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Chapter 2 - Current approaches for the treatment of chronic respiratory disorders and limitations

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Abstract

Chronic respiratory disorders present a significant health challenge globally, with a profound impact on both individuals and healthcare systems. This chapter discusses the current approaches employed for the treatment of chronic respiratory disorders, including asthma, chronic obstructive pulmonary disease (COPD), lung cancer, idiopathy pulmonary fibrosis cystic fibrosis (CF), bronchiectasis and pulmonary arterial hypertension (PAH) and explores the associated limitations. Drawing upon recent research and clinical insights, the chapter provides a comprehensive overview of pharmacological and non-pharmacological interventions, including inhalation therapies, bronchodilators, corticosteroids, pulmonary rehabilitation and novel biologic agents. Furthermore, it examines the challenges posed by disease heterogeneity, medication adherence, adverse effects, and the emergence of antimicrobial resistance. By critically evaluating the efficacy, safety and accessibility of existing treatments, this chapter underscores the urgent need for innovative strategies to address the evolving landscape of chronic respiratory disorders and optimize patient outcomes.