

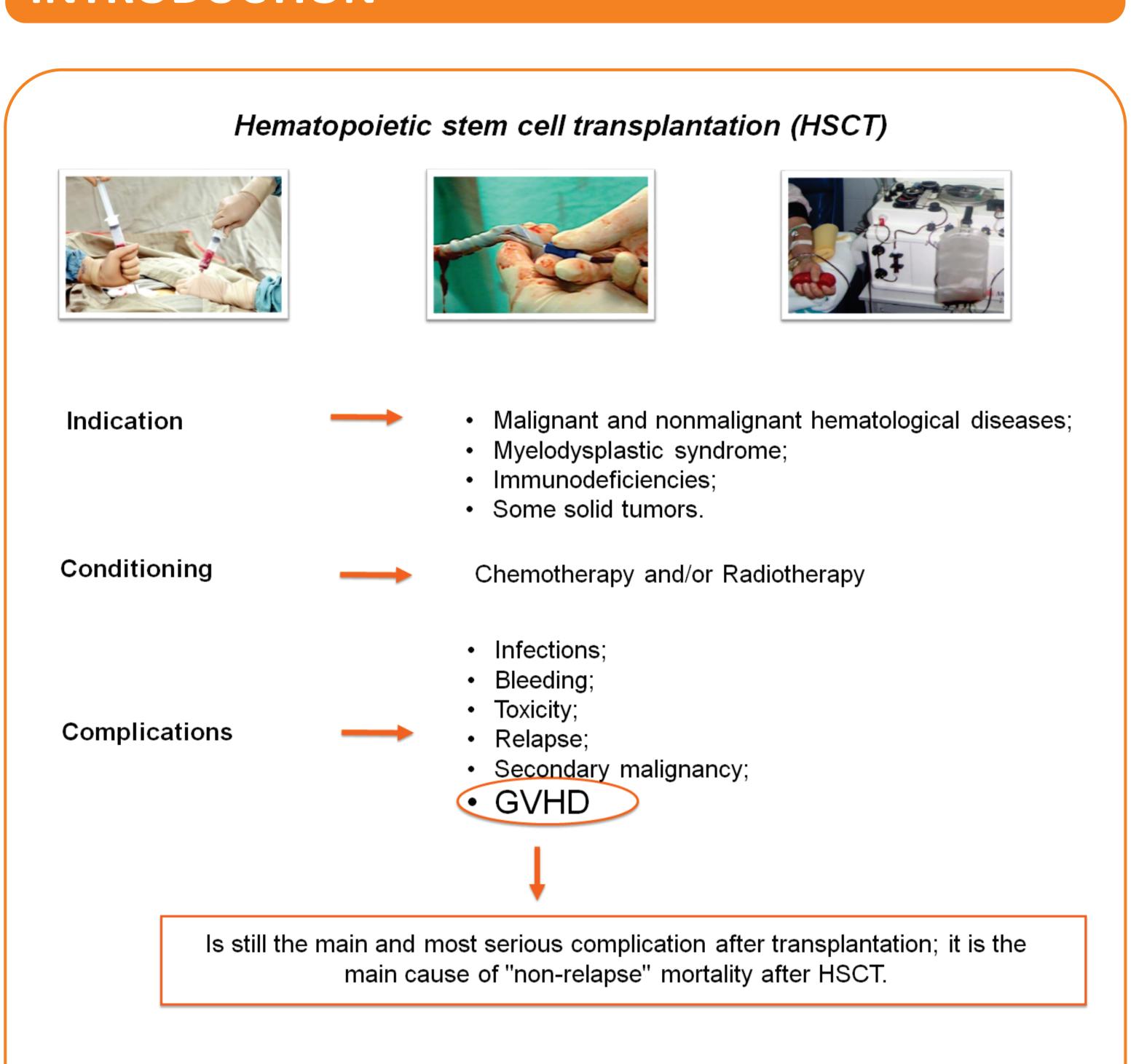
# Evaluation of possible salivary biomarkers for early detection of graft versus host disease in patients submitted to allogeneic hematopoietic stem cell transplantation



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### INTRODUCTION



Carbonic anhydrases,

Histatins

Amylases,

Cystatins,

Statherins

rich proteins,

Mucins, Lipase

Histatins, Proline-

Homeostasis in the oral cavity is

maintained by a complex network

of innate and adaptive immune

proteins and normal oral flora.

