

I have a dream

State-of-the-Art Research Opens the

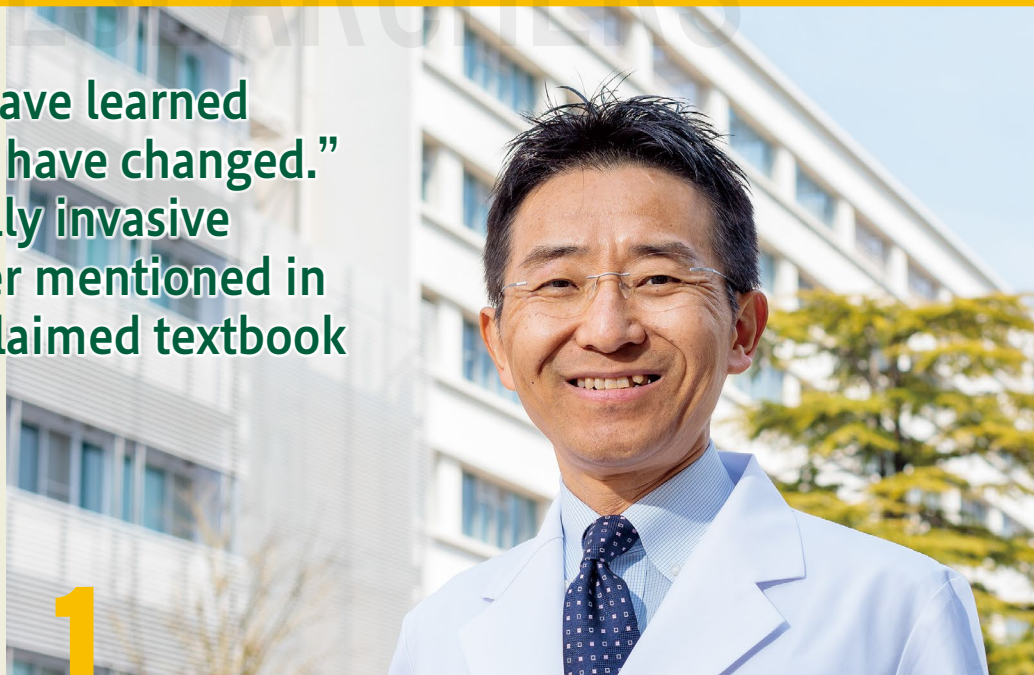
“The only proof you have learned something is that you have changed.” Developing a minimally invasive surgery for lung cancer mentioned in an internationally acclaimed textbook

Lung cancer is extremely hard to cure, with a high incident rate and mortality rate. I fight this tough opponent, holding a pair of Cooper scissors, 30-cm-long surgical scissors, in a “reverse” fashion, which allows me to manipulate them freely to attack the focus. To treat small cell lung cancer, whose patients have been rapidly increasing in number, I use the approach called “hybrid VATS,” which I developed myself, to perform highly difficult segmentectomy, to preserve the patient’s pulmonary capacity.

The term “VATS” stands for “video-assisted thoracic surgery.” Compared to the conventional open surgery, it leaves smaller scars, and since muscles are not cut and ribs not removed, the patients experience less postoperative pain and reduced functional deterioration, returning to normal daily life more quickly. Incisions are made at two locations: a 1-cm hole through which a thoracoscope is inserted and a 4 to 5-cm hole through which surgical procedure is performed. VATS is used on 99% of patients with lung cancer.

Previously, in the surgical treatment of lung cancer, it was a standard practice to completely remove the lobe of the lung with tumor, regardless of its size. Today, in the case of small cell lung cancer, it is possible to perform cytoreductive surgery, removing only a limited segment, as a curative operation. This method is actively employed on patients with a lung cancer 2 cm or smaller, to preserve their pulmonary capacity and improve their postoperative quality of life. In other words, the hybrid procedure combining cytoreductive surgery with thoracoscopy is the ultimate patient-friendly procedure.

