

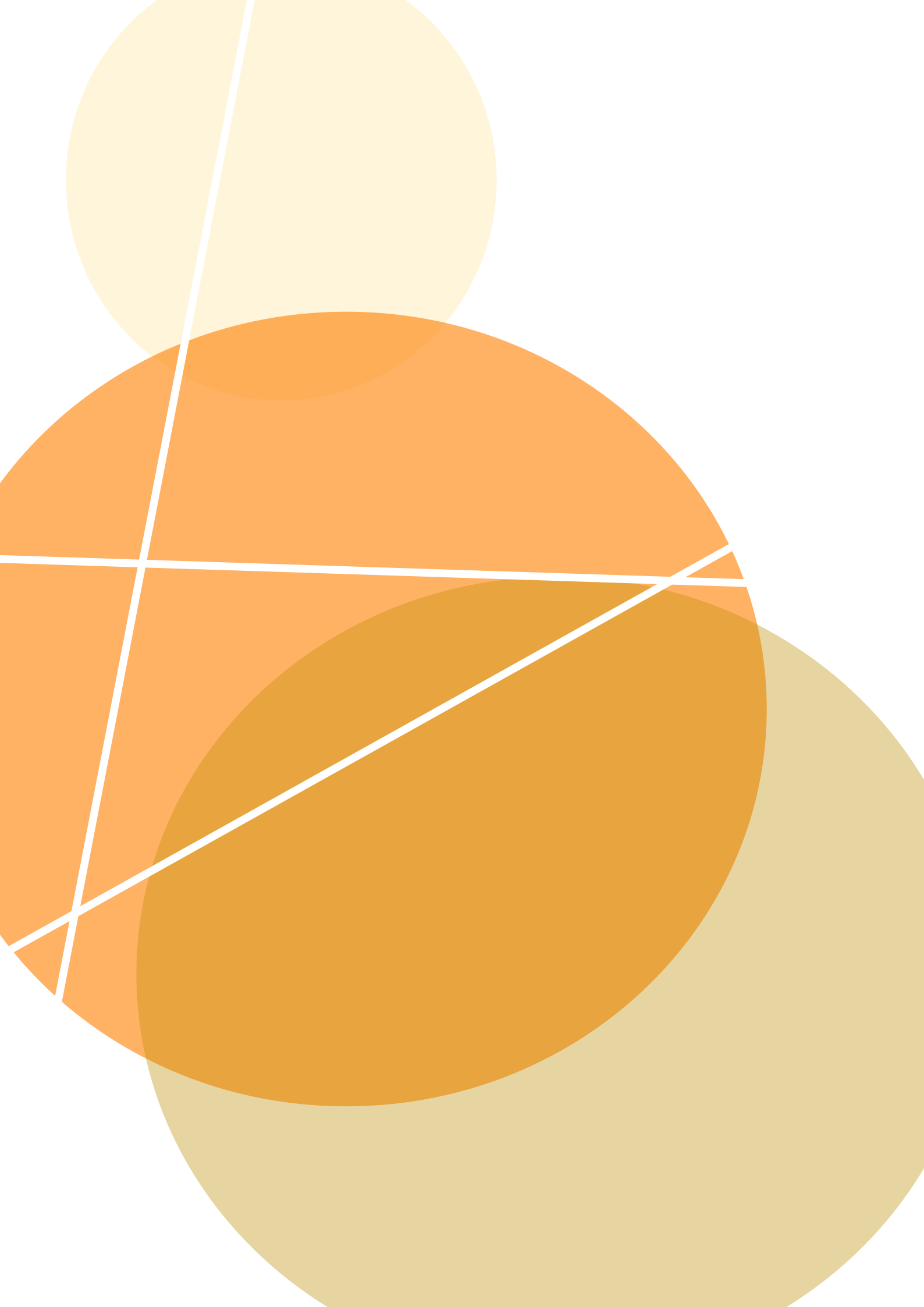


SCIENTIFIC REPORT

2022



Fondazione
Epatocentro Ticino



**ALL PROGRESS
IN THE FIELD OF TREATMENT
FOR LIVER DISEASE
IS A SIGNIFICANT STEP
FORWARD IN IMPROVING
THE QUALITY OF LIFE
OF PATIENTS AFFECTED BY
SUCH DISEASES**

**At the
Foundation
Epatocentro Ticino
we work every day
to reach this goal**



The Foundation in numbers

16

DOCTORS ACTIVE
in research and
training

566

CONTRIBUTIONS
received for research
(000's Swiss francs)

38

PUBLICATIONS
abstracts
textbooks

43

TRAINING
completed



30

COLLABORATION
with entities and
institutions

17

SPONSORS
for training activities

25

FINANCIERS
of research projects

6

PRIVATE
sponsors



Address from Council



Dear readers of the Scientific Report 2022 of the Fondazione Epatocentro Ticino, as I am about to leave the chairmanship of the Foundation, I should like to review the film of the 10 years spent with the Fondazione Epatocentro since 2013, the year of its inception, frames that illuminate the Foundation's highly diversified activities. On the one hand, focus is on the prevention and treatment of liver diseases: antivirals successful in combating hepatitis, the accompaniment of transplantation candidates and post-transplantation care, the competent infectological contributions during the Covid epidemic, and prevention measures. On the other hand, research in many different directions: autoimmune hepatitis with the successful conference on the subject, but also collaboration with the Institute for Biomedical Research (IRB), numerous and original scientific trials such as the use of methylene blue as an antiviral. And then the creation of Biobanks, an indispensable basis for present and future research, an important and welcome addition, including for researchers outside Europe. All this activity has been accompanied by the diligent assumption of hepatology consultancy throughout the Ticino, with the consultants working side by side with hospitals and doctors' surgeries, primarily at Moncucco, which has provided us and will continue to provide us with a solid roof under which to carry on our future activity. This success story has been made possible thanks to the commitment of the diligent scientific collaborators and doctors who, under the leadership of Prof. Cerny and the pharmacist Maurizia Bissig, in a spirit of initiative and sympathetic camaraderie, have built and sustained the Foundation's activities over this decade. Without the enlightened sponsors who have given financial security to our budgets, we would never have made it. To them go our heartfelt thanks and those of our patients. With the appointment of Prof. Hans Jürg Beer to succeed me, I am pleased to see in him the enlightened ability to strengthen the bridges with both the Moncucco Clinic and the University of Lugano (USI) and its associated research branches (IRB). I wish the Foundation and the Epatocentro every success for the benefit of all those patients with liver disease.

A handwritten signature in black ink, appearing to read 'S. Martinoli'.

Prof. Sebastiano Martinoli MD
President: Council of the Foundation



Director's address



2022 brought with it several changes and challenges for the team of the Fondazione Epatocentro Ticino. One above all, a first for the Foundation, was its role as initiator of a clinical study with medication, specifically the trial "*Methylene blue in people with SARS CoV-2 infection*". The study started in the spring of 2021 and ended in autumn 2022: the final data analysis is still ongoing. The study was also the subject of an inspection by Swissmedic, which, thanks to the commitment, expertise and professionalism of the Foundation's team, was brought to a successful conclusion. Our research unit has been selected as a centre for the study of fatty liver disease and is participating in several international studies on its treatment and consequences (steatohepatitis, fibrosis, cirrhosis). Promising new molecules are under investigation, which give the investigating physicians at the Epatocentro Ticino SA a wider choice as regards treatments to be made available to patients. As far as the COVID-19 Biobank is concerned, thanks to the collaboration with the Clinica Luganese Moncucco and the team of Prof. Yves Bochud, the Fondazione Epatocentro Ticino was able to contribute to the "*COVID-19 Host genetics initiative*" study, which analysed the clinical data and correlation of the genetic factors of 49,562 COVID-19 patients with the data of 2 million control patients gathered in numerous centres in Europe, America and Asia. The enormous mass of data continues to be investigated by researchers and new findings have constantly come to light such as, for example, that relating to a region located on chromosome number 3 found in approximately 50% of people in South Asia and 16% of people in Europe, the presence of which has been shown to increase the risk of severe COVID-19 pneumonia and which, moreover, is nothing more than a segment of DNA inherited from Neanderthals. As you read this report, dear readers, you will also discover the rich education and awareness-raising programme implemented by our Foundation in the field of the various manifestations of liver disease. In an attempt to create more and more synergies with entities in our area, the Fondazione Epatocentro Ticino is approaching the University of Lugano and our colleagues at the Ente Ospedaliero Cantonale (Cantonal Hospital Institute), in particular Prof. Andrea De Gottardi and Prof. Pietro Majno-Hurst. Last but not least, I would like to thank the entire operational team of the Fondazione Epatocentro Ticino directed by Maurizia Bissig, our Foundation Board which, under the direction of Prof. Sebastiano Martinoli, wisely supports and guides us. To dear Prof. Martinoli, who left the Foundation Board at the end of the year, I should like to extend my heartfelt thanks for his enthusiasm, helpfulness, sagacity and competence. We shall always remember him as a "great person and a great gentleman".

