



SCIENTIFIC REPORT



2024



Fondazione
Epatocentro Ticino





2024: figures and facts at a glance

18 DOCTORS ACTIVE
in research and training

45 COLLABORATIONS
in research and training

590 CONTRIBUTIONS
received for research (CHF)
thousand

12 SPONSORS
for training activities

26 PUBLICATIONS
Abstracts, textbooks, guidelines

15 FINANCIAL
SUPPORT
of research projects

69 TRAINING EVENTS
completed

2 PRIVATE
sponsors

- ▶ The cohort study on fatty liver disease (NAFLD cohort), launched by the Fondazione Epatocentro in 2023, having received recognition and support from the Swiss Association for the Study of the Liver (SASL), will now become a multicentre study.
- ▶ The annual platform for discussion on excellence and sustainability in the healthcare system, together with the Ticino Hepatology Symposium, organised by the Fondazione Epatocentro Ticino, has reached its 10th edition.
- ▶ The Fondazione Epatocentro Ticino was invited to give an oral presentation on the autoimmune liver disease biobank (AILD Biobank) at the European Biobanking Congress, held in Vienna from 14 to 17 May 2024.
- ▶ Dr. Alberto Moriggia MD has joined the executive committee of the Swiss Society of Addiction Medicine (SSAM) and has been appointed by the Grand Council of Ticino to serve on the Expert Group in the field of drug addiction.

Foundation milestones

2014 – 2016

RAPID TREATMENT OF HEPATITIS C

Thanks to the Epatocentro, Ticino was declared the number one canton in Switzerland for the speed with which patients with chronic hepatitis C received the new Sovaldi treatment (ref. Helsana Report 2016). In addition, the Fondazione Epatocentro collected and analysed clinical data and biological samples as part of the Swiss Hepatitis C Cohort Study.

2014

TICINO HEPATOLOGY SYMPOSIUM ESTABLISHED

On the initiative of Fondazione Epatocentro Ticino, the Ente Ospedaliero Cantonale (EOC) hospital network, and Swiss Experts in Viral Hepatitis (SEVHep), the first Ticino Hepatology Symposium was launched, an annual event intended to update specialists and general practitioners on the latest developments in liver disease.

2014 – 2017

INVOLVEMENT OF THE FOUNDATION IN A HEPATITIS E EPIDEMIC IN TICINO

An increase in cases of hepatitis E, attributable to the consumption of raw pork liver and wild boar liver, kicked off a joint research project between the Institute of Clinical Neuroscience of Italian Switzerland and the Fondazione Epatocentro Ticino, with the aim of characterising the spectrum of this complication. The active collaboration with the Cantonal authorities led to an effective intervention by these authorities that helped to stem the problem. The foundation is conducting a research project to verify whether the disease was the cause of autoimmune phenomena.

2015

ANNUAL DISCUSSION PLATFORM LAUNCHED

Every year, the Platform for discussing excellence and sustainability in the health system – which was launched on the initiative of the Fondazione Epatocentro Ticino and involves the Ente Ospedaliero Cantonale (EOC) hospital network and the University of Lugano (USI) – compares the various players in the local and national health systems on key issues for the development of the sector.

2015

LAUNCH OF THE BLUE BOOK

Due to its belief in the importance of developing a series of guidelines based on scientific evidence, the Fondazione Epatocentro Ticino launched a project aimed at drawing up the main recommendations for managing patients suffering from specific liver diseases.

2016

THE THURSDAY LECTURES

The Fondazione Epatocentro, which has always been dedicated to research and training, firmly believes in the importance of disseminating new developments in the scientific knowledge and treatment of liver diseases (viral hepatitis, autoimmune hepatitis, fatty liver disease, non-alcoholic steatohepatitis (NASH), and alcoholic liver disease). To this end, it organises numerous training courses, symposia, seminars, and conferences for doctors working in Ticino.

2016

THE FIRST CONFERENCE ON AUTOIMMUNE DISEASES OF THE LIVER

This conference was established as a result of the collaboration between the Fondazione Epatocentro Ticino, the Swiss Society of Allergology and Immunology (SSAI), and the Swiss Association for the Study of the Liver (SASL). It was the first such national congress and continues to attract specialist doctors from Switzerland and abroad to Lugano every two years to discover the latest developments in basic research and clinical strategies to combat autoimmune diseases of the liver.

2017

FATTY LIVER BECAME THE NUMBER ONE LIVER DISEASE

Aware that 30% of the population is affected by fatty liver disease (NAFLD/NASH), the Fondazione Epatocentro Ticino is increasingly involved in the search for new treatments. After the first phase III studies yielded disappointing results, new types of drugs are producing promising results, which were reported in scientific articles co-authored by the Fondazione Epatocentro Ticino and published in prestigious medical journals such as the New England Journal.

Foundation milestones

2018

"IAN MACKAY" CONFERENCE

Leading experts in the field of primary biliary cholangitis gathered in Lugano for a three-day conference dedicated to the Australian doctor Ian Mackay, the father of autoimmune diseases of the liver. The published conclusions mapped out the path for research in the field for years to come.



2018

INTERNATIONAL COLLABORATIONS

The first international collaborations were launched in the field of autoimmune diseases: the Fondazione Epatocentro is collaborating on projects with the European Reference Network (ERN RARE-LIVER) and the International Autoimmune Hepatitis Group (IAIHG).



2019

CREATION OF THE ULTRASOUND ACADEMY

An ultrasound course was created to offer the various modules required for the training pathway defined by the Swiss Society of Sonography in Medicine (SGUM); doctors from all over Switzerland were thus be able to access a wide range of case studies and cutting-edge ultrasound technology.



2019

THE SWISS BIOBANK FOR AUTOIMMUNE DISEASES OF THE LIVER

Created for future research, the biobank is a facility for the systematic collection, storage, and management of biological samples from patients suffering from autoimmune diseases of the liver. The biobank for autoimmune diseases of the liver was the first Swiss biobank in the field of hepatology to have obtained the NORMA quality certification from the Swiss Biobanking Platform.



2020

LAUNCH OF COLLABORATION WITH THE BIOMEDICAL RESEARCH INSTITUTE (IRB)

The support of a private Foundation enabled PD Dr. Benedetta Terziroli Beretta-Piccoli MD, Primary Investigator at the Fondazione Epatocentro Ticino, to undertake a period of basic research in the laboratory of Prof. Federica Sallusto at the IRB; the purpose of the project was to characterise the molecular target of the immune response in patients with autoimmune hepatitis.



2020

THE COVID-19 BIOBANK

In Switzerland, the first COVID-19 biobank was created in Lugano thanks to the will of the Fondazione Epatocentro Ticino, in collaboration with the Clinica Luganese Moncucco. Systematically collecting biological samples and data from patients hospitalised due to COVID-19 made it possible to establish a platform that can be used for joint research, aimed at better understanding the nature and mechanisms of the disease and finding appropriate drugs and treatments.



