

Program and Abstract Book

Venue:

Ágnes-Heller-Haus, University of Innsbruck

Address: Agnes-Heller-Haus. Innrain 52a, 6020 Innsbruck, Austria

Phone: +43 512 5070

Webpage: <https://www.uibk.ac.at/de/newsroom/2023/agnes-heller-haus-eroffnet/>

SOCIAL PROGRAMME ACTIVITIES

Social activity - Fun Run for charity:

The Funrun has become a tradition at each ESCP Workshop or Symposium and offers the participants the possibility to enter a group run, organised by sportsman and photographer Berry van Schaik. This slow-paced run, fit for everyone with running shoes, will take about 45 minutes. A low participation fee (€15) is requested to raise funds to support charity - Children with Cancer.

Registration available in person at ESCP desk on Thursday 19th, or online via ESCP Workshop registration webpage: <https://escpweb.org/product/escp-spring-workshop-2026-innsbruck-social-activity-funrun/>

Date: Friday 20th February 2026

Time: 7:30 – 08:00

Fee: €15

Meeting point: Main Entrance of Ágnes-Heller-Haus, University of Innsbruck, Innrain 52a, 6020 Innsbruck

Organizing and Scientific Committee:

Univ.-Prof. Dr. Anita Weidmann (UIBK- Chair)

Dr. Ivana Tadić (UIBK – Deputy Chair)

Assoc. Prof. Pharm. Dr. Daniela Fialová (ESCP GC/ResCom)

Dr. Valentina Buda (ESCP EduCom)

Dr. Stefan Deibl, MSc (Austrian Chamber of Pharmacists)

Mag.pharm Alexander-Schmied Islinger, MSc (CPD dept. Austrian Chamber of Pharmacists)

Mag.pharm Susanne Ergott Badawi (Vice President - VAAÖ / Austrian Chamber of Pharmacists)

Mag.pharm Martina Jeske (President - AAHP Hospital Pharm Association)

Mag.pharm Danielle Hochhold (Postgraduate research student representative)

Miss Vanessa Scharmer (Undergraduate Pharmacy student representative)

Ap.Prof. Priv.-Doz. Dr.med.univ. Dr.scient.med. Schörgenhofer (Medical Prescriber)

Edwin van Aalten, PharmD (Director ESCP)

ESCP General Committee

Anna Oleárová (SK), President

Monika Lutters (CH), Past President

Kamila Urbańczyk (PL), Vice President

Freyja Jónsdóttir (IS), Treasurer

Emanuela Peila (IT), Secretary

Daniela Fialová (CZ)

Ivana Tadić (AT)

ESCP International Office

Edwin van Aalten, Director

international.office@escpweb.org

www.escpweb.org

Welcome to the ESCP International Workshop in Innsbruck!

We are proud to invite you to join the Spring Workshop of the European Society of Clinical Pharmacy in Innsbruck, Austria, from 19-20 February 2026.

With this Spring Workshop, themed “5 Steps of Medication Safety: Medication Without Harm, Where Are We Now?” we want to reflect our commitment to advancing the WHO’s global initiative on medication safety. Since the landmark 2019 WHO technical report, clinical pharmacists across Europe have been at the forefront of implementing innovative strategies to reduce medication-related harm.

As we are at the midpoint toward the WHO’s ambitious target of reducing preventable medication-related harm by 50% by 2030, this workshop provides a timely opportunity to assess our progress, share successes, and address ongoing challenges.

The ESCP Workshop in Innsbruck is an excellent opportunity to enjoy discussions with specialists and share experience with others from all around the globe.

To enhance the networking possibilities, a networking social event including dinner will take place on Wednesday, February 18th, at the Hotel Rufis Innsbruck restaurant.

This event will coincide with the 10th PCNE Working Symposium 2026 (Pharmaceutical Care Network Europe), which will be held in Innsbruck, on 17 and 18 February 2026, just before the ESCP Spring Workshop. Attendees from both societies are invited to register for this joint event. The number of participants for the network event is limited, and registration will be available until all spots are filled.

On these pages you will find all relevant information about the event, the venue, transport and accommodation in Innsbruck also together with the workshop Abstract book.

We are looking forward to meeting you in Innsbruck, Austria in February 2026!



Dr. Anna Oleárová, PharmD., Ph.D.,
Slovak Republic
ESCP President

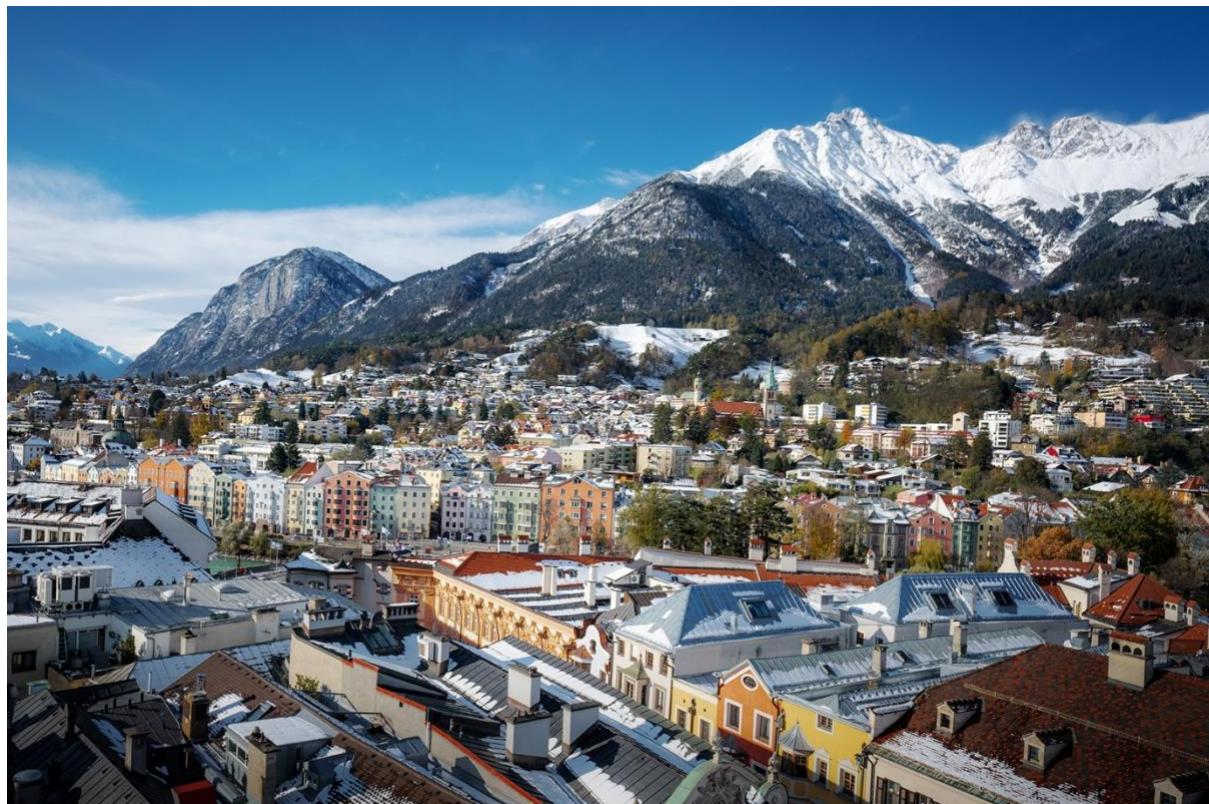


Prof. Dr. Anita E. Weidmann, Austria
Chair of the Organizing & Scientific Committee of the ESCP International Workshop in Innsbruck

Welcome to Innsbruck

Innsbruck is a picturesque Alpine city in western Austria, beautifully set between towering mountains and the River Inn. Famous for its unique blend of imperial history and modern mountain lifestyle, the city offers charming streets, colorful facades, and impressive landmarks such as the Golden Roof and the Imperial Palace. You can stroll through the historic Old Town, enjoy cozy cafés with mountain views, or take a cable car straight from the city center up to breathtaking alpine scenery. With its rich culture, striking architecture, and easy access to nature, Innsbruck is an inviting destination for both urban explorers and outdoor enthusiasts alike.

For more tourist information visit: <https://www.innsbruck.info/en/>



ESCP Spring Workshop 2026 Venue - Ágnes-Heller-Haus, University of Innsbruck

The ESCP Spring Workshop 2026 Innsbruck will be hosted at the **Ágnes-Heller-Haus**, a recently completed and architecturally distinctive building at the **University of Innsbruck**. Opened in 2023, the venue stands out for its contemporary design centered around a spacious, light-filled atrium that encourages interaction and exchange - an ideal setting for an international academic workshop. Its modern lecture halls and seminar rooms, combined with a strong focus on openness, sustainability, and functionality, provide an inspiring and well-equipped environment for the ESCP community.

Program

First Day: Thursday February 19 th		Second Day: Friday February 20 th	
08:00 - 08:30	Registration Welcome Coffee & Tea <i>Room: 1st floor – SR 11</i>	07:30 - 08:00	Charity Fun Run <i>Meeting point: Main entrance of Ágnes-Heller-Haus, University of Innsbruck, Innrain 52a, 6020 Innsbruck</i>
08:30 - 09:30	Welcome & Introduction President ESCP: Dr. Anna Oleárová Chair of the Organizing Committee: Prof. Anita Weidmann Welcome by Dean of the Faculty of Health Sciences, University of Innsbruck: Univ.-Prof. Dr. Hubert Huppertz Welcome by Representative of the Apothekerkammer Tirol: Mag. Phar. Stefanie Lair. Impulse Talk on Austrian Medication without Harm Guideline for Hospitals: Mag. Pharm. Martina Jeske, President Welcome from PCNE President: Dr. Ivana Tadic <i>Room: Audimax</i>	08:30 - 08:45	Summary of the First Day <i>Room: Audimax</i>
09:30 - 10:15	Plenary Lecture 1 <u>Title:</u> Plenary lecture 1: First, do no harm. Challenges and solutions in appropriate prescribing and risk and benefit assessment <u>Speaker:</u> Prof. Carmel Hughes <i>Room: Audimax</i>	08:45 - 09:30	Plenary Lecture 4: <u>Title:</u> Patient Engagement in Health Care – Overview, Communication, Practical Tips and Outcomes <u>Speaker:</u> Prof. Lotte Stig Nørgaard <i>Room: Audimax</i>
10:15 - 10:45	COFFEE BREAK - POSTER VIEWING - EXHIBITION <i>Room: 1st floor – SR 11</i>	09:30 - 10:15	Plenary Lecture 5 <u>Title:</u> Medication Reconciliation at Care Transition: knowing the unknown <u>Speaker:</u> Dr. Clementine C.M. Stuijt <i>Room: Audimax</i>
10:45 - 12:15	Parallel Sessions part I WS 1: Room SR 8 WS 2: Room SR 9 WS 3: Room SR 12 WS 4: Room SR 13 WS 5: Room SR 14 <i>Room: 1st floor – SR 11</i>	10:15 - 10:45	COFFEE BREAK - POSTER VIEWING – EXHIBITION <i>Room: 1st floor – SR 11</i>
12:15 - 13:45	LUNCH - POSTER VIEWING – EXHIBITION <i>Room: 1st floor – SR 11</i>	10:45 - 12:15	Parallel sessions workshops part I WS 1: Room SR 8 WS 2: Room SR 9 WS 3: Room SR 12

