MBioLIMS BioBanking® Information Management System for CRYOSTEM national cohort

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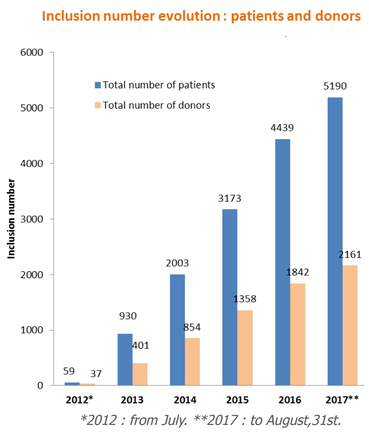
INTRODUCTION

CRYOSTEM national cohort is a French collaborative network aiming at better understanding the complications of allogeneic Hematopoietic Stem Cell Transplantation (HSCT), including Graft versus Host Disease (GvHD), to speed up biomarkers discovery and development of adequate treatments.
CRYOSTEM brings together 33 out of the 36 French HSCT Units and 23 Biological Resources Centres (BRC) that operate a nationwide, prospective and standardized collection of biological samples associated with well-annotated clinical data from donors and patients pre- and post-allogeneic HSCT.
All the corresponding data, related to patients and samples, are centralized in the MBioLIMS BioBanking® software, centerpiece to CRYOSTEM biobank activity.
The latest version of MBioLIMS BioBanking® recently deployed has enabled to manage a significant increase in the number of samples to be collected and stored by the 23 BRCs. The new software modules allow increased quality management and collaboration between the centres involved.



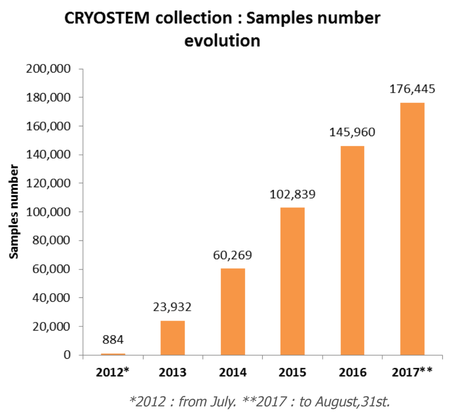
*2012 : from July. **2017 : to August,31st.

A START FOCUSING ON GvHD SAMPLES COLLECTION

In 2012, CRYOSTEM started a biological collection focused on GvHD, collecting samples from patients, either suffering from GvHD (acute and chronic forms) or not (control samples) following HSCT, under the "GvHD protocol".
Since the first inclusion, the collection has been constantly growing, reaching currently almost 6,000 patients and 2,300 donors, leading to nearly 200,000 samples available for research (last update September, 6th).

INCREASE FLEXIBILITY & PRODUCTIVITY WITH THE LATEST VERSION

In November 2016, CRYOSTEM enlarged its initial thematic focused on GvHD to all the HSCT complications, integrating more systematic sampling points, under the "HSCT Complications protocol". The new version of MBioLIMS BioBanking® was launched to reflect the new sampling protocol and to manage efficiently both protocols. The new interface is intuitive and user-friendly and enriched with new functionalities and modules such as the Reagents and Consumables Stock Management, saving time for users.