Buffering

ion &Visco

Digestion

Mineral-

Mucins, Statherins

**Bacterial** 

Coating

Salivary

Families

Anti-

Anti-

Fungal

# **OBJECTIVES**

Amylases, Cystatins,

Histatins, Mucins,

Peroxidases

Cystatins,

Histatins

Amylases,

Cystatins, Mucins,

Proline-rich proteins, Statherins

Mucins

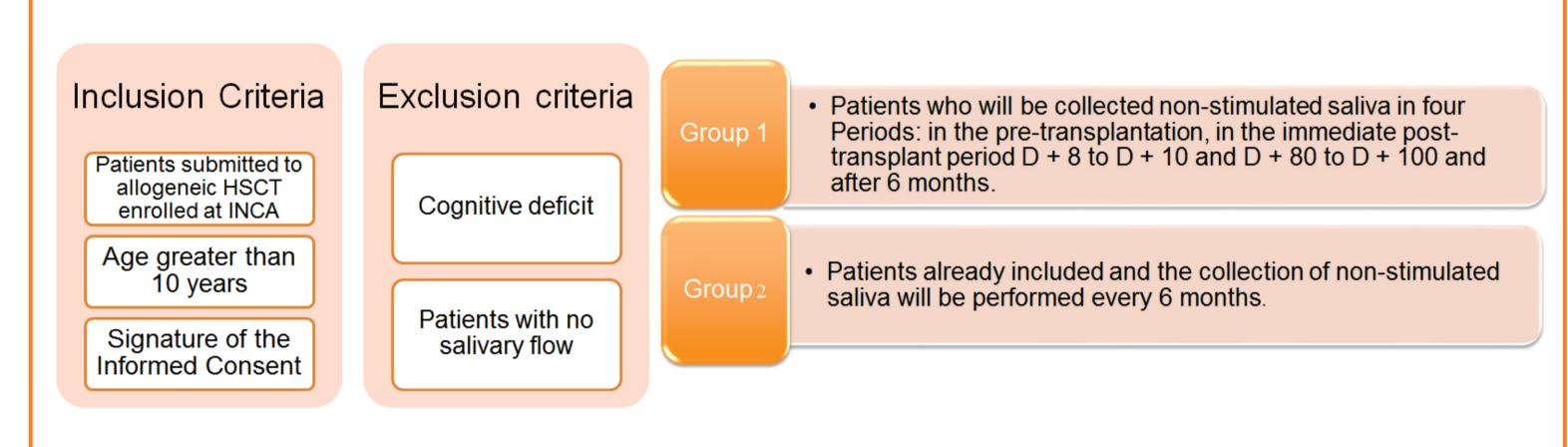
The diagnosis and prognosis of GVHD depend almost entirely on the presence of clinical signs, as there are no laboratory tests to predict the risk of developing GVHD. Thus, in order to investigate salivary changes, the present study aims to evaluate the expression profile of salivary proteins in patients undergoing allogeneic HSCT and to compare the profile of these proteins in patients who developed GVHD with patients who did not develop the disease after transplantation.

# **PERSPECTIVES**

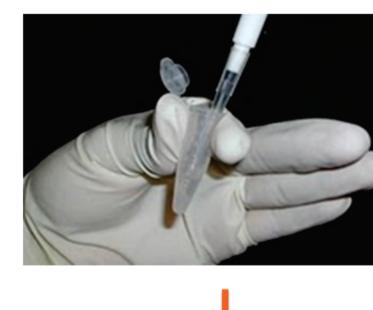
The collection of saliva, besides being a non-invasive and easily performed procedure, is an important way to identify a possible biomarker. Therefore, we expected through proteomic analysis find potential biomarkers in saliva that could predict risk of developing GVHD.

