PATENT

DETECTION OF STAPHYLOCOCCUS AUREUS BY THE IDENTIFICATION OF THE LINEAR FORMS OF ITS AUTOINDUCING PEPTIDES

The Need

Novel diagnostic methodologies for the correct detection of infections and fast identification of *Staphylococcus aureus* in biological samples, capable of providing reliable and fast results, are crucial for an adequate treatment and prevention of exacerbation.

The Solution

A diagnostic tool for the detection of the presence of *Staphylococcus aureus* by means of the identification and/or quantification of four molecules from its quorum sensing system, which are called autoinducing peptides (AIPs), in biological samples of patients who may have these bacteria.

Innovative Aspects

The present invention provides for the first time an assay for the identification and/or quantification of molecules from the quorum sensing system of *Staphylococcus aureus*, allowing their evaluation as biomarkers of infection for diagnostic purposes.

Early detection

Correct detection and fast identification of *S. aureus, which* is crucial for an adequate treatment and prevention of exacerbation.

The invention overcomes the lack of sensitivity of present methods.

More rapid and reliable diagnostic tool

Specific, sensitive and robust detection in clinical samples.

Stage of Development: Analytical validation

Intellectual Property

European patent application (Priority date: April 15, 2025)

Suitable for international extension (PCT application)

Available for:

- **Licensing**
- **Further development**

Contact details

fsantos@ciber-bbn.es

www.ciber-bbn.es