Prof. Andreas Cerny MD
Director: Fondazione Epatocentro Ticino



OUR COMMITMENT, *TODAY*

Research (p. 10)

Training (p. 33)

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WHO WE ARE

People (p. 52)

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OUR COMMITMENT, *TOMORROW*

Key themes for our future (p. 60)



RESEARCH

THE BEATING HEART OF MEDICAL SCIENCE, WITHOUT WHICH ANY FORM OF PROGRESS BECOMES IMPOSSIBLE

DR LORENZO MAGENTA MD

In 2022, the Foundation completed the projects it had initiated in 2020 in the field of COVID-19: the clinical trial with the drug Methylene Blue and the collection of samples from SARS-CoV-2 patients for the COVID-19 Biobank. Research activities are fast increasing in the field of fatty liver disease (NAFLD/NASH) and its consequences (steatohepatitis, fibrosis, cirrhosis) together with intensive research in the field of viral hepatitis B, C, Delta and E. In the field of autoimmune hepatopathies, national and international collaborations in both clinical and basic research are also fast on the rise. The scientific world's interest in the Fondazione Epatocentro Ticino's Biobanks is growing.



- Cohort studies
- Clinical studies
- Epidemiological studies
- Retrospective studies
- Prospective studies
- “Nested” cohort studies of autoimmune diseases of the liver
- Translational studies in collaboration with IRB
- Biobanks
- Publications



Cohort studies

• • • SWISS HEPATITIS C COHORT STUDY - SCCS

The Swiss Hepatitis C Cohort Study, initiated in 2000, is a systematic and longitudinal study which registers persons resident in Switzerland testing seropositive for HCV (Hepatitis C Virus). This involves collaboration between university hospital outpatient clinics, two large canton hospitals, affiliated laboratories, minor hospitals, and private medical practices. The principal goal consists of providing a data platform for aiding the processes of projects in the sphere of Hepatitis C.

IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>

• • • SWISS TRANSPLANT COHORT STUDY - STCS

This prospective and multi-centered cohort study, initiated in 2006 by several researchers, aims at overall data-gathering at a national level of all patients who have undergone Solid Organ Transplant (SOT) therapy. After a set-up period of two years, the STCS cohort began enrolling patients in May 2008. At the same time, the new law on transplants, promulgated in 2007, required lifelong monitoring for all transplant patients in Switzerland. As a collaborative effort with the Federal Office of Public Health, the cohort ensures compliance with legal requirements.

IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>

• • • SWISS HIV COHORT STUDY - SHCS

Started in 1988, the SHCS is a systematic and longitudinal study in which a major proportion of individuals affected by HIV in Switzerland participate. It involves a collaborative network consisting of university hospital outpatient clinics for infectious diseases, two large canton hospitals, associated laboratories, minor hospitals, and medical practices. The goal consists of providing a data platform useful in supporting numerous significant projects and research in the sphere of HIV infection.

IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>



• • • **SAMMSU (SWISS ASSOCIATION FOR THE MEDICAL MANAGEMENT IN SUBSTANCE USERS) COHORT**

Starting in 2013, this study involves gathering and analysis of anonymous data of patients treated in a program of substitution for opiates. The goal of the study is to follow the course and the transmission of diseases in substance abuse patients or patients that formerly used them. In effect, the characteristics, and collateral effects of various types of treatment were recorded, and furthermore the correlation between the personal, behavioural, and onset or prognoses of these diseases' clinical characteristics were studied. It is possible that hereditary factors of the participants may be identified and documented, in case this may have therapeutic significance.

**IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>**

• • • **SASL35: SLVTS SWISS LIVER VENOUS THROMBOSIS STUDY**

This is a prospective and observational cohort study of patients affected with venous thrombosis of the liver (either a first diagnosis or already diagnosed). The long-term effects of treatments are studied while registering occurrences, risk factors, and results of treatment. Previous diagnoses, serious comorbidities, base parameters, imaging results, pathological results, characteristics of tumours, treatments and their results, hospital admissions, interventions and complications are recorded. Blood and other samples obtained during routine examinations are recorded.

**IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>**

• • • **SASL 38: SWISS AUTOIMMUNE HEPATITIS COHORT STUDY**

The purpose of data and biological sample gathering is to obtain high quality prospective data to obtain epidemiological and natural history clarity, reaction to treatment and the effects of this rare pathology. The Biobank will enable the analysis of particular scientific phenomena and respond to a number of open questions. From 2018 the cohort has been collaborating in research projects with the International Group for Autoimmune Hepatitis (IAIHG <http://www.iaihg.org/>) and with the European Reference Network (ERN RARE-LIVER, <https://www.rare-liver.eu/>).

**IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>**



• • • SASL 39: SWISS PRIMARY BILIARY CHOLANGITIS COHORT STUDY

The primary purpose of this study is to regularly follow up, using standardized methods, on the greatest number possible of patients in Switzerland suffering from primary biliary cholangitis to better understand and treat the disease. At the same time, blood samples are frozen for future further possible research in this field. From 2018 the cohort has been working together with the European Reference Network (ERN RARE-LIVER, <https://www.rare-liver.eu/>).

IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>

• • • SASL 40: SWISS PRIMARY SCLEROSING CHOLANGITIS COHORT STUDY

The primary purpose of this study is to regularly follow up, using standardized methods, on the greatest number possible of patients in Switzerland suffering from primary sclerosing cholangitis to better understand and treat the disease. At the same time blood samples are frozen for future further possible research in this field. From 2018 the cohort has been collaborating in research projects with the European Reference Network (ERN RARE-LIVER, <https://www.rare-liver.eu/>).

IN PROGRESS FOR AN UNLIMITED TIME
CONSULT THE STUDY >>

• • • SWISS HEPATITIS B COHORT STUDY

This involves a multicentric cohort study which registers and longitudinally observes patients with chronic hepatitis B infections. The seroprevalence of the HBs-Antigen is estimated to be 0.3% of the Swiss population, with higher rates among groups at risk (immigrants, IVDU). The rationale for a multicentric cohort is to carefully register patients with chronic hepatitis B using standardized methods, making it possible to carry out scientific projects in the field of hepatitis B.

