

## Biomarker for Rheumatic Heart Disease (RHD)

**INTRODUCTION:** With an estimated prevalence of 15.6 million people worldwide resulting in 233,000 deaths, Rheumatic Heart Disease (RHD) is the result of valvular damage caused by abnormal immune response to group A streptococcal infection, usually during early childhood. In India, the disease is responsible for 30 to 40% of cardiovascular disease related hospital admissions and is a common indication for cardiac surgery.



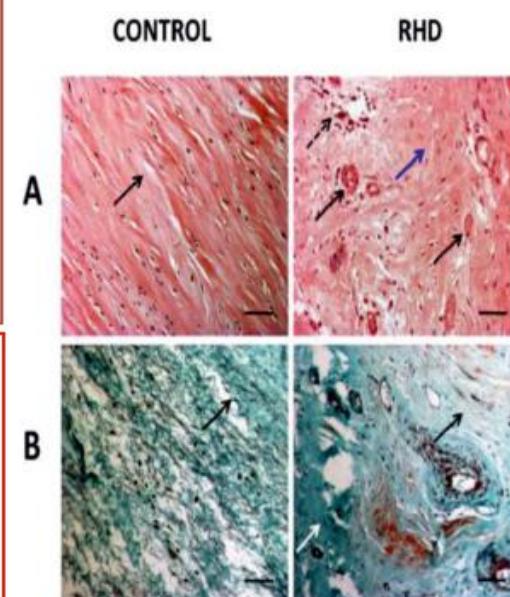
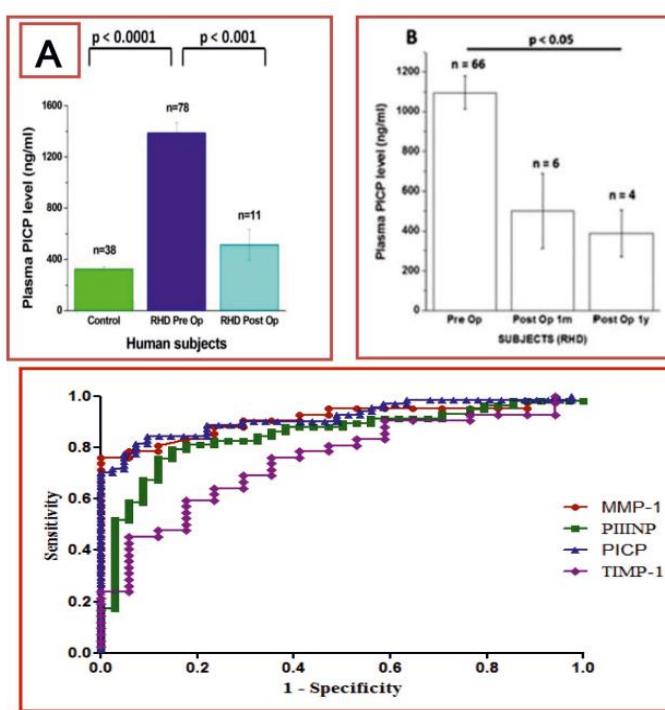
### SALIENT FEATURES OF BIOMARKER:

A robust Plasmabiomarker, with well defined cut-off value.

Sensitivity 90%; Specificity 89%,

AUC: 0.998.

Detected in Urine and Serum.



### IMPORTANCE:

RHD is diagnosed by ECG. No Biochemical marker is available for management of RHD. We have found that PICP is robustly increased in RHD Patients. Based on this, a prototype of the lateral flow is developed.

**OPPORTUNITY:** This test Kit would help in the measurement of clinical activity in quiescent rheumatic heart disease, prognosis, post penicillin treatment and overall management of rheumatic heart disease.

**STAGE OF TECHNOLOGY DEVELOPMENT:** Prototype ready.

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