Molecular Bases for Targeted Therapies of Multiple Myeloma and Mantle Cell Lymphoma

RESEARCH THEMATICS & OBJECTIVES
The laboratory studies the role of the microenvironment in the reactivation of signaling pro-apoptotic pathways in B-cell lymphopathy: molecular and preclinical mechanisms.

EXPERTISE
Biological targets and in vitro / in vivo / ex vivo models
Targets:
- Apoptosis intrinsic pathway (BCL2 family)
- TP53 pathway
- BCR pathway (BTK)
Models:
In vitro models: mantle lymphoma cell lines (n= 9)
Ex vivo models: coculture system of primary cells of LCM + L40 + cytokines

PLATFORMS & TECHNICAL RESOURCES
Platforms of the SFR François Bonamy (www.sfrsante.univ-nantes.fr):
- Cytocell platform: flow cytometry and cells sorting (Biogenouest)
- GenoBIRD platform: bioinformatics and genomics (IBISA/Biogenouest)

R&D OFFER
The laboratory offers to evaluate drugs that directly activate the intrinsic apoptosis pathway or that modulate actors implicated in that pathway mainly by inhibiting the protective role of microenvironment.
To do so, the laboratory has set up a coculture system in the medium run (15 days) of primary cells of Mantle Cell Lymphoma. This coculture system mimics the effect of microenvironment and reproduces molecular signatures of tumor cells observed in lymphoid tissue.
The laboratory offers access to collections and databases: REFRACT-LYMA (Hanf M, 7 authors, Le Gouill S. The REFRACT-LYMA Cohort Study: a French observational prospective cohort study of patients with Mantle Cell Lymphoma BMC Cancer in press).

KEY WORDS
Microenvironment, B-Cell lymphoma, Cellular cycle, Cellular death