

THE CONSORTIUM FOR THE ACCELERATION OF INNOVATION AND ITS TRANSFER IN THE LYMPHOMA FIELD

Advancing LYMPHOMA Diagnosis & Treatment TOGETHER



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CALYM, AN INSTITUTE DEVOTED TO RESEARCH AND DEVELOPMENT OF SOLUTIONS FOR THE TREATMENT AND DIAGNOSIS OF LYMPHOMA

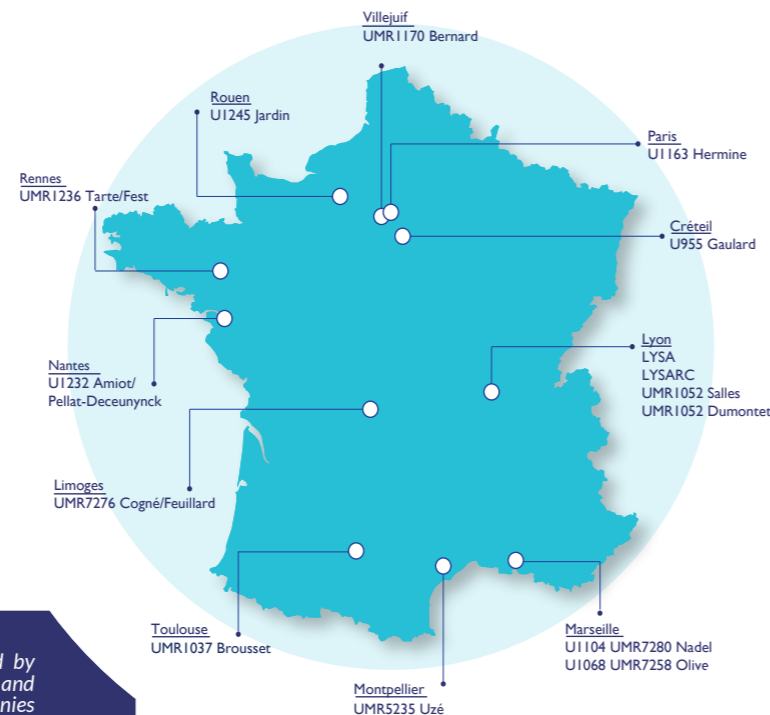
Accredited Carnot* institute in 2011, by the French Government, CALYM gathers 15 multidisciplinary and complementary preclinical and clinical research entities of scientists, teachers-researchers, physicians and clinical research professionals in the exclusive field of lymphoma:

• 2 non-profit research associations:

- **The Lymphoma Study Association (LYSA)**, cooperative group, international leader of lymphoma research
- **The Lymphoma Academic Research Organisation (LYSARC)**, largest European academic organization devoted to clinical research operations in the lymphoma field

• 13 academic research teams of excellence:

based in universities and hospitals across France, conducting research activities on lymphoma



* Carnot institutes are public research organizations, accredited by the French Government, that are strongly committed to conduct and develop partnership research activity for the innovation of companies - from SMEs to big pharmaceutical companies - and socio-economic actors.



A COMPLEX DISEASE

LYMPHOMA KEY FIGURES

1st

blood cancer

80

lymphoma subtypes classified by the World Health Organization

6th

most common cancer worldwide

more than **70,000**
new cases/year in Europe
80,000 in the USA,
12,000 in France

2 millions
patients
worldwide
(estimation)

PATIENTS



Incidence x2 since the 70's
13/100,000 cases in France



THE MARKET

\$5,600M in 2013 / about **\$6,200** in 2020 only
for non-Hodgkin lymphomas (90% of lymphomas)

OUR 4 R&D PILLARS AT THE CORE OF INNOVATION

1.

Research and validation of **new biological targets** and **in vitro** and **in vivo** models of lymphoma

> To develop new preclinical drug candidates



2.

Identification, validation, patenting and licensing of **blood and tissue biomarkers**

> To improve diagnosis, guide therapy decisions and predict tumor responses



3.

Early monitoring of activity (early pharmacodynamic markers, circulating DNA, immunomonitoring)

> To accelerate translational research



4.