IN PROGRESS FOR AN UNLIMITED TIME



Clinical studies

- • • A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, PARALLEL-GROUP, MULTIPLE-DOSE, PHASE 2 STUDY TO EVALUATE THE EFFICACY AND SAFETY OF BMS-986263 IN ADULTS WITH COMPENSATED CIRRHOSIS FROM NON-ALCOHOLIC STEATOHEPATITIS (NASH), (IM025017)

The purpose of this study is to demonstrate the antifibrotic quality, safety of and tolerance of BMS-986263, in patients with non-alcoholic steatohepatitis (NASH) and compensated cirrhosis.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>

- • • A PHASE II, MULTICENTER, OPEN-LABEL, RANDOMIZED TWO-YEAR STUDY TO EVALUATE THE EFFICACY AND SAFETY OF DEFERASIROX FILM-COATED TABLET VERSUS PHLEBOTOMY IN PATIENTS WITH HEREDITARY HEMOCHROMATOSIS (ORION)

The purpose of the study is to compare the extent of reaction to Deferasirox FCT as opposed to classic phlebotomy in patients suffering from hemochromatosis, where the reaction is determined by transferrin saturation at $\leq 100 \mu\text{g} / \text{L}$ at 24 months or earlier.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>

- • • A PHASE 3, DOUBLE-BLIND, RANDOMIZED, LONG-TERM, PLACEBO-CONTROLLED, MULTICENTER STUDY EVALUATING THE SAFETY AND EFFICACY OF OBETICHOIC ACID IN SUBJECTS WITH NON-ALCOHOLIC STEATOHEPATITIS. THE REGENERATE STUDY

The aim of the study is to evaluate the effect of obeticholic acid (OCA) as compared to a placebo in the histological improvement in non-alcoholic steatohepatitis (NASH) assessing the following primary endpoints using the points Criteria of the NASH Clinical Research Network (CRN): Improvement in fibrosis by at least 1 stage without a NASH deterioration; Resolution of NASH without deterioration in fibrosis.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>



• • • **DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED, PHASE III STUDY COMPARING NORURSODEOXYCHOLIC ACID CAPSULES WITH PLACEBO IN THE TREATMENT OF PRIMARY SCLEROSING CHOLANGITIS: NUC-5/PSC**

The purpose of the study is to demonstrate the superiority of norursodeoxycholic capsules (norUDCA) as compared with a placebo in treating primary sclerosing cholangitis (PSC) in preventing progression of the disease, ascertained through liver histology and partial normalization of serum levels of alkaline phosphatase in patients affected by PSC.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>

• • • **A PHASE 3, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY EVALUATING THE SAFETY, TOLERABILITY, AND EFFICACY OF CILOFEXOR IN NON-CIRRHOTIC SUBJECTS WITH PRIMARY SCLEROSING CHOLANGITIS (PRIMIS)**

This is a Phase 3 study, randomized, double blind, placebo-controlled to evaluate the safety, tolerability, and efficacy of cilofexor (CILO) in non-cirrhotic subjects. The primary objective of this study is to assess whether CILO reduces the risk of the progress of fibrosis in non-cirrhotic subjects with primary sclerosing cholangitis (PSC).

CLINICAL TRIAL: CONCLUDED
CONSULT THE STUDY >>

• • • **NON-INVASIVE ASSESSMENT OF LIVER HARDNESS AND STEATOSIS IN PATIENTS WITH FATTY LIVER DISEASE**

This is a prospective study with the aim of determining what non-invasive methods as between Fibroscan/CAP and ultrasound/ARFI (Acoustic Radiation Force Impulse Imaging) would be more efficacious in determining the hardness and steatohepatitis in patients suffering from fatty liver disease.

CLINICAL TRIAL: IN PROGRESS

• • • **A PHASE 3, MULTINATIONAL, DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED STUDY OF MGL-3196 (RESMETIROM) IN PATIENTS WITH NON-ALCOHOLIC STEATOHEPATITIS (NASH) AND FIBROSIS TO RESOLVE NASH AND REDUCE PROGRESSION TO CIRRHOSIS AND/OR HEPATIC DECOMPENSATION**

This is a Phase 3 multinational, double-blind, randomized, placebo-controlled study of MGL-3196 (Resmetirom) in patients with non-alcoholic steatohepatitis (NASH) and fibrosis to resolve NASH and reduce progression to cirrhosis and/or hepatic decompensation. The



primary objective of the study is the resolution of NASH (absence of ballooning and slight/absent inflammation) associated with a reduction of at least 2 points in the non-alcoholic fatty liver disease (NASH) occurrence scoring system and without a deterioration in fibrosis confirmed by liver biopsy 52 weeks after treatment administered to F2 and F3 patients.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>

- • • **A DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED STUDY AND OPEN-LABEL LONG TERM EXTENSION TO EVALUATE THE EFFICACY AND SAFETY OF ELAFIBRANOR 80 MG IN PATIENTS WITH PRIMARY BILIARY CHOLANGITIS WITH INADEQUATE RESPONSE OR INTOLERANCE TO URSODEOXYCHOLIC ACID**

This is a double blind, randomized placebo-controlled and open-label term extension Phase 3 study to evaluate the efficacy and safety of Elafibranor 80 mg in patients with primary biliary cholangitis with inadequate response or intolerance to ursodeoxycholic acid. The aim of the study is to evaluate the effect of Elafibranor (80 mg/p.d.) on cholestasis, on the normalization of alkaline phosphatase (ALP) as well as on pruritus, over 52 weeks of treatment as opposed to the placebo.

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>

- • • **EVALUATION OF THE EFFICACY OF METHYLENE BLUE ADMINISTRATION IN SARS-COV-2 AFFECTED PATIENTS: A PHASE 2, RANDOMIZED, PLACEBO-CONTROLLED, SINGLE BLIND CLINICAL TRIAL**

This is a Phase 2, randomized, placebo-controlled, single blind clinical trial on the efficacy of methylene blue against SARS-CoV-2 infection in patients recently diagnosed with a SARS-CoV-2 infection. The purpose of the study is to evaluate the efficacy of methylene blue against SARS-CoV-2 in patients with a recent diagnosis of infection with SARS-CoV-2, not only to assess the efficacy of methylene blue of COVID-19 in patients with a recent diagnosis of infection with SARS-CoV-2 but also to ensure proper adherence to treatment with methylene blue in patients with Covid-19.

CLINICAL TRIAL: CONCLUDED
CONSULT THE STUDY >>



- • • **TRANSFORM: A 52-WEEK, RANDOMIZED, PLACEBO-CONTROLLED, DOUBLE-BLIND, ADAPTIVE PHASE 2B/3 TRIAL OF SETANAXIB WITH A 52-WEEK EXTENSION PHASE IN PATIENTS WITH PRIMARY BILIARY CHOLANGITIS (PBC) AND ELEVATED LIVER STIFFNESS**

52-week, randomized, placebo-controlled, double-blind adaptive phase 2B/3 of Setanaxib with a 52-week extension phase in patients with Primary Biliary Cholangitis (PBC) and elevated liver stiffness. The aim of the study is to evaluate the effect of Setanaxib on the biochemical response at week 52 in patients with PBC and high liver stiffness and intolerance or inadequate response to ursodeoxycholic acid (UDCA).

CLINICAL TRIAL: IN PROGRESS
CONSULT THE STUDY >>



Epidemiological studies

- • • **RETROSPECTIVE ANALYSIS OF THE OUTCOME OF PATIENTS WITH FATTY LIVER DISEASE FOLLOWED AT THE EPATOCENTRO TICINO BETWEEN 2009 AND 2019**

This is a retrospective analysis with the purpose of providing a preliminary global view of the effect of the fatty liver disease in the Italian region of Switzerland to endeavour to determine whether there are factors that could show an increasing spread of the disease.

EPIDEMIOLOGICAL ANALYSIS: IN PROGRESS

- • • **CRiPSI: COVID-19 RISK PREDICTION IN SWISS ICUs-TRIAL**

This is an epidemiological analysis aimed at identifying genetic risk factors as clinically predictive in relation to hospital mortality or near-death results and the presence of respiratory, neurocognitive, or other symptoms in a long-term clinical follow-up of patients critically ill with Covid-19.

EPIDEMIOLOGICAL ANALYSIS: CONCLUDED



Retrospective studies

- • • LOOK-BACK PROCEDURE TO REACH NON-COMPLIANT AND LOST TO FOLLOW-UP HBV PATIENTS

This is a retrospective study aimed at identifying patients with chronic hepatitis B virus (HBV) who are non-compliant or lost to follow-up to reach them and reintroduce them into the treatment system.

RETROSPECTIVE: CONCLUDED

- • • EFFECT OF DIRECT ACTING ANTIVIRAL DRUGS ON THE OCCURRENCE AND RECURRENCE OF INTRA- AND EXTRA-HEPATIC MALIGNANCIES IN PATIENTS WITH CHRONIC HEPATITIS C

This is a multicentric observational cohort study at national level aiming at evaluating whether the sustained virological response (SVR) reached by Direct Acting Antiviral (DAA) drugs leads to greater risk of infection and/or reinfection HCC (hepatocellular carcinoma), clear cell carcinoma (CCC) and/or extra-hepatic malignancies in Swiss patients with chronic hepatitis C (HCV) by comparison to the SVR recorded with regimes with a long-acting interferon (Peginterferon alfa) base.

