PRESS RELEASE

# New Project "PerPrev-CID" Investigates Innovative Approaches for Personalised Prevention and Early Treatment of Chronic Inflammatory Diseases

*International research team aims to advance risk prediction, early detection of disease progression, and personalised prevention in rheumatoid arthritis (RA) and inflammatory bowel disease (IBD) to optimise patient outcomes.*

*Kiel/Germany, 7th of January 2025* – **Rheumatoid arthritis (RA) and inflammatory bowel disease (IBD) are two common chronic inflammatory diseases (CIDs) that place a substantial strain on European healthcare systems. While significant research efforts have led to improvements in treatment, there remains a lack of risk prediction tools and preventive interventions for these diseases. The European research project PerPrev-CID (Personalised Disease Prediction and Prevention in Chronic Inflammatory Disorders) sets out to fill this gap by exploring new standards for early molecular diagnosis and novel assessment tools. Coordinated by the University Hospital Schleswig-Holstein (UKSH) and Kiel University bringing together fifteen international partners from nine countries, the project will receive a total funding of 11 million Euros from the European Union's Horizon Europe Framework Programme for Research and Innovation over the next five years. In addition, the Swiss government will contribute over 2.5 million Euros in funding for the Swiss Associate Partners.**

Chronic inflammatory diseases (CIDs) are disorders of the immune system, which are characterized by uncontrolled inflammation and subsequent tissue destruction in different organ systems. They are expected to affect over 10 % of the European population by 2030. At the same time, there is a high unmet medical need for these diseases, particularly in the areas of prevention and early intervention. Therefore, PerPrev-CID aims to develop new standards for preventing and treating two prototypic CIDs, rheumatoid arthritis (RA) and inflammatory bowel disease (IBD), at an early stage. "We want to gain a deeper understanding of early disease progression focusing on mechanisms, biomarkers and innovative patient-centred outcome measures to develop actionable decision support tools for identifying individuals at risk for IBD and RA. This transformation of medicine is now in reach with innovation in molecular technologies and computational methods," explains Professor Philip Rosenstiel, director of the Institute of Clinical Molecular Biology at UKSH and Kiel University, and scientific coordinator of the PerPrev-CID consortium.

Building on prior and ongoing EU research efforts to optimise targeted therapies, PerPrev-CID will analyse cross-sectional and longitudinal Omics-data sets as well as clinical phenotypes from patients and at-risk individuals to identify markers that predict transitions to active disease, disease progression and early disease relapse. To better monitor individual disease progression and patients' well-being, PerPrev-CID also develops safe digital health technologies such as wearables and apps to track a range of objective health indicators, and enable continuous, digital monitoring of patient data. The network will develop innovative biomarkers from home-based sampling methods of biomaterials such as blood and stool. Furthermore, the project will assess the effectiveness of a nutritional intervention targeting the tryptophan metabolic axis in preventing disease flares and progression in early RA and IBD.

"A shift towards earlier interventions is now crucial to maximise patient outcomes," says Stefan Schreiber, Director of the Dep. of Internal Medicine I at UKSH, Kiel Campus, and speaker of the Cluster

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of Excellence Precision Medicine in Chronic Inflammation, who is leading the clinical intervention part in PerPrev-CID. “If we really want to transform our approach to these disorders, we have to develop rationale, low-threshold health-promoting interventions in individuals at risk to re-program disease at the earliest possible time point.”

Through these efforts and a strong focus on patient involvement, the project significantly contributes to empowering patients and advancing patient-centred research. “We aim to challenge the traditional top-down approach in medical research by promoting co-creation, where patients and individuals at risk of RA or IBD are engaged as active stakeholders throughout the research process. This involvement empowers them to actively participate in decisions regarding their health,” says Rosenstiel. Moreover, PerPrev-CID will provide health professionals with advanced tools and scientifically validated data on omics, diet, and lifestyle factors, enabling personalised patient care. These resources will serve as blueprints for future personalised healthcare initiatives, advancing patient-centred clinical practice.

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**Project Key Facts**

**Title:** Personalised Disease Prediction and Prevention in Chronic Inflammatory Disorders (PerPrev-CID)
**Start:** 1 January 2025
**Duration:** 60 months
**Budget:** € 11 Mil. + € 2.5 Mil. (Swiss government)
**Coordinator:** Universitätsklinikum Schleswig-Holstein (UKSH), Germany
**Website:** www.perprev-cid.eu
**LinkedIn:** www.linkedin.com/showcase/perprev-cid

**PerPrev-CID Partners**

**Belgium**

- European Federation of Crohn`s And Colitis Associations
- Université de Liège
- VIB VZW

**Germany**

- Christian-Albrechts-Universität zu Kiel
- Deutsches Zentrum für Neurodegenerative Erkrankungen E.v.
- EURICE – European Research and Project Office GmbH
- Universitätsklinikum Schleswig-Holstein, Campus Kiel (UKSH)

**Israel**

- Weizmann Institute of Science

**Italy**

- Università Cattolica del Sacro Cuore

Funded by the European Union

**Lithuania**

- Lietuvos Sveikatos Mokslu Universitetas
- Lietuvos Sveitakos Mokslu Universiteto Ligonine Kauno Klinikos

**Netherlands**

- Stichting Radboud Universiteit

**Switzerland**

- European Alliance of Associations for Rheumatology
- Université de Genève

**UK**

- The University of Manchester

## Contact

**Project Coordinator:**
Universitätsklinikum Schleswig-Holstein (UKSH)
Prof. Dr Philip Rosenstiel
Institute of Clinical Molecular Biology
p.rosenstiel@mucosa.de

**Project Management:**
EURICE – European Research and Project Office GmbH
Dr. Francesca Vaccaro
f.vaccaro@eurice.eu

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