2021

THE CLINICAL TRIAL WITH METHYLENE BLUE

In collaboration with Synlab Ticino and the Medical Association of the Canton of Ticino and assisted by the medical and nursing team at Epatocentro Ticino SA, the Fondazione Epatocentro Ticino team sponsored a clinical trial in Ticino to test the efficacy and safety of methylene blue, a drug that has shown good efficacy against SARS-CoV-2 for the treatment of COVID-19 in in vitro tests.



2023

FONDAZIONE EPATOCENTRO OBTAINED THE QUALITY CERTIFICATION AS A FACILITY FOR THE CREATION AND MANAGEMENT OF BIOBANKS

The Fondazione Epatocentro Ticino is now a facility certified by the Swiss Biobanking Platform: obtaining the NORMA quality certification represents recognition and attests to the high-quality work carried out by the Fondazione Epatocentro in the field of biobanks, for which it is now setting standards at the Swiss level.



Foundation milestones

2023

FATTY LIVER DISEASE AND THE NAFLD BIOBANK

Fatty liver disease, which often has silent progression, is very common in Switzerland; if it is not diagnosed and stopped in time, it can develop into inflammation of the liver, cirrhosis, or even liver cancer. To date, there are no drugs to treat it. The scientific community is heavily interested in studying and finding treatments for this disease. Biological samples and clinical data are needed to carry out research projects: to this end, the Foundation has created the NAFLD Biobank, a platform for future research.



2023

METHYLENE BLUE FOR HEPATITIS B?

The collaboration between the Fondazione Epatocentro Ticino, the Laboratory of Prof. Francesco Negro in Lausanne, and Prof. Caroline Tapparel at the University of Geneva showed that methylene blue has an antiviral effect against hepatitis B and delta viruses. The Foundation prepared a study to test the efficacy of methylene blue in people with chronic hepatitis B virus infections.



2024

SUBMISSION OF THE APPLICATION OF EPATOCENTRO TICINO / FONDAZIONE EPATOCENTRO TO THE NATIONAL COORDINATION FOR RARE DISEASES (KOSEK)

KOSEK's aim is to create a network of centres for the treatment of patients with rare diseases, interconnected with one another. In April 2024, Epatocentro – supported by the Fondazione Epatocentro in the areas of research, biobanking, and training – submitted its application to become a reference centre for the treatment of rare liver diseases in Ticino. Epatocentro will be one of eight reference centres in Switzerland.



2024

GROWING INTEREST IN THE FONDAZIONE EPATOCENTRO'S BIOBANKS: ORAL PRESENTATION OF THE FOUNDATION'S AILD BIOBANK AT THE EUROPEAN BIOBANKING CONGRESS

The Fondazione Epatocentro was invited to give an oral presentation on the autoimmune liver disease biobank (AILD Biobank) at the European Biobanking Congress, held in Vienna from 14 to 17 May 2024. Established in 2017 and involving 21 centres across Switzerland, the AILD Biobank holds more than 10,000 biological samples accompanied by clinical data. Clinical research based on the samples collected to date has resulted in over 50 scientific publications.



2024

THE FATTY LIVER DISEASE COHORT STUDY (NAFLD COHORT) BECOMES A SASL STUDY

The fatty liver disease cohort (NAFLD cohort), established in 2023 by the Fondazione Epatocentro, has received recognition and support from the Swiss Association for the Study of the Liver (SASL). The cohort will therefore move from being a single-centre study to one involving multiple university centres in Switzerland.



A word from the Board

Chairman

The year 2024 has been a period of particular significance and success for the Fondazione Epatocentro.

Research in the service of high-quality patient care: In the field of research, the liver disease biobanks have been further developed and strengthened, in line with the highest quality standards for biobanking, through the collection and clinical characterisation of biological samples from patients affected by both common liver conditions (such as fatty liver disease) and rare autoimmune liver diseases. Noteworthy is the national collaboration with numerous Swiss centres – currently 23 – as well as the international recognition that this cooperation continues to receive.

Participation in several multicentre studies plays a key role in advancing knowledge in the field of liver diseases. In-house studies with promising therapeutic outcomes, such as those on the use of methylene blue, are presented separately in the Director's editorial. The Fondazione's research activity is gaining increasing importance in terms of public health, making a significant contribution to improving the clinical management of patients with liver diseases. Over the past year, these activities have resulted in 26 scientific publications with a significant impact on the academic community.

Contribution to training: The early diagnosis of liver diseases depends largely on the clinical training of doctors and on raising public awareness. In this regard, the Fondazione makes a vital contribution through the organisation of monthly training events and specialist symposia presenting the latest scientific evidence. This, together with the ultrasound training offered by our "Ultrasound Academy", represents a highly valuable contribution. These initiatives are complemented by outreach activities aimed at the general public and patients, which effectively round out our educational commitment. From a financial perspective, the Fondazione is pleased to report a balanced and robust budget, achieved thanks to the ongoing support of our sponsors, to whom we wish to extend our special gratitude.

With regard to the composition of the Foundation Board, we note the retirement, after years of active and fruitful collaboration, of Prof. Daniel Candinas, Head and Director of Visceral Surgery and Liver Transplantation at the Inselspital in Bern. We extend to him our deepest thanks, together with our best wishes for his retirement and his move to Ticino. In his place, we are pleased to welcome Prof. Silke Gillessen-Sommer, Head of Oncology at the EOC in Bellinzona and Director of the IOSI, to whom we extend a warm welcome. We are confident that in the coming year we will be able to further develop our activities and collaborations in the fields of research, clinical practice and training, with the shared goal of promoting liver health.



Prof. Jürg Hans Beer MD
Chairman of the Foundation Board

A word from the Director

With this scientific report, we wish to share the milestones achieved in 2024, made possible by the support of our sponsors and by collaborations in Ticino and beyond, highlighting two areas in which we provide significant added value.

1. Repurposing of drugs. The repurposing of existing drugs for new therapeutic indications is an approach promoted by the World Health Organization (WHO). It involves researching and testing medicines already approved for a specific condition to assess their effectiveness in treating other diseases, including those of an epidemic or pandemic nature. This method is particularly valuable as it makes use of existing safety and efficacy data, thereby accelerating the development process for a new indication and expanding the available therapeutic arsenal. During the COVID-19 pandemic, the Fondazione Epatocentro conducted a study involving the treatment of patients with a recent COVID-19 infection using methylene blue. The treatment showed a good safety profile; however, the limited number of participants did not allow definitive conclusions to be drawn regarding its efficacy. Subsequently, in collaboration with Prof. Francesco Negro, Dr Sophie Clement, and Prof. Caroline Tapparel from the University of Geneva, we studied the *in vitro* antiviral effect of methylene blue against the hepatitis B and D viruses, with positive results. On the basis of these encouraging laboratory findings, we prepared a clinical study protocol to assess whether the effect observed in the laboratory can also be confirmed in patients with chronic hepatitis B virus infection. According to the WHO, around 254 million people worldwide are affected by chronic hepatitis B. Hepatitis D, which only develops in individuals already infected with the hepatitis B virus, is less common but can lead to serious complications due to the lack of effective treatments available on a large scale. The pilot clinical study “Methylene blue in hepatitis B” will begin during 2025.