RETROSPECTIVE: CONCLUDED

- • • OUTCOME OF LIVER TRANSPLANT RECIPIENTS WITH AUTOIMMUNE HEPATITIS AS INITIAL INDICATION IN THE SWISS TRANSPLANT COHORT STUDY

This is a study that analyses and describes in the transplant cohort, the outcome of transplants in patients who had transplants for autoimmune hepatitis (AIH).

RETROSPECTIVE: IN PROGRESS

- • • LOOK-BACK PROCEDURE TO REACH NON-COMPLIANT AND LOST TO FOLLOW-UP HCV PATIENTS

This is a retrospective analysis with the aim of identifying untreated or lost to follow-up HCV patients, to reach them and reintroduce them into the treatment system.

RETROSPECTIVE: CONCLUDED



• • • **ETIOLOGIES AND OUTCOME OF SUPER-URGENT LIVER TRANSPLANTATION IN SWITZERLAND**

This is a retrospective analysis with the aim of describing outcomes of super-urgent liver transplants in Switzerland.

RETROSPECTIVE: IN PROGRESS

• • • **STUDYING THE PATHOBIOLOGY OF COVID-19 USING TISSUE- AND CELL-BASED ANALYSIS**

This retrospective analysis aims at understanding the pathobiology of COVID-19 by analysing tissue samples and cells of patients infected with SARS-Cov-2 using different methods and understanding the process of collateral effects on the liver after vaccination against SARS-Cov-2.

RETROSPECTIVE: IN PROGRESS



Prospective studies

- • • EFFECT OF ANTI COVID-19 mRNA VACCINES ON DEVELOPMENT OR WORSENING OF AUTOIMMUNE REACTIVITY IN PATIENTS WITH AUTOIMMUNE LIVER DISEASE

The purpose of the study is to investigate the rise in the development or worsening of an existing autoimmune reactivity in patients with autoimmune liver disease and in health management after vaccination with mRNA COVID-19 vaccinations.

PROSPECTIVE: IN PROGRESS



“Nested” cohort studies for autoimmune diseases of the liver

- • • **DIAGNOSTIC ACCURACY OF LIVER AUTOANTIBODY ASSAYS AND DEFINITION OF THE AUTOANTIBODY PROFILE IN THE SWISS AUTOIMMUNE LIVER DISEASE COHORTS**

Study aimed at assessing the accuracy of diagnoses for autoimmune hepatic diseases of four *in vitro* automated diagnostic tests for autoantibodies and defining the autoantibody profile associated with AIH, PBC, PSC and variant syndromes in the scope of the Swiss AIH, PSC and PBC cohort.

NESTED: IN PROGRESS

- • • **ANTI-NUCLEAR ANTIBODY ANTIGENETIC TARGETS IN TYPE 1 AUTOIMMUNE HEPATITIS**

The purpose of the present project is to identify, via immunoprecipitation, the molecular targets of ANA in a cohort of untreated Type 1 ANA-positive patients affected by AIH and to investigate the clinical characteristics associated with the specific ANA and AIH antigens.

NESTED: IN PROGRESS

- • • **QUANTIFICATION OF POLYREACTIVE IMMUNOGLOBULIN G TO AID IN THE DIAGNOSIS OF AIH VS DILI**

The aim of this project is to demonstrate that pIgG have diagnostic value in populations with different ethnicities and geographical backgrounds to discriminate AIH from non-AIH liver disease, that they can help distinguish AIH from AIH-like DILI and from classical DILI, and finally to predict steroid dependence in acute liver disease at 3 – 6 months after occurrence.

NESTED: IN PROGRESS



• • • PROFILE OF PBC-RELATED AUTOANTIBODIES AND DISEASE PROGRESSION IN PBC

The primary objective of this study is to better define the prognostic role of the antibodies anti-gp210, anti-sp100, anti-centromere, anti-Kelch-like12 (KLHL12) and anti-hexokinase 1 (HK1) on disease progression in PBC using the Global PBC Study Group cohort.

NESTED: IN PROGRESS



Translational studies in collaboration with IRB

- • • AUTOREACTIVE T, B AND REGULATORY T CELLS TARGETING SEPSECS IN TYPE 1 AND TYPE 2 AUTOIMMUNE HEPATITIS AND AUTOIMMUNE SCLEROSING CHOLANGITIS

The scope of this study is to identify and characterize T cells which recognize SEPSECS in AIH and ASC.

IN PROGRESS



Biobanks

- • • **AILD BIOBANK - AUTOIMMUNE LIVER DISEASES**

Certified entity established to collect, conserve, and manage samples of biological material and patient clinical data to make them available for clinical research. The AILD Biobank is thus not only a systematic collector of biological samples, but also of the clinical data of patients affected by autoimmune diseases of the liver (autoimmune hepatitis, primary biliary cholangitis, primary sclerosing cholangitis) and represents a platform for future research.

BIOBANK: IN PROGRESS
CONSULT THE STUDY >>

- • • **BIOBANK COVID-19 TICINO: COLLECTION OF DATA AND SAMPLES OF COVID-19 POSITIVE PATIENTS**

Certified entity established to collect, conserve, and manage samples of biological material and the clinical data of patients affected by COVID-19 hospitalized at the Clinica Luganese Moncucco with the goal of making same available for clinical research. The COVID-19 Biobank is thus not only a systematic collector of biological samples, but also of the clinical data of patients affected by COVID-19 and serves as a platform for future research with the aim of studying the effects of this dreadful virus and find possible treatments for same.

BIOBANK: IN PROGRESS
CONSULT THE STUDY >>



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Accettato: 26. 4 2021

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• • • EDITORIALS 2022

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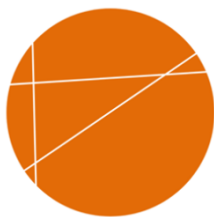


TRAINING

LEARNING FROM AND DISCUSSING WITH REAL TEACHERS KEEPS THE PASSION FOR OUR WORK ALIVE

PD DR BENEDETTA TERZIROLI BERETTA-PICCOLI MD

The Foundation, which is consistently dedicated to research and training, firmly believes in the importance of promoting innovation and advancing the boundaries of knowledge and healthcare in the field of hepatic diseases (viral hepatitis, autoimmune hepatitis, fatty liver disease and non-alcoholic steatohepatitis (NASH), alcoholic liver disease); to this end we have organized numerous training sessions, symposia, seminars and conferences for doctors practicing in Ticino, for para-medical personnel, as well as for the general public and we have established and made available to doctors practicing within the region a number of tools useful for diagnosis/triage and for the management of hepatic patients. Additionally, in the field of training, the Foundation has, since 2019, been able to offer ultrasound courses recognized and certified by SGUM and POCUS courses for doctors and medical students and, in the research field as well, it supervises and trains medical students at the University of Lugano.



- Training events ● Ticino Symposium on Hepatology
- Swiss Autoimmune Liver Disease Meeting ● Annual discussion platform ● Newsletter ● Ultrasound Academy
- Participation of speakers at symposia and training sessions



Training events

• • • REFRESHER COURSES AND DISCUSSION EVENTS

The Foundation organized a series of refresher courses and discussion events. Part of the training, of a specialized nature, was designed for specialists in the sector and consultants to the Epatocentro; other parts are more specifically intended for family doctors and specialists involved in the treatment of patients with hepatic problems and which will require the intervention of external specialists.

• • • THURSDAY LECTURES

Meetings where the nature of the discussion points covered are extremely specialized, the structure of the meeting allows interested doctors to consider and discuss clinical cases.

When	Topic	Speaker
13.01.2022	Diagnosis and therapy of inflammatory bowel diseases	Dr Vera Kessler Brondolo MD
28.04.2022	Liver and COVID-19	Prof. Andreas Cerny MD & Dr Chiara Becchetti MD
08.09.2022	Surgical and non-surgical problems after liver transplantation	Dr Giulia Magini MD
10.11.2022	A glimpse into the future of Hepatology	Prof. Franco Negro MD
15.12.2022	Cholestasis: The significance of ERCP and Spyglass	Prof. Alessandro Repici MD



• • • SCHOOL OF HEPATOLOGY

Online training enables us to learn from leading Swiss experts in the sector; training is organized by the SASL (Swiss Association for Study of the Liver) with which the Fondazione Epatocentro Ticino has traditionally enjoyed direct links.

