

Clinical and genetic data exploitation for the breast unit management

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Desiree project, acronym of Decision Support and Information Management System for Breast Cancer (number ref. 690238), is a European project that has received funding from the European Union's Horizon 2020 research and innovation program. Its aim is to provide a multidisciplinary and collaborative software ecosystem for the personalised management of primary breast cancer, facilitating at the Functional Units of Breast Cancer, diagnosis, treatment and follow-up of the patients with this pathology.

The role of ERESA and Sistemas Genómicos in DESIREE project is to provide a fruitful set of image and genetic data respectively. Furthermore Sistemas Genómicos has defined the structure of Desiree Decision Support System genetic area. The system will be able to classify a patient in high or low risk of hereditary breast cancer thanks to the clinical and genetic data collected and based on the DESIREE decision support system.

This data has been divided in two types of dataset. On one hand, relevant data for breast units management has been selected and on the other hand DESIREE system focuses in the data needed for a decision support system. The decision support system will be based on International guidelines and previous patient cases, so the system will learn of every decision taken.

ERESA as image leader in Spain, especially in MRI, will provide to the consortium the clinical images needed for the integration in the DESIREE system developed by other partners.

Sistemas Genómicos, as a specialized laboratory leader in the study of DNA and RNA, will provide all the data related with genes involved in breast cancer, also providing access to its own genetic variant database called DBNLVar, this results in an important genetic knowledge shared with the system.

Desiree will be a multidisciplinary software bringing together image, genetics and other clinical data for the primary breast cancer personalized management.