

# METHOD FOR EARLY TAKO-TSUBO CARDIOMIOPATHY PROGNOSIS IN PATIENTS WITH ANEURYSMAL SUBARACHNOID HEMORRHAGE

A research from a group from Foundation for Biomedical Research of La Paz University Hospital and CIBER.

## The Need

Aneurysmal subarachnoid hemorrhage represents a serious medical emergency with high mortality and morbidity due to early rebleeding. Approximately 11% of these patients die before receiving medical attention and 40% die within 4 weeks after admission to hospital. Among survivors 30% have a considerable limitation for activities of daily living and often suffer from cardiac complications associated with an increased risk of short-term death. Tako-Tsubo cardiomyopathy (TTC) is the main cardio-dysfunction that occurs after neurological damage. The prevalence in SAH's patients is between 20% and 30%, with a higher prevalence in women. There is a medical need in predicting risk of TTC in early SAH stages in order to adapt accordingly their treatment and monitoring.

## The Solution

The technology provides an in vitro method able to predict, at day 0 with 100% efficiency, patients with a subarachnoid aneurysmal hemorrhage that will develop a complication of Tako-Tsubo cardiomyopathy and therefore should follow a preventive treatment and monitoring. The solution is based in determining the combined level of two molecules or their mRNA in serum/ blood samples obtained from the patient at emergency arrival.

## Innovative Aspects

This type of test would bring the opportunity to:

1. Early prediction of SAH complications into a TTC cardiomyopathy.
2. Rapid and easy identification of patients.
3. Preventive treatment and monitoring of these patients.
4. Reduction of severity effects and mortality.
5. Minimally invasive method from serum or blood samples

The IVD can be easily implemented to be performed in health services' currently available devices.

## Stage of Development:

The method is currently being validated by the group in a bigger cohort of patients arriving through emergency services at hospitals.



Blood Test by [Nick Youngson](#) CC BY-SA 3.0 Alpha Stock Images

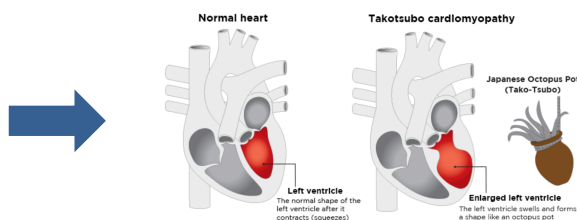


Image by: <https://www.heartfoundation.org.nz/>

## Intellectual Property:

- Priority P202130180 Spanish Patent 3th March 2021

## Aims

Looking for companies to develop the IVD thought licence or collaboration agreements.

## Contact details