INSTITUT CARNOT CALYM

TENOMIC COLLECTION: AN UNPARALLELLED TOOL TO ADVANCE PERIPHERAL T-CELL LYMPHOMAS DIAGNOSIS & TREATMENT

CALYM offers access to its unique peripheral T-cell lymphomas biological collection.

BACKGROUND

Peripheral T-cell lymphomas are morphologically, immuno-phenotypically and clinically heterogeneous and overall account for about 10% of all non-Hodgkin lymphomas. Apart from anaplastic lymphoma, the molecular abnormalities associated with T-cell lymphomas are poorly known. Poly-chemotherapy treatments are not effective in the majority of patients. About 30% of patients will survive for 5 years or more after diagnosis. New alternative and targeted treatments are needed.

The TENOMIC collection can help to advance research and development in the oncology field. It arises from a clinical research project (PHRC) funded by the French National Cancer Institute in 2009. The objective was to characterize molecular diagnostic and prognostic biomarkers associated with the diversity of non-cutaneous T-cell (and NK) lymphomas. An initial cohort of 300 patients with prospective clinical follow-up, associated with the analysis of fixed and frozen, tumor and non-tumor biological material was constituted. Since then, numerous other projects were linked to the collection and resulted to high impact publications involving world-level KOLs.

DESCRIPTION

The TENOMIC collection accounts for more than 900 T-cell lymphoma patients and continues its growth. It includes:

- FFPE samples (blocks, slides, TMAs)
- Frozen samples and derived products
- Fresh blood or tumor samples whenever possible
- Biological data
- Clinical data (all annotated)

From FFPE samples, complementary immuno-staining assays were systematically performed and TMAs were made, according to pathologies (TFH marker, CD30, etc.). From frozen samples, derived products (DNA, RNA) were extracted for high throughput analyses.
OMICS studies were conducted to identify robust biomarker and get better molecular description.

PUBLICATIONS

- McKinney M. *et al.* Cancer Discov. 2017 Jan 25
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- L. de Leval *et al.* Haematologica. 2015 Sep; 100(9): e361–e364
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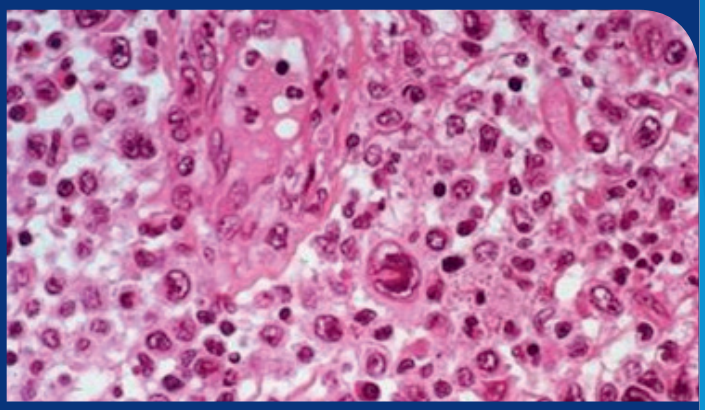

CLINICALLY ANNOTATED SAMPLES OF T-CELL LYMPHOMAS FROM 900+ PATIENTS

ADVANTAGES / APPLICATIONS

The TENOMIC collection is unique in the world. It offers many perspectives for research and development in the oncology field:

- identification of new T-cell lymphoma biomarkers
- development of new diagnostic assays
- evaluation of a new drug/target/marker suitable for T-cell lymphoma treatment
- replication and validation for Laboratory Developed Tests, *in vitro* diagnostics registration
- ancillary/bioinformatics studies.

TENOMIC offers the opportunity to define expression range, variation, localization to identify lymphoma subtype specificities, to study correlation with other biomarkers, to manage multivariate analysis, etc.

With TENOMIC, new diagnostic assay results can be associated with patient outcome. Correlation studies of target data with medical annotations can be managed based on existing clinical trial biological databases (e.g.: expression or mutation of the target versus response or survival data).

KEYWORDS

peripheral T-cell lymphomas, collection, biobank, biomarker

PARTNERSHIP

Research collaboration, co-development of biomarker
Development, replication and/or validation of new *in vitro* diagnostic assay relevant to lymphoma

RESEARCH TEAM

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