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Amar Safdar *Editor*

# Principles and Practice of Cancer Infectious Diseases

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Editor

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*This book is dedicated for promoting excellence in care and well-being for the patients with cancer.*

## Preface

Patients with cancer are highly susceptible to infections. These infections are inclined to be difficult to prevent, diagnose, and treat. There are a variety of reasons for this which will be discussed in detail in the chapters of this book. The intent for this book is to provide a comprehensive review of the ever changing spectrum of the management of infectious diseases in this complex population of patients. The changes in patient demography, near-constant global migration of contagious infections, emerging resistance to standard antimicrobial therapy, and the impact of expanding repertoire of antineoplastic therapies including the anticancer biologics and stem cell transplantation have influenced these changes. This book will provide a detailed guide for assessment of risk factors for various infections, evaluating prognosis among susceptible oncology patients with complex issues related to management of opportunistic infections. Strategies to promote hosts' immune response underscore the future measures based on perspicacious insight in the disease pathogenesis; interaction between the pathogen and host's immune function and inflammatory response are given prominent discussion throughout the book. I hope the reader will become acquainted with common and less often encountered infections and importantly, develop a keen knowledge of conditions that might be mistaken as infectious diseases in patients undergoing treatment for neoplastic diseases.

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## **Part I**

# **Overview and Special Population**