

# INNOVATIONS IN COVID-19

Bridging opportunities  
at Oswaldo Cruz Institute

## IMMUNITY, INFLAMMATION AND COAGULATION IN COVID-19: SEARCH FOR DISEASE RESISTANCE MARKERS USING MULTIPARAMETRIC ANALYZES AIMING AT PLANNING A VACCINATION STRATEGY (COD. 2020.010)

### COORDINATOR

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### RESEARCH AREA

Diagnostic

### DEVELOPMENT STAGE

Level 1 - TRL - Basic principles observed and reported. MRL - Basic principles observed and reported.

### PROPOSITION / APPLICATION

SARS-Cov2 infects the respiratory, intestinal epithelium as well as the vascular endothelium, triggering acute inflammatory syndrome, accompanied by coagulation changes, which can progress to sepsis. In this context, it is highlighted that 85% of infected individuals are asymptomatic, showing the existence of protective responses without significant inflammatory dysregulation. It turns out that, currently, there are no predictive signatures identified in the evolution of the disease, which prevents the proposition of efficient intervention strategies and long-term protection.

### INNOVATION

The present proposal aims to identify health / disease markers with analysis of more than 300 markers, studied individually. Such analysis seeks to develop a signature that defines the efficiency of a healthy response to SARS-CoV2, determining protective epitopes, important for vaccine responses and monitoring.

### OPPORTUNITY

Stratification of risk groups, evaluation of vaccine response and identification of therapeutic and vaccine targets.

### CONTACT

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