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13th APLF Annual Conference, 18-19 October 2025, Aveiro, Portugal
Programme and selected Abstracts



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THERAPEUTIC ADVANCES in *Drug Safety*

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Therapeutic Advances in Drug Safety delivers the highest quality peer-reviewed open access original research articles, reviews, and scholarly comment on pioneering efforts and innovative studies pertaining to the safe use of drugs in patients. The journal has a strong clinical and pharmacological focus and is aimed at an international audience of clinicians and researchers in drug safety, providing an online forum for rapid dissemination of recent research and perspectives in this area.

The journal is dedicated to publishing clinical research. We do not publish preclinical research, including basic laboratory research and animal studies.

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 - (ii) avoid bias in favour of the interests of particular schools or directions of research or particular political or narrow disciplinary objectives to the exclusion of others;
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Dear participants,

The XIII National Conference, organized by the Portuguese Association of Pharmacy Technicians (APLF), reinforces the commitment to fostering scientific exchange and discussion among Pharmacy Technicians, bringing together professionals, students, academia, and the professional association. Held on 18–19 October 2025 at Aveiro, this year’s conference embraces the central theme “Medication Safety”, addressing one of the most pressing priorities in healthcare today. The event gathers renowned national and international speakers, ensuring a multidisciplinary and up-to-date approach to the safe and effective use of medicines and health technologies. The scientific programme includes lectures, workshops, debates, and scientific presentations, covering the diverse areas of professional practice and offering a platform for the sharing of innovative ideas, best practices, and research outcomes.

A record-breaking 92 abstracts were submitted for this edition — the highest number ever in the history of the institution, now published in the *Therapeutic Advances in Drug Safety*, marking a unique contribution to scientific dissemination in the field.

Our thanks go to all participants, to the members of the Organizing and Scientific Committees — composed of dedicated professionals from across the country — and to all authors who have actively contributed by sharing their research and practical experiences, thereby promoting both professional growth and the advancement of the profession.

We hope this conference proves to be a fruitful opportunity for knowledge exchange and networking, and we look forward to continuing this journey of excellence together.

Jorge Balteiro

President of the Organizing Committee of XIII National Conference of APLF

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Programme

Day 1 – 18th October, 2025

09:30 – Opening Ceremony

Cristiano Matos (President of APLF)

Jorge Balteiro (President of the Organizing Committee, XIII National Conference)

Rui Cruz (President of the Scientific Committee, XIII National Conference)

10:00 – Inaugural Conference: *“Medication Safety: From Approval to Use”*

Moderator: Sofia Antunes (Senior Specialist in Pharmacovigilance, PharmaLex Portugal, LDA, Portugal)

- *“Medicinal Product Lifecycle: Safety and Risk Management”* – Maria Teresa Herdeiro (Associate Professor with Habilitation, Department of Medical Sciences, University of Aveiro, Portugal) – **CONFERENCE-01**
- *“Medicinal product lifecycle: Regulatory and Quality Management”* – André Luz (OWLTECH – Manager and Qualified Person, Portugal) – **CONFERENCE-02**

11:30 – Panel I: *“Medicines in Society and Sport: The Thin Line Between Use and Misuse”*

Moderator: Luís Fonseca (Judicial Police, Forensic Science Laboratory – Drugs and Toxic Unit, Portugal)

- *“The Medicalisation of Everyday Life and the Trivialisation of Risk: The Trajectory of Addiction”* – Graça Vilar (Director, Department of Integrated Intervention, Institute for Addictive Behaviours and Dependencies, I.P., Portugal) – **CONFERENCE-03**
- *“Illicit and Inappropriate Use of Medicines in Portugal: The Current Landscape”* – Sara Tábuas (Forensic Science Specialist, Drugs and Toxic Sector of the Forensic Science Laboratory, Judicial Police, Portugal) – **CONFERENCE-04**
- *“Use of Performance-Enhancing Substances: Factors and Prevalence among Fitness Enthusiasts in Portugal”* – Ana Sofia Tavares (Escola Superior de Tecnologia da Saúde de Lisboa, Instituto Politécnico de Lisboa, Lisboa, Portugal) – **CONFERENCE-05**