When	Topic
14.03.2022	SASL School of Hepatology, Number 35
13.06.2022	SASL School of Hepatology, Number 36
12.09.2022	SASL School of Hepatology, Number 37
12.12.2022	SASL School of Hepatology, Number 38

• • • MEETING OF EXPERTS

Online meetings between Swiss experts in the field of autoimmune liver diseases to discuss clinical cases and exchange opinions.

When	Topic
29.11.2022	Pediatric Clinical case discussion of Swiss Autoimmune Liver disease Cohort Studies

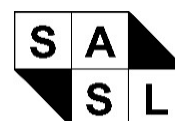


Ticino Symposium on Hepatology

From 2013 the Ticino Symposium on Hepatology has offered medical specialists and family doctors a unique window onto **the latest innovations concerning diseases affecting the liver**. The challenges presented by this pathology are addressed by persons who are outstanding in the field, both nationally and internationally, and who, on this occasion, share their research and the results of their findings.

When	Topic	Speaker
13.10.2022	Chronic liver failure clinical case	Prof. Andrea de Gottardi MD
	Taking care of cirrhosis from decompensation to acute on chronic liver failure	Prof. Paolo Angeli MD
	Local HCC treatment: which, how, when	Dr Stefano Cappio MD
	Clinical Case Alpha-1 antitrypsin deficiency	PD Dr Benedetta Terziroli Beretta-Piccoli MD
	Alpha-1 antitrypsin deficiency: liver	Prof. Giorgina Mieli-Vergani MD
	Alpha-1 antitrypsin deficiency: lung	Dr Sándor Györík MD
	Wilson's disease: how not to miss the diagnosis	Prof. Darius Moradpour MD

In partnership with:



Swiss Autoimmune Liver Disease Meeting

The Swiss conference on autoimmune diseases of the liver, the fourth edition of which will be held in 2023, is unique in its class at national level, and specifically for hepatologists and immunologists from throughout the country and from abroad interested in being updated on developments in basic research and clinical strategies aimed at combating autoimmune diseases of the liver.

When	Topic	Speaker
20.11.2020 21.11.2020	Digital 3rd Swiss Autoimmune Liver Disease Meeting	
	Genetics in primary biliary cholangitis beyond GWAS	Prof. Pietro Invernizzi MD
	Therapeutic developments in autoimmune liver diseases	Prof. Tom Hemming Karlsen MD
	There is more than one cause for primary sclerosing cholangitis	Prof. Richard Thompson MD
	Autoimmune hepatitis type 2	Prof. Giorgina Mieli-Vergani MD
	Autoantibodies in autoimmune liver diseases: clinical aspects	Prof. Luigi Muratori MD
	Beyond guidelines	Prof. Michael Manns MD
	Living in the Liver: overcoming constraints on T cells	Prof. Mala Maini MD
	Anti-tumour autologous T-cell therapy for HBV-associated hepatocellular carcinoma	Prof. Antonio Bertolotti MD
	Animal model of autoimmune liver diseases	Prof. Urs Christen MD
	The impact of gut microbiome on T-cell trafficking	Prof. Giandomenica Iezzi MD
	Immunometabolic drugs	Prof. Michael Trauner MD



Drug-induced liver injury and autoimmunity	Prof. Raul Andrade MD
Post-transplant autoimmune liver diseases	Prof. Diego Vergani MD
Gut-liver axis	Prof. Antonio Moschetta MD
Oral session:	
Antibody-mediated clearance of serum HBsAg has minimal impact on CD8+ T cell responses in mouse models of HBV pathogenesis	Valeria Fumagalli
Cell specific transcriptomic analyses reveals a disassociation between treatment response and peripheral markers of immune activation in primary biliary cholangitis	Victoria Mulcahy
Gamma-glutamyl transferase is a prognostic biomarker in primary biliary cholangitis and improves risk stratification based on the alkaline phosphatase	Alessio Gerussi
The PBC Foundation App: What Have We Learned and What Should We Do Next?	Robert Mitchell-Thain
What have we learned and what should we do next	Prof. Pietro Invernizzi MD
CHAIRS:	
PD Dr Benedetta Terziroli Beretta-Piccoli MD, Prof. Andreas Cerny MD, Prof. Giorgina Mieli-Vergani MD, Prof. Michael Manns MD, Prof. Pietro Majno MD, Prof. Andrea De Gottardi MD, Prof. Maria Isabel Lucena MD, Prof. Diego Vergani MD, PD Dr Florian Bihl MD, Prof. Michael Trauner MD	



Annual discussion platform

The annual round table offers an occasion to discuss themes linked to the development of excellence and sustainability for the healthcare system in Ticino. The rendezvous is organized by the USI (Italian University of Switzerland), which, with its new biomedical faculty, plays an ever more important role in academic and training spheres. Stakeholders from local and national healthcare systems gathered around the same table for the occasion, to share their own experiences and points of view on issues tabled.

When	Topic	Speaker
15.11.2022	<p>Coordinated Care: a way to more effective and sustainable medical treatment?</p> <p>More informed patients, insurance models that loosen the centrality of the treating physician, an elderly population with several health problems and different specialist referrals. A fragmented picture that risks leading patients along ineffective and costly treatment paths. This gives rise to the need for "coordinated care", i.e. care models focused on the needs of the patient in order to provide the right services, with utmost efficiency.</p>	<p>Giovanni Pedrazzini, Dean of the Faculty of Biomedical Sciences USI; Raffaele De Rosa, State Counsellor and Director of the DSS; Céline Antonini, Health Policy Project Manager and Head of Curafutura for Italian-speaking Switzerland; Claudia Gamondi, Head of the Palliative and Supportive Care Clinic, IOSI, EOC; Andreas Cerny, Director of Fondazione Epatocentro Ticino; Alberto Moriggia, Ingrado Health Director; Giorgio Merlani, –Cantonal Physician; Carlos Garcia, ICT Architect at EOC and President e-Health Ticino; Franco Denti, President of the Medical Association of Canton Ticino.</p>

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In partnership with



Newsletter: The Liver Bulletin

“The Liver Bulletin” is the newsletter produced by the Foundation and addressed to all doctors in Ticino. It has been specifically conceived to keep doctors constantly updated on the latest information in the field of hepatology and of forthcoming events; in each edition a specialist doctor presents a topic in the field of hepatology in which it is discussed in detail.

To receive the newsletter simply sign-up online at www.epatocentro.ch

When	Topic	Author
23.02.2018	Newsletter #6 – Hyperferremia in the study of medicine	Dr M. Balmelli MD
08.06.2018	Newsletter #7 – Hepatic Biopsies	Dr D. Hagara MD
04.12.2018	Newsletter #8 – Wilson’s Disease	Dr A. Robatto MD
28.03.2019	Newsletter #9 – Hepatitis E	Dr L. Magenta MD
27.01.2020	Newsletter #10 – Hepatic encephalopathy	Dr A. Griffa MD
15.07.2020	Newsletter #11 – CEUS (Contrast Enhanced Ultrasound)	Dr M. Gobbo MD
27.01.2021	Newsletter #12 – SARS-Cov2 the liver	Dr M. Balmelli MD
17.06.2021	Newsletter #13 – Autoimmune hepatitis	PD Dr B. Terzioli Beretta-Piccoli MD
09.12.2021	Newsletter #14 – Hepatitis B	Dr L. Magenta MD
24.10.2022	Newsletter #15 – Liver disease and substance abuse	Dr A. Bruno MD



Ultrasound Academy

The Foundation, which performs 2 500 ultrasound examinations annually, since 2019, has offered interested doctors, ultrasonography (SGUM) courses (abdominal module) and POCUS. The Foundation's Ultrasound Academy staff consists of 4 SGUM tutors and 8 SGUM doctors. They are exposed to well-documented cases showing clinical profiles, laboratory findings and often also NAFLD histopathology findings such as hepatic cirrhosis, hepatobiliary pathologies, focal lesions of the liver, kidneys, and pancreas. State of the art ultrasound equipment will be used for ultrasound examinations.