			<i>WS 4: Room SR 13 WS 5: Room SR 14</i>
12:45 - 13:30	ERASMUS+ Lecture (for students & YESCP) <i>Room: SR 7</i>	12:15 - 13:45	LUNCH - POSTER VIEWING – EXHIBITION <i>Room: 1st floor – SR 11</i>
13:45 - 15:15	Parallel sessions part II (continued) <i>WS 1: Room SR 8 WS 2: Room SR 9 WS 3: Room SR 12 WS 4: Room SR 13 WS 5: Room SR 14</i>	12:45 - 13:45	Sponsored Lecture by BAYER <u>Title:</u> Contrast media safety update <u>Speaker:</u> Dr. Thomas Wels <i>Room: Audimax</i>
15:15 - 15:45	COFFEE BREAK - POSTER VIEWING – EXHIBITION <i>Room: 1st floor - SR11</i>	13:45 - 15:15	Parallel sessions part II (continued) <i>WS 1: Room SR 8 WS 2: Room SR 9 WS 3: Room SR 12 WS 4: Room SR 13 WS 5: Room SR 14</i>
15:45 - 16:30	Oral Communications <i>Room: SR 6, SR 7</i>	15:15 - 15:45	COFFEE BREAK - POSTER VIEWING – EXHIBITION <i>Room: 1st floor - SR11</i>
15:45 - 16:05	Dispocal Study Household Pharmaceutical Waste as an Overlooked Source of Medication-Related Harm: Results of a Europe-Wide DISPOSAL Study <u>Speaker:</u> Prof. Przemyslaw Kardas <i>Room: Audimax</i>	15:45 - 16:30	Oral Communications <i>Room: SR 6, SR 7</i>
16:30 - 17:15	Plenary Lecture 2 <u>Title:</u> Optimising Patient Outcomes Through Medication Reviews <u>Speaker:</u> Prof. Olivia Dalleur <i>Room: Audimax</i>	16:30 - 17:00	Wrap up & Conclusions President ESCP & Chair of the Spring Workshop Committee <i>Room: Audimax</i>
17:15 - 18:00	Plenary Lecture 3 <u>Title:</u> Improving Medication Safety with an Electronic Closed-loop Medication Management System? <u>Speaker:</u> Dr. Lotta Schepel <i>Room: Audimax</i>		
18:00 - 19:30	After-hours Dialogue: Medication Safety Prov.Droz.Dr. Maria Kletecka-Pulker (Austrian Platform for Patient Safety)- (followed by a free Networking Buffet) <i>Room: Aula, Main Building Innrain 52, 1st floor, Room 1001</i>		

19:30 - 20:30	Young ESCP Dinner Meeting Point: CCB Innsbruck, Innrain 80/82		
---------------	--	--	--

PLENARY SPEAKERS' BIOGRAPHIES AND SUMMARIES



Prof. Carmel Hughes, PhD.

Primary Care Pharmacy, School of Pharmacy, Queen's University Belfast, the UK

Carmel is Professor of Primary Care Pharmacy at the School of Pharmacy at Queen's University Belfast. Her research interests centre on prescribing in older people, intervention development and evidence-based healthcare. She has published >350 papers and attracted ~£15 million in grant funding. Carmel is a Senior Editor for the journal *Pilot and Feasibility Studies*. She is a Trustee of the Vivensa Foundation, a charity which funds research focusing on older people and she also chairs the Foundation's Research Grants Committee. She is a member of the National Institute for Health and Care Research (NIHR) Programme Grants for Applied Research funding panel. Carmel is currently a member of the International Advisory Board of the School for Primary Care Research (funded by NIHR), and International Advisor to the Advisory Committee on the Trust-initiated Project on the Development of Primary Care Community Pharmacy Services, Hong Kong. Carmel was co-Chair for Unit of Assessment 3 (Allied Health Professions, Dentistry, Nursing and Pharmacy) as part of the Research Excellence Framework (REF) People, Culture and Environment Pilot and has recently been appointed as Deputy Chair for Unit of Assessment 3 for REF 2029, a periodic assessment of research quality conducted in all United Kingdom universities.

At the ESCP Spring workshop she will give a plenary lecture entitled: “**“First, do no harm”. Challenges and solutions in appropriate prescribing and risk and benefit assessment”**

Abstract of the lecture

Prescribing of medication is one of the most common interventions in health care. Most people will receive medication at some point, and as the population ages, more people will receive more medications (polypharmacy) as a way to manage multiple medical conditions (multimorbidity). Polypharmacy presents challenges as people may be at risk of side-effects and poor adherence, and a balance needs to be struck between many and too many medicines. Other prescribing scenarios may lead to public health concerns such as the overuse of antibiotics and the resultant increase in antimicrobial resistance. Using selected examples from the research literature, this presentation will explore these prescribing challenges, potential solutions in terms of interventions, and how to assess risk and benefit through the careful selection of outcomes.



Prof. Olivia Dalleur, PhD.

Academic Centre for Pharmaceutical Care, Université catholique de Louvain, Belgium

Olivia Dalleur is passionate about advancing safe and effective medication use. A Pharmacy graduate from UCLouvain (Belgium) with specializations in hospital and clinical pharmacy, she has served as a clinical pharmacist at Cliniques universitaires Saint-Luc since 2007, blending hands-on geriatric care with innovative IT solutions to strengthen decision support systems.

Her PhD and postdoctoral fellowship in Boston shaped her expertise in optimizing medication for older patients. Today, she bridges practice and academia as a professor at UCLouvain, teaching pharmaceutical care and clinical pharmacy methodology, while driving education and research through the Centre Académique en Soins Pharmaceutiques of UCLouvain.

At the Louvain Drug Research Institute, Olivia leads projects on medication safety, polypharmacy, and appropriate prescribing. She actively contributes to European research initiatives on medication review. She also collaborates globally, including with Université d'Abomey-Calavi (Benin), to develop clinical pharmacy practice in emerging healthcare systems. She serves on the Education Committee of the European Society of Clinical Pharmacy (ESCP).

Her work focuses on improving patient outcomes and shaping the future of pharmaceutical care through innovation, research, and international partnerships.

At the ESCP Spring workshop she will give a plenary lecture entitled: **“Optimising Patient Outcomes Through Medication Review”**

Abstract of the lecture

Medication review is a cornerstone of clinical pharmacy practice, but how strong is the evidence for its impact on patient outcomes? This plenary session will provide an update on the latest research, explore innovative approaches, and discuss strategies to move beyond traditional models. Join us to examine how medication review can evolve into a more effective, patient-centered intervention and discover cutting-edge practices shaping the future of pharmaceutical care.



Assoc. Prof. Lotta Schepel, PhD.

Helsinki University hospital and University of Helsinki, Finland

Lotta Schepel (Associate Professor; Ph.D.; Hospital Pharmacy Specialist, Accredited for Comprehensive Medication Reviews) works as a Chief medication safety officer at Helsinki University hospital (HUS) and Visiting researcher at the University of Helsinki.

In 2017, she was the first Finnish medication safety officer and has done remarkable pioneer work in developing medication safety and hospital clinical pharmacy services in Finnish healthcare system. Interprofessional collaboration, identifying high-alert medications,

electronic closed-loop medication management system and patient-centered tasks of hospital clinical pharmacists (e.g. medication reconciliation and medication reviews) have been in key focus of her practical and scientific work.

In addition, she has been active in competence development of hospital clinical pharmacists and have created In-house comprehensive education training program for HUS Pharmacy in close collaboration with University of Helsinki. Her persistent and determined work has led to medication safety improvements and several interesting new positions for clinical pharmacists in HUS and Finnish healthcare setting.

At the ESCP Spring workshop she will give a plenary lecture entitled: **“Improving Medication Safety with electronic closed-loop medication management system?”**

Abstract of the lecture

Many medication errors (MEs) in the hospital setting are due to manual, error-prone processes in the medication management system. Closed-loop Electronic Medication Management Systems (EMMSs) are seen as potential technological solutions to prevent MEs. Electronic medication management refers to a closed-loop system that encompasses prescribing, pharmacy verification, smart infusion pumps, automated dispensing cabinets, barcoded medication administration (BCMA), and anything that has electronic or digital medicine datasets or encompasses medication management processes.

Aim of using a closed-loop technology approach is to decrease the manual, error-prone human labor in the medication management process (e.g., verbal, handwritten orders, or manual double checks). Electronic health record (EHR) systems should enable this technology to achieve a closed-loop medication management process with EMMSs. However, new technology can introduce new challenges and processes that need to be managed. Furthermore, new technology is usually expensive and its value and effects on patient safety, quality, and resource management should be carefully considered.

This plenary describes hospitals’ EMMS approaches and their impact on medication workflows and safety. The Finnish Helsinki University Hospital (HUS) is used as an example, because it has recently implemented its first closed-loop EMMS with the Epic-based Electronic Health Record system (APOTTI).



Prof. Lotte Stig Nørgaard, PhD.
University of Copenhagen, Denmark

Lotte Stig Nørgaard (LSN) is a Professor of Social Pharmacy at the University of Copenhagen, Denmark. She holds a PhD. in Social Pharmacy from the same institution. Over the past three decades, she has held key academic and leadership positions within pharmacy education and research, including serving as head of the pharmacy internship and as head of the Social and Clinical Pharmacy Research Group.

Her research (mainly qualitative) focuses on the intersection of medicine use, patient safety, and communication – with a special focus on community pharmacy. She has led and contributed to numerous national and international projects exploring how healthcare professionals communicate with patients about medicines, and how patients can be actively involved in research. Among other things, she and her co-workers have developed an online course on patients' perspectives on medicine use, which has reached over 9,000 healthcare professionals. She has contributed to the establishment of The Danish Network for Community Pharmacy Practice Research and Development – a network now effective in more than 100 community pharmacies.

LSN has authored more than 130 international peer-reviewed articles and is known for translating complex research into practical strategies for improving medicine-safe care.

