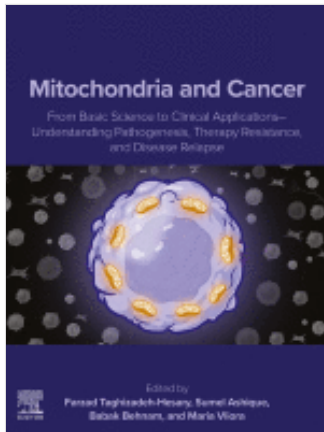


# Mitochondria and Cancer

From Basic Science to Clinical Applications – Understanding Pathogenesis, Therapy Resistance, and Disease Relapse

Edited by: Farzad Taghizadeh-Hesary, Sumel Ashique, ... Maria Vliora



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## About the book

### Key Features

- Delivers an in-depth analysis of how mitochondrial alterations contribute to cancer formation, disease progression, and resistance to conventional and targeted therapies
- Presents comprehensive insights into the dynamic interactions between mitochondria in cancer cells, tumor microenvironment, and microbiota, highlighting their collective influence on cancer progression and therapeutic outcomes
- Combines fundamental scientific knowledge with clinical relevance, covering a wide array of topics from mitochondrial metabolism to innovative therapeutic strategies

### Description

*Mitochondria and Cancer: From Basic Science to Clinical Applications—Understanding Pathogenesis, Therapy Resistance, and Disease Relapse* offers comprehensive perspectives about the role of mitochondria in cancer biology and treatment. This book integrates fundamental scientific knowledge with clinical relevance, presenting recent findings that will engage oncology researchers and provide valuable recommendations for cancer prevention and prognosis. In response to the rising global cancer incidence, this book serves as a comprehensive guide to mitochondrial metabolism in oncology, furthering cancer study and management. It explores a wide range of topics that highlight the multifaceted role of mitochondria in cancer, including tumor microenvironment, cancer stem cells, microbiota, resistance mechanisms, mitochondria-enhancing strategies, and targeted therapies. It includes technical details, research findings, and discussions on the implications of mitochondrial research in cancer treatment and management. Its distinguishing aspects include its comprehensive coverage and diverse perspectives from global experts, providing a well-rounded view of current research.

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