

PROLEPSIS

Horizon Europe-funded project developing a novel personalised digital care ecosystem for people with PsA

iPROLEPSIS project newsletter | Issue No.6 October 2024

Welcome to the 6th edition of the iPROLEPSIS project newsletter! In this issue, we highlight the release of the miPROLEPSIS and miPROLEPSIS Joint Landmarker apps, recent publications, reflections on Psoriatic Arthritis Awareness Day and Psoriasis Awareness Month, and key takeaways from recent events.

Inside this issue



Apps Now Available Interview with Jolanda Luime Psoriatic Arthritis Awareness Day & Month Patients Handbook Networking activities



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A Spotlight on iPROLEPSIS

The miPROLEPSIS App

Now Available for Android Devices on Google Play Store

The miPROLEPSIS app **facilitates the iPROLEPSIS-PDPID multicenter clinical study** as a data collection tool that will enable the development of digital biomarkers for psoriatic arthritis symptoms and predictive models for inflammation exacerbation.

Note: The app is available only to psoriatic arthritis patients enrolled in the PDPID study in the UK, Netherlands, Portugal, and Greece. Details on study enrollment and app access will be shared when ready.



Read more here.

The miPROLEPSIS Joint Landmarker App

Now Available for Android Devices on Google Play Store.

The miPROLEPSIS Joint Landmarker is an **accompanying app of the miPROLEPSIS app** that enables the video-based active tests feature. More specifically, a set of 6 hand and body exercises are given and the user is asked to perform them in front of the smartphone camera. The app uses the collected videos to extract skeletal data (coordinates of skeletal joints), which are then sent to a cloud for further processing. Through the skeletal data processing, the aim is to **identify whether a patient with Psoriatic Arthritis have difficulties in performing certain hand and body actions.**



Read more <u>here</u>.



Interview with Jolanda Luime

Jolanda Luime, a senior researcher and project partner from <u>Erasmus MC</u> (the Netherlands), shares insights on the <u>iPROLEPSIS</u> project and discusses how iPROLEPSIS is advancing psoriatic arthritis research. The project focuses on improving how we measure and understand disease activity using smartphones and advanced data analysis.

By integrating cutting-edge technology and collaborative efforts, iPROLEPSIS aims to enhance patient selfmanagement and provide clinicians with more accurate insights for better treatment decisions.



Watch the full interview here.

Psoriatic Arthritis Awareness Day 2024

28 September 2024

On 28 September, we celebrated **Psoriatic Arthritis Awareness Day**, **a day dedicated to raising awareness about this condition and its impact on patients' lives.** The iPROLEPSIS project is focused on improving our understanding and management of psoriatic arthritis, which affects 112 out of 100,000 adults worldwide, causing inflammation, pain, and fatigue.

Through **the iPROLEPSIS-PDPID study**, conducted in the Netherlands, UK, Portugal, and Greece, we are developing AI-driven models for personalised monitoring and flare prediction using smart devices and clinical data. **The miPROLEPSIS app** further supports patients by tracking their condition and providing insights into disease triggers.

The iPROLEPSIS project aims to bring together experts and patients to create effective solutions that improve the management of psoriatic arthritis.

Watch the full video here.

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| | | www.iprolepsis.eu | |



Psoriatic Arthritis Patients Handbook

arthritis Living with psoriatic can be challenging, but understanding your condition helps. The upcoming iPROLEPSIS Psoriatic Handbook will Patient Arthritis provide guidance managing symptoms and on communicating with healthcare professionals.

While we finalise the full handbook, explore a preview with infographics offering tips on treatment and coping strategies.



Check out here: https://www.iprolepsis.eu/learning-hub

Psoriasis Awareness Month



In August, we marked **Psoriasis Awareness Month**, standing in support of the millions of people worldwide living with psoriasis – a chronic autoimmune disease. It's important to remember that **between 20-40% of those with psoriasis may go on to develop psoriatic arthritis.**

The iPROLEPSIS Website in Dutch

To strengthen our connection with the community, the iPROLEPSIS website is now accessible in Dutch.