2. Improving the care of patients with rare diseases. These patients face various challenges, such as often late or incorrect diagnosis, limited access to treatments, difficulty in finding adequate medical and social support, and an insufficient clinical research framework due to the low prevalence of the disease and lack of funding. For this reason, the National Coordination for Rare Diseases (KOSEK) has created a platform aimed at improving care for people with rare diseases. KOSEK carries out projects working with healthcare providers, always involving those concerned through patient organisations. It also aims to strengthen collaboration among stakeholders in the rare disease sector through the recognition of reference centres for rare diseases and the accreditation of rare disease registries. In 2024, the Fondazione Epatocentro, together with Epatocentro Ticino and drawing on its decade-long experience in the field, submitted its application to KOSEK to become the reference centre for Italian-speaking Switzerland for the treatment of rare liver diseases, in which research, training, and the involvement of patient associations represent a key component.



Prof. Andreas Cerny MD
Director, Fondazione Epatocentro Ticino

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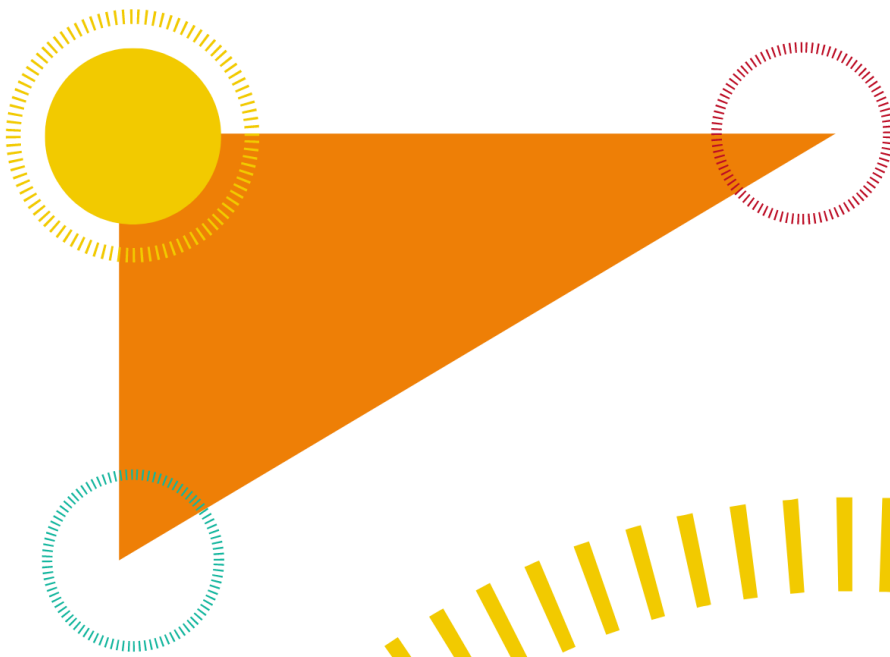
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01

RESEARCH



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The story of one of our patients



Elia, aged 55, suffers from liver cirrhosis, diabetes, epilepsy, and is overweight. He has long struggled with a severe alcohol addiction that has damaged his health despite several attempts at treatment.*

** not his real name*

Who is Elia and what disease is he facing?

Elia has been living for years with liver cirrhosis, which developed from chronic liver disease and was progressively worsened by alcohol dependence. He receives treatment for diabetes, suffers from epileptic seizures, and is overweight. Alcohol abuse has had a profound impact on the deterioration in his health. Despite undergoing various treatment programmes, including inpatient care and medication-based therapies, none has proved truly effective in the long term.

How was the disease treated?

Elia has begun an **unconventional drug treatment** based on the active ingredient sodium oxybate. This course of care was made possible through collaboration between Epatocentro Ticino, and Ingrado, a centre specialising in the treatment of dependency, through its psychiatrist with expertise in alcohol use disorder. The integration of distinct yet synergistic areas of expertise made it possible to design a tailored approach for Elia who, after an initial stint of rehabilitation at the Clinica Moncucco in Lugano, was able to start a **targeted therapeutic programme**. Today, Elia is doing markedly better: he has stopped drinking alcohol, shows visible improvements and, most importantly, has regained motivation and confidence, actively participating in the programme and regularly attending follow-up.

What made the difference in treating the patient?

This combination of expertise from specialists in different fields made it possible to go beyond traditional approaches, paving the way for a bold approach. This innovative decision, the result of synergy between diverse professional skills, led to the identification of a concrete turning point in Elia's care pathway. Today, thanks to this integrated work, Elia has regained a new balance and greater stability, both clinically and personally. Moreover, it should be noted that this experience, in addition to its therapeutic value, opens up research prospects and could lead to a study promoted by the Fondazione Epatocentro Ticino on new solutions for liver diseases and addictions.



Dr. Alberto Moriggia MD
Medical Director, Ingrado
Accredited Physician, Epatocentro Ticino

Research activities

► 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 cantonal hospitals, affiliated laboratories, minor hospitals, and private medical practices. The principal goal consists in providing a data platform for aiding the processes of projects in the sphere of Hepatitis C.

ONGOING

[CONSULT THE STUDY >>](#)

SWISS TRANSPLANT COHORT STUDY – STCS

This prospective and multi-centered cohort study, initiated in 2006 by several researchers, aims at gathering overall data 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, enacted 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.

ONGOING

[CONSULT THE STUDY >>](#)

SWISS HIV COHORT STUDY – SHCS

Set up 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 cantonal hospitals, associated laboratories, minor hospitals, and private medical practices. The goal consists in providing a data platform useful for supporting numerous significant projects and research in the sphere of HIV infection.

ONGOING

[CONSULT THE STUDY >>](#)

SWISS ASSOCIATION FOR THE MEDICAL MANAGEMENT IN SUBSTANCE USERS (SAMMSU) 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. The characteristics and collateral effects of various types of treatment were recorded, and 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.

ONGOING

CONSULT THE STUDY >>

SASL35: SWISS LIVER VENOUS THROMBOSIS STUDY (SLVTS)

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.

ONGOING

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 geared towards developing epidemiological and natural history clarity, reactions to treatment and the effects of this rare pathology. The Biobank will enable the analysis of specific 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/>).

ONGOING

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 possible number of patients in Switzerland suffering from primary biliary cholangitis to better understand and treat the disease. In addition, blood samples are frozen for future further potential 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/>).

ONGOING

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, the greatest possible number of patients in Switzerland suffering from primary sclerosing cholangitis to better understand and treat the disease. Likewise, blood samples are frozen for future further potential 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/>).

ONGOING

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, intravenous drug users 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.