At the ESCP Spring workshop she will give a plenary lecture entitled: **“Patient Engagement in Health Care – Overview, Communication, Practical Tips and Outcomes”**

Abstract of the lecture

Conveying everything about communication and patient engagement in a 45-minute plenary lecture is virtually an impossible task. We know from a wide range of research projects that the way healthcare professionals communicate with patients has a significant impact on patients' medication safety. Likewise, patient engagement in relation to medicine use has been high on the research agenda in many countries in recent years.

In this plenary lecture, I will thus introduce the audience to selected and effective models within patient communication (including mentalization) and patient engagement/involvement - all “seasoned” with concrete examples from completed or ongoing projects.

During the lecture, the audience will be introduced to an online course on patients' perspectives on medicine use, which has already been visited by more than 9,000 healthcare professionals. The course and its associated research provide, among other things, an introduction to why there is often a difference between patients' and healthcare professionals' perspectives on medicines - and why it is important to take this difference into account when attempting to establish medication-safe treatment pathways for (and with) patients. The audience will also get no less than 24 tips on how to engage and involve patients as co-researchers in projects on

medicine use, just as the result of several scoping reviews of models and frameworks of patient engagement in broader health services research will be discussed.

The aim of the plenary lecture is to make the audience reflect on how to communicate effectively with patients about their medicine and on how to engage patients in medication safety research.



Dr. Clementine C.M. Stuijt, PharmD., MSc., PhD,

Centre of Excellence in Parkinson's disease, Groningen/Zorg voor Parkinson, ParkinsonNet, Nijmegen the Netherlands

Clementine Stuijt, PharmD., MSc., PhD., began her professional career as a community pharmacist in various community pharmacies. She became increasingly concerned about the practice of dispensing medications without having adequate knowledge of a patient's medical history or complaints. Consequently, she enrolled in the clinical pharmacy master course in Edinburgh and successfully graduated as a clinical pharmacist in 2006, with a focus on medication

review. In the meantime, she pioneered clinical pharmacy services at the Onze Lieve Vrouwe Gasthuis hospital in Amsterdam, focusing on care of older patients in residential or nursing homes. In 2013, Clementine transitioned to work for the, at that time still to be established, center of excellence on Parkinson's disease, known as "Punt voor Parkinson." In addition to individual medication guidance involving personalized support and advice for managing medications effectively, medication optimization and -review are carried out in this outpatient setting by Clementine. At that time, she also began lecturing various healthcare professionals on pharmacotherapy for people with Parkinson's disease in close collaboration with ParkinsonNet, which is still ongoing.

A PhD trajectory on the impact of targeted pharmaceutical care interventions on clinical and patient-related outcomes, focusing on transitions in care both in the hospital and the outpatient clinic, was successfully defended in 2024.

Currently she is working for Punt voor Parkinson and ParkinsonNet for people with Parkinson's disease.

Publications: <https://www.researchgate.net/profile/Clementine-Stuijt/research>

At the ESCP Spring workshop he will give a plenary lecture entitled: **"Medication Reconciliation at Care Transition: knowing the unknown"**

Abstract of the lecture

Transitions of care like from home to hospital (and vice versa) or from outpatient clinic to primary care, are critical moments in the patient journey, often associated with unintended medication discrepancies that can lead to adverse drug events (ADEs) and compromised patient safety. Several studies have highlighted up to 60% of patients experience at least one medication discrepancy during hospital admission or discharge, with 20% resulting in potential harm [1]. Medication reconciliation (MedRec), a structured process designed to ensure accurate and comprehensive medication information transfer across healthcare settings, has been introduced as of the early 2000s by the World Health Organization and the Institute for Healthcare Improvement. These institutes emphasized the necessity of MedRec as a standard of care to guarantee this patient safety [2].

However, despite its proven benefits, the effectiveness of MedRec interventions varies widely, influenced by factors such as challenges in implementation due to system complexity, (the lack of) multidisciplinary collaboration and patient engagement, the use of non-integrated electronic health records and limited resources [3].

Targeted pharmaceutical care interventions, such as pharmacist-led MedRec, including medication optimization, in close collaboration with involved healthcare professionals and patient education, have demonstrated significant reductions in medication errors and preventable ADEs [4], [5]. Nevertheless, knowledge gaps persist regarding optimal implementation strategies, sustainability, and the impact on clinical and patient-related outcomes[6]. Recent studies suggest that tailored approaches, integrating risk stratification and technology, may enhance MedRec, as part of a bundle of activities, effectiveness, but further research is warranted [4]

This presentation will synthesize current evidence, share practical experiences from diverse healthcare settings, and discuss future directions for MedRec at care transitions. By “knowing the unknown,” healthcare professionals can better anticipate risks, optimize medication prescriptions and use, and ultimately improve patient safety.

Footnotes

- [1] K. Boockvar, S. Blum, A. Kugler, and E. Livote, “Effect of Admission Medication Reconciliation on Adverse Drug Events From Admission Medication Changes,” *Archives of Internal*, vol. 171, no. 9, pp. 860–1, May 2011, Accessed: Aug. 14, 2011. [Online]. Available: [#6](http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:P=.04)
- [2] A. Leotsakos *et al.*, “Standardization in patient safety: the WHO High 5s project,” *International Journal for Quality in Health Care*, vol. 26, no. 2, pp. 109–116, Apr. 2014, doi: 10.1093/intqhc/mzu010.
- [3] A. B. Mekonnen, A. J. McLachlan, and J.-A. E. Brien, “Effectiveness of pharmacist-led medication reconciliation programmes on clinical outcomes at hospital transitions: a systematic review and meta-analysis.,” *BMJ Open*, vol. 6, no. 2, p. e010003, 2016, doi: 10.1136/bmjopen-2015-010003.
- [4] H. T. Ensing *et al.*, “Identifying the Optimal Role for Pharmacists in Care Transitions: A Systematic Review.,” *J Manag Care Spec Pharm*, vol. 21, no. 8, pp. 614–36, 2015, [Online]. Available: <http://www.ncbi.nlm.nih.gov/pubmed/26233535>
- [5] J. Kwan, “Medication Reconciliation During Transitions of Care as a Patient Safety Strategy,” *Ann Intern Med*, vol. 158, no. 5, pp. 397–403, 2013.
- [6] E. C. Lehnboim, M. J. Stewart, E. Manias, and J. I. Westbrook, “Impact of Medication Reconciliation and Review on Clinical Outcomes,” *Annals of Pharmacotherapy*, vol. 48, no. 10, pp. 1298–1312, Oct. 2014, doi: 10.1177/1060028014543485.

WORKSHOP DESCRIPTIONS

All five workshops have a first part before lunch and a second part after lunch. All workshops are repeated the next day. Each participant is asked to choose one workshop on Thursday and another one on Friday.

Sign up for the Thursday workshops at the ESCP booth on Thursday morning before 10:00 AM.

Sign up for the Friday workshops at the ESCP booth on Friday morning before 10:00 AM.

Workshop 1: Success and failure: what should we measure in studies focusing on appropriate prescribing?

Moderator:



Prof. Carmel Hughes, PhD.

Professor of Primary Care Pharmacy, School of Pharmacy, Queen's University Belfast, UK

Carmel is Professor of Primary Care Pharmacy at the School of Pharmacy at Queen's University Belfast. Her research interests centre on prescribing in older people, intervention development and evidence-based healthcare. She has published >350 papers and attracted ~£15 million in grant funding. Carmel is a Senior Editor for the journal *Pilot and Feasibility Studies*. She is a Trustee of the Vivenza Foundation, a charity which funds research focusing on older people and she also chairs the Foundation's Research Grants Committee. She is a member of the National Institute for Health and Care Research (NIHR) Programme Grants for Applied Research funding panel. Carmel is currently a member of the International Advisory Board of the School for Primary Care Research (funded by NIHR), and International Advisor to the Advisory Committee on the Trust-initiated Project on the Development of Primary Care Community Pharmacy Services, Hong Kong. Carmel was co-Chair for Unit of Assessment 3 (Allied Health Professions, Dentistry, Nursing and Pharmacy) as part of the Research Excellence Framework (REF) People, Culture and Environment Pilot and has recently been appointed as Deputy Chair for Unit of Assessment 3 for REF 2029, a periodic assessment of research quality conducted in all United Kingdom universities.

Workshop Abstract

When performing studies focusing on the appropriateness of prescribing, we need to consider the impact of an intervention and whether we have succeeded or failed in such studies. This requires careful consideration of the outcomes that should be measured to judge success or failure. But how should we select what outcomes to measure?

The learning objectives of this workshop are as follows:

1. To introduce participants to the concept of a core outcome set (COS)
2. To provide an overview of how to develop a COS
3. To raise awareness of medication-related COSSs
4. To highlight the benefits of COSSs in research and clinical practice.

This workshop will be didactic and interactive in nature, with participants engaging in group work to discuss the various aspects of COS development and to bring their own perspectives and expertise in how best to implement a COS for the benefit of patients.

Workshop 2: Making Medication Review Matter: Practical Solutions for Clinical Pharmacists

Moderator:



Prof. Olivia Dalleur, PhD.

Academic Centre for Pharmaceutical Care, Université catholique de Louvain, Belgium

Olivia Dalleur is passionate about advancing safe and effective medication use. A Pharmacy graduate from UCLouvain (Belgium) with specializations in hospital and clinical pharmacy, she has served as a clinical pharmacist at Cliniques universitaires Saint-Luc since 2007, blending hands-on geriatric care with innovative IT solutions to strengthen decision support systems.

Her PhD and postdoctoral fellowship in Boston shaped her expertise in optimizing medication for older patients. Today, she bridges practice and academia as a professor at UCLouvain, teaching pharmaceutical care and clinical pharmacy methodology, while driving education and research through the Centre Académique en Soins Pharmaceutiques of UCLouvain.

At the Louvain Drug Research Institute, Olivia leads projects on medication safety, polypharmacy, and appropriate prescribing. She actively contributes to European research initiatives on medication review. She also collaborates globally, including with Université d'Abomey-Calavi (Benin), to develop clinical pharmacy practice in emerging healthcare systems. She serves on the Education Committee of the European Society of Clinical Pharmacy (ESCP).

Her work focuses on improving patient outcomes and shaping the future of pharmaceutical care through innovation, research, and international partnerships.

Workshop Abstract

This interactive session equips clinical pharmacists with practical strategies to make medication reviews impactful. Participants will learn to structure their approach, use decision-support tools, prioritize interventions, and integrate patient perspectives. Through case-based exercises, role-play, and peer exchange, the workshop fosters critical reflection and innovative practices. Attendees will leave with actionable tools and methods to enhance medication safety and optimize pharmaceutical care.