For more information consult the site www.epatocentro.ch/la-fondazione



Participation of speakers at symposia and training sessions

When	Topic	Speaker
04.02.2022	Management of alcohol problems after transplantation	Dr Alberto Moriggia MD
	Hepatology training Civic Hospital Lugano	
20.02.2022	MAFLD (Metabolic Fatty Liver Disease)	Dr Lorenzo Magenta MD
	OMCT, Aragonite Manno room	
02-03.03.2022	How Clinical Practice Guidelines refer to these conditions	PD Dr Benedetta Terziroli Beretta-Piccoli MD
	Consensus Conference on DI-AIH, Malaga Spain	
14.03.2022	POCUS course for medical students	Dr Daniel Hagara MD
18.03.2022	Post-hospitalisation alcohol management	Dr Alberto Moriggia MD
	Hepatology training Lugano Civic Hospital	
21.03.2022	POCUS course for medical students	Dr Daniel Hagara MD
31.03-01.04.2022	Raising of liver parameters workshop	PD Dr Benedetta Terziroli Beretta-Piccoli MD
	Primary Care Academy, 17. Multidisciplinary update for general practitioners, Villa Sassa Lugano	
04.04.2022	POCUS course for medical students	Dr Daniel Hagara MD



10–11.04.2022	Course 3 SGUM Castelrotto	Dr Andrea Griffa MD
11.04.2022	POCUS course for medical students	Dr Daniel Hagara MD
30.04.2022	Ist die Pandemie vorbei? Wie weiter? Medical association Helsana, Hotel Grappoli, Sessa	Prof. Andreas Cerny MD
07.05.2022	Ultrasound course USI Lugano Ultrasound Course Usi	Dr Andrea Griffa MD
13.05.2022	When alcohol is too much and what damage it causes Hepatology training Lugano Civic Hospital	Dr Alberto Moriggia MD
16.05.2022	POCUS course for medical students	Dr Daniel Hagara MD
23.05.2022	POCUS course for medical students	Dr Daniel Hagara MD
24.05.2022	Alcohol when it's too much. It's not just too much alcohol Cantonal Alcohol Day, Cadempino Event Center	Dr Alberto Moriggia MD Dr Lorenzo Magenta MD
03.06.2022	Evolution of addiction in Ticino. Conference within the CAS Addiction – SUPSI	Dr Alberto Moriggia MD
07.06.2022	Eye on foie gras Bellinzona Medical Circle, State Bank Auditorium, Bellinzona	Dr Lorenzo Magenta MD
14.09.2022	Organ donation and transplantation, Monte Ceneri Lions Club, Villa Sassa, Lugano	Prof. Andreas Cerny MD
15.09.2022	The Swiss Primary Biliary Cholangitis Cohort Study: Report on the first five years 2017 – 2021 Oral presentation at SGG – SGVC – SASL & SVEP Annual Meeting 2022, Interlaken	PD Dr Benedetta Terziroli Beretta–Piccoli MD
17–18.09.2022	Peer tutor preparation course	Dr Daniel Hagara MD



23.09.2022	Opioid agonist therapy Conference within the CAS Addiction – SUPSI	Dr Alberto Moriggia MD
29.09.2022	Synlab Academic Day	Prof. Andreas Cerny MD
13.10.2022	Clinical Case Alpha-1 antitrypsin deficiency	PD Dr Benedetta Terziroli Beretta-Piccoli MD
15.11.2022	An integrated care of the hepatopathic patient USI, Lugano, Platform of Health	Prof. Andreas Cerny MD Dr Alberto Moriggia MD
03.12.2022	Course 1 SGUM	Dr Andrea Griffa MD
08.12.2022	Covid-19 and the liver Symposium 60 years Prof. Moradpour, Unil Lausanne	Prof. Andreas Cerny MD
13.12.2022	Eye on foie gras Medical Circle 3 Valleys, Bibliomedia Switzerland, Biasca	Dr Lorenzo Magenta MD



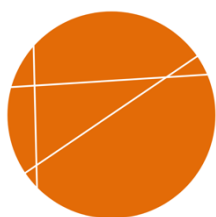


THE PATIENT

THE DAILY DOCTOR-PATIENT RELATIONSHIP IS THE FOUNDATION OF MEDICAL CARE. THIS RELATIONSHIP IS THE BEACON THAT GUIDES THE CLINIC AND CHARTS THE COURSE OF TRAINING AND RESEARCH.

DR ALBERTO MORIGGIA MD

Epidemiological studies carried out in the last year have shown how the number of patients affected by hepatic pathologies has increased overall. This has led the Foundation to develop a patient management strategy focusing directly on the particularities of the Ticino Canton. Furthermore, it is important to create a network of synergies drawing together various elements of the healthcare sector whether public or private, as well as a network of specialized clinics which assures integrated and comprehensive patient management. A collaboration that has been in place for years and which puts the patient at the centre is that between the Foundation and Ingrado for the care of patients with addictions.



- Patient management and treatment strategies
- Means of implementation



Patient management and treatment strategies

• • • A NEW STRATEGY: 7 OBJECTIVES FOR BETTER PATIENT MANAGEMENT

The complexity of the situation in Ticino has led the Fondazione Epatocentro Ticino to consider a strategy which will enable patients affected by hepatic pathologies to get treatment from the best specialists available in the Ticino region. The strategy which the Foundation intends to advance, with the daily collaboration and experience of the doctors at the Epatocentro Ticino, sets out 7 different objectives:

Objective	Description
1. Strengthening and extension of the “Hub and spoke” operational system	This organisational model presupposes that specialized and expensive skills are required for certain complex conditions and diseases and that it is not possible to ensure these are readily available and widespread throughout the entire region. For this reason, organisations provide for the concentration of complex cases at a limited number of Hub sites (centres of excellence, in our case at our main centre at 5A via Soldino, Lugano) and at peripheral Spoke centres (in our case external sites at Locarno, Bellinzona, Biasca, Taverne Chiasso) where patient management takes place for those patients who do not exceed a certain threshold of complexity. The term “Hub and Spoke” derives from the aviation industry.
2. Development of clear standardized programs	Develop a series of well-defined standard operating procedures based on national and international guidelines, and at the same time implement a program which can provide clear treatment protocols for chronic patients, in parallel with effective pharmaco-vigilance, to ensure monitoring and follow-up of all patients according to their specific requirements, applying the most up-to-date quality standards.
3. Development of a patient database	Support and coordinate the implementation of a database which will enable patients to be grouped according to their diagnosis, treatment, and outcomes and, in addition to process the data in accordance with resources used. In so doing, it will be possible to analyse a cross section of the situation in Ticino from various points of view with information that is always accurate and up-to-date, and which meet the specific needs of a specialist centre.

- | | |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4. Measures to ensure the quality and safety of treatments | Regular, clinically oriented meetings; conferences dedicated to critical incidents; specialized training aimed at doctors and paramedic personnel. In collaboration with the Epatocentro Ticino, indicators for and monitoring of treatment care for different types of patients will be defined, following regular assessments of the degree of satisfaction of patients and doctors with respect to the services offered by a specialist centre. |
| 5. Participation in existing epidemiological studies | Participation in existing epidemiological studies (Swiss cohort for Hepatitis B, for Hepatitis C, Swiss transplant cohort etc.) and the development of projects related thereto, collaboration in the creation of international registries (International Autoimmune Hepatitis Group IAIHG, European Reference Network for Rare Liver Diseases ERN–Rare–Liver) as well as participation in national strategies in combating Hepatitis B and C (http://www.hepatitis-schweiz.ch/en/why-a-hepatitis-strategy) and active collaboration in organized initiatives. |
| 6. Support the establishment of new cohort studies | Promoting and establishing cohort studies for Primary Biliary Cholangitis (PBC), Primary Sclerosing Cholangitis (PSC) and Autoimmune Hepatitis (AIH), involving other hepatology centres nationwide, as well as participating in studies such as the Swiss Cohort Study for Hepatitis B, Hepatitis C, and the SAMMSU cohort study for the management of the medical consequences of substance use. |
| 7. Establishment of certified Biobanks and collaboration at international level | Biobanks, facilities certificate established to gather, conserve, and manage samples of biological material and patient clinical data to make same available for clinical research to be able to offer scientific explanations and search for possible treatments for certain diseases such as, for example, primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC) and for autoimmune hepatitis (AIH) and COVID–19. The AILD Biobank and the COVID–19 Biobank of the Foundation, one–of–a–kind in Switzerland, are available on international platforms and accessible to researchers worldwide. |

Means of Implementation

• • • BLUE BOOK

The institute of Medicine (USA) sets out guidelines as recommendations for clinical practice, developed through a systematic process, with the objective of helping doctors and patients in deciding which healthcare measures are most appropriate in certain clinical situations.

