

SepAsT: SOFTWARE FOR EARLY SEPSIS DIAGNOSIS OF SEPSIS AND PATIENTS CLINICAL COURSE AND SEPTIC SHOCK

DESCRIPTION OF THE TECHNOLOGY

Sepsis is the dysregulated response of the body to infection (bacteria, viruses, fungi), causing a syndrome characterised by organ dysfunction, which can lead to multiple organ failure and death, if not recognised and treated early. **Septic shock** is a subset of this syndrome in which circulatory, cellular and metabolic abnormalities become so severe that they are associated with an increased risk of mortality. Sepsis is a public health problem, as its incidence is increasing due to population ageing, immunosuppression, emerging multi-resistant bacteria and antibiotic resistance, and is the most frequent cause of mortality in most hospital Intensive Care Units.

There is currently no test for early diagnosis of sepsis and septic shock with effective prognostic capacity. Researchers from INCLIVA, UV and CIBER have developed a tool to improve the clinical management of critically ill patients in an Intensive Care Unit setting by obtaining rapid information on a diagnosis of sepsis and septic shock, predicting the clinical evolution of patients, and even predicting the need for life-support therapies (Fig. 1).

ADVANTAGES

- ✓ Early diagnosis.
- ✓ Personalised, fast and accurate treatment.
- ✓ Possibility of predicting the evolution of the disease.
- ✓ Non-invasive treatment.

STATE OF DEVELOPMENT

Software developed using real clinical samples from over 100 patients admitted to the Intensive Care Unit of the Hospital Clínico Universitario de Valencia. Real-world testing must be conducted to improve the diagnostic and prognostic software.

APPLICATION

Companies that commercialise medical devices, *in vitro* diagnostic medical devices and sepsis products.

INTELLECTUAL PROPERTY RIGHTS

Registered software with number SW-202193 on 19 January 2022 and trademark registered at the Spanish Patent and Trademark Office with number M4155197.

COLABORATION SOUGHT

Available to companies specialised in *in vitro* diagnostic medical devices interested in signing a licensing agreement to commercialise the software or an agreement to complete the development of this technology.



Fig.1. Software SepAsT image.

CONTACT

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