Healthy Liver → NAFLD → NASH → High Risk NASH → Cirrhosis

NAFLD + Inflammation

Non-alcoholic steatohepatitis (NASH)

Accumulation of fatty acids and triglycerides
No regulatory approved non-invasive diagnostic biomarkers!
Liver Investigation

Testing Marker Utility in Steatohepatitis
Aim:
To establish a defined set of biomarkers for detection and monitoring of NAFLD

Funding:
The Innovative Medicines Initiative (IMI2) Program of the European Union
Strong Collaborative Foundations in Discovery Science

Mechanisms of progression of liver disease

Pathophysiological variation across a spectrum of progressive liver disease
## Work packages

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<th>Academic Lead</th>
<th>Industry Lead</th>
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Overview of LITMUS data management

Recruitment and collection of clinical datasets

NAFLD registry

Limited clinical dataset (only to support case selection on Nested-study)

Reverse translation (WP6)

Bioinformatics, overall integrative biomarker analysis and methodological validation

Data analysis (WP2)

QED (WP7)

Collection of Biological Samples

Limited Clinical Dataset

Imaging Data Acquisition

Blinded Imaging Analysis Imaging (WP4)

Blinded Biomarker Analysis

Results

Results

Dissemination of results

LITMUS Central Biobank

Central labs (WP4)
Work package 2

Analysis, Evaluation & Evidence Synthesis
Systematic review and meta-analysis of literature.


Validation of clinical performance of candidate biomarkers using the prospective cohort and longitudinal follow-up of patients within the LITMUS cohort.
Hémodynamique, Interaction Fibrose et Invasivité Tumorales Hépatiques (HIFIH)
Diagnostic accuracy and prognostic significance of blood fibrosis tests and liver stiffness measurement by FibroScan in non-alcoholic fatty liver disease

Julien Vergniol 1, Anne-Guiller 1, Jean-Baptiste Hirlot 1, Adrien Lann 1, Michaela 1, Faiza Chemk 1, Sandrine Bertrais 1, Juliette Fouche Hartionnier 1, Isabelle Foucard-Hubert 1, Marie-Christine Roux 1, Paul Calès 1, Victor de Ledinghen 1

1. CHU de Bordeaux, University Hospital, France; 2. University of the Philippines, Manila, Philippines; 3. CHU de Bordeaux, University Hospital, France; 4. CHU de Bordeaux, University Hospital, France


Available online at www.sciencedirect.com
ScienceDirect

FibroMeters: a family of blood tests for liver fibrosis

P. Calès a,⁎, J. Boursier a,⁎, Y. Gallois a,⁎, M.C. Rousselet b, L. Macchi b, A. Chevailler c, S. Milet d, J. Châigneau a, S. Sawadogo a

a. Laboratoire Hépato-Gastroentérologie, CHU, Angers; b. Laboratoire de Biochimie et Biologie Moléculaire, CHU, Angers; c. Département de Pathologie Cellulaire et Tissulaire, CHU, Angers

Optimization and robustness of blood tests for liver fibrosis and cirrhosis

Paul Calès 1, Jérôme Boursier 2, Sandrine Bertrais 2, Frédéric Oberti 2, Yves Gallois 3, Isabelle Foucard-Hubert 3, Nina Dib 2, Jean-Pierre Zarski 2, Marie Christine Rousselet 3 and multicentric groups (SNIF 14 & 17, ANRS HCV 23 Fibrostar)


Clinical Biochemistry

Clinical Biochemistry
No biopsy for you!