Among small-cell-lung-cancer patients undergoing radical cytoreductive surgery, the five-year survival rate is over 95%. In the spring of 2018, lung cancer surgery using the Da Vinci robot system became reimbursable by health insurance. Before health insurance coverage was authorized, Hiroshima University Hospital had the largest cumulative number of robot-assisted surgical procedures in Japan, and we intend to actively perform robotic lung surgery.



1 Morihiro Okada, M.D., Ph.D.

Professor, Research Institute for Radiation Biology and Medicine
Deputy Director, Hiroshima University Hospital

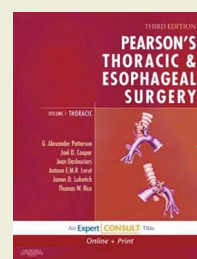
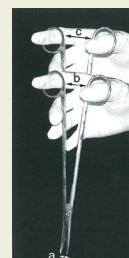
After graduating from Nagata Senior High School in Hyogo Prefecture in 1982 and from Nara Medical University in 1988, Dr. Okada entered the Department of Surgery II at Kobe University in the same year. He completed a doctoral course at Kobe University Graduate School of Medicine and earned PhD in 1995. In 1999, he went to study as a faculty member of the department of thoracic surgery at Columbia University Medical Center in the United States. Upon returning to Japan in 2002, he was appointed Head of the Department of Respiratory System Surgery at Hyogo Cancer Center. In 2007, Dr. Okada arrived at Hiroshima University as a professor of surgical oncology. He is a Director of the Japanese Association for Thoracic Surgery, the Japanese Association for Chest Surgery, and the Japan Lung Cancer Society, as well as an expert member of the Central Environment Council of the Ministry of the Environment. Dr. Okada has been featured in numerous TV programs (including NHK’s “General Practitioner Doctor G” and TBS’s “The World’s Super Doctors”) and magazine feature articles (including *Bungei Shunju* and *Shukan Asahi*).

My surgical approach is internationally recognized and highly evaluated. *Pearson’s Thoracic and Esophageal Surgery* is a well-established textbook/reference book of over 2,000 pages that is considered the “bible” for students and young practitioners of thoracic surgery the world over. At the beginning of the book, in the chapter on the history and development of thoracic surgery, my name is mentioned in connection with the development of minimally invasive surgical techniques for lung cancer. I am the only Japanese mentioned in this book.

I think my most important mission is to continue improving myself, while not forgetting gratitude to others, and developing future human resources capable of working not just in Japan but anywhere in the world. When the rough skin protecting the body surface prevents further growth, a snake sheds it while growing new skin in the process of molting. To obtain something new, you must open your hand and release what you are holding in it. I experienced the Great Hanshin-Awaji Earthquake when I was in graduate school and was studying in New York when the 9/11 terror attacks occurred. Perhaps because of this, I want to live my life, with no regrets at all times. Physicians are intellectual professionals charged with the duty of harnessing scientific progress into peo-

ple’s health and well-being. The object of our work is people. To fulfill our duty, it is essential to learn not just medicine but about all types of subjects relating to humanity. The only proof you have learned something is that you have changed. I hope to continue learning with the courage to change myself, and I hope that younger physicians with high potential will also approach their profession likewise.

Sharp dissection with 30-cm Cooper scissors held reversely is indispensable for the hybrid VATS; as with a large knife held by a cook, a delicately controlled yet strong force is transmitted to the edges by the effect of leverage.



centers speculated that a lobectomy for the persuasive, published by Okada and colleagues the role of extended segmentectomy of non-small cell T1 NO later. In this prospective study that segmentectomy comes to those reported

In *Pearson’s Thoracic and Esophageal Surgery*, the most widely read reference book on thoracic surgery in the world, Dr. Okada is the only Japanese mentioned along with the new surgical technique he developed.