Workshop 3: Improving Medication Safety with electronic closed-loop medication management system – where are we now?

Moderator:



Assoc. Prof. Lotta Schepel, PhD.

Helsinki University hospital and University of Helsinki, Finland

Lotta Schepel (Associate Professor; Ph.D.; Hospital Pharmacy Specialist, Accredited for Comprehensive Medication Reviews) works as a Chief medication safety officer at Helsinki University hospital (HUS) and Visiting researcher at the University of Helsinki.

In 2017, she was the first Finnish medication safety officer and has done remarkable pioneer work in developing medication safety and hospital clinical pharmacy services in Finnish healthcare system. Interprofessional collaboration, identifying high-alert medications, electronic closed-loop medication management system and patient-centered tasks of hospital clinical pharmacists (e.g. medication reconciliation and medication reviews) have been in key focus of her practical and scientific work.

In addition, she has been active in competence development of hospital clinical pharmacists and have created In-house comprehensive education training program for HUS Pharmacy in close collaboration with University of Helsinki. Her persistent and determined work has led to medication safety improvements and several interesting new positions for clinical pharmacists in HUS and Finnish healthcare setting.

Workshop Abstract

Aims and objectives:

Aim of this workshop is to create a mutual understanding of implementation level of closed-loop electronic medication management systems in the participants' healthcare organizations. Another objective is to identify the main promoting and inhibiting factors in the implementation of closed-loop EMMS.

Teaching methods:

This workshop will be carried out as a learning café style. Participants (20-40) will be divided into seven groups (3-6 in each group). The groups will discuss each key element of the closed-loop EMMS:

1. Updated national electronic database for home medication list or outpatient medication list in the electronic health record system (EHR)
2. Computerized Physician Order Entry (CPOE) with the Clinical Decision Support System (CDSS)
3. Pharmacy order review and verification process
4. Unit-dose dispensing system
5. Secure storage e.g. with automated dispensing cabinets (ADCs integrated into EHR)
6. Barcode-assisted medication administration (BCMA) with electronic medication administration records (eMAR)
7. Smart-infusion pumps and other EHR integrated applications e.g. for patient monitoring

Topics for discussion:

- Implementation level: each participant will write the name and country of their organization (blue post-it notes), add it on the paper on the wall and will tell other participants at which level they are right now.
- Promoting and inhibiting factors: participants write promoting (green post-it notes) and inhibiting (red post-it notes) factors related to the implementation of each topic and add these on the paper: promoting factors (green post-it notes) on the upper part of the paper and inhibiting factors (red post-it notes) on the lower part of the paper

All groups will go through all seven topics. Each group complement and enrich the work of earlier groups.

After this, all groups will shortly present the outcomes to the other groups:

- Implementation level
- Main promoting and inhibiting factors

Output of the workshop will be photographed, summarized and later provided to the participants.

Workshop 4: Patient Engagement in Health Care - Overview, Communication, Practical Tips and Outcomes

Moderator:



Prof. Lotte Stig Nørgaard, PhD.
University of Copenhagen, Denmark

Lotte Stig Nørgaard (LSN) is a Professor of Social Pharmacy at the University of Copenhagen, Denmark. She holds a PhD. in Social Pharmacy from the same institution. Over the past three decades, she has held key academic and leadership positions within pharmacy education and research, including serving as head of the pharmacy internship and as head of the Social and Clinical Pharmacy Research Group.

Her research (mainly qualitative) focuses on the intersection of medicine use, patient safety, and communication – with a special focus on community pharmacy. She has led and contributed to numerous national and international projects exploring how healthcare professionals communicate with patients about medicines, and how patients can be actively involved in research. Among other things, she and her co-workers have developed an online course on patients' perspectives on medicine use, which has reached over 9,000 healthcare professionals. She has contributed to the establishment of The Danish Network for Community Pharmacy Practice Research and Development – a network now effective in more than 100 community pharmacies.

LSN has authored more than 130 international peer-reviewed articles and is known for translating complex research into practical strategies for improving medicine-safe care.

Workshop Abstract

In the first part of the workshop, the participants will be introduced to key concepts within patient communication, patient engagement and inclusion in relation to medicine safety. Next, they work in groups to share own experiences from using various communication models and approaches to patient engagement and inclusion in relation to medication safety topics - including challenges, ethical issues and best practices.

In the second part of the workshop, each group will present their work to the other groups, and the workshop facilitator will place the discussions into a broader theoretical context. The workshop concludes with each participant explicitly identifying their three most important take-home messages when it comes to creating medicine safe communication and patient engagement and inclusion.

Learning objectives:

- Participants will be able to describe and apply foundational concepts in patient communication, engagement and inclusion as they relate to medication safety.
- Participants will be able to analyze and share their own experiences with communication and engagement strategies, identifying ethical challenges and best practices in medication safety contexts.
- Participants will be able to articulate three personal take-home messages that connect theoretical insights with practical strategies for improving medicine-safe communication and patient involvement.

Workshop 5: Medication Reconciliation and beyond in Persons with Parkinson's disease

Moderator:



Dr. Clementine Stuijt, PharmD., MSc., PhD,
Centre of Excellence in Parkinson's disease, Groningen/Zorg voor
Parkinson, ParkinsonNet, Nijmegen, the Netherlands

Clementine Stuijt, PharmD., MSc., PhD., began her professional career as a community pharmacist in various community pharmacies. She became increasingly concerned about the practice of dispensing medications without having adequate knowledge of a patient's medical history or complaints. Consequently, she enrolled in the clinical pharmacy master course in Edinburgh and successfully graduated as a clinical pharmacist in 2006, with a focus on medication review. In the meantime, she pioneered clinical pharmacy services at the Onze Lieve Vrouwe Gasthuis hospital in Amsterdam, focusing on care of older patients in residential or nursing homes. In 2013, Clementine transitioned to work for the, at that time still to be established, center of excellence on Parkinson's disease, known as "Punt voor Parkinson." In addition to individual medication guidance involving personalized support and advice for managing medications effectively, medication optimization and -review are carried out in this outpatient setting by Clementine. At that time, she also began lecturing various healthcare professionals on pharmacotherapy for people with Parkinson's disease in close collaboration with ParkinsonNet, which is still ongoing.

A PhD trajectory on the impact of targeted pharmaceutical care interventions on clinical and patient-related outcomes, focusing on transitions in care both in the hospital and the outpatient clinic, was successfully defended in 2024.

Currently she is working for Punt voor Parkinson and ParkinsonNet for people with Parkinson's disease.

Publications: <https://www.researchgate.net/profile/Clementine-Stuijt/research>

Workshop Abstract

Parkinson's disease (PD) is a progressive neurodegenerative disorder characterized by both motor and non-motor symptoms, including neuropsychiatric manifestations, which significantly impair quality of life (QoL). As the disease advances, many individuals with PD require complex medication regimens—typically involving two to four anti-Parkinson drugs administered three to four times daily [1]. In cases of advanced PD with both motor and non-motor fluctuations, patients may need medication up to seven times per day [2]. This complexity contributes to the high vulnerability of PD patients, where vulnerability is defined as an increased risk of medication-related harm. These patients are often older adults with cognitive impairments and multiple comorbidities, leading to polypharmacy and intricate treatment schedules [3][4]. Pharmaceutical interventions have shown effectiveness primarily when implemented in close collaboration with other healthcare professionals. A multidisciplinary approach—combining medication reconciliation, comprehensive medication review, and patient counselling—has proven beneficial [5].

So, where should we begin? With whom, and in what setting?

We are pleased to invite you to an interactive workshop designed to equip pharmacists with practical tools for initiating care for individuals living with Parkinson's disease. Whether you work in a community pharmacy, hospital pharmacy, or as a consultant pharmacist, this

workshop will provide actionable strategies that you can apply in your professional setting. Join us to enhance your expertise and make a meaningful impact on patient care.

Aim of the Workshop:

- Refreshed knowledge on pathophysiology, therapy for persons with Parkinson's disease.
- Engage the participant in the MedRec and medication review process of PD patients: define specific steps for the approach of PD patients with focus points for the review.
- Recognize potential medication related problems, quick wins. Recognize opportunities for improvement of quality of the medication review (process) in PD patients.
- Define barriers and facilitators.
- Have an opportunity to share knowledge, experience, and solutions.

Learning objectives:

- Understand specific focus points for the execution of a medication review in PD patients.
- Describe how different approaches of involved health care professionals can be tailored in different settings.
- Understand and outline ways to improve steps in the medication review process for PD patients in order to create abilities for local implementation.

IMPORTANT PREPARATION:

Bring your own case: this will be very helpful to reach mentioned goals.

1. **Invite a PD patient (and caregiver) for a (pharmaceutical) intake on medication use and problems, formulate potential medication related problems.**
2. **Do you need more information?**
3. **Which interventions do you propose?**
4. **If possible: write the information in the accompanying PowerPoint.**

ABSTRACTS

Oral Communications and Posters

Oral Communications

THURSDAY, 19th February 2026

OC1.1

MEDICATION SAFETY CHALLENGES IN OSTOMY PATIENTS: INSIGHTS FROM AN AUSTRIAN CROSS-SECTIONAL SURVEY

S. Hehenberger^{1,2,*}, I. Lagoja¹, S. Glamočlija³

¹Hospital Pharmacy, Klinik Ottakring, 1160 Wien, ²Vienna Doctoral School of Pharmaceutical, Nutritional and Sport Sciences, ³Department of Pharmaceutical Sciences, University of Vienna, 1090 Wien , Austria

Background: Evidence on oral drug absorption in ostomy patients remains limited. Although specific factors such as altered gastrointestinal physiology and dosage form characteristics are known to influence therapy, awareness among healthcare professionals and patients is low, posing potential treatment risks.

Aim: To assess medication-related problems, perceived efficacy, and patient knowledge regarding oral drug therapy among ostomy patients through a cross-sectional online survey, aiming to identify information gaps and opportunities to improve patient counseling and pharmacotherapy outcomes.

Method: A descriptive cross-sectional online survey was conducted among ostomy patients in Austria between June and October 2025. A 16-item questionnaire, developed based on literature and expert input, included both open and closed questions. Pretested by two hospital pharmacists and one ostomy patient, the survey ensured clarity and validity. Data were collected via the DSGVO-compliant SoSci Survey platform. Descriptive statistics were calculated in Excel. Tables and graphs were used to present findings, illustrating patterns in medication use, perceived efficacy, and patient knowledge regarding oral therapy in ostomy care.