ONGOING

NAFLD COHORT STUDY: NON-ALCOHOLIC FATTY LIVER DISEASE COHORT STUDY

The primary objective of this study promoted by the Fondazione Epatocentro is to create a unified cohort for the retrospective and prospective recording of high-quality baseline and follow-up data from patients diagnosed with NAFLD (non-alcoholic fatty liver disease) / NASH (non-alcoholic steatohepatitis) / MAFLD (metabolic dysfunction-associated fatty liver disease), according to standardised criteria. The clinical data gathered, and the biological samples stored in our biobank will enable researchers to conduct future research aimed at shedding light on the clinical presentation, natural history, treatment response, genetic and metabolic risk factors, therapeutic options, and disease outcomes. The cohort will also allow investigators to carry out genetic, serological, microbiological, and immunological studies.

IN ONGOING, INDEFINITE DURATION

SASL 45: SWISS HEPATOCELLULAR ADENOMA REGISTRY

The Swiss Hepatocellular Adenoma (HCA) Registry, a national multicentre project involving the seven national tertiary hepatology centres (BE, BS, GE, VD, SG, TI, ZH), aims to collect retrospective and prospective epidemiological and clinical data to improve understanding of this rare and complex pathology. The registry will also provide prognostic data on the disease's progression and complications through prospective patient follow-up, with the aim of delivering standardised, multidisciplinary care throughout the country.

ONGOING, INDEFINITE DURATION

SWISS CIRRHOSIS COHORT STUDY (SSCiCoS)

SSCiCoS is a long-term, prospective, national observational cohort study that systematically monitors patients with cirrhosis in Switzerland. Its aim is to collect and record epidemiological, clinical, histological, and psychosocial data, as well as patient-reported information via questionnaires, together with biobank biological material from patients with cirrhosis, with the intention of initiating nested projects.

ONGOING, INDEFINITE DURATION

► Clinical studies

A PHASE 2b RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, MULTICENTER STUDY TO EVALUATE THE EFFICACY AND SAFETY OF EFINOPEGDUTIDE (MK-6024) IN ADULTS WITH PRECIRRHOTIC NONALCOHOLIC STEATOHEPATITIS

The purpose of this phase 2 study is to verify the efficacy of Efinopegdutide compared to placebo in people with non-alcoholic steatohepatitis (NASH) and to evaluate the safety and tolerability of the drug.

CLINICAL TRIAL: IN PROGRESS

[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

A 52-week, randomised, placebo-controlled, double-blind, adaptive phase 2b/3 clinical trial of Setanaxib with a 52-week extension phase in patients with primitive biliary cholangitis (PBC) and elevated liver stiffness. The purpose of the study is to evaluate the effect of Setanaxib on 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 >>](#)

DOUBLE-BLIND, RANDOMISED, PLACEBO-CONTROLLED, PHASE II DOSE-FINDING STUDY COMPARING DIFFERENT DOSES OF NORUCHOLIC ACID TABLETS WITH PLACEBO IN THE TREATMENT OF PRIMARY BILIARY CHOLANGITIS IN PATIENTS WITH AN INADEQUATE RESPONSE TO URSODEOXYCHOLIC ACID: NUT-2/PBC

The aim of the phase 2 NUT-2 study is to assess the efficacy of two doses of nurucolic acid versus placebo for the treatment of primary biliary cholangitis in patients with an inadequate response to ursodeoxycholic acid.

CLINICAL TRIAL: IN PROGRESS

[CONSULT THE STUDY >>](#)

A TWO-PART, RANDOMIZED, PLACEBO CONTROLLED, DOUBLE BLIND, MULTICENTER, PHASE 3 STUDY TO EVALUATE THE EFFICACY AND SAFETY OF LINERIXIBAT FOR THE TREATMENT OF CHOLESTATIC PRURITUS IN PARTICIPANTS WITH PRIMARY BILIARY CHOLANGITIS (PBC): GLISTEN STUDY.

The aim of the study is to evaluate the effect of oral treatment with Limerixibat, compared with placebo, on itching in PBC patients with cholestatic pruritus.

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 AND EFFICACY OF EFRUXIFERMIN IN SUBJECTS WITH COMPENSATED CIRRHOSIS DUE TO NONALCOHOLIC STEATOHEPATITIS (NASH) / METABOLIC DYSFUNCTION-ASSOCIATED STEATOHEPATITIS (MASH), (SYNCHRONY)

The aim of the study is to assess the effect of Efruxifermin versus placebo on all-cause mortality and liver-related clinical outcomes in subjects with compensated cirrhosis due to NASH/MASH, and to assess the effect of Efruxifermin compared with placebo on fibrosis regression.

CLINICAL TRIAL: IN PROGRESS

[CONSULT THE STUDY >>](#)

A RANDOMISED, DOUBLE-BLIND, PLACEBO-CONTROLLED, MULTICENTRE, PHASE III TRIAL EVALUATING LONG-TERM EFFICACY AND SAFETY OF SURVODUTIDE WEEKLY INJECTIONS IN ADULT PARTICIPANTS WITH NONCIRRHOTIC NON-ALCOHOLIC STEATOHEPATITIS/METABOLIC ASSOCIATED STEATOHEPATITIS (NASH/MASH) AND (F2) - (F3) STAGE OF LIVER FIBROSIS

This study aims to determine whether Survodutide improves the clinical status of people with the liver disease known as NASH/MASH and moderate or advanced liver fibrosis, compared with placebo.

CLINICAL TRIAL: IN PROGRESS

[CONSULT THE STUDY >>](#)

A PHASE III DOUBLE-BLIND, RANDOMISED, PLACEBO-CONTROLLED TRIAL TO EVALUATE LIVER-RELATED CLINICAL OUTCOMES AND SAFETY OF ONCE WEEKLY INJECTED SURVODUTIDE IN PARTICIPANTS WITH COMPENSATED NONALCOHOLIC STEATOHEPATITIS/METABOLIC DYSFUNCTION ASSOCIATED STEATOHEPATITIS (NASH/MASH) CIRRHOSIS

The primary goal of this study is to determine whether Survodutide, compared with placebo, improves the condition of people with NASH/MASH associated with cirrhosis.

CLINICAL TRIAL: IN PROGRESS

[CONSULT THE STUDY >>](#)

METHYLENE BLUE TREATMENT OF CHRONIC HEPATITIS B VIRUS INFECTION: A PILOT STUDY

This is an exploratory, open-label, single-centre pilot study aimed at demonstrating the efficacy of incremental doses of methylene blue against the hepatitis B virus in patients with chronic hepatitis B virus infection.

CLINICAL TRIAL: IN PROGRESS

[CONSULT THE STUDY >>](#)

NON-INVASIVE ASSESSMENT OF LIVER STIFFNESS AND STEATOSIS IN PATIENTS WITH FATTY LIVER DISEASE

This is a prospective study with the aim of determining which of the non-invasive methods, Fibroscan/CAP or 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

► Epidemiological studies

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

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

EPIDEMIOLOGICAL ANALYSIS: IN PROGRESS

► Retrospective studies

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

This study analyses and describes outcomes of transplants for autoimmune hepatitis (AIH) of transplanted patients in the transplant cohort.