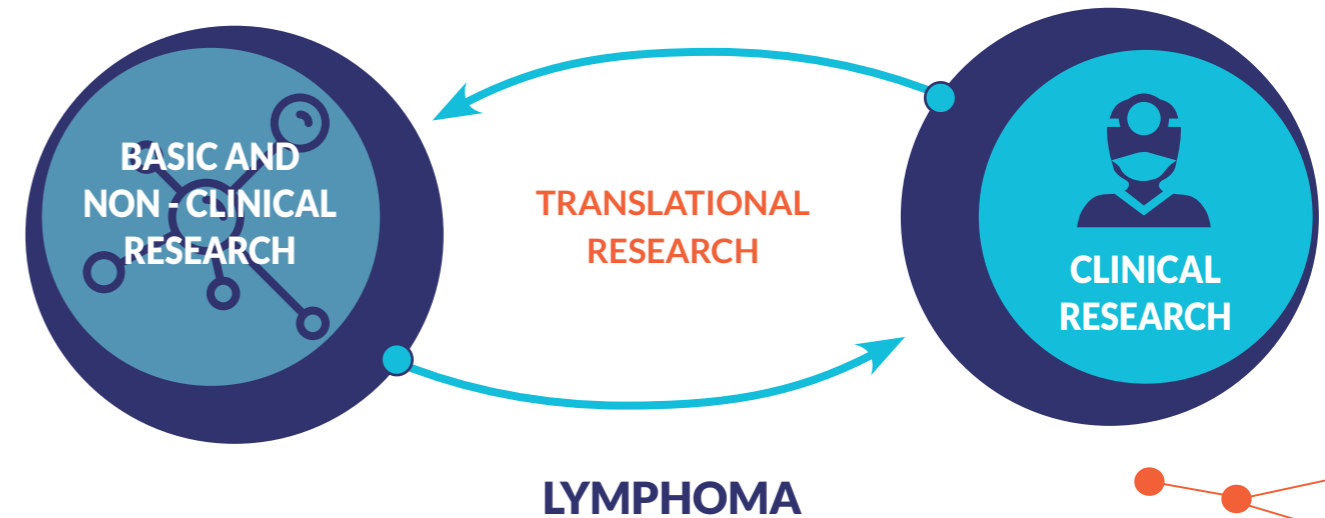
Optimization and exploitation of **clinical research** related tools

> To accelerate development, registration and market access of drug candidates



A VERY BROAD SPECTRUM OF ACTIVITY

Our approach of integrated research from the bench to the bedside of the patient and vice versa is a major asset to advance research against lymphoma, particularly in the **translational phase**.



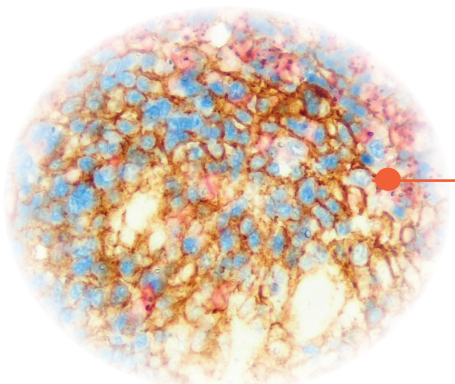
CALYM is the response to the needs of life science companies. We offer our unique expertise, scientific skills, resources and means at all levels of our R&D approach.



DISCOVER OUR PARTNERSHIP OFFER

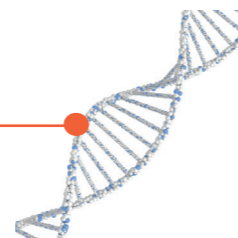
FROM THE IDENTIFICATION OF **NEW BIOLOGICAL TARGETS**
TO INTERNATIONAL PHASE III **CLINICAL TRIALS** AND BEYOND

THE **RECOGNIZED EXPERTISE** of our teams in studying signaling pathways, the physiology of normal and pathological lymphoid tissue, the microenvironment and the mode of action of monoclonal antibodies, offer the opportunity to **explore new therapeutic pathways** for the development of more targeted, better tolerated and more effective drugs.



