

# RESEARCH PROJECT WITH PUBLIC FUNDING 2023



## IMMUNO-RADIOTHERAPY TO SPARE THE IMMUNE SYSTEM (LYSAIRI) €477,298



### WHAT IS THE AIM OF THE RESEARCH PROJECT?

The idea behind the project is to be able to spare lymphocytes and thus avoid 'radiation-induced' lymphopenia, the severity of which is closely correlated with survival rates. Two main areas will be studied.



### WHO ARE THE PRINCIPAL INVESTIGATORS?

**Karine Lamiraud** and **Guillaume Chevillon** have been part of the ESSEC Institution for more than 15 years as Professor of Health Economy and Professor of Analytics, Economics & Forecasting



### WHO ARE THE STAKEHOLDERS?

LySAIRI is coordinated by Gustave Roussy. It was selected for funding under the 5th call for projects in the Hospital-University Health Research (RHU) action within the *Investissements d'avenir* programme.



## ABSTRACT:

- The aim of the project is to develop a new imaging platform guided by artificial intelligence to create a 3D histology of the tumor. LySAIRI will make it possible to define new 'immunological' dose constraints.
- The development of software for prescribing radiotherapy doses will encompass the above solutions. In practice, it will help radiotherapists to define dose constraints for each patient automatically.
- The final pillar will aim to combine radiotherapy optimising the target volume with a new interleukin 15, and will be validated by a detailed medical/economic analysis to facilitate widespread adoption of the programme and assess its business model.

