

NEW BIOMARKER FOR HEART FAILURE DIAGNOSIS

The present invention aims at developing a new method for the diagnosis of Heart Failure (HF) based on the determination of one soluble protein in serum. It will be used in a broader application field such as diagnosis in the acute and non-acute setting, prognosis, patient stratification, guidance to patient treatment and screening test.

BACKGROUND

Heart failure (HF) is a syndrome characterized by the shortness of breath at rest or during exertion, a fluid retention such as pulmonary congestion or ankle swelling and an objective evidence of an abnormality of the structure or function of the heart at rest.

HF prevalence is between 2- 3% and rises sharply at 75 years of age, being the prevalence in 70-80 year old people between 10-20%. The overall prevalence of HF is increasing because of the ageing of the population, the success in prolonging survival in patients suffering coronary events, and the success in postponing coronary events by effective prevention.

HF is currently diagnosed by clinical examination, electrocardiogram, Chest X-Ray, echocardiography and laboratory testing, being the determination of B-type natriuretic peptide (BNP) and N-terminal pro-BNP (NT-proBNP) the *gold standard* in blood analysis. BNP and NT-proBNP are unstable peptides and their determination results in many false positive. They also lack from specificity in HF of non-treated patients.

TECHNOLOGY DESCRIPTION

New method for diagnosing and prognosing a HF syndrome, said method being based on the measurement of the amount of soluble protein in blood.

ADVANTAGES

- Non invasive method.
- Protein stable in serum: simpler and more reliable quantification compared to BNP or NT-proBNP.
- Useful as prognostic for treated patients

CURRENT STAGE OF DEVELOPMENT

- The method has been validated in a cohort of 188 patients suffering HF and 66 controls (not suffering HF).
- It is foreseen to validate these results in a wider and varied population.

GOAL

We are searching companies interested in the acquisition of the license, the further development of the diagnostic kit and its commercialization.

PATENT

A European patent application was filed on February 2012 by IDIBAPS and CSIC. Inventors: Montserrat Batlle, PhD and Pablo García de Frutos, PhD. Application number: EP12382048

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