Our studies lead us to create and enrich unparalleled **BIOLOGICAL COLLECTIONS** in order to develop new innovative **MODELS** closer to the biology that represent an important collaborative potential to **provide proof of concept**, elucidate the **mode of action of drug candidates** and conduct suitable and effective **preclinical studies**.

CALYM researchers develop in collaboration with the industry new diagnostic, prognostic, pharmacodynamics and clinical response predictive **BIOMARKERS** that can be **clinically validated in large cohorts** and **registered as part of a clinical trial**.



We have been successfully **collaborating for more than 30 years** with pharmaceutical and biotechnology companies to design and conduct **CLINICAL TRIALS** in lymphoma, from Phase I (including first-in-man) to Phase III (including international registration trials) and beyond (Phase IV, registers).

In addition, CALYM conducts and supports more and more **NON-INTERVENTIONAL AND ANCILLARY biological, histopathological, imaging, statistical and bioinformatics studies**.

UNIQUE BIOLOGICAL COLLECTIONS, DATABASES & MODELS

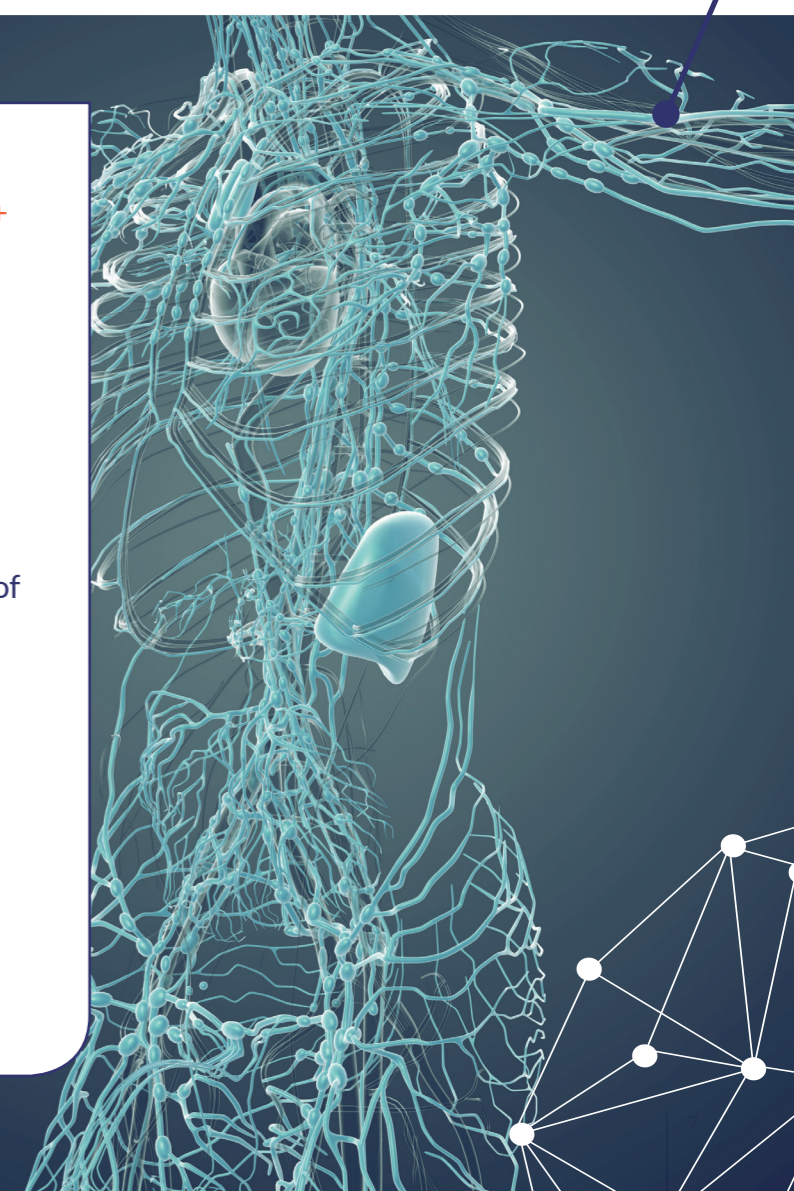
— **CeVi collection (ISO 9001:2015): 1,400+** samples of cryopreserved viable cells of lymphomas and reactive tissues and **5,400+** tubes

