form of emphysema, the irritation caused by smoking is blamed for almost all cases. Damage to the air sacs in the lungs, where oxygen from the air is exchanged for carbon dioxide in the blood, results in permanent holes in the tissues. The lungs’ ability to transfer oxygen decreases and the lungs lose their elasticity. Patients typically begin to feel shortness of breath and have difficulty exhaling. The condition itself cannot be cured but medical, nutritional, rehabilitative and surgical approaches may be offered in an attempt to improve lung function, reduce limitations and increase longevity.

Cedars-Sinai is one of the largest nonprofit academic medical centers in the Western United States. For the fifth straight two-year period, it has been named Southern California's gold standard in health care in an independent survey. Cedars-Sinai is internationally renowned for its diagnostic and treatment capabilities and its broad spectrum of programs and services, as well as breakthroughs in biomedical research and superlative medical education. Named one of the 100 "Most Wired" hospitals in health care in 2001, the Medical Center ranks among the top 10 non-university hospitals in the nation for its research activities.

###