

The first successful heart-lung transplantation by Reitz and his colleagues at Stanford University in 1981 is an important landmark in the field of thoracic organ transplantation. Two years later in 1983, the first successful single lung transplantation was reported by Cooper and his colleagues at Toronto University. Since then, more than 60,000 lung transplants and more than 4,000 heart-lung transplants have been reported worldwide in The Registry of the International Society for Heart and Lung Transplantation. It is well accepted that these thoracic organ transplants are the last hope for patients with various end-stage diseases when medical treatment becomes ineffective. As the world experience has increased, considerable refinements in the selection and care of donors, and in surgical and medical management for recipients, have contributed to improved outcome. In spite of significant these advances, long-term survival after lung transplantation and heart-lung transplantation remains to be inferior to the other solid organ transplantation. Lung is a unique organ in the sense that it is directly connected to the air, which makes it difficult to prevent from infection especially under immunosuppressive condition. Moreover, lung consists of various types of cells and carries high antigenicity, which makes it necessary for recipients to receive high dose immunosuppressants.

Having these backgrounds, there are many unsolved problems in lung and heart-lung transplantation. This book provides up-dated medical and surgical information reported by experts from all over the world. The stage-of-art knowledge contained within this book will help to find solutions for unsolved problems.



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