Results: 51 ostomy patients participated (57% ileostomy, 41% colostomy, 2% unspecified; mean age 54 years). 74% regularly used medication (median 6 drugs/ day). After stoma creation, 70% reported no change in therapy, while 18% adjusted their medication. 69% perceived no change in drug efficacy. About 25% reported finding medication residues in their stoma bag at least once; half of them identified the affected drugs, mainly enteric-coated or extended-release formulations. In about half of these cases, therapy was subsequently adjusted. 60% percent routinely informed physicians and 50% pharmacists about their stoma. 35% had used alternative dosage forms such as liquids, dissolvable tablets, or patches, which were described as particularly helpful when solid oral forms had insufficient effect. 12% reported intolerance or avoidance of specific drugs since stoma creation. Only 10% had been informed about potential absorption changes. Participants frequently expressed uncertainty and

a strong need for improved counseling and education concerning the specific characteristics of drug therapy in stoma patients.

Conclusion: Medication-related issues are common among ostomy patients, who often face high therapeutic complexity. Although many report no immediate problems, difficulties with drug efficacy or absorption occur frequently and may remain unrecognized or unresolved. Limited patient information and suboptimal interprofessional communication underline the need for targeted education and counseling. Individualized pharmacotherapy is crucial to ensure safe and effective treatment outcomes.

Email address: stefanie.hehenberger@gesundheitsverbund.at, a00216907@unet.univie.ac.at

Disclosure of Interest: None Declared

OC1.2

ADHERENCE TO INITIAL ANTIBIOTIC TREATMENT GUIDELINES IN PATIENTS WITH PNEUMONIA USING AN AI-ASSISTED DATA EXTRACTION TOOL

N. Stollarova ^{1,2,*}, A. Cinakova ¹, Z. J. Rihova ^{1,3}

¹Department of Clinical Pharmacology, Faculty Hospital Trnava, Trnava, ²Department of Pharmacology and Toxicology, Faculty of Pharmacy, Comenius University Bratislava, ³Department of Pharmacology, Faculty of Medicine, Slovak Medical University Bratislava, Bratislava, Slovakia

Background: Antibiotic (ATB) therapy can be divided into empirical, initial, and targeted depending on available diagnostic information. The appropriateness of the initial ATB regimen is essential for clinical outcomes. In pneumonia, early initiation of adequate therapy in accordance with antibiotic stewardship is vital due to increasing microbial resistance.

Aim: This study aimed to evaluate whether patients admitted with pneumonia received ATB according to hospital guidelines and to analyse resistance results of the initial ATB treatment. A secondary aim was to explore the applicability of an AI-based data extraction tool (MERIE, Datlowe, s.r.o.) for retrospective analysis of ATB prescribing and resistance patterns.

Method: A retrospective study included adult patients (≥ 18 years) admitted to the Faculty Hospital Trnava (Slovakia) between March and May 2025 with a diagnosis of pneumonia recorded within the first day of admission. Data for analysis were extracted from the hospital information system using the AI-based clinical decision-support software MERIE (Datlowe, s.r.o.), originally developed for clinical pharmacists. The dataset has not yet undergone manual validation, which may represent a limitation of the study.

Results: A total of 472 patients were included (213 females, 259 males; median age 74 ± 15.7 years). The mean hospital stay was 9.6 ± 6.7 days, and the mean CRP level during the first three days was 104.6 ± 104.1 mg/L. Antibiotic susceptibility testing was performed in 368 (77.97%) patients overall, including 245 of the 287 patients who received initial antibiotic therapy. Only 4 patients ($\approx 1\%$) received first-line therapy according to guidelines (amoxicillin/clavulanate + clarithromycin), and 16 ($\approx 6\%$) received second-line therapy (cefuroxime or cefotaxime + clarithromycin). Resistance was detected in 148 isolates for amoxicillin, 32 for clarithromycin, 83 for cefuroxime, and 67 for cefotaxime.

Conclusion: Adherence to the hospital's guideline-recommended antibiotic regimens for pneumonia was notably low. Potential reasons may include limited guideline awareness, recent prior outpatient antibiotic use, and concerns about resistance. These findings highlight the need to reassess local treatment protocols and strengthen antimicrobial stewardship efforts. Although manual validation is required to ensure data accuracy, the study illustrated the potential applicability of AI-assisted data extraction for antibiotic surveillance and was made possible by this automated approach.

Email address: hromnikova7@uniba.sk

Disclosure of Interest: None Declared

OC1.3

ANALYSIS OF POTENTIAL INTERACTIONS BETWEEN ORALLY ADMINISTERED MEDICINES AND PRESCRIBED DIETS IN THE HOSPITAL SETTING

A. Martí Patiño ^{1,*}, N. Miserachs-Aranda ^{1,2}, A. J. Braza ¹, E. Fernández-Cañabate ^{1,2}, M. Viñas-Bastart ¹, C. F. Lastra ¹, E. L. Mariño ¹, P. Modamio ¹

¹Clinical Pharmacy and Pharmaceutical Care Unit. Department of Pharmacy and Pharmaceutical Technology, and Physical Chemistry, Faculty of Pharmacy and Food Sciences, University of Barcelona, Barcelona, ²Pharmacy Service, Fundació Hospital de l'Esperit Sant, Santa Coloma de Gramenet, Barcelona, Spain

Background: Drug–food interactions (DFIs) may compromise the benefit–risk balance of prescribed medicines [1]. In hospital settings, polypharmacy and the frequent prescription of multiple diets increase the likelihood of clinically relevant DFIs. However, these are not always considered in clinical practice [2].

Aim: 1. To determine the prevalence and characteristics of DFIs in hospitalized patients. 2. To propose possible interventions to prevent negative outcomes associated with DFIs.

Method: A descriptive cross-sectional study was conducted in a 165-bed university hospital including internal medicine patients hospitalized ≥ 24 h, with at least one oral medication and oral diet prescribed. Data were collected over two weeks; 10–15 patients/day were randomly selected and included following the inclusion criteria. Study variables included patient characteristics, prescribed medicines and foods for each meal, as well as the potential for DFI (mechanism and clinical relevance). Data were obtained from electronic medical/nutritional records and validated through the literature and the Spanish Medicines Agency. Lastly, descriptive statistics were performed.

Results: A total of 81 patients were included (52% women, mean age: 77 ± 12 years), all with polypharmacy (≥ 5 drugs; mean: 12.1 ± 3.7 , range: 5–18). At least one potential DFI was identified in 57 patients (70.4%). Most cases (77.1%) involved older adults with hyperpolypharmacy (≥ 10 drugs) and specific dietary requirements. A total of 123 different medicines were prescribed, of which 75 (61%) had at least one DFI described in the literature with possible clinical impact. The medicines most frequently involved in DFIs among the study patients were prednisolone (n=22), and paracetamol (n=22). The mechanisms of DFIs were mainly pharmacokinetic, affecting absorption (chelation, e.g., calcium–iron) and metabolism (enzyme inhibition, e.g., grapefruit–statins). Potential strategies

identified included integrating DFI evaluation into daily prescription validation, strengthening multidisciplinary collaboration among pharmacists, physicians, and dietitians, developing electronic prescribing alerts to anticipate or minimize DFI-related risks, and promoting patient, family, and citizen engagement in medication safety.

Conclusion: Potential DFIs among hospitalized patients were highly prevalent and clinically relevant, particularly among older adults with hyperpolypharmacy. Interventions are needed to prevent and reduce DFIs, especially in high-risk patients, in order to promote safe medication practices in hospital settings.

References/Acknowledgments:

[1] Mohn ES, Kern HJ, Saltzman E, Mitmesser SH, McKay DL. Evidence of drug-nutrient interactions with chronic use of commonly prescribed medications: An Update. *Pharmaceutics*. 2018;10(1):36. doi: 10.3390/pharmaceutics10010036.

[2] Osuala EC, Ojewole EB. Knowledge, attitudes and practices of healthcare professionals regarding drug-food interactions: a scoping review. *Int J Pharm Pract*. 2021;29(5):406-415. doi: 10.1093/ijpp/riab049

Email address: annamp2000@gmail.com

Disclosure of Interest: None Declared

OC2.1

THE PERSPECTIVES OF PATIENTS AND CARERS ON OPIOID STEWARDSHIP INTERVENTIONS IN ENGLAND: A SEMI-STRUCTURED INTERVIEW STUDY

T. Haykir ^{1,*}, N. Alaboud ^{1,2}, B. D. Franklin ^{1,3}, S. Garfield ¹

¹Research Department of Practice and Policy, School of Pharmacy, University College London,

²Centre for Medicines Optimisation Research and Education, University College London Hospitals NHS Foundation Trust, ³NIHR North West London Patient Safety Research Centre, London, United Kingdom

Background: Opioid stewardship (OS) aims to prevent harm caused by inappropriate opioid use. To implement OS effectively in the UK, it is important to understand patients' and carers' views. To the best of our knowledge, few studies have explored the views of patients and carers on OS interventions in the UK.

Aim: This study aimed to explore patients' and carers' perspectives on OS interventions.

Method: Semi-structured interviews were conducted with individuals who had experience of opioid use and carers of those who had used opioids. Potential participants were identified through online advertisements, charities, an NHS hospital and a GP practice in England. Participants were asked about their unmet needs around opioid use, selected OS interventions (personalised pain management, education, deprescribing, and patient follow-up) and any new potential strategies that participants believed may be helpful. After the interviews were transcribed verbatim, reflexive thematic analysis was conducted using a combination of deductive and inductive analysis.

Results: Nineteen interviews were conducted with two carers and seventeen patients, two of whom were also carers. Participants expressed a need for improved clinician capabilities, better implementation of alternative strategies for treating pain, additional resources, and better access to care. Both experiences with interventions and views on their acceptability varied between participants. While some participants had no or limited experience with OS interventions, others reported experience via healthcare professional guidance, or interventions initiated or directed by patients themselves. Barriers and enablers frequently reported included access to care, the patient-clinician relationship, the clinician approach and patient willingness. Recommendations included improving access to care by ensuring continuity of care with the same clinician and improving the clinician's approach through effective communication. New interventions suggested included clinical approaches, such as genetic testing, and strategies that focussed on societal impact, such as support for enabling the resumption of social roles.

Conclusion: This study suggested potential improvements in healthcare around pain management with opioids and the implementation of OS, including a better clinician approach, improved access to care, and the implementation of additional clinical and societal strategies. The findings might be helpful for policymakers and clinicians in implementing or adapting OS interventions in primary and secondary care in the UK to improve opioid safety.

References/Acknowledgments: This study was designed with the contribution of patient public representatives. The costs related patient and public involvement activities for this project were funded by NIHR UCLH Biomedical Research Centre. Research cost associated with this project was funded by the Harold and Marjorie Moss Charitable Trust. The first author acknowledges the scholarship provided by the Republic of Türkiye Ministry of National Education for her PhD study.