The Fondazione Epatocentro Ticino believes in the importance of a series of guidelines based on scientific evidence, over the years, has advanced a project to compile the principal recommendations in the management of patients affected by specific pathologies.

In this way, the Blue Book sets out indications for the management of patients affected by the following pathologies:

HBV	Venous Thromboses	CEUS	Autoimmune Hepatitis
Hepatitis E	Hepatitis D	Focal liver lesions	Primary biliary cholangitis
Complications of Cirrhosis	Hyperferremia	Primary sclerosing cholangitis	Wilson’s disease
Hepatocarcinoma and new treatments	Liver transplants	HCV update	Updates on treatment for Hepatitis C
Increase in hepatic testing	ASH Hepato-pathology Alcohol-related	NAFLD/NASH	Professional liver diseases
Pancreatic cysts	Hepatitis A	Drug-induced liver diseases	Liver diseases in pregnancy
Paracentesis portal hypertension – Baveno VII 2022	Liver biopsy	Genetic cholestatic liver diseases	Hepatorenal syndrome
Portal hypertension – Baveno VII			

• • • PATIENT ORIENTED GUIDELINES AND PUBLIC CONFERENCES

The Fondazione Epatocentro Ticino has also produced a series of documents specifically for the public which sets out in clear language medical aspects and indications useful in daily life for anyone living with liver disease and organizes public conferences on specific topics.

THE DETAILS



ULTRASOUND ACADEMY: TRAINING FOR A SONOGRAPHY IN EXPERT HANDS

DR DANIEL HAGARA MD

Since 2019, the Foundation has been recognized as a training institution by the Swiss Society of Ultrasound in Medicine (SSUM), the umbrella organisation for all those involved in the application of diagnostic ultrasound in medicine. A commitment that, since then, has seen it at the forefront of continuing education and the issuing of the Certificates of Proficiency in Sonography (abdomen module: basic course, advanced course and course III final and POCUS course).

at the Foundation: **4** SSUM tutors, **8** SSUM doctors • per year, **2'500** ultrasounds, **90** CEUS, **50** liver biopsies, **80** ascites punctures • **1'064** certificates of supervised ultrasound examinations issued since 2019 • **60%** participating doctors • **40%** participating students.

Address from Dr Daniel Hagara MD

- • • **WHY HAS THE FOUNDATION BECOME AN SSUM TRAINING INSTITUTE?**
WE ARE WELL AWARE OF THE IMPACT OF SONOGRAPHY ON MEDICAL PRACTICE.
The doctors working in the Foundation have personally experienced the key role that sonography plays in the diagnosis and monitoring of disease evolution. Convinced that ultrasound is an essential tool for health professionals, we believe in the value of training in this field, which, for many of us doctors in the Foundation, is a commitment that goes back well over 15 years. With the aim of facilitating this, almost 5 years ago, the Foundation joined the SSUM training network to offer courses aimed at issuing certificates of competence recognized by the same organisation.
 - • • **WHAT DOES TAKING THIS PATH MEAN FOR THE FOUNDATION?**
AN INTENSE TRAINING EXPERIENCE.
The fact of seeing many different cases becomes a unique learning experience. At the Foundation, we come into contact with patients, see a large and interesting number of case studies, pathologies and cases defined by clinical, laboratory and often histological profile (e.g. transplanted livers, tumours, rare diseases), affecting the liver, but also other organs. Collaboration with other institutions (e.g. University Hospitals of Berne and Geneva) makes possible exchange of opinion with different specialists.
 - • • **WHAT ROLE DOES TECHNOLOGY PLAY?**
TECHNOLOGICAL EVOLUTION FAVOURS NEW INTERPRETATIVE OPTIONS.
We are well aware of this at the Foundation, first and foremost, when it comes to diagnostics. Training plays a key role in learning how to take full advantage of the opportunities offered by technology today. This is a constantly evolving field on which the Foundation has an ever-watchful eye, with the aim of introducing the necessary innovations and keeping up with the times.
-
- • • **THE TRAINING COURSE**
aimed at doctors, university students, assistants; 1 month of practical training under the guidance of SSUM tutors; approx. 40 supervised and SSUM-certified ultrasound scans per week.
 - • • **TECHNOLOGY**
at the Foundation: 4 Philips Affinity 70 and 1 Philips Epiq 5 featuring ARFI system, CEUS with Accuson, portable GE and Siemens ultrasound scanners, 3 Fibroscan®, 1 Fibroscan CAP®.



People

• • • PHYSICIANS

Prof. Cerny Andreas MD
 Dr Balmelli Manuela MD
 Dr Barda Beatrice MD
 PD Dr Bihl Florian MD
 Dr Bruno Alessandra MD
 Prof. De Gottardi Andrea MD
 Prof. med. Garzoni Christian MD
 Dr Gobbo Manuel MD
 Dr Griffa Andrea MD
 Dr Hagara Daniel MD
 Dr Magenta Lorenzo MD
 Dr Moriggia Alberto MD
 Dr Nessi Mauro MD
 Dr Robatto Antonella MD
 Dr Schwarzenbach Hans–Rudolf MD
 PD Dr Terziroli Beretta–Piccoli Benedetta MD

• • • MEMBERS OF THE BOARD

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 Prof. Beer Jürg–Hans MD
 Prof. Bianchetti Mario MD
 PD Dr Bihl Florian MD
 Prof. Candinas Daniel MD
 Adv. Pelli Fulvio

• • • OPERATIONAL TEAM

Prof. Cerny Andreas MD, Director
 Dipl. Pharm. fed. ETH, Bissig Maurizia, Foundation Operational Director
 PhD Dr Barda Beatrice MD, Medical researcher
 Dr Baserga Adriana MD, Medical researcher
 Dipl. Pharm. fed. ETH, Bissig Maurizia, Pharmacist
 Biol. Dipl., Di Bartolomeo Claudia, Data manager
 Biol. Dipl., Forlenza Rossella, Data manager – Clinical Study Co–ordinator
 Messina Paola, Clinical Study Co–ordinator
 PD Dr vet Gillian Saywer, Medical researcher



Organisation

Foundation Board of Directors

Determines the strategic guidelines of the Foundation, provides inspiration and gives impetus to its activities.

Clinical Trial Unit (CTU) Directorate

Consists of Directors and operational management of the Foundation, assesses the scientific relevance of each and every research project and examines feasibility from an executive point of view

Cantonal ethics Committee, Swissmedic

Healthcare authority evaluating ethics, scientific relevance and formal aspects and authorising the implementation of a clinical trial.

Controlling, RU management

Responsible for control of funds raised and their application in accordance with their objectives/defined purposes.

Private and public sponsors

Donations contributed in support of specific research projects as well as in favour of projects/planned training activities.

Epatocentro Ticino Ltd

Partner in medical and paramedical matters collaborating in the running of the Foundation's clinical trial studies

CTU Staff

Ensure the operational capacity of the Foundation, both the proper execution of research studies in compliance with GCP regulations

Patients

Focal point of the operations of the Foundation

Clinica Luganese Moncucco

Partner for research projects requiring hospital admission.



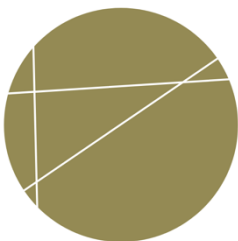


OUR PARTNERS

FOSTERING AND SUPPORTING PARTNERSHIPS IS THE BEST WAY TO ENSURE AN INNOVATIVE, HIGHLY COMPETENT RESPONSE TO THE ADDICTION PHENOMENON

KARIN GIANOLA,
DIRECTOR OF INGRADO - ADDICTION SERVICES

The Fondazione Epatocentro Ticino collaborates with specialists and institutions both in the fields of research and training and makes a fundamental contribution to effecting training, holding high-level conferences and symposia, activities made possible thanks to the support of various entities and companies, whose contributions are vital to the implementation of projects, study protocols and training activities.