RETROSPECTIVE: CONCLUDED

ETIOLOGIES AND OUTCOME OF SUPER-URGENT LIVER TRANSPLANTATION IN SWITZERLAND

This retrospective analysis aims to describe outcomes of super-urgent liver transplants in Switzerland.

RETROSPECTIVE: CONCLUDED

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: CONCLUDED

TRANSARTERIAL CHEMOEMBOLIZATION (TACE) IN HEPATOCELLULAR CARCINOMA: A RETROSPECTIVE STUDY

A retrospective observational study on patients with a diagnosis of hepatocellular carcinoma (HCC) having undergone transarterial chemoembolisation (TACE), with the primary objective of assessing overall survival and progression-free survival in patients at different stages of HCC treated with TACE. Secondary objectives include characterising recurrences and identifying predictors of survival.

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 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 plgG 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: CONCLUDED

ACUTE LIVER INJURY WITH AUTOIMMUNE FEATURES FOLLOWING SARS-COV-2 VACCINATION IN AN ERN/IAIHG COHORT: AUTOIMMUNE HEPATITIS VERSUS DRUG-INDUCED AUTOIMMUNE-LIKE HEPATITIS

It is unclear whether rare cases of acute liver injury with autoimmune features reported after COVID-19 vaccination represent vaccine-triggered autoimmune hepatitis (AIH), requiring long-term immunosuppression, or whether the liver injury is self-limiting, as seen in drug-induced autoimmune-like hepatitis (DI-AIH). We report follow-up data from our well-characterised international patient cohort to determine whether the disease's course is self-limiting or dependent on immunosuppression.

NESTED: IN PROGRESS

SECOND-LINE TREATMENT AND CORRELATION BETWEEN PROFILE OF PBC-RELATED AUTOTIBODIES AND DISEASE PROGRESSION IN PBC IN SWITZERLAND

Primary biliary cholangitis (PBC) is a chronic liver disease initially treated with ursodeoxycholic acid (UDCA), although 30–40% of patients respond poorly. This study aims to examine the use of second- and third-line treatments, such as obeticholic acid (OCA) and fibrates, at Swiss hepatology centres, in order to understand their real-world effectiveness and guide future treatment strategies. The study also seeks to investigate the correlation between the profile of PBC-related autoantibodies and disease progression in patients with PBC. In addition, it aims to shed some light on how specific autoantibodies influence disease severity and outcomes in PBC.

NESTED: IN PROGRESS

PHENOTYPING ANTIGENS OF ANTINUCLEAR ANTIBODIES IN AUTOIMMUNE HEPATITIS (ANA Juvenile AIH)

Knowledge of ANA autoantigens associated with AIH may help improve diagnostic accuracy. Paediatric data on this topic are scarce. The aim of this study is to compare the ANA autoantigens found in adult AIH patients with those identified in younger AIH patients (children, adolescents, and young adults who are ANA-positive).

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.

STATUS: CONCLUDED

► 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 therefore a systematic collection, not only of biological samples, but also of clinical data on patients with autoimmune diseases of the liver and represents a platform for future research. The AILD biobank includes three biobanks: the autoimmune hepatitis (AIH) biobank, the primary biliary cholangitis (PBC) biobank, and finally, the primary sclerosing cholangitis (PSC) biobank.

BIOBANK: IN PROGRESS

[CONSULT THE STUDY >>](#)

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

Certified facility created to collect, store and manage samples of biological material and clinical data from COVID-19 patients admitted to the Clinica Luganese Moncucco in order to then make them available for clinical research. The COVID-19 Biobank is thus a systematic collection, not only of biological samples, but also of clinical data of COVID-19 patients and serves as a platform for future research in order to study the effects of this dreaded virus and to find possible remedies to it.

BIOBANK: IN PROGRESS

[CONSULT THE STUDY >>](#)

FONDAZIONE EPATOCENTRO TICINO (FEPT) BIOBANK INFRASTRUCTURE

The Fondazione Epatocentro Ticino is a facility certified by the Swiss Biobanking Platform: obtaining the NORMA quality certification represents recognition and attests to the high-quality work carried out by the Fondazione Epatocentro in the field of biobanks, for which it is now setting standards at the Swiss level.

BIOBANK: IN PROGRESS

BIOBANCA NAFLD – NON-ALCOHOLIC FATTY LIVER DISEASE BIOBANK

Certified facility established to gather, store, and manage biological material and clinical data from patients with NAFLD/NASH/MAFLD. The primary objective of this project is to establish a unified cohort for the retrospective and prospective recording of high-quality baseline and follow-up data from patients diagnosed with NAFLD/NASH/MAFLD, according to standardised criteria. Biological samples from all patients diagnosed with NAFLD/NASH/MAFLD and monitored at Epatocentro Ticino are collected and stored. This will enable future studies aimed at clarifying the clinical presentation, natural history, treatment response, genetic and metabolic risk factors, therapeutic options, and disease outcomes. The cohort will also allow investigators to conduct genetic, serological, microbiological, and immunological studies.

BIOBANK: IN PROGRESS

[CONSULT THE STUDY >>](#)

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GUIDELINES 2024

Participation in the Delphi process of the “EASL Clinical Practice Guidelines on the Management of Autoimmune Hepatitis” 2024

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PUBLICATIONS FOR PATIENTS

Magenta L, **Fegato grasso, un problema sempre più frequente**, Tutto salute, 01/2024

02

TRAINING



1. The insight

2. Training activities

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

The insight



Small sample, big answers: liver biopsy reveals what is really happening in the liver, helping doctors and researchers to treat earlier and more effectively.

Liver biopsy

What is a liver biopsy and when is it performed?

A liver biopsy is a procedure that involves **taking a small sample of liver tissue for examination under the microscope**. It is useful when blood tests or imaging are not sufficient to make a clear diagnosis or assess the severity of a disease. It can also be used to identify cancers, monitor treatment, or as part of clinical research. The sample is usually taken with a fine needle under local anaesthesia, inserted through the right flank under ultrasound guidance. The procedure lasts only a few minutes and requires the patient's cooperation by briefly holding their breath. After the biopsy, the patient remains under observation for a few hours. Results are generally available in about two weeks. In certain situations, such as in the presence of coagulation problems or ascites, alternative techniques like transjugular biopsy may be used.

What are the risks of biopsy and what should patients know prior to the procedure?

Liver biopsy is considered a **safe procedure, but it is not without risks**. Possible complications include bleeding (in most cases mild), infection at the entry site and, very rarely, injury to other organs. The risk of serious complications is low: significant bleeding occurs in fewer than 2% of cases, and mortality is less than 1 in 1,000. Before the procedure, the doctor assesses the patient's health to minimise any risk. Good communication between the doctor requesting the biopsy, the person performing it, and the pathologist analysing the sample is also essential — only in this way can reliable results be obtained that truly aid in diagnosis.

