

Mechanisms of Drug Resistance in Pathogenic Bacteria

Kim Green

PhD

Hebrew University of Jerusalem

Jerusalem, 91905, Israel

Kim Mitchell

Dr.

National University of Singapore

21 Lower Kent Ridge Rd, Singapore 119077

Dana Perez

Prof.

University of Milan

Via Festa del Perdono, 7, 20122 Milano MI, Italy

Abstract. Drug resistance in pathogenic bacteria poses a critical challenge to global health. This study investigates the mechanisms through which bacteria develop resistance to antibiotics, aiming to inform the development of new therapeutic strategies to combat resistant strains.

Keywords: Drug Resistance, Pathogenic Bacteria, Antibiotics, Therapeutic Strategies, Public Health

Introduction

Pathogenic bacteria that exhibit resistance to antibiotics represent a significant threat to public health worldwide. These bacteria have evolved various mechanisms to survive antibiotic treatments, complicating efforts to manage infectious diseases effectively. This research focuses on understanding the genetic and biochemical pathways that contribute to antibiotic resistance in pathogenic bacteria. By identifying key resistance mechanisms, we aim to inform the development of new drugs and treatment strategies to combat resistant bacterial strains.

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References

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