- Sponsors
- Financiers
- Collaborators



Sponsors

An important support for the training activities of the Foundation.

ABBVIE AG • ASTELLAS PHARMA AG • BIOTEST (SCHWEIZ) AG • BRISTOL MYERS SQUIBB SA • ZUR ROSE SUISSE AG • IDEOGEN AG • EISAI PHARMA AG • EUROIMMUN SCHWEIZ AG • DR. FALK PHARMA AG • CURATIS AG • SANOFI-AVENTIS SCHWEIZ AG • ROCHE PHARMA (SCHWEIZ) AG • CLINICA LUGANESE MONCUCCO • PFIZER • HELSANA VERSICHERUNGEN AG • SYNLAB SUISSE • UNILABS



Financiers

Important contributors to specific projects of the Foundation.

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Collaborators

- CENTRE HOSPITALIER UNIVERSITAIRE VAUDOIS (CHUV) • CENTRE SUISSE DES MALADIES DU FOIE DE L'ENFANT, HÔPITAUX UNIVERSITAIRES DE GENÈVE (HUG) • HÔPITAUX UNIVERSITAIRES DE GENÈVE (HUG)
- CLINICA LUGANESE MONCUCCO SA • KINDERKLINIK, INSELSPITAL BERN • ENTE OSPEDALIERO CANTONALE (EOC) • CITTÀ DI LUGANO • EOLAB ISTITUTO DI MEDICINA DI LABORATORIO • ISTITUTO DI RICERCA IN BIOMEDICINA (IRB) • ISTITUTO CANTONALE DI PATOLOGIA • KANTONSSPITAL BASELSTADT • KANTONSSPITAL BASELSTADT • KANTONSSPITAL BASELSTADT
- KANTONSSPITAL GRAUBÜNDEN • KING'S COLLEGE HOSPITAL - LONDON • KANTONSSPITAL ST. GALLEN
- OSTSCHWEIZER KINDERSPITAL • UNIVERSITY OF MILAN-BICOCCA, OSPEDALE SAN GERARDO
- LUZERNER, KANTONSSPITAL KINDERSPITAL
- UNIVERSITÀ DELLA SVIZZERA ITALIANA (USI) • SWISS EXPERTS IN VIRAL HEPATITIS (SEVHEP) • SWISS ASSOCIATION FOR THE STUDY OF THE LIVER (SASL) •

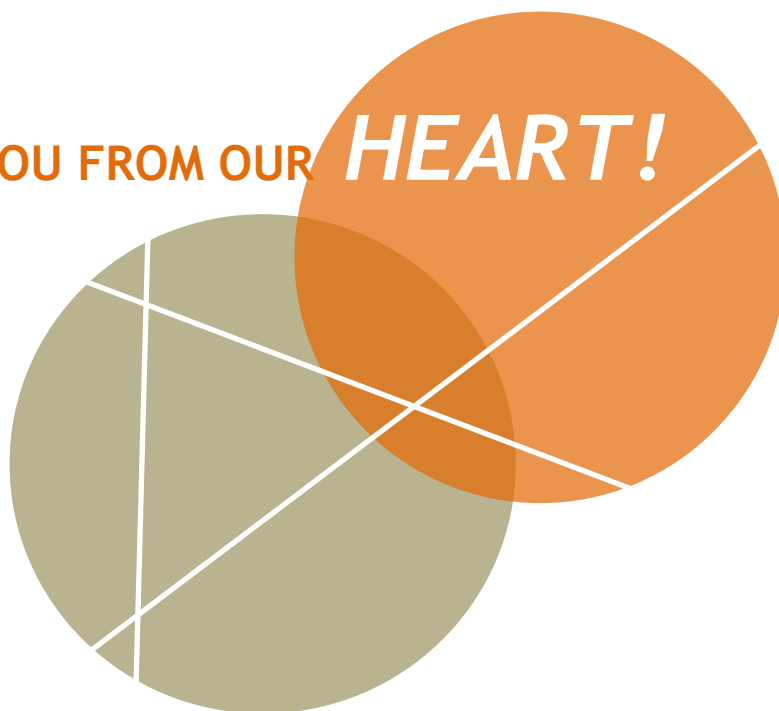


SCUOLA UNIVERSITARIA PROFESSIONALE DELLA SVIZZERA ITALIANA (SUPSI) • UNIVERSITÄTSKINDERSPITAL ZÜRICH (USZ) • UNIVERSITÄTSKINDERSPITAL BEIDER BASEL (UKBB) • INGRADO • ANTENNA ICARO • LABORATORIO UNICO METROPOLITANO (LUM), OSPEDALE MAGGIORE, BOLOGNA • KLINIK FÜR KINDER- UND JUGENDMEDIZIN - KANTONSSPITAL WINTERTHUR • KANTONSSPITAL WINTERTHUR • GASTROENTEROLOGIE UND HEPATOLOGIE, CLARUNIS - UNIVERSITÄRES BAUCHZENTRUM, BASEL • EUROPEAN REFERENCE NETWORK (ERN RARE-LIVER)



TO ALL THOSE WHO HAVE
SUPPORTED THE ACTIVITIES
OF THE FOUNDATION
WE OFFER OUR HEARTFELT
THANKS!

• • • THANK YOU FROM OUR *HEART!*



TO FIND OUT HOW TO SUPPORT THE FOUNDATION WRITE TO maurizia.bissig@hin.ch
OR CALL +41 91 960 85 03



Key Themes for our future

In 2023, the Fondazione Epatocentro Ticino will continue its research activities in what have been core areas for years, with ongoing activities and partnerships in the field of Covid-19. At the same time however, it has already identified further important topics on which to focus new projects. As regards training, the Foundation will continue to arrange events dedicated to hepatic specialists, family doctors and the general public, and will continue to place emphasis upon the continued training of specialists and paramedic personnel to achieve better outcomes in patient management. The Fondazione Epatocentro Ticino confidently looks forward with renewed energy to the coming years, building on and consolidating its activities and opening up new and interesting opportunities.

Topics	Description
Non-alcoholic steatohepatitis (NASH)	Its spread is certainly noteworthy, in as much as 30% of the population is affected by hepatic steatosis and of these, some 10–20% will develop non-alcoholic steatohepatitis.
Screening and follow-up of patients with hepatitis	Given the improvement in treatments which are today available to treat, or keep under control, hepatitis in patients affected by hepatitis C and B, it is important to continue screening to try to reach all those who are not aware of being affected by hepatitis and require treatment and so contribute tangibly to achieving the goal of eradicating hepatitis C by 2030 set by the WHO. Equally important is ensuring that patients treated, or receiving treatment, are regularly followed up.
Autoimmune diseases	The Foundation wishes to support patient management which is ever more focused on these disease (autoimmune hepatitis, primary biliary cholangitis, primary sclerosing cholangitis), continuing to support research and offering specialist opportunities to meet and hold high-level discussions.
Ultrasound of the liver	We constantly continue to work on assessing the best ultrasound methods for the determination of the degree of hardness (fibrosity) and steatosis (fat content) of the liver, important parameters for the diagnosis and treatment of hepatic disease.



Keeping updated

• • • ALWAYS STAY UP TO DATE ON WORK BEING DONE AND THE EVENTS OF THE FONDAZIONE EPATOCENTRO TICINO

The Foundation is present on social networking channels which enables its own followers, currently more than 1 000, to remain updated on its notifications, activities, and research results as well as training events offered by the Foundation. Linked to the site are reference points for all those who, for whatever reason, are interested in liver diseases.



Website

www.epatocentro.ch/fondazione



Facebook page

www.facebook.com/FondazioneEpatocentroTicino



LinkedIn page

www.linkedin.com/company/fondazione-epatocentro-ticino



Instagram page

www.instagram.com/fondazione_epatocentro_ticino/



Newsletter – The Liver Bulletin

www.epatocentro.ch/fondazione