What is the role played by liver biopsy in research?

At Fondazione Epatocentro Ticino, liver biopsies form a fundamental part of scientific research. They allow us to study how the liver responds to new drugs and to monitor, over time, the clinical course of patients taking experimental therapies. Each sample makes a tangible contribution to advancing knowledge of liver diseases and to developing increasingly targeted and effective treatments. Thanks to the willingness of patients, we are able to make significant progress in the care of liver pathologies.



Dr. Daniel Hagara MD

Accredited Physician, Epatocentro Ticino
Specialty: General Internal Medicine

Training activities

► Training events

Refresher courses and discussion events

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

Thursday lectures

Meetings covering highly specialised topics and taking an approach that promotes debate between the doctors involved and discussion of clinical cases.

When	Topic	Speaker
08.02.2024	Ageing with substance use: the GOLD study	Dr. Alberto Moriggia MD Maria Caiata Zufferey (PhD)
21.03.2024	Hepatitis B and beyond	Prof. Francesco Negro MD
11.04.2024	Diabetes and the liver	Dr. Gianni Balza MD Dr. Lorenzo Magenta MD
14.05.2024	2024 update on autoimmune liver diseases	PD Dr. Benedetta Terziroli Beretta-Piccoli MD
05.09.2024	Wilson's disease	Prof. Darius Moradpour MD
07.11.2024	Cirrhosis and its complications in 2024: updated management	Prof. Andrea De Gottardi MD
21.11.2024	Infectious issues associated with liver transplant	Dr. Christian Garzoni MD

Addiction medicine

Meetings focusing on the problems of dependence, addiction, and risky consumption of alcohol, substances, and medicines, and on behavioural addictions. The training is organised by the Ingrado Centre – Services for addiction and the Epatocentro Ticino.

When	Topic
30.01.2024	Heroin-assisted therapy
12.03.2024	Medical consequences of addiction
16.04.2024	Clinical case discussion (from the Swiss Doctor and Addictions portal)
14.05.2024	Prison medical service: presentation and specific clinical activities
18.06.2024	Damage limitation: theory and practice
16.07.2024	Damage limitation: theory and practice part 2 & Pharmacology of inhaled substances
10.09.2024	Behavioural aspects in addiction and SUD
01.10.2024	Smoking addiction update
05.11.2024	Alcohol Use Disorder: drug treatments and beyond
03.12.2024	Low-threshold approaches to addiction care

School of Hepatology

Online training enables us to learn from leading Swiss experts in the sector. Training sessions are organized by the Swiss Association for Study of the Liver (SASL) with which the Fondazione Epatocentro Ticino enjoys a long tradition of direct links.

When	Topic
18.03.2024	SASL School of Hepatology, Number 43
17.06.2024	SASL School of Hepatology, Number 44
16.09.2024	SASL School of Hepatology, Number 45
16.12.2024	SASL School of Hepatology, Number 46

Meeting of expert

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

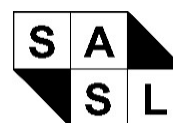
When	Topic
12.07.2024	A case of unusual presentation of autoimmune hepatitis Clinical case discussion of Swiss Autoimmune Liver Disease Cohort Studies
13.12.2024	Autoimmune hepatitis: drug-induced or not? Clinical case discussion of Swiss Autoimmune Liver Disease Cohort Studies

► 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
10.10.2024	Clinical case on liver–drug interaction	Dr. Daniel Hagara MD
	Liver–drug interactions	Prof. pharm. Stephan Krähenbühl MD
	Acute alcoholic hepatitis: a diagnosis not to be missed	Prof. Andreas Cerny MD
	Case report	Dr. Alessandra Bruno MD
	High ferritin: should I refer to a haematologist or a hepatologist?	Dr. Marco Capecchi MD Dr. Manuela Balmelli MD
	When should I list my patient for liver transplant?	Dr. Giulia Magini MD Dr. Antonio Galante MD
	“Clinical pearls”: informative hepatology case reports	PD Dr. Florian Bihl MD Dr. Hans–Rudolf Schwarzenbach MD Dr. Alessandra Cristaudi MD PD Dr. Benedetta Terziroli Beretta–Piccoli MD

In partnership with:



► Swiss Autoimmune Liver Disease meeting

The Swiss Conference on Autoimmune Diseases of the Liver, the fifth edition of which will be held in 2026, is unique in its class at national level, and specifically for hepatologists and immunologists from throughout the country and from abroad interested in updates on developments in basic research and clinical strategies aimed at treating autoimmune diseases of the liver.

When	Topic	Speaker
21.09.2023	Digital 4 th Swiss Autoimmune Liver	
22.09.2023	Disease Meeting	
	Patients' session:	
	Pregnancy	Prof. Michael Heneghan MD
	Drug side effects	Prof. Maria Isabel Lucena MD Prof. Raul Andrade MD
	New Therapies	Prof. Michael Manns MD
	Basic science sessions:	
	Genetics:	
	Genetics of PBC	Prof. Pietro Invernizzi MD
	Genetics of PSC	Prof. Tom Karlsen MD
	Genetics of AIH	Prof. Ynto de Boer MD
	Inherited immune deficiencies and autoimmunity	Prof. Mike Recher MD
	Hot topics in autoimmune liver diseases:	
	Cellular therapies	Prof. Maria Serena Longhi MD
	SARS-CoV-2 and liver autoimmunity	Prof. Gideon Hirschfield MD
	Drug-induced AIH-like DILI	Prof. Maria Isabel Lucena MD
	Mechanisms of autoimmunity:	
	The Long and Latent Road to Autoimmunity	Prof. Eric Gershwin MD
	T cells in autoimmunity	Prof. Federica Sallusto MD

Viruses and autoimmunity

Prof. Christian Münz MD

Clinical sessions:

Diagnostic dilemmas:

Radiological clinical case
presentation:

Dr. Stefano Cappio MD
and his fellow

the diagnosis of PSC

Imaging in PSC and ASC

Prof.
Annamaria Deganello MD

Serological case presentation:
the diagnosis of AIH

Dr. Eric Dayer MD
Dr.
Benedetta Terziroli-Piccoli MD

Are autoantibodies still useful in the
AI era?

Prof. Diego Vergani MD

Treatment:

Novel therapeutic targets for
autoimmune cholestatic liver diseases
Treatment of cholestatic pruritus

Prof.
Michael Trauner MD
Prof.
Andreas Kremer MD

Difficult to treat AIH patients

Prof. Ansgar Lohse MD

Pediatrics:

Case presentation

PD Dr. Christiane Sokollik MD

Sclerosing cholangitis in pediatric IBD
patients

Prof.
Patrick Van Rheenen MD

Growing up with autoimmune liver
disease: longterm outcome of
autoimmune liver disease

Dr. Marianne Samyn MD

Checkpoint-inhibitors and the liver

Clinical case presentation

Dr. Antonio Galante MD

Checkpoint-inhibitors-induced liver
injury

Prof.
Eleonora de Martin MD

Liver histology of checkpoint–
inhibitors–induced liver injury

Prof. Yoh Zen

Can checkpoint inhibitors be used in
patients with autoimmune liver
diseases?