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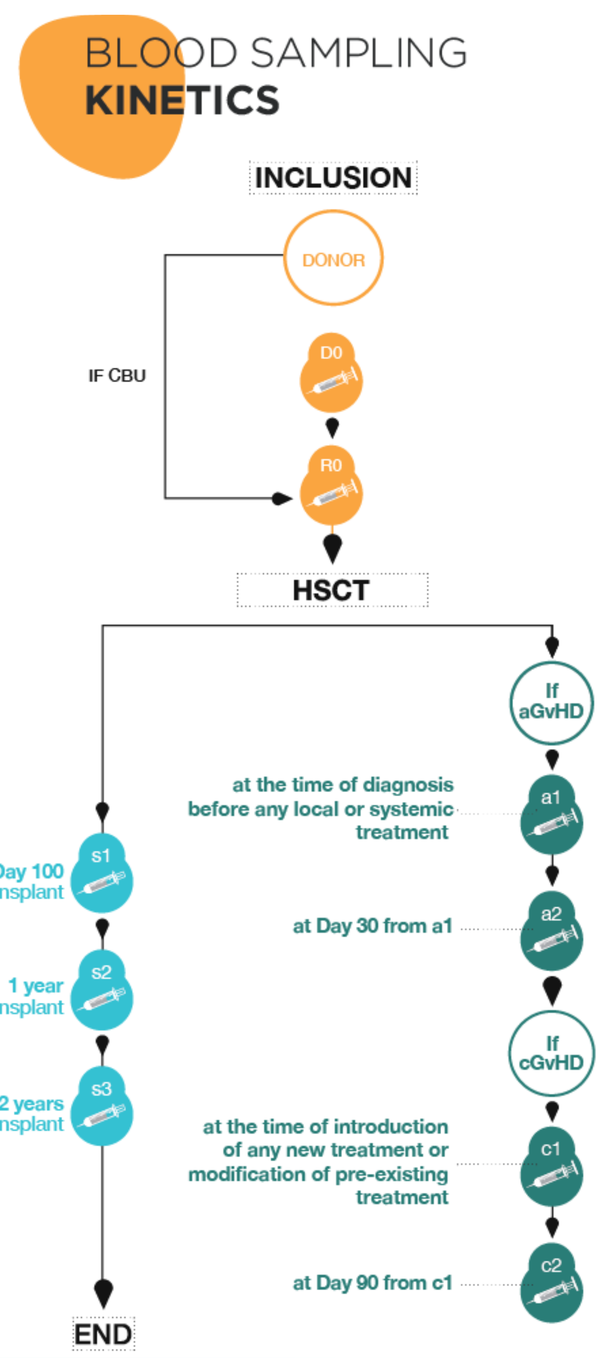
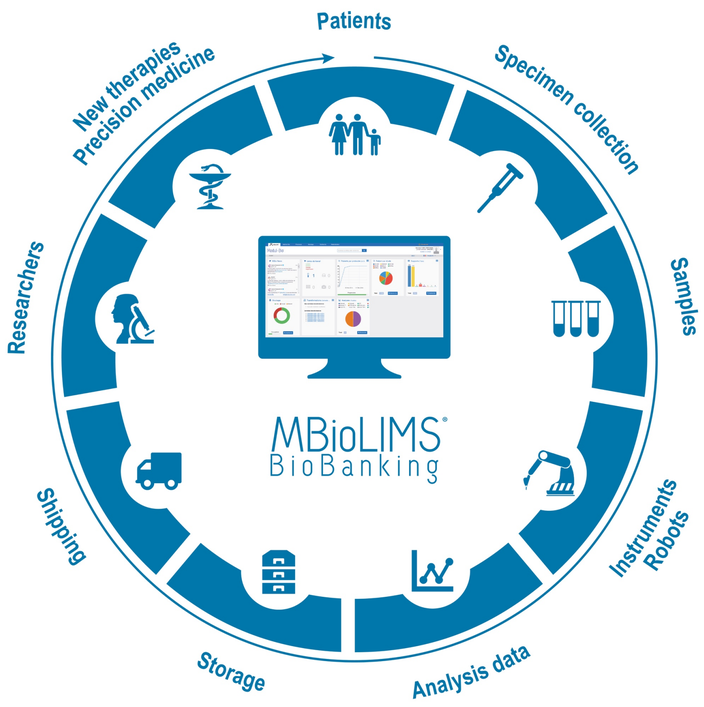
Specific modules such as Multi-Site Module, Reagents and Consumables Stock Management, Notification, Reporting, Automatic Interoperability with ProMISe, the European clinical database of EBMT (European Society for Blood and Marrow Transplantation), Samples Provision and Transfer increase efficiency and productivity to CRYOSTEM cohort.
In addition, the software is also designed to collect samples from other projects related to Hematopoietic Stem Cell Transplantation and can manage different sampling kinetics as they differ among collections.



CONCLUSION & EVOLUTION



The latest version of MBioLIMS BioBanking® recently deployed has enabled to manage a significant increase in the number of samples to be collected and stored by the 23 BRCs. The new software allows increased quality management and collaboration between the centres involved and contributed to the network's successful ISO 9001 certification.
Benefits to using a software such as the MBioLIMS BioBanking®, are multiple: centralization of samples and data through 23 BRCs, homogenization of labelling, traceability, real-time monitoring of operations, better communication with BRCs, and SOP sharing.
Because tailored to the collection and its evolution, the MBioLIMS BioBanking® contributes to CRYOSTEM high-quality level in biobanking.

CRYOSTEM biobank has become an effective tool for discovering new therapies against complications of allogeneic Hematopoietic Stem Cell Transplantation including Graft versus Host Disease (GvHD) by using Modul-Bio software that empowers biobanks towards precision medicine.

HSCT	Hematopoïetic Stem Cell Transplantation	cGvHD	chronic Graft-versus-Host Disease
	EDTA sampling	R0 & D0	Pre-transplant sampling
R	Recipient	a1/c1	Sampling at the time of diagnosis before any treatment
D	Donor	a2/c2	Sampling at X days after a1/c1
CBU	Cord blood unit	s1/s2/s3	Systematic sampling at X days from transplantation
aGvHD	acute Graft-versus-Host Disease		