— **TENOMIC collection:** **900+** clinically annotated samples of T-cell lymphoma patients

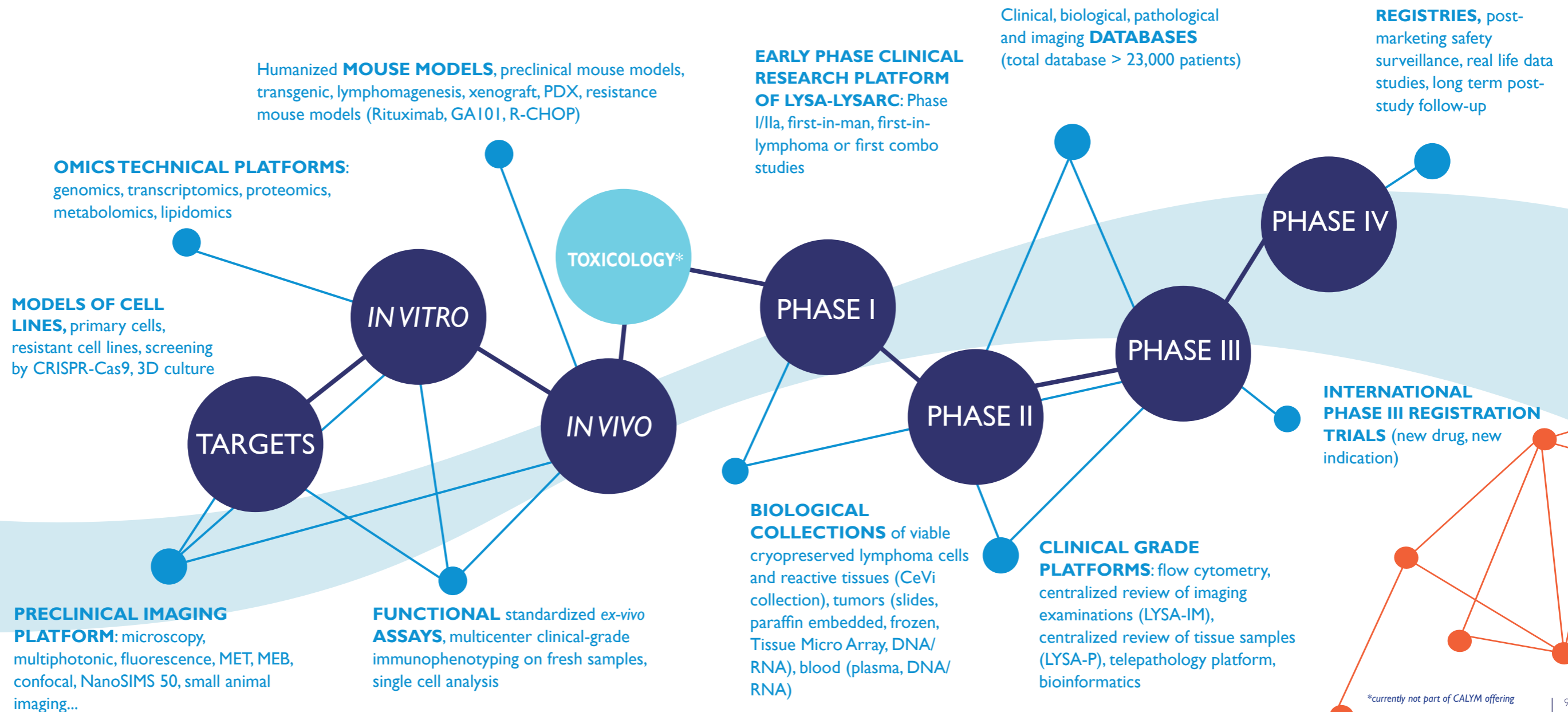
— **Clinical-biological annotated database of 23,000+** lymphoma patients

— **Proprietary imaging database of 20,000+** medical examinations

— **In vitro, ex vivo and in vivo models** reflecting genetic disorders and microenvironment associated to each lymphoma subtype