Prof. Michael Manns MD

CHAIRS:

Prof. Andreas Cerny MD, PD Dr. Benedetta Terziroli Beretta–Piccoli MD, Prof. Giorgina Mieli–Vergani MD, Prof. Michael Manns MD, Prof. Andrea De Gottardi MD, Prof. Maria Isabel Lucena MD, Prof. Michael Trauner MD, Prof. Pietro Invernizzi MD, Prof. Michael Heneghan MD, Prof. Andreas Kremer MD, Prof. Raul Andrade MD, Prof. Gideon Hirschfield MD, Prof. Ansgar Lohse MD, Prof. Federica Sallusto MD, Prof. Diego Vergani 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 Italian University of Switzerland (USI), 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
12.11.2024	Pharma, do we have a problem? Supply shortages, drug resistance, and the impact on healthcare costs — medicines and the pharmaceutical industry come under the scrutiny of institutions and public opinion when discussing our healthcare system. On one hand, there is reflection on the possible “overuse” of drugs, which, in addition to generating significant costs, contributes to the worrying phenomenon of drug resistance. On the other, supply shortages undermine our confidence in access to care.	Giovanni Pedrazzini , USI Dean of the Faculty of Biomedical Sciences; Raffaele De Rosa , Cantonal Minister of Health and Social Affairs ; Giovan Maria Zanini Cantonal Pharmacist; Silke Gillesen Head of Medical Oncology, EOC, and Medical and Scientific Director, IOSI ; Marco Bissig Head of the Central Pharmacy Service at the Institute of Pharmacological Sciences of Southern Switzerland ; Riccardo Braglia Executive chairman, Helsinn; Lorenzo Magenta , Vice-chair, Epatocentro Ticino; Elisa Biacchi Centre for the Treatment of Obesity and Metabolic Disorders, Moncucco Hospital Group

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 which is discussed in detail.

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

When	Topic	Speaker
10.03.2015	Newsletter #1 – New drugs against hepatitis c	Dr. Lorenzo Magenta MD
04.09.2015	Newsletter #2 – Primary biliary cholangitis	PD Dr. Benedetta Terziroli Beretta-Piccoli MD
24.03.2016	Newsletter #3 – Innovative ascites treatment	Dr. Andrea De Gottardi MD
19.10.2016	Newsletter #4 – Fatty liver	Prof. Andreas Cerny MD
20.07.2017	Newsletter #5 – Alcoholic liver disease	Prof. Alberto Moriggia MD
23.02.2018	Newsletter #6 – Hyperferremia in the study of medicine	Dr. Manuela Balmelli MD
08.06.2018	Newsletter #7 – Hepatic Biopsies	Dr. Daniel Hagara MD
04.12.2018	Newsletter #8 – Wilson’s Disease	Dr. Antonella Robatto MD
28.03.2019	Newsletter #9 – Hepatitis E	Dr. Lorenzo Magenta MD
27.01.2020	Newsletter #10 – Hepatic encephalopathy	Dr. Andrea Griffa MD
15.07.2020	Newsletter #11 – CEUS (Contrast Enhanced Ultrasound)	Dr. Manuel Gobbo MD
27.01.2021	Newsletter #12 – SARS-Cov2 the liver	Dr. Manuela Balmelli MD
17.06.2021	Newsletter #13 – Autoimmune hepatitis	PD Dr. Benedetta Terziroli Beretta-Piccoli MD
09.12.2021	Newsletter #14 – Hepatitis B	Dr. Lorenzo Magenta MD
24.10.2022	Newsletter #15 – Liver disease and substance abuse	Dr. Alessandra Bruno MD
30.03.2023	Newsletter #16 – Fatty liver: when to worry	Prof. Andreas Cerny MD
26.03.2024	Newsletter # 17 – Hepatocellular carcinoma (HCC)	Dr. Daniel Hagara MD
03.12.2024	Newsletter # 18 – Liver and pharmacology	Prof. pharm. Stephan Krähenbühl MD

► **Ultrasound academy**

The Foundation, which performs 2 500 ultrasound examinations annually since 2019, has been offering ultrasonography (SGUM) courses (abdominal module) and POCUS to an ever-growing number of interested doctors. 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 is be used for ultrasound examinations.

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

► Participation of speakers at symposia and training session

When	Topic	Speaker
30.01.2024	Addiction medicine: heroin-assisted therapy	Dr. Alberto Moriggia MD
08.02.2024	Ageing with substance use: the GOLD study	Dr. Alberto Moriggia MD Maria Caiata Zufferey (PhD)
08.02.2024	SGUMSI refresher course, USI, Lugano	Dr. Daniel Hagara MD
09–10.03.2024	I Kombi course (basic course + POCUS course) for ASTIM members (Ticino Medical Students' Association)	Dr. Daniel Hagara MD
11.03.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
12.03.2024	Addiction medicine: medical consequences of addiction	Dr. Alberto Moriggia MD Dr. Alessandra Bruno MD
18.03.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
06–07.04.2024	SGUMSI I Kombi course	Dr. Daniel Hagara MD
09.04.2024	Diseases of the liver, biliary tract, and pancreas – SUPSI Bachelor's degree in nursing	Dr. Alberto Moriggia MD
11.04.2024	Diabetes and the liver	Dr. Gianni Balza MD Dr. Lorenzo Magenta MD
16.04.2024	Addiction medicine: discussion of clinical cases (from the Swiss Doctor and Addictions portal)	Dr. Alberto Moriggia MD
06.05.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
13.05.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
14.05.2024	2024 update on autoimmune liver diseases	PD Dr. Benedetta Terziroli Beretta–Piccoli MD
15.05.2024	Swiss Autoimmune Liver Disease (AILD) Biobank	Claudia Di Bartolomeo

