



**Metabolomics:**  
Is the qualitative and quantitative analysis of the metabolome, that is to say, the group of metabolites that are present in a cell, tissue or biofluid at a given instant.

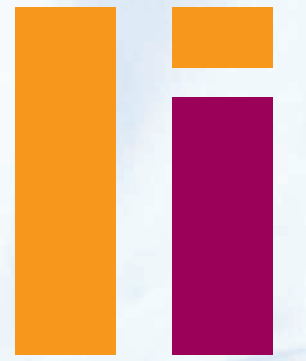
**OWL Genomics** is a biotechnology company founded in 2002 upon the knowledge and scientific expertise of Dr. José María Mato whose objective is to develop new diagnostic systems and therapeutic targets based on **Metabolomics**.

Using metabolomics technology, **OWL Genomics** has identified Steatosis and NASH biomarkers. **OWL Genomics** applies state of the art technology that combines High Performance Liquid Chromatography with Mass Spectrometry.

Our company also offers metabolomic services to hospitals, research centers, biotechnology and pharmaceutical companies.

**OWL Genomics** has a qualified group of professionals, with competencies ranging from chemistry, biology to statistics that use state of the art technologies to perform tasks relevant to present and future research challenges.

The company is currently applying similar technology and know how to other diseases with complex diagnostics with a personalized medicine approach.



**owl liver**

# owl liver

owl liver is the first serum based test to be used for NASH diagnosis. It is a non-invasive, effective method that allows easy follow up and monitoring of patient progression whilst avoiding the costs and complications of other diagnostic procedures.

## 1 Benefits



### Patient

The patient benefits from a non-invasive diagnostic method that allows disease progression to be monitored with a simple blood test.



### Clinician

Using owl liver the clinician now has a reliable tool for early Steatosis/NASH diagnosis. owl liver provides a very precise solution to monitor patient evolution.



### Health Care System

owl liver is a cost-saving tool, since via this prevention method, health care systems are provided with a product that minimizes hospital stays and other procedure costs.

## 2 Blood Sampling Protocol



The owl liver NAFLD Diagnosis Test needs just a serum sample together with a set of patient clinical parameters (age, sex, BMI...).

The following blood sample extraction procedure should be followed:



In fasting in Vacutainer SST II Advance tubes or similar, without anti-clot and with separation gel.



Needles Vacutainer systems Blood Collection Set or similar.



Centrifuge following the extraction tube manufacturer's instructions. Once the phases are separated, collect the serum and immediately keep it at -80°C in Eppendorf tubes or similar.



The sample transportation must be in dry ice to keep them freeze. OWL Genomics will pay for this service.



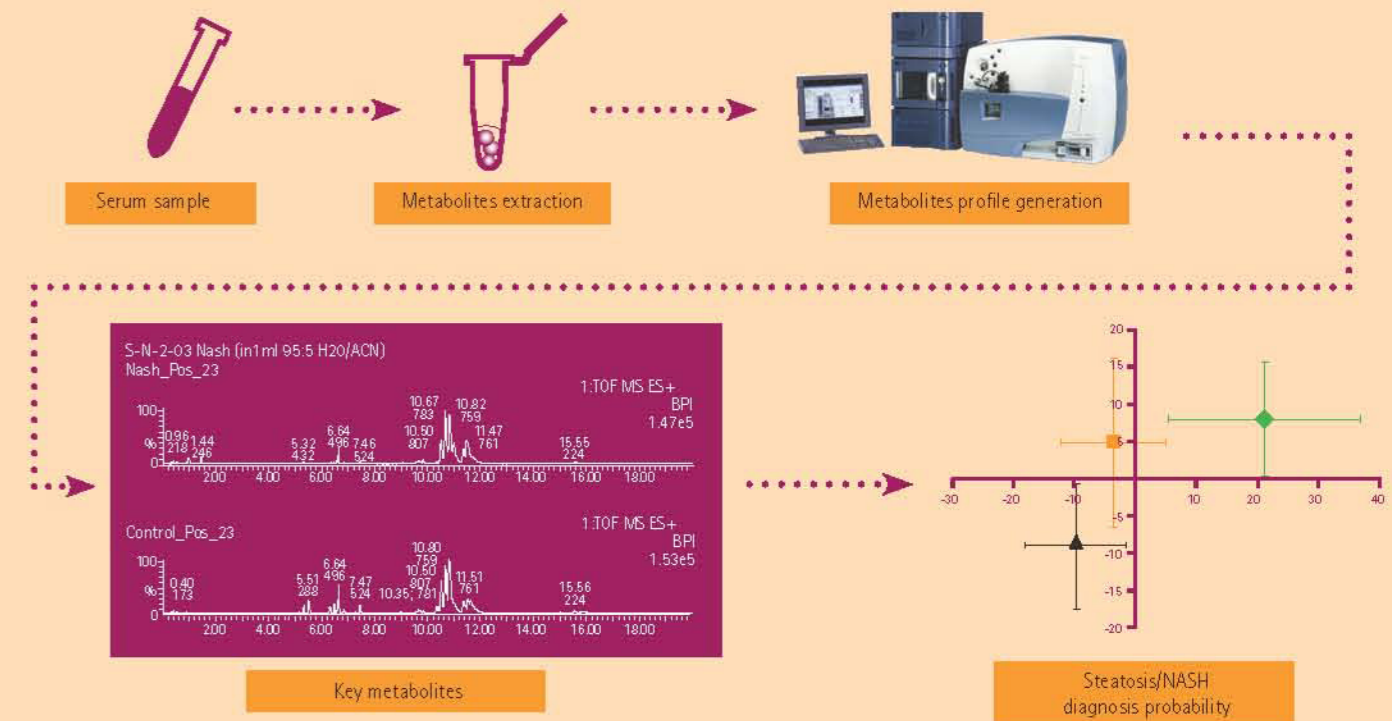
Sample processing and analysis will depend of the type of sample and de procedure needed in each case.



## 3 Diagnosis System

- Clinician prescribes owl liver NAFLD Diagnosis Test using the patients' blood sample.
- Metabolites are extracted from the serum sample.
- An analytical profile of the extracted metabolites is generated.

- The relative levels of key metabolites are checked against a NASH / Steatosis database.
- A report with the analysis results is delivered to the clinician for disease diagnosis.



## 4 Results Report

A complete report is forwarded to the clinician, containing a Steatosis/NASH diagnosis probability.

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