Email address: tugce.haykir.19@ucl.ac.uk

Disclosure of Interest: None Declared

OC2.2

PHARMACIST-LED CONSULTATIONS IN PRIMARY CARE: ADVANCING MEDICATION SAFETY AND OPTIMISATION

C. Diogo ^{1,*}, M. H. Duarte ¹, A. M. Simões ¹, B. Resende ¹, M. Lourenço ¹, R. Silva ², A. Alcobia ¹

¹Pharmaceutical Services, Hospital Garcia de Orta, Unidade Local de Saúde Almada-Seixal, ²Family Medicine, Unidade de Cuidados de Saúde Personalizados da Amora, Unidade Local de Saúde Almada-Seixal, Almada, Portugal

Background: In Portugal, pharmacist-led consultations within primary care remain limited and are dependent on medical referral. Building on a previous initiative, we - hospital pharmacists - implemented a novel multidisciplinary pharmacist-led pharmacology consultation in a Primary Care Unit with patients without an assigned family doctor.

Aim: To describe the implementation and outcomes of a pharmacist-led medication optimisation consultation in primary care, including patient risk stratification, pharmaceutical interventions and potential economic impact.

Method: A retrospective study of pharmacist-led consultations conducted between March and September 2025. Data collection was performed through PowerApps and clinical records; analysis with Excel and SPSS v29. Variables included patient age, chronic medication, posology, pharmacological class, pharmacist interventions, reference price and reimbursement levels. Patients were stratified according to an adapted Kaiser Permanente model.

Results: During the study period, 101 consultations were performed (81 first visits, 20 follow-ups), involving 81 patients (mean age 69,1 years, SD 14.4). Risk stratification identified 11,1% (n=9) as low risk, 18,5% (n=15) as intermediate risk and 70,4% (n=57) as high risk.

Inferential analysis revealed a higher number of pharmaceutical interventions in high-risk patients ($p=0.002$). Patients were taking an average of 8 medications (max 27). Across all patients, 245 pharmacist interventions were recorded, averaging 2,75 per patient. Interventions included dose adjustment (20%), drug initiation (23,3%) and deprescribing (56,7%). Medicines most frequently targeted were antidiabetics (15,1%), antidepressants/benzodiazepines (14,3%), analgesics/anti-inflammatories (13,5%), antihypertensives (11,8%) and lipid-lowering agents (10,6%). A total of 4 medication-related adverse drug reactions were identified. Of these, 2 cases led to desprescription and 2 to dose adjustment. Medical referral was required in 32,7% (n=33). Estimated annual cost savings from deprescribing were 14628,93€, of which 7808,96€ corresponded to savings for the National Health Service.

Conclusion: This pioneering model of pharmacist-led consultation in Portuguese primary care proved effective in enhancing medication safety, optimising therapeutic regimens and use of medical resources, with economic benefits. Interventions targeted high-risk and high-cost therapeutic areas (antidiabetic and psychotropic agents), underscoring the pharmacist's role in improving prescribing quality and reducing medication-related harm. These findings align with European evidence confirming that clinical pharmacists contribute significantly to safer and more efficient primary care.

References/Acknowledgments: Anderson A, Francetic I, Brennan A, Herbert A, Schaffer A, Guthrie B. *Adoption of clinical pharmacist roles in primary care: longitudinal evidence from English general practice.* Br J Gen Pract. 2025 Mar;75(752):e187–e195. doi:10.3399/BJGP.2024.0297.

García-Cárdenas V, Gastelurrutia MA, González-Benedí C, Monte Boquet E, et al. *Primary care pharmacist-led medication review in older adult patients in coordination with general practitioners: an observational retrospective cohorts study.* BMC Geriatr. 2024 Jan 16;24(1):48. doi:10.1186/s12877-023-04413-2.

Email address: catarina.diogo@ulsas.min-saude.pt

Disclosure of Interest: None Declared

OC2.3

THE EFFECTS OF PHARMACIST-CONDUCTED MEDICATION ORDER VERIFICATION IN HOSPITAL SETTING: A SYSTEMATIC REVIEW

M. Kallio ^{1,2,*}, A. Kumpu-Huhtala ², K. Kvarnström ^{1,2}, I. Niittynen ^{1,2}, O. Lapatto-Reiniluoto ¹, M. Airaksinen ², L. Schepel ¹, S. Kuitunen ^{1,2}

¹Pharmacy, Helsinki University Central Hospital, ²Faculty of Pharmacy, Helsinki University, Helsinki, Finland

Background: Prescribing errors are common in hospital settings and can lead to severe harm to patients. Pharmacist-conducted medication order verification has been recommended to ensure safe prescribing in hospitals, but the systematic scientific evidence of the efficiency is lacking.

Aim: The objective of this study was to study effects of pharmacist-conducted medication order verification in hospital settings. This study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 criteria and it was registered in PROSPERO (CRD42022309192).

Method: The final literature search was conducted in February 2024 covering the period 2000-2023. Only peer-reviewed studies considering the effects of pharmacist-conducted medication order verification in hospital settings were included. Study selection, data extraction, and quality assessment were carried out by two individual reviewers. The findings describing the effects of pharmacist-conducted medication order verification were synthesized and categorized according to the ECHO (Economic, Clinical, and Humanistic Outcomes) Model.

Results: A total of 35 studies met the inclusion criteria. All of the studies (n=34) reporting clinical outcomes showed positive results. Pharmacist-conducted medication order verification could detect a wide variability of DRPs, with dose-related issues being the most common (n=33 studies). The physician acceptance rate in the pharmacist interventions studies (n=27) varied from 26% up to 100%. Of the verifications, 0.8% - 45.2% led to a pharmacist intervention. Economic outcomes were reported in 7 studies and all showed positive results. None of the included studies reported humanistic outcomes.

Conclusion: Pharmacist-conducted medication order verification is associated with prevention of DRPs, reduced harm and cost savings in hospital settings. Further research is needed on the quality of pharmacist-conducted medication order verification, high-quality studies investigating the economic benefits, the effects on patient perspective and outpatient medication prescriptions.

References/Acknowledgments: Moher D, Shamseer L, Clarke M, et al. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Syst Rev*. 2015 Dec 1;4(1):1.

Kozma CM, Reeder CE, Schulz RM. Economic, clinical, and humanistic outcomes: a planning model for pharmaco-economic research. *Clin Ther*. 1993;15(6):1121–32; discussion 1120.

Email address: milia.kallio@hus.fi

Disclosure of Interest: None Declared

FRIDAY, 20th February 2026

OC3.1

THE MULTIPROFESSIONAL TEAMWORK EXPERIENCE OF STUDENTS IN A HOSPITAL DEPARTMENT TO BUILD A SAFE MANAGEMENT OF ACUTE PATIENTS

C. Mustaccio ^{1,*}, F. Nani ², F. Bono ¹, A. Minolfo ¹, G. Acquistapace ³, S. Paglia ³, G. Ricevuti ^{1,2}

¹Department of Drug Science, ²Faculty of Medicine and Surgery, University of Pavia, Pavia,

³Department of Emergency Medicine, ASST LODI, Lodi, Italy

Background: A hospital or emergency department is a high-pressure clinical environment where timely decisions are essential to ensure safe and effective patient care. Improving interprofessional collaboration enhances clinical reasoning, medication safety and patient-centered care via “five rights”, equipping students for interdisciplinarity.

Aim: The project evaluated the educational impact of a multiprofessional model involving medical and pharmacy students working together in a hospital department or the ED. We sought to assess how a joint activity influenced students’ skills in communication, decision-making, pharmacotherapy safety, and interprofessional understanding.

Method: A mixed-methods design was implemented during a structured hospital department rotation. Medical and pharmacy students were assigned to supervised shifts where they jointly collected patient histories, reviewed medication profiles, participated in diagnostic reasoning, and collaborated on therapeutic planning under the guidance of physicians and clinical pharmacists of the department. Data were collected through direct observation, reflective journals, post-experience survey. Qualitative insights were obtained through semi-structured interviews, reflective reports and qualitative analysis was used to evaluate teamwork processes and perceived safety competencies.

Results: The multiprofessional teamwork experience involving pharmacy and medical students of the last years in hospital departments, particularly Oncology-Hematology and the Emergency Department, demonstrated significant improvements in students’ collaborative competencies and patient-management skills. Participants reported increased confidence in recognizing clinical problems, potential medication errors and drug-drug and drug-disease interactions, optimizing medication processes and rapid clinical decision-making, communicating effectively with patients and senior staff, discussing pharmacotherapy decisions, understanding of each profession’s contribution role in acute care to patient safety. Clinical teams noted more efficient patient assessments and improved medication reconciliation accuracy and supportive care planning. Students’ reflections highlighted enhanced situational awareness, better understanding of therapeutic priorities, and stronger adherence to safety protocols. Overall, the project strengthened interprofessional integration and fostered a shared safety culture in the management of acute patients.

Conclusion: The collaborative experience of the students with hospital multiprofessional teamwork proved feasible and educationally valuable by every student groups. Interprofessional learning in real clinical settings enriched students’ clinical reasoning, teamwork, and medication safety competencies. These findings support the integration of structured medicine–pharmacy collaboration programs into health professions curricula, emphasizing that shared learning in acute care environments can strengthen future workforce readiness and contribute to safer patient management.

References/Acknowledgments:

Emerg Med J . 2017 Aug;34(8):495-501.Clinical relevance of pharmacist intervention in an emergency department

M.A. Pérez-Moreno, J.M. Rodríguez-Camacho, B. Calderón-Hernanz, ...

Weidmann, A.E., Lutters, M. European Society of Clinical Pharmacy: 5 steps of medication safety—medication without harm, where are we now?. Int J Clin Pharm 47, 1547–1548 (2025).

Email address: Giovanni.ricevuti@unipv.it

Disclosure of Interest: None Declared

OC3.2

PHARMACEUTICAL INTERVENTIONS TO IMPROVE MEDICATION SAFETY IN GERIATRIC ONCOHEMATOLOGIC PATIENTS

A. Gómez Balazote ¹, Á. García López ^{1,*}, C. Alarcón Payer ¹, A. Jiménez Morales ¹

¹PHARMACY, VIRGEN DE LAS NIEVES HOSPITAL, GRANADA, Spain

Background: Older oncohematologic patients often face multiple drug risks due to polypharmacy and comorbidities. Pharmaceutical interventions are essential to prevent medication errors, detect drug interactions and avoid inappropriate prescriptions, ensuring safe and effective cancer treatment outcomes.

Aim: To evaluate the impact of pharmacist-led interventions in detecting, preventing and resolving drug-related problems in geriatric oncohematologic patients, with a focus on optimizing medication safety, adherence and clinical effectiveness within a hospital pharmacy setting.

