

## Book Review:

# Gene Therapy. Principles and Applications

---

Blankenstein T (ed): Gene Therapy. Principles and Applications. Birkhäuser, Basel, Boston, Berlin. 1999. ISBN: 3-7643-5972-2, 168,00 CHF

Clinical gene therapeutic trials range back for about 20 years, and numerous patients are waiting for a break through of this new approach, especially those suffering from inherit disorders such as cystic fibrosis or thalassaemia. Gene therapy is defined as the deliberate transfer of DNA for human therapeutic purposes. Starting about ten years ago, more than 2,500 patients have been included in about 200 different clinical trials with gene therapy. The diseases to be treated have a broad range, starting with thalassaemia, hemophilia, cystic fibrosis, juvenile diabetes, immune deficiencies, HIV infections, ischemic heart disease, familial hypercholestaemia, arthritis, or cancer. The book is divided into four major partitions: a) gene transfer modes, b) gene therapy of single gene defects, c) gene marking, d) gene therapy of cancer. These headlines already underline what the reader has to expect: The techniques of gene transfer and the most appropriate vector systems in relation to the disease to be treated form the heart of the book. For example, the advantages and constraints of adenovirus vectors, receptor mediated gene transfer or gene transfer using particle bombardment are described in details and inform the reader at a high scientific level. The experimental difficulties and strategies are followed by theoretical considerations to apply the developed techniques in clinical trails. After a few pages the reader gets to know that these trials did not meet the expectations in general, mainly due to severe side effects. This textbook reflects the clinical situation of gene therapy at an outstanding true and honest view, and gives an excellent depiction of the experimental approaches and efforts to finally overcome all the hazards of clinical application of gene therapy, which hopefully will take place within this new millennium.

Klaus Kayser, MD, Ph.D.

[top](#)