# METHODOLOGY

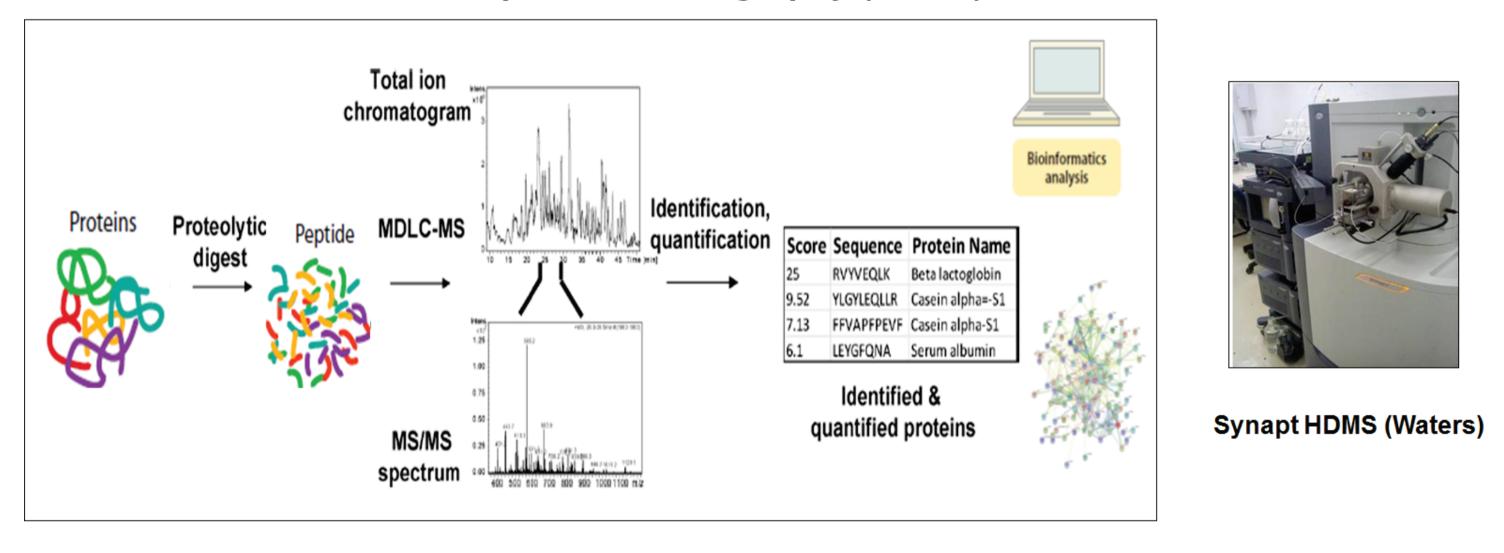
- Longitudinal study;
- This study is a branch of a larger project that began in 2012 with the inclusion of 74 patients by November 2016;
- Expected to include 150 patients until March 2019.

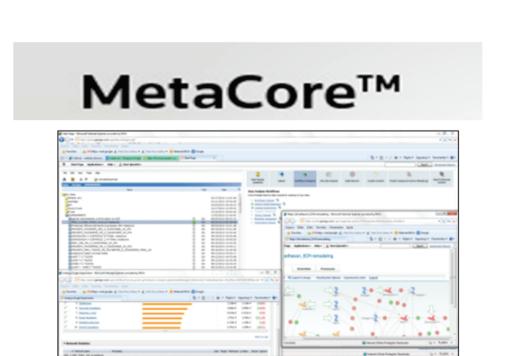


## Patients' saliva



### Multidimensional liquid chromatography (MDLC) LC-MS<sup>E</sup> Label-Free 2D







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