14:30 – Panel II: *“Antibiotics: Strategies for Safe and Efficient Use”*

Moderator: Cláudia Nazareth (Clinical Director for Hospital Healthcare, Local Health Unit of Coimbra)

- *“Antimicrobial stewardship: data-driven behaviour change in proximity”* – Francisco Almeida (Infection Prevention and Control and Antimicrobial Resistance Unit – UPCIRA, Local Health Unit São João, Portugal) – **CONFERENCE-06**
- *“Multifaceted interventions to improve antibiotic use – One Health approach”* – Fátima Roque (ESS/IPG; BRIDGES – Biotechnology Research, Innovation and Design for Health Products, Portugal) – **CONFERENCE-07**
- *“Rational Use of Antibiotics and the Challenges of Antimicrobial Resistance”* – André Peralta Santos (Deputy Director General of Health - DGS - Portugal)

16:30 – Panel III: “Artificial Intelligence in Medication Safety and its Impact on the Future of the Profession: Challenges and Opportunities”

Moderator: Fábio Urbano Soares (Edol Laboratories, Portugal; Seeha, United Arab Emirates)

- “*Localized AI in Hospital Pharmacy: Medex and Smart Distribution*” - António Fonseca (Local Health Unit of Vila Nova de Gaia/Espinho, Portugal) – **CONFERENCE-08**
- “*Artificial Intelligence in Hospital Pharmacy: Revolution or Complement?*” - José Miguel Mesquita (Senior Manager, Strategy Unit, Glintt Life Hospitals, Portugal) – **CONFERENCE-09**
- “*Pharmaceutical AI and Care Delivery: Reality or Promise?*” - Filipa Fixe (Healthcare Director, KPMG; Visiting Professor, Institute of Social and Political Sciences, University of Lisbon, Portugal)
- “*Ideas and Opportunities for Clinical Trials management systems in the age of AI*” - Rui Patricio (Universidade of Aveiro, Aveiro, Portugal) – **CONFERENCE-10**

18:00 – Cultural Moment

Day 2 – 19th October, 2025

09:00 – Oral Communications (choice from Scientific Committee)

11:00 – Panel IV: “Deprescribing: Less is More”

Moderator: Carla Perpétuo (Local Health Unit of Guarda; BRIDGES – Biotechnology Research, Innovation and Design for Health Products, Polytechnic Institute of Guarda, Portugal)

- “*Optimizing Medication Use in Elderly Patients: A Framework for Deprescribing and Rational Prescribing*” - Luís Monteiro (Coordinator, USF Esgueira +; Full Professor, Department of Medical Sciences, University of Aveiro; Researcher, Egas Moniz Academic and Clinical Centre, Portugal) – **CONFERENCE-11**
- “*A Multifaceted Intervention to Reduce Potentially Inappropriate Medication in Older Adults*” - Daniela Rodrigues (BRIDGES – Biotechnology Research, Innovation and Design for Health Products, Polytechnic Institute of Guarda, Portugal) – **CONFERENCE-12**
- “*Deprescribing in Portugal: Perspectives of Physicians and Older Patients*” - Anabela Pereira (RISE-Health, Associated Laboratory, Portugal) – **CONFERENCE-13**

12:30 – Closing Ceremony and Awards Presentation

Cristiano Matos (President of APLF)

Jorge Balteiro (President of the Organizing Committee, XIII National Conference)

Abstract-Post-59 Patient-Centered Safety

Sleep deprivation in athletes – efficacy and risks of benzodiazepines in improving sleep and sports performance

