



Yolonda L. Colson, MD, PhD

Young Clinician Award 2006

Investigator Profile

Education

- BS, Rensselaer Polytechnic Institute, Biomedical Engineering
- PhD, University of Pittsburgh, Pathology/Immunology
- MD, Mayo Medical School

Clinical /Professional Appointment

- Assistant Professor of Surgery, Thoracic Surgery, BWH
- Assistant Professor of Medicine, Harvard University

Honors and Awards:

Dr. Colson has won some of the most prestigious academic awards available to a young surgeon-scientist. She was the first surgeon BWH to receive the Mary Horrigan Connors award for young investigators and one of few physicians to ever receive the Starfish Award for excellence in patient care and emotional support. She has also received the prestigious Second Alton Ochsner Research Scholarship for the American Association of Thoracic Surgeons and the Michelle & Howard Kessler Award for Leadership in Women's Health.



Impact on Care

- It is estimated that in 2006 lung and bronchus cancers will be responsible for the deaths of over 90,000 men and 71,000 women in the US alone
- An estimated 350,679 Americans are living with lung cancer. In 2005, an estimated 172,570 new cases were diagnosed
- Lung cancer is the leading cancer killer in both men and women in the United States
- This treatment has the potential to reduce the risk of local tumor recurrence at the site of surgical resection and minimize systemic morbidity
- Decrease the surgical resection margins for the treatment of lung cancer permitting surgeons freedom to undertake more localized therapies such as RFA and wedge resection via VATS
- Possible translation to the surgical treatment of nearly all cancers

Abstract

Lung Cancer is the number one cause of cancer deaths in both men and women. Despite what appears to be a successful surgical resection, tumor recurrence at the site of the prior surgery (i.e., surgical resection margins) occurs in an estimated 9% to 16% of patients. Higher recurrence rates are associated with more localized resections and therefore most patients with even small surgically resectable tumors have ~ 1/2 of an entire lung removed, thus sacrificing a large amount of "good" lung in order to decrease the risk of recurrence. The current therapy for tumor recurrence is re-resection. However, due to tumor location and patient morbidity, only 1/3 of these recurrences can be resected, and the majority of the remaining patients die as a consequence of their recurrent disease.

The overall objective of this study is to perform a preclinical study to assess the safety and feasibility of in vivo the local delivery of anti-neoplastic agents (chemotherapeutic drugs that inhibit the growth of malignant cells) via microsphere incorporation at surgical resection margins using a minimally invasive surgical approach in a large animal model.