

Exploring Novel Biomarkers in Cardiovascular Disease

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Abstract. This study investigates new biomarkers that can potentially predict and aid in the early diagnosis of cardiovascular diseases (CVDs). Despite advances in medical technology, CVDs remain a leading cause of mortality worldwide. Identifying reliable biomarkers is crucial for improving early intervention and treatment. This research uses a novel approach combining proteomics and genomics to uncover potential biomarkers. Results suggest several promising candidates that warrant further investigation. These findings could pave the way for more personalized treatment strategies, ultimately improving patient outcomes. Further validation in larger cohorts is necessary to substantiate these initial findings and to translate them into clinical practice.

Keywords: biomarkers, cardiovascular, disease, genomics, proteomics

Introduction: Cardiovascular diseases are the leading cause of morbidity and mortality globally, prompting the need for early detection and intervention strategies. Current diagnostic methods, although effective, often fail to predict outcomes in asymptomatic individuals. Biomarkers have emerged as a promising tool in the clinical setting for predicting disease presence and progression. However, the identification of novel, specific, and sensitive biomarkers remains a challenge. This study aims to bridge that gap by employing integrated proteomic and genomic approaches to uncover potential novel biomarkers associated with CVDs. Through these efforts, we hope to refine early detection methodologies and provide a framework for personalized medicine in cardiovascular care. Our findings could significantly impact clinical practice by enhancing the precision of diagnostic capabilities and tailoring treatment strategies to individual patient profiles.
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References

1. Viroliya, K., Hojjat, A., Pena, B., Bhatt, H., Mehta, N. N., Venkata, S. Y., ... & Palabindela, P. (2023). Sa1359 HELICOBACTER PYLORI ASSOCIATED GASTRO-INTESTINAL BLEEDING IN BARIATRIC SURGERY-NATIONWIDE SURREY. *Gastroenterology*, 164(6), S-373.