16.05.2024	COVID-19 Biobank in the first wave, biological witnesses of the first encounter between SARS CoV-2 and our species	Federal Diploma in Pharmacy Maurizia Bissig
16.05.2024	SGUMSI refresher course, USI, Lugano	Dr. Daniel Hagara MD
17.05.2024	Acute liver injury after SARS-CoV-2 vaccination, 23 rd progress in hepatology day, Malaga	PD Dr. Benedetta Terziroli Beretta-Piccoli MD
14.06.2024	Ageing and substance use, Swiss Addiction Training Day (SADT), Friburgo Vaccination in chronic liver disease and transplantation, SASL School of hepatology	Dr. Alberto Moriggia MD
18.06.2024	Addiction medicine: harm reduction, principles and practices	Dr. Alberto Moriggia MD
18-19.06.2024	I Kombi course for recruits, Moudon	Dr. Daniel Hagara MD
27-29.06.2024	Speaker at the SGUM Congress in Davos	Dr. Daniel Hagara MD
16.07.2024	Addiction medicine: harm reduction, principles and practices – part 2, and pharmacology of inhaled substances	Dr. Alberto Moriggia MD
09/10.08.2024	Peertutor course	Dr. Daniel Hagara MD
10.09.2024	Press conference on the cantonal action plan for interventions in the field of drug addiction	Dr. Alberto Moriggia MD
26.09.2024	Alcohol at work	Dr. Alberto Moriggia MD Dr. Michele Mattia MD
10.10.2024	Case presentation: Hepatopathy on Clopidogrel	Dr. Daniel Hagara MD
10.10.2024	Clinical case: Liver and Medication	Dr. Daniel Hagara MD
10.10.2024	Liver and Medication	Prof. Stephan Krähenbühl (MD, PharmD)
10.10.2024	Acute alcoholic hepatitis: a diagnosis not to be missed	Prof. Andreas Cerny MD
10.10.2024	Case Report	Dr. Alessandra Bruno MD
10.10.2024	High ferritin: should I refer to a haematologist or a hepatologist?	Dr. Marco Capecchi MD Dr. Manuela Balmelli MD
15-16.10.2024	I Kombi course for recruits, Moudon	Dr. Daniel Hagara MD
17.10.2024	SGUMSI refresher course, USI, Lugano	Dr. Daniel Hagara MD
26-27.10.2024	SGUMSI II Kombi Course	Dr. Daniel Hagara MD

09.11.2024	POCUS emergency course for USI medical students, Lugano	Dr. Daniel Hagara MD
11.11.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
12.11.2024	GLP-1: victims of their own success?, 10th Edition Healthcare Platform, USI Lugano	Dr. Lorenzo Magenta MD
14.11.2024	Fatty liver disease, General Assembly of Internal Medicine Physicians	Prof. Andreas Cerny MD
18.11.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
21.11.2024	The dangers of adolescence: teens and substances – from mediation to brief intervention, Lugano–Trevano	Dr. Alberto Moriggia MD
21.11.2024	The dangers of adolescence: Addiction made easy – general concepts, Lugano–Trevano	Dr. Alberto Moriggia MD
26.11.2024	Conference on the justice system and addiction	Dr. Alberto Moriggia MD
02.12.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
03.12.2024	Addiction medicine: low-threshold approaches to addiction care	Dr. Alberto Moriggia MD
05.12.2024	SGUMSI refresher course, USI, Lugano	Dr. Daniel Hagara MD
05.12.2024	Fatty liver linked to obesity, diabetes, and alcohol, Bellinzona Medical Circle	Dr. Lorenzo Magenta MD
07–08.12.2024	SGUMSI I Kombi Course	Dr. Daniel Hagara MD
09.12.2024	SGUM abdominal course for USI medical students, Lugano	Dr. Daniel Hagara MD
10.12.2024	Hepatitis C in the care of people who use psychotropic substances, Infodrog – Hepatitis C campaign	Dr. Antonella Robatto MD
10.12.2024	INFODROG training on hepatitis C in the drug-dependent population, Laboratorio 21 Castione	Dr. Alberto Moriggia MD
13.12.2024	Case presentation: PBC in a patient on ursodeoxycholic acid therapy, Swiss AILD cohort study meeting	Dr. Antonella Robatto MD

03 THE FOUNDATION



1. About us

- ▶ People
- ▶ Organization

2. What we do

- ▶ Patient management and care strategy
- ▶ Means of implementation

3. Our partners

- ▶ Sponsors
- ▶ Financial support
- ▶ Collaborators

About us

► People

DOCTORS

- Prof. Cerny Andreas MD
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- Dr. Barda Beatrice MD
- Dr. Besso Gea MD
- PD. Dr. Bihl Florian MD
- Dr. Bruno Alessandra MD
- Prof. De Gottardi Andrea MD
- Prof. Garzoni Christian MD
- Dr. Griffa Andrea MD
- Dr. Hagara Daniel MD
- Prof. pharm.
Krähenbühl Stephan MD
- Dr. Magenta Lorenzo MD
- Dr. Malino Donald MD
- Dr. Moriggia Alberto MD
- Dr. Robatto Antonella MD
- Dr. Schwarzenbach Hans-Rudolf MD
- Dr. Strigklogiannis Ioannis MD
- PD. Dr. Terziroli Beretta-Piccoli
Benedetta MD

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- PhD Dr. Barda Beatrice MD, Medical
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- Dipl. chemist-pharm., De Luca Chiara,
Clinical trials coordinator
- Biol. Dipl., Di Bartolomeo Claudia,
Data manager
- Biol. Dipl., Forlenza Rossella,
Data manager-Clinical Study
coordinator
- Dr. Malino Donald, MD, Medical
researcher

MEMBERS OF THE BOARD

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

About us

► Organization

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.

Oversight, 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 SA

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.

What we do

► Patient management and treatment strategies

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 extensive 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 9 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 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 Hepatitis B Cohort, Swiss Hepatitis C Cohort, Swiss Transplant Cohort, Swiss Adenoma Cohort, Swiss Hepatocellular Carcinoma Cohort, etc.) and the development of related projects, collaboration in the creation of international registries (International Autoimmune Hepatitis Group – IAIGH, European Reference Network for Rare Liver Diseases – ERN–Rare–Liver), as well as participation in the national strategy to combat hepatitis B and C (http://www.hepatitis-schweiz.ch/en/why-a-hepatitis-strategy) through active involvement in the initiatives promoted.
6. Support the establishment of new cohort studies	Promotion and creation of cohorts for primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis (AIH), and fatty liver disease (NAFLD), involving other hepatology centres at the national level, as well as participation in studies such as the Swiss Hepatitis B Cohort Study, the Swiss Hepatitis C Cohort Study, and the SAMMSU cohort study on the management of the medical consequences of substance use.
7. Establishment of certified Biobanks and collaboration at international level	Biobanks — certified facilities created to collect, store, and manage biological material and clinical data from patients, making them available for clinical research in order to provide scientific explanations and identify possible treatments for specific diseases such as primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC), autoimmune hepatitis (AIH), fatty liver disease (NAFLD/MASLD), and COVID–19. The Fondazione’s AILD Biobank, NAFLD/MASLD Biobank, and COVID–19 Biobank — unique of their kind in Switzerland — are listed on both the Swiss SBP platform and the international BBMRI–ERIC platform and are 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 and, 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	Hyperferritaemia (review)	Primary Sclerosing Cholangitis	Wilson’s disease (review)
Hepatocarcinoma and new treatments	Liver transplants	HCV update	Updates on treatment for Hepatitis C
Increased liver tests	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	Evaluating the hepatopathic patient	Alpha–1 antitrypsin deficiency	

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.

Our partners

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