

Lung transplantation exchanges one set of medical conditions for another. For patients with end-stage lung disease, lung transplantation is the only viable long-term solution that improves the quality of and extends the quantity of life. Exchanging the insidious diseases that suffocate patients and curb all their quality of life for a different set of chronic medical conditions is a choice that most patients with end-stage lung disease are willing to make.

Even though lung transplantation has been evolving for over a half-century, it's only the most recent decade or so we have seen accelerated advances in our outcomes, surgical technique, and medical management. Our understanding of the surgical science has allowed us to refine our techniques to minimize perioperative complications while at the same time our modulation of the immune response and chronic allograft dysfunction have enable the long-term success of our recipients.

Perhaps most excitedly, we have seen the introduction and refinement of *ex vivo lung perfusion* (EVLP). This technology and this time in transplantation is perhaps the most exciting and potentially revolutionary for our field since the advent of cyclosporine. We have seen rapid growth in perfusion technology where the ability to assess, repair, and modify organs is being undertaken. Transplant centers, both academic and private, as well as industry, are making huge advances and our ability to recover marginal organs and assess quality and other marginal allografts that we would not have considered just years ago. As this expertise grows to other organ systems we will no doubt see a growth in multiorgan assessment and repair centers.

This book is a composite of leading articles on lung transplantation by the worldwide leaders in lung transplantation. This book has been assembled in such a fashion as to be able to provide a depth and breadth of content for the thoracic transplantation community. The information is intended to provide context for the current state-of-the-art, recipient and donor selection and management, and exciting clinical, translational, and basic science advances that are at our fingertips.



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