Method: A prospective observational study was conducted (Dec 2023–Sept 2025) in a specialized pharmaceutical clinic for older oncohematologic patients. Pharmacists assessed home medication, self-medication and alternative therapies to identify potential interactions, therapeutic duplications and inappropriate prescriptions using START-STOPP criteria. All interventions were documented in the patient's electronic health record for multidisciplinary visibility. Medication adjustments were discussed with prescribers and patients received personalized counseling to enhance treatment safety and adherence.

Results: Among 380 patients (median age 78 years, 65% male), a total of 172 pharmaceutical interventions were performed to improve treatment safety. Of these, 62 focused on dose and administration corrections to prevent posological errors and support safe handling of oral and parenteral chemotherapy. Fifty interventions targeted clinically significant drug interactions that could compromise efficacy or safety. Thirty cases involved herbal or dietary supplements posing interaction risks with oncohematologic agents. Ten patients had therapeutic duplications requiring withdrawal of redundant drugs, and another ten were treated with high-anticholinergic or low-value medications linked to falls and cognitive decline. Two patients required pharmacokinetic dose adjustments. Each intervention enhanced the safety profile of therapy and facilitated rational polypharmacy management.

Conclusion: Pharmaceutical interventions significantly improved medication safety in elderly oncohematologic patients by reducing dosage errors, interactions and exposure to inappropriate

drugs. The hospital pharmacist played a key role in optimizing therapy, preventing adverse outcomes and promoting safer prescribing through active collaboration with clinical teams.

Email address: alvaro.garcia.lopez.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

OC3.3

APPLYING SYSTEMS ENGINEERING TO SUPPORT SAFER SODIUM VALPROATE USE IN UK TEACHING HOSPITALS WITH ELECTRONIC HEALTH RECORDS

B. Levkovich ^{1 2 3,*}, C. A. Oborne ^{2 4}, R. Patel ⁵, R. Dattani ¹, A. Dewan ⁴, Y. Nagamootoo ¹, L. L. Tan ⁴, O. Fuller ⁴, S. Jones ^{1 2}

¹Pharmacy, Kings College Hospital NHS Foundation Trust, ²School of Cancer & Pharmaceutical Sciences, Kings College London, London, United Kingdom, ³Faculty of Pharmacy & Pharmaceutical Sciences, Monash University, Melbourne, Australia, ⁴Pharmacy, ⁵Information Technology Clinical Systems, Guys and St Thomas' NHS Foundation Trust, London, United Kingdom

Background: The Systems Engineering Initiative for Patient Safety (SEIPS) framework is a tool to understand complex systems and target interventions to improve safety[1]. Congenital malformations and neurodevelopmental delays in children born to valproate users have prompted complex regulation to increase safe use in the United Kingdom (UK)[2].

Aim: To apply SEIPS to develop an electronic health record (EHR) solution for safer sodium valproate use in UK teaching hospitals, that also supports compliance with regulatory requirements.

Method: Safety, clinical and digital health experts from two large teaching hospital Trusts sharing one EHR iteratively developed an EHR solution. Using SEIPS, the design brief considered how clinicians interacted with the EHR and patients during valproate prescribing for inpatients and outpatients. Injectable valproate was excluded. Appreciative inquiry informed the outcome of supporting clinicians with decision making during prescribing whilst minimising data entry time. Supporting audit and assurance were also required but needed to avoid distress to patients or carers from inappropriate or repetitive questions about reproductive health and family planning decisions.

Results: The approach identified and prioritised design features including: task simplification and intuitive use in any clinical environment, reduce cognitive burden and reliance on human performance, system-based resilience, supporting regulatory compliance and audit, avoiding barriers to timely medicines use. The final tool was a prescribing flow triggered only for patients less than 55 years of age when prescribed oral valproate. Prescribers completed mandatory prompts individualised for patients via branching based on sex and previous valproate use. The prompts navigated through regulatory requirements and collated audit data. Prescribers could record when information was unavailable to prevent barriers to treatment – these could be updated later by the prescriber or pharmacist. During initial rollout, prescribers provided real-time feedback to enable rapid adaptation. Over eight months, the tool supported safe valproate use for 414 patients; over 95% were continuing existing therapy. Audit data collation was high but capture of risk assessment was low because documentation was difficult to locate and potentially held outside the hospital systems.

Conclusion: The use of SEIPS and collaboration of clinical, safety and digital health experts underpinned the design of an effective EHR solution to support safer valproate use.

References/Acknowledgments: NHS England. SEIPS quick reference guide and work system explorer. PAR 1465. [online]. NHSE: London; August 2022 [accessed 10 May 2025]. Available from: [B1465-SEIPS-quick-reference-and-work-system-explorer-v1-FINAL-1.pdf](https://www.gov.uk/government/publications/par-1465-seips-quick-reference-and-work-system-explorer-v1-FINAL-1.pdf).

Medicines & Healthcare products Regulatory Agency. Valproate: organisations to prepare for new regulatory measures for oversight of prescribing to new patients and existing female patients. NatPSA/2023/013/MHRA [online]. MHRA: London; November 2023 [Accessed 10 May 2025]. Available from: [NatPSA-2023-013-MHRA.pdf](https://www.gov.uk/government/publications/natpsa-2023-013-mhra/natpsa-2023-013-mhra.pdf)

Email address: bianca.levkovich@nhs.net

Disclosure of Interest: None Declared

OC4.1

STAKEHOLDERS' VIEWS ON IMPLEMENTING PHARMACIST PRESCRIBING IN THE COMMUNITY PHARMACY SETTING: A MIXED-METHODS SYSTEMATIC REVIEW

A. Colthorpe ^{1,*}, A. Fleming ¹, S. McCarthy ¹, E. McManus ¹, J. Keating ¹, K. Dalton ¹

¹School of Pharmacy, University College Cork, Cork, Ireland

Background: Pharmacist prescribing in community pharmacy settings is expanding internationally to improve timely access to medications and medication safety. However, as uptake varies, it is key to understand the views of pharmacists, patients, physicians, policymakers and other relevant stakeholders to identifying factors influencing implementation.

Aim: To synthesise stakeholders' views, experiences, perceived benefits, concerns, and contextual influences relating to the implementation of pharmacist prescribing in community pharmacy settings across pre-, peri- and post-implementation stages.

Method: A mixed-methods systematic review using a convergent integrated approach was conducted in accordance with the Joanna Briggs Institute methodology. The review protocol was pre-registered with PROSPERO. Searches were undertaken in five electronic databases (PubMed, Embase, CINAHL, Web of Science and Scopus) from inception to February 2025. Studies were eligible if they explored stakeholder views relating to pharmacist prescribing in community pharmacy settings. Included studies were quality appraised using the Mixed Methods Appraisal Tool. Data were analysed using thematic synthesis and analytical themes were developed.

Results: Seventy-eight studies from 15 countries were included. Five analytical themes were generated which explained variation in implementation:

1. **Structural, policy, and organisational conditions shape feasibility** – safe implementation required supportive policies, access to diagnostic information, integration with medical records, and appropriate staffing and remuneration.
2. **Professional identity, autonomy, and legitimacy** – prescribing extended pharmacists' clinical authority, but challenged professional boundaries and required recognition of pharmacists' diagnostic roles.

3. **Moral responsibility, risk, and safe practice boundaries** – there was uncertainty about clinical accountability, error management, and safety governance, with perceived medico-legal risks influencing willingness to prescribe.
4. **Motivation, confidence, and clinical readiness** – willingness and preparedness to prescribe safely depended on confidence, training, and mentorship.
5. **Patient-centred access, continuity, and therapeutic relationship** – pharmacist prescribing improved medication access and adherence, but raised concerns about fragmentation and duplication of care.

Conclusion: Successful and safe implementation of pharmacist prescribing in community pharmacies is influenced not only by operational and policy factors, but also by how pharmacists navigate their professional identity, understand clinical responsibility and safety, and maintain collaborative patient-centred care. To enhance medication access and medication safety in primary care, the findings from this novel synthesis of key stakeholder views should be considered when implementing pharmacist prescribing in community pharmacy settings in future.

References/Acknowledgments: 1. Lizarondo L, Stern C, Carrier J, Godfrey C, Rieger K, Salmond S, Apostolo J, Kirkpatrick P, Loveday H. Chapter 8: Mixed methods systematic reviews (2020).

Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. JBI; 2024. Available from: <https://synthesismanual.jbi.global>.

2. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*. 2008 July 10;8(1):45.

Email address: anna.colthorpe@umail.ucc.ie

Disclosure of Interest: None Declared

OC4.2

ELDERLY CARE PHYSICIANS' PERSPECTIVES ON POTENTIAL PHARMACIST PRESCRIBING IN THE NETHERLANDS: A NATIONWIDE SURVEY

M. Abadier ^{1,2}, A. Saleeb ³, M. Bouvy ³, T. Kempen ^{3,4,*}

¹ErasmusMC, Rotterdam, ²GGZ Rivierduinen, Leiden, ³Utrecht University, Utrecht, Netherlands,

⁴Uppsala University, Uppsala, Sweden

Background: In multiple countries worldwide, pharmacists have obtained the authority to prescribe medication. In the Netherlands, pharmacist prescribing does not (yet) exist. The viewpoints of Dutch patients, pharmacists, and general practitioners on potential pharmacist prescribing have been studied, but little is known about the perspectives of other physicians.

Aim: This study investigated the perspectives of elderly care physicians and other physicians working in nursing homes on the potential role of pharmacists in prescribing in the Netherlands.

Method: A cross-sectional web-based survey was conducted from April to May 2025. Elderly care physicians (in training) and other physicians working in nursing homes were recruited through professional elderly care networks and indirectly through pharmacist networks across the Netherlands. Questionnaire topics were current pharmacist-physician collaboration, hypothetical prescribing

scenarios, preconditions, and benefits and risks of introducing pharmacist prescribing. Key questions contained 4-point Likert scale options to indicate the level of agreement. Open-text comments were categorised. Data were primarily analysed using descriptive statistics.

Results: In total, 199 respondents, of which 153 (76.9%) were female, completed the questionnaire. Most respondents (n = 194, 97.5%) (somewhat) agreed with pharmacist prescribing in at least one scenario. Agreement or somewhat agreement was highest for scenarios within the less complex cases regarding the current competency of pharmacists, e.g., modifications due to difficulty in swallowing (n = 186, 93.5%) and drug substitution due to stock unavailability (n= 184, 92.5%). Scenarios involving complex clinical decision-making e.g., adjustment of lithium dosage (n = 79, 39.7%), were less strongly supported. Clear agreements about the division of tasks (n =189, 97.9%) and feedback to physicians (n = 185, 96.8%) were preconditions that physicians frequently (somewhat) agreed with. The most frequent perceived benefit was improved collaboration (n = 146, 76.4%), whereas pharmacist workload (n = 123, 64.4%) was the most frequent perceived risk.