Explore here: https://www.iprolepsis.eu/nl



Events

European Researchers' Night

27 September, 2024



Bárbara Ramalho, Hugo Escobar, and Marta Vicente from FMH/IST-ULisboa presented the **iPROLEPSIS Games** and the iPROLEPSIS project at the European Researchers' Night in Oeiras, Portugal. This event, part of the "**Science for Everyone (SCIEVER) – Inclusion and Sustainability"** initiative, aimed to engage the public with scientific advancements.



Researchers from various fields participated, sharing their work through interactive presentations, live demonstrations, and diverse activities, fostering a stronger connection between **science and the community**. The event unerlined the importance of making **scientific research accessible to all**.



20-21 September, 2024

The iPROLEPSIS colleagues from the <u>AINIGMA Technologies</u> team participated in the <u>InnoHealth Forum</u> 2024 (20-21 September), an event that promotes and highlights innovative health technology solutions for the benefit of humanity.

With 25 exhibitors, 50+ live demos of cutting-edge health products and services and over 130 matchmaking meeting and networking opportunities, this forum was a great opportunity to spread the word about the **iPROLEPSIS** project and connect with potential end-users.







Events



The iPROLEPSIS project partner, **PLUX Biosignals, participated in the 46th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)**, held in Orlando, Florida, USA, from July 15-19, 2024. During this prestigious event, PLUX presented the innovative work of the iPROLEPSIS project, which focuses on developing a novel, personalised digital care ecosystem for individuals with psoriatic arthritis.





Read <u>more.</u>

HUMAN Lab meetup

8 July, 2024

On 8 July 2024, the HUMAN Lab meetup was organised by Universidade de Lisboa (Instituto Superior Técnico, IST).

During the event, **Bárbara Ramalho and Hugo Escobar from FMH/IST-ULisboa presented the iPROLEPSIS project and the iPROLEPSIS Games.** She discussed the project's main goals, motivations, and key milestones, providing insights into their roles in the design and development of serious games.

Read <u>more.</u>





15-19 July, 2024



Scientific Publications

Al Nutrition Recommendation Using a Deep Generative Model and ChatGPT

Papastratis I., et al. (2024). Sci. Rep. 14:14620. Springer Nature.

Read the full **publication**.

ChatGPT in Nutrition: Trends Challenges and Future Directions

Tsiantis V., et al. (2024). PETRA '24: Proc. 17th Int. Conf. on PErvasive Technologies Related to Assistive Environments, pp. 548–553.

Read the full **publication**.

Can ChatGPT provide appropriate meal plans for NCD patients?

Papastratis I., et al. (2024). Nutr. 121, 112291. Elsevier.

Read the full **publication**.

"The Kite" Breathing Serious Game: Agile Co-Design for Psoriatic Arthritis

Ramalho B., et al. (2024). 2024 IEEE 22nd Mediterranean Electrotechnical Conf. (MELECON)

Read the full **<u>publication</u>**.

Developing Sensorimotor Art Games for Psoriatic Arthritis using Agile Storyboarding and Game Co-Design Processes

Ramalho B., et al. (2024). Proc. 11th Int. Conf. on Software Development and Technologies for Enhancing Accessibility and Fighting Info-exclusion (DSAI '24).

Read the full **publication**.



Clustering and Networking

Following our approval for the Horizon Results Booster (HRB), we are now **advancing with Module A services focused on dissemination.** This initiative by the European Commission helps maximise the impact of EU-funded research.

Our cluster brings together five projects—iPROLEPSIS, AI-PROGNOSIS, HIPPOCRATES, REBECCA, and AutoPiX—and we look forward to the next steps in this collaboration.



DHU week. From September 16th to 20th, the Digital Health Uptake (DHU) project hosted a series of free online master classes aimed at enhancing the skills needed to implement and scale digital health solutions. These master classes were a key part of DHU's broader mission to strengthen capacity building and encourage mutual learning across regions, Member States, and countries associated with the Digital Europe Programme, under which DHU is funded.



The week was a great success with 926 registrations and 467 participants.

Missed the sessions? Watch the recordings **here**.

Executive Digests: DHU Executive Digests offer concise, trusted insights on the most significant topics shaping the industry today. With **9 expertly crafted editions**, each digest delivers clear, actionable guidance on pressing issues like legislation, policy, standards, and best practices.

Read our Digests here.

