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## EMA Workshop on generating clinical evidence for treatment and prevention options for Long- COVID/Post-acute sequelae condition (PASC)

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PCWP/HCPWP Meeting 14<sup>th</sup> – 15<sup>th</sup> November 2023

Presented by Stephanie Buchholz on 14 November 2023  
National Expert on Secondment, Health Threats and Vaccines Strategy (AF-HTV)

An agency of the European Union



# EMA-Workshop on generating clinical evidence for treatment and prevention options for Long-COVID/Post-acute sequelae condition (PASC)

**Date:** Friday **17<sup>th</sup> of November 2023**  
**Time:** **13:00-18:00**, CET Amsterdam time  
**Location:** **Virtual only**, WebEx meeting  
Live broadcasting

## Propose/Objective of the Workshop

- To bring together the expertise of clinicians, academic, regulatory and pharmaceutical communities and patients' groups to address and discuss:
  - The **complexity** of the **pathophysiological mechanisms** and **clinical syndromes** associated with Long-COVID/Post-acute sequelae condition (PASC) that **impacts** the **evaluation** of possible **therapeutic or preventive strategies** in **clinical trials**.
  - The **challenges** of **conducting clinical trials** for novel/repurposed treatment and prevention approaches for **Long-COVID** with respect to the **appropriate therapeutic endpoints, trial designs** and **patient populations** to be included in clinical trials.
  - The **regulatory concerns** that are raised by the **complexity of the conditions** and pertain to **trial design issues** for both prevention and therapeutic strategies, especially the **measures to assess efficacy** in clinical trials.

→ **Technical Workshop** on challenges in **clinical study design** and **potential outcome measures** to assess efficacy for the multiple clinical syndromes of Long-COVID

# Workshop Agenda – Session 1

## Welcome remarks

Sandra Gallina (European Commission, DG Sante)

## **Session 1: Physiopathology and epidemiology of Long-COVID/Post-acute sequelae of SARS-CoV-2 infection (PASC)**

**Chairs:** Christine Dehn (Patients' representative, Deutsche Herzstiftung)

Catherine Cohet (EMA)

## ***Update on epidemiological data on characteristics, burden of disease, and risk factors for Long-COVID***

**Speaker:** Lourdes Mateu Prunonosa (Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain)

- Latest data on the elaboration of a working definition for Long-COVID/PASC, risk factors, main clinical aspects, long-term consequences and differences with other post-acute infection syndromes.

# Workshop Agenda – Session 1 continued

## ***Update on the physiopathological mechanisms of Long-COVID***

- The complexity of pathological mechanisms and clinical syndromes associated, with an additional focus on possible therapeutic or prevention strategies

## ***The role of viral/antigen persistence and links to possible therapeutic strategies***

**Speaker:** Giulia Marchetti (University of Milan, Italy)

- Recent evidence of pathophysiological mechanism and the role of viral/antigen persistence, viral reactivation of other viruses, potential sanctuary sites and therapeutics evaluated in ongoing clinical trials

## ***The role of immunological mechanisms and links to possible therapeutic strategies***

**Speaker:** Daniel Altmann (Imperial College London, UK)

- Recent evidence on immunological mechanisms resulting in immune dysregulation, pathophysiological mechanism resulting in mitochondrial dysfunction, fibrosis, ME/CFS, hyperthrombotic events, ongoing clinical trials and potential treatment options

## Workshop Agenda – Session 2

### **Session 2: Clinical study design for prevention and treatment of Long-COVID/PASC**

**Chairs:** Bruno Sepodes (INFARMED, Portugal Co-Chair ETF, Vice-chair CHMP)

Eugenia Di Meco (EMA)

#### ***Update on recent developments and ongoing trials for treatment and prevention of Long-COVID***

- ***The NIH RECOVER Initiative – Strategic approach to the development of a clinical trials portfolio for Long-COVID***

**Speaker:** Laurie Gutmann (Indiana University School of Medicine, US. Co-chair RECOVER Clinical Trials Steering Committee)

- ***Case example of key considerations and trial design features: Viral persistence and reactivation, and immune dysregulation clinical trial (RECOVER-VITAL)***

**Speaker:** Lindsey Robert Baden (Vice President of Clinical Research, Brigham and Women's Hospital, Co-Principal Investigator, RECOVER Initiative Clinical Trial)

## Workshop Agenda – Session 2 continued

- ***Regulatory challenges concerning the appropriate clinical study design for treatment and prevention options for Long-COVID***

**Speaker:** Stephanie Buchholz (EMA)

- Regulatory concerns due to the complexity of the clinical conditions pertaining the appropriate trial design, patient populations, therapeutic endpoints and outcome measures.

- ***Joint industry presentation on challenges of designing and conducting clinical trials for treatment and prevention***

**Speaker:** Amanda Radola (Pfizer, industry representative)

- Challenges concerning the terminology/definitions, symptoms, clinical trial design: endpoints & population and the potential use of real-world data to complement clinical trial data

# Workshop Agenda – Session 3

## **Session 3. Discussion**

**Moderator:** Marco Cavaleri (EMA)

- Panel with representatives of involved stakeholders (patients, academics and clinicians, industry, regulators)

*Chantal Britt (Long-COVID Europe, patient representative)*

*Daniele Dona (University of Padova, PENTA)*

*Evelina Tacconelli (University of Verona, ORCHESTRA)*

*Eldrin F. Lewis (Co-chair of the RECOVER Clinical Trials Steering Committee, Chief Cardiovascular Medicine, Stanford University)*

*Lindsey Robert Baden (Vice President of Clinical Research, Brigham and Women's Hospital, Co-Principal Investigator, RECOVER Initiative Clinical Trial)*

*Amanda Radola (Pfizer, industry representative)*

*John Farley (Center for Drugs Evaluation and Research, FDA)*

*Ewa Bałkowiech-Iskra (Office for Registration of Medicinal Products, Medical Devices and Biocidal Products, Warsaw, Poland, Member of Emergency Task Force - ETF)*

*Ann-Marie Janson Lang (Swedish MPA, Member of the Clinical trials coordination group - CTCG)*

- Open discussion with the whole audience



## Potential outcome

- To **identify** the **major challenges on the clinical study design** for novel or repurposed prevention and treatment options of Long-COVID/PASC.
- To **better understand** and **potentially resolved** the **methodology issues** of conducting such studies.
- To **identify potential outcome measures** for the **various conditions** that could allow **reliable assessment of efficacy** in clinical trials.
- To **facilitate** and **expedite future designing** of **clinical studies** for prevention and treatment options for Long-COVID/PASC with the knowledge gather in this workshop

## Further information

- **Event homepage:**

[Workshop on generating clinical evidence for treatment and prevention options for long-COVID and post-acute sequelae condition \(PASC\) | European Medicines Agency \(europa.eu\).](#)

- **Active involvement** in the discussion or **further information**, please send an email to:

[CTworkshop@ema.europa.eu](mailto:CTworkshop@ema.europa.eu)

- **Broadcast link:**

[EMA's Vimeo channel 2](#)

# Any questions?

## Further information

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