The D-SOLVE Consortium

CiiM
ZENTRUM FÜR INDIVIDUALISIERTE INFEKTIONSMEDIZIN

Karolinska Institutet

MHH Medizinische Hochschule Hannover

Inserm

INSTITUTUL NAȚIONAL DE BOLI INFECȚIOASE "PROF. DR. MATEI BALȘ"

KAROLINSKA UNIVERSITETSSJUKHUSET

CISPA HELMHOLTZ CENTER FOR INFORMATION SECURITY

HZI HELMHOLTZ Centre for Infection Research

Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico

Project coordinator/ leader

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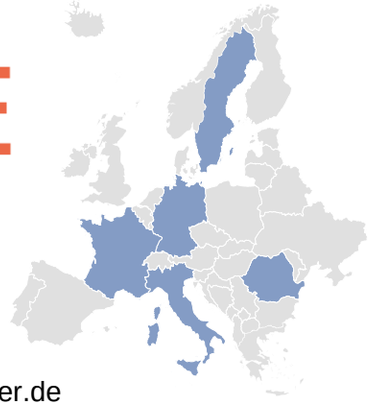
- Helmholtz-Zentrum für Informationssicherheit (CISPA), Germany, Dr. Yang Zhang

D-SOLVE



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Images: stock.adobe.com

The D-SOLVE Consortium

Understanding the individual host response against Hepatitis D Virus to develop a personalized approach for the management of Hepatitis D

Prof. Dr. Heiner Wedemeyer

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Horizon Europe Framework Programme
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Funded by the European Union

The pathogen in a nutshell: Hepatitis D virus

- Hepatitis D is by far the most severe form of chronic viral hepatitis, frequently leading to liver failure, hepatocellular carcinoma and death
- Hepatitis D is caused by coinfection of hepatitis B patients with the hepatitis D virus (HDV)
- There is a large interindividual variability in the course of hepatitis D

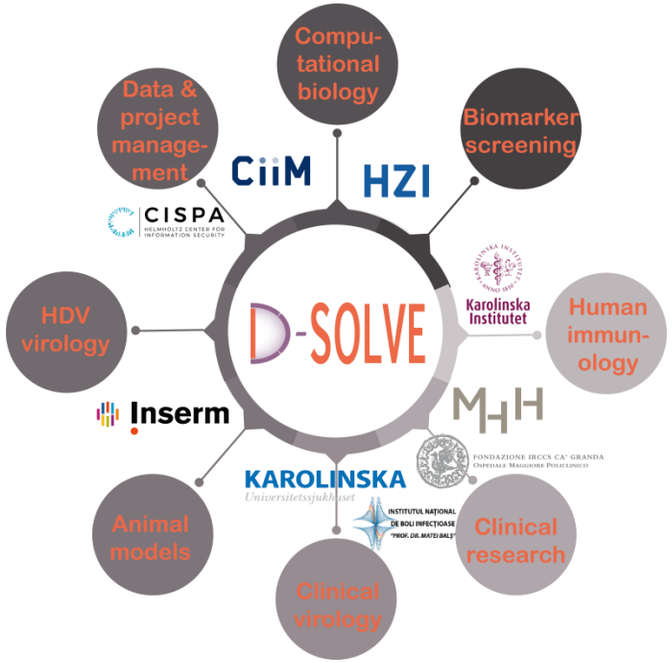
→ **prototype infection for an individualized infection medicine approach**

BUT hepatitis D is an orphan disease

- There is only limited knowledge on disease pathophysiology and host-virus interactions
- No multicenter cohorts of HDV infected patients are available

→ **urgent need to better understand individual factors determining the outcome of infection and to identify subjects benefiting from currently available treatments**

The Consortium: Expertise



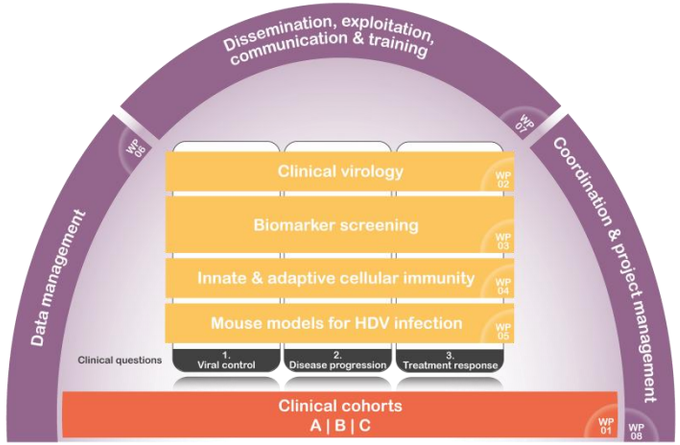
- Several of the leading experts in European HDV research contribute to D-SOLVE
- Clinical centers with an outstanding experience in translational research
- High-level knowledge in performing an unbiased and broad biomarker screening, from host genetics to host transcriptome and proteome analysis
- Mechanistic studies will be performed by renowned specialists in human immunology, HDV immunity and viral hepatitis research

The Aim

- Unbiased screening of a large multicenter cohort of well-defined HDV-infected patients
- Mechanistic studies to determine the functional role of distinct molecules
- Identification of specific parameters and prognostic markers

The Approach

- Key clinical questions on viral control, disease progression and treatment response will be studied across 4 research workpackes
- Similar methodological approaches will be applied for all clinical questions



Clinical cohort A: cross-sectional screening cohort of 750 HDV patients.
Clinical cohort B: retrospective-prospective group of patients with liver biopsies for immunological studies.
Clinical cohort C: prospective clinical trial where controlled stopping of bulevirtide is explored.