OUR PLATFORMS AND TECHNICAL RESSOURCES OF EXCELLENCE





VARIOUS TERMS OF COLLABORATIONS

COVERING ALL STAGES OF YOUR R&D IN THE LYMPHOMA FIELD

- **Contract research partnerships** on preclinical, translational or clinical projects
- **Joint setting-up of projects** on national or international calls for projects
- **Access** to our databases, technical platforms, biological collections, preclinical models, technical resources
- **Expertise and consulting** of internationally renowned lymphoma experts

Besides its platforms, CALYM offers a **unique training, both scientific and operational**, through **The Lymphoma Academy**, a LYSARC initiative to foster lymphoma R&D excellence.

THE
LYMPHOMA
ACADEMY

WHY PARTNER WITH US ?



STRONG COMMITMENTS

- Single entry point to a network of scientific and technical skills and platforms
- Continuous improvement process
- Systematic answer in less than 5 days to partner requests (possible direction towards another structure of research)
- Full cost quotation
- Performing to deadlines
- Compliance with contractual commitments
- Follow-up of relationships with partners and assessment of their satisfaction



QUALITY STANDARDS INSURING A LEVEL OF OPTIMAL PERFORMANCE

ISO 9001:2015 certifications for:

- The management and monitoring of CALYM's partnership research activities
- The coordination of CALYM's lymphoma viable cells CeVi collection

Accreditations by the French National Cancer Institute:

- LYSARC: "French Cooperative Intergroup of International Dimension in the Field of Cancer"
- 12 early phase centers (CLIP²)

International quality standards: GCP, GLP, ICH

TAX BENEFITS

CALYM is accredited for the French research tax credit scheme (Crédit Impôt Recherche). Eligible entities (must be subject to corporate tax in France) having research contracts with CALYM can save up to 50 % of audited R&D expenses.



EXAMPLES OF COLLABORATIVE PROJECTS WITH INDUSTRY

Ro-CHOP: A clinical trial in the long run

In partnership with a leading biopharmaceutical company in onco-hematology, the addition of romidepsin to CHOP chemotherapy in first-line for peripheral T-cell lymphoma patients has been the subject of a complete clinical evaluation by LYSARC, from Phase I to an international Phase III registration trial.

PRIMA: A Phase III clinical trial with many outputs

PRIMA Phase III clinical trial, conducted in 25 countries in collaboration with a big pharmaceutical group, led to the registration of rituximab as a two-year maintenance therapy for follicular lymphoma patients responding to first-line immunochemotherapy. PRIMA also generated many ancillary biological studies leading to a significant number of results and publications (such as the new prognostic index, PRIMA PI. E. Bachy *et al.*, Blood 2018, 132:49-58). Long-term follow-up of this study showed that efficacy of rituximab maintenance persists after ten years of follow-up in follicular lymphoma (G. Salles *et al.* Blood 2017, 130:486)..

A QUICK AND EASY ASSAY to improve diagnosis of large B-cell lymphoma

A patented assay (WO2015135935 A1) developed for the differentiation of large B-cell lymphoma sub-types (GCB vs ABC) using the RT-MLPA technology (multiplex ligation-dependent probe amplification) is available for licensing.

Diagnostic and therapeutic use of MONOCLONAL ANTIBODIES for various lymphoma sub-types

Several antibodies playing a specific role in the lymphoma immune control by targeting molecules such as BTLA and ICOS were developed and patented by CALYM's teams. They are available for licensing.



250 university and hospital
RESEARCHERS including
30+ PhD students

500+



PHYSICIANS:
clinicians, biologists,
pathologists,
radiologists,
statisticians...

140

**QUALIFIED
STAFF**
for clinical
research
operations

120



clinical **CENTERS**

750+ **PATIENTS**

enrolled per year in clinical cases

CALYM KEY FIGURES

70+ **CONTRACTS**

with the industry per year

150+ **R&D PROJECTS**

80+ **PATENTS**

Consolidated annual budget:

more than **€20M**

CALYM is a member of :

FINDMED

("Drug Industry" Carnot consortium)

www.findmed.fr



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