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Background: Benzodiazepines act on GABA-A receptors, causing sedation and relaxation, and are used by athletes to induce sleep and control anxiety. Despite the immediate benefits, they can impair performance due to residual sedation, cognitive impairment, and risk of dependence. **Objectives:** To evaluate the efficacy and risks of benzodiazepines on sleep and athletic performance, considering immediate benefits and physical and cognitive adverse effects. **Methods:** This narrative review analyzed studies from the last six years, in PubMed and Google Scholar in this period: September 2024–May 2025. It included open-access studies in Portuguese or English on benzodiazepines in athletes. It excluded non-reviewed, biased, or other-language studies. **Results:** Benzodiazepines are effective in inducing rapid sleep and reducing anxiety in athletes, but they pose risks such as residual sedation, cognitive impairment and dependence [1]. Prolonged use, over two weeks, can impair performance, especially in sports that require focus and fine motor control, such as gymnastics and racket sports [2]. Non-pharmacological alternatives, such as sleep hygiene, cognitive behavioral therapy, and mindfulness, are recommended for their sustained benefits and minimal side effects [3]. **Conclusion:** In conclusion, benzodiazepines help with sleep and anxiety in the short term in athletes, but carry risks such as cognitive impairment, residual sedation, and dependence, especially in sports that require focus and fine motor control. Non-pharmacological methods, such as sleep hygiene, cognitive behavioral therapy, and mindfulness, are safer and more effective for long-term performance and health.

Keywords: Benzodiazepines; Sleep and Sports Performance; Adverse Effects

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Abstract-Post-67 Patient-Centered Safety

Medication Use During Pregnancy: Patterns And Associated Factors

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Background: Pregnancy causes physiological changes that can increase vulnerability to illness and alter drug pharmacokinetics, while some medications cross the placenta and affect foetal development, especially during organogenesis. These risks highlight the importance of careful monitoring and support regulatory updates such as the FDA's 2015 revision of pregnancy risk categories [1]. **Objectives:** To identify factors associated with medicine use during pregnancy and describe consumption patterns among pregnant women in northeastern Trás-os-Montes, Portugal. **Methods:** A cross-sectional, quantitative, descriptive and correlational study was conducted with 205 women from Bragança and Mirandela, all of whom had experienced at least one pregnancy. Data were collected between April and June 2023 using a structured questionnaire adapted from Guerra et al. (2008) [2]. **Results:** A total of 79.5% reported using medication during pregnancy. The most used substances were folic acid (12.2%), paracetamol (29.3%), and doxylamine-pyridoxine (23.4%). The most frequent groups included dietary supplements, analgesics, and antiemetics. Although supplements are not classified as medicines, their

inclusion is justified due to widespread use and relevance during pregnancy. A statistically significant association was found between age and medicine use ($p < 0.01$). Most women reported having received professional guidance and being aware of the associated risks. **Conclusion:** Women in northeastern Trás-os-Montes demonstrated awareness of medication risks and used medicines under professional supervision, despite few reporting complications. These results underline the importance of ongoing education and the role of healthcare professionals in ensuring safe medicine use during pregnancy.

Keywords: Pregnancy, medicine use, risks

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Abstract-Post-70 Patient-Centered Safety

Pharmaceutical Literacy Among Elderly Individuals Who Attend Community Pharmacies

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Background: The safe and effective use of medication is based on pharmaceutical literacy, which is of great importance among the elderly population, who are often polymedicated. **Objective:** This study aimed to assess the pharmaceutical literacy of elderly people using

community pharmacies. **Methods:** Observational, descriptive, cross-sectional study conducted between March and April 2025 in community pharmacies located in the central region of Portugal, selected by convenience. Data were collected using the RALPH questionnaire, which assesses three dimensions of pharmaceutical literacy: functional, communicative, and critical. The sampling criteria included individuals aged 65 or older, cognitively able to respond, undergoing chronic treatment, and who consented to participate. **Results:** The sample consisted of 42 individuals aged between 65 and 91 years and revealed a female predominance (54.8%), with an overall mean age of 77.26 years. Most participants demonstrated high functional and communicative literacy, but moderate critical literacy. It was found that 59.5% of users did not seek clarification about the usefulness of the medicines. Differences between sexes were not statistically significant, although trends indicate greater functional and critical literacy in males, and communicative literacy in females. **Conclusion:** This study shows that elderly people who are using medications have good functional and communicative skills in terms of pharmaceutical literacy but have difficulty in critically evaluating information about the medications they are taking. Thus, we highlight the relevance of the role of community pharmacies in identifying users with low literacy, contributing to a safer and more self-aware use of medications and to health promotion.

Keywords: Health literacy; Pharmaceutical literacy; Community pharmacy

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