Conclusion: Dutch elderly care physicians in this study agree to a large extent with pharmacist prescribing, although cases that involve complex clinical decision-making were less supported. A well-defined division of tasks and feedback to the physicians through the electronic health record system seem essential for implementation within elderly care.

References/Acknowledgments: This abstract has also been submitted for poster presentation at the PCNE Working Symposium, 17-18 February 2026, Innsbruck.

Email address: t.g.h.kempen@uu.nl

Disclosure of Interest: None Declared

OC4.3

CLINICAL APPLICATION OF THE NETPHARM ALGORITHM FOR CO-ANALGESICS IN FRAIL OLDER ADULTS WITH HEPATORENAL AND CARDIORENAL SYNDROMES

I. Taškova ^{1,2,*}, K. Pechandová ^{1,3}, A. Martínková ², D. Fialová ^{1,4}

¹Department of Social and Clinical Pharmacy , Charles University, Hradec Králové, ²Clinical Pharmacy Department, Psychiatric Hospital Bohnice, Prague, ³Clinical Pharmacy Department, Strakonice Hospital, Strakonice, ⁴Department of Internal Medicine and Geriatrics, Charles University, Prague, Czech Republic

Background: Neuropathic pain in frail older adults with hepatorenal and cardiorenal syndromes remains a major therapeutic challenge. Psychotropic co-analgesics (amitriptyline, duloxetine, venlafaxine, gabapentin, pregabalin, and carbamazepine) are commonly used but often limited by altered pharmacokinetics, variability, and organ-related adverse effects.

Aim: Building on a previous review, this study aimed to translate pharmacokinetic and safety data on psychotropic co-analgesics in frail older adults into practical prescribing recommendations and to develop a pilot-tested clinical decision-support tool for rational drug selection and dosing in patients with hepatorenal and/or cardiorenal dysfunction.

Method: Literature searches of MEDLINE and Web of Science identified pharmacokinetic, dosing, and safety data for psychotropic co-analgesics. Key findings on PK, dose adjustments, and cardiovascular safety were summarised with recommendations for renal, hepatic, and cardiac impairment. Drugs were reviewed for inclusion in PIM lists and frailty risks. A two-step algorithm was developed and pilot-tested at the Department of Gerontopsychiatry at the Psychiatric Hospital Bohnice.

Results: Specific prescribing recommendations were developed for each psychotropic co-analgesic and coded using a traffic-light system: green (safe), yellow (use with caution), and red (avoid if possible), according to renal, hepatic, cardiovascular, and frailty-related risks. Carbamazepine was highlighted for its potential to cause bradycardia, atrioventricular block, hypotension, or heart failure decompensation, and for strong CYP3A4 induction, which can reduce plasma levels of co-medications. It is therefore classified as red. If use is unavoidable, start at the lowest dose with ECG, sodium, and interaction monitoring. A web-based version implementing this system was created to support rapid medication-safety assessment and will be prospectively tested within the NETPHARM project (2026–2027).

Conclusion: The NETPHARM algorithm provides a structured and pragmatic approach to optimise the use of psychotropic co-analgesics in frail older adults with organ dysfunctions. Its web-based version enables broader clinical testing and may serve as a basis for future validation and integration into geriatric practice.

Email address: ivana.taskova@bohnice.cz

Disclosure of Interest: I. Taškova Grant/Research support from Supported by the NETPHARM project (CZ.02.01.01/00/22_008/0004607), co-funded by the European Union and the Cooperation research programme of the Faculty of Pharmacy, Charles University, Czech Republic., K. Pechandová Grant/Research support from Supported by the NETPHARM project (CZ.02.01.01/00/22_008/0004607), co-funded by the European Union and the Cooperation research programme of the Faculty of Pharmacy, Charles University, Czech Republic., A. Martíková: None Declared, D. Fialová Grant/Research support from Supported by the NETPHARM project (CZ.02.01.01/00/22_008/0004607), co-funded by the European Union and the Cooperation research programme of the Faculty of Pharmacy, Charles University, Czech Republic.

Posters

PP001

EFFECTIVENESS AND SAFETY ANALYSIS OF TRIFLURIDINE–TIPIRACIL IN COMBINATION WITH BEVACIZUMAB IN METASTATIC COLORECTAL CANCER

M. Á. Urbano Fernández¹, J. Pérez Cruz¹, S. Cano Domínguez¹, Á. G. López^{2*}, J. Cabeza Barrera¹

¹Pharmacy, San Cecilio Hospital, ²Pharmacy, Virgen de las Nieves Hospital, Granada, Spain

Background: Trifluridine–tipiracil (TAS-102) is a combination of a thymidine nucleoside analogue and a thymidine phosphorylase inhibitor. Combined with bevacizumab, is used to treat adults with metastatic colorectal cancer who have previously received fluoropyrimidine-, oxaliplatin-, and irinotecan-based chemotherapy, as well as anti-VEGF and/or anti-EGFR therapies.

Aim: To evaluate the effectiveness and safety of TAS-102 in combination with bevacizumab in adult patients with mCRC treated in two tertiary-level hospitals.

Method: This was an observational, retrospective, multicenter study including adult patients with mCRC treated with TAS-102 - Bevacizumab between September 2023 and September 2025. The primary endpoints for effectiveness were median progression-free survival (PFS) and median overall survival (OS). Additional variables collected included demographic data (sex, age), KRAS mutation status, prior treatments, treatment initiation date, treatment duration, dose reductions, and reported adverse events (AEs).

Results: Thirty patients were analyzed (57% male), with a mean age of 67.1 years (range 44–83). KRAS mutation (KRASm) was present in 60% of cases. The median number of prior treatment lines was 3. Previous therapies included bevacizumab in 14 patients, anti-EGFR agents in 12, and afibbercept in 5. The median number of treatment cycles received was 5.5 (range 1–25). By the data cutoff date, 14 patients had progressed (71.4% KRASm). Six-month PFS was 76.7%. Twelve patients had died (67% KRASm), with a current median OS of 13.1 months and a 6-month OS rate of 86.7%. AEs occurred in 33.3% of patients, the most frequent being hematologic toxicity (50%), asthenia (20%), and diarrhea (10%). Dose reductions were required in 23% of cases (6 due to hematologic toxicity, 1 due to gastrointestinal toxicity), with no treatment discontinuations due to AEs.

Conclusion: Trifluridine–tipiracil in combination with bevacizumab shows limited effectiveness, consistent with expectations in this refractory population, with poorer outcomes observed in KRAS-mutated patients. The safety and tolerability profile was acceptable and comparable to that reported for these agents in other indications. Additional data are needed to confirm long-term efficacy and safety.

Email address: maria.urbano.fernandez.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP002

ANALYSIS OF THE SWITCH FROM EFMOROCTOCOG ALFA TO EFANESOCTOCOG ALFA IN PATIENTS WITH SEVERE HEMOPHILIA A

Á. García López ^{1,*}, A. Gómez Balazote ¹, C. Alarcón Payer ¹, B. González Sánchez ¹, A. Jimenez Morales ¹

¹Pharmacy, Virgen de las Nieves Hospital, Granada, Spain

Background: Severe hemophilia A is an inherited disorder caused by profound factor VIII deficiency, leading to spontaneous bleeding and joint damage. Long-acting replacement therapies have improved management. Among them, efanesoctocog alfa, an extended half-life factor VIII, provides stable activity, reducing infusion frequency and improving protection against bleeding

Aim: To analyze the switch from efmorococog alfa to efanesoctocog alfa in patients with severe hemophilia A, evaluating factor VIII levels and clinical parameters.

Method: Ambispective study from September 2024 to October 2025.

Variables: Sex, age, start date, end date, Visual Analog Scale (VAS), exercise, and IPAQ score. Number of bleeding episodes requiring extra factor doses. Number of administrations per week, previous therapies, adherence, quality of life using the Eq-5D scale. Daily exercise performed. Chromogenic and coagulative factor VIII levels were measured before the next administration and Efanesostocog also at 96h. Efanesostocog was administered once a week. Efmorococog was administered 2–3 times per week. All patients treated with efanesoctocog received the standard dose of 50 IU/kg.

Results: 7 patients (100% male), with a median age of 29 years (IQR: 26–61), were included. Before initiating efanesoctocog alfa, 60% were receiving efmorococog every 72 hours and 40% every 96 hours, with a median dose of 58 IU/kg. Pre-dose factor VIII levels with efmorococog were 5.6 (0.7–8.4) IU/dL (coagulative) and 0.53 (0.1–0.7) IU/dL (chromogenic). With efanesoctocog alfa, factor VIII levels at 96 hours were 24.2 (20–31) IU/dL (coagulative) and 47.8 (42–52) IU/dL (chromogenic), and at 7 days (previous of next administration) : 8.4 (5.7–9) IU/dL and 6.4 (1.4–19) IU/dL, respectively. VAS score decreased from 6.6 (5–8) to 2.6 (0–4), and IPAQ increased by 12%. All patients reported improved quality of life, mainly due to decreased pain and less frequent infusions. Adherence was 100% before and after the switch. During a median follow-up of 258 days, only one patient required an extra dose for hemoarthrosis, whereas with efmorococog 71% had required at least one extra dose in the previous 258 days.

Conclusion: Extended half-life drugs have represented a major advance in the treatment of hemophilia A. In our cohort, efmorococog alfa maintains adequate trough levels, allowing for weekly administration, in contrast to Elocta, which requires 2–3 doses per week. Furthermore, we observed a reduction in the VAS score, reflecting a significant improvement in patients' quality of life.

Email address: garcialopezalvaro.29@gmail.com

Disclosure of Interest: None Declared

PP003

SAFETY OF JAK INHIBITORS IN ULCERATIVE COLITIS: REAL-WORLD EXPERIENCE

A. Gómez Balazote ¹, Á. García López ^{1,*}, B. González Sánchez ¹, A. Jiménez Morales ¹

¹PHARMACY, VIRGEN DE LAS NIEVES HOSPITAL, GRANADA, Spain

Background: Janus kinase (JAK) inhibitors are an emerging treatment class for inflammatory bowel disease. Although clinical trials have demonstrated their efficacy, real-world safety data remain limited. Characterisation of adverse reactions and treatment discontinuations is essential to assess the safety and risk profile of these agents in routine clinical practice.

Aim: To evaluate and compare the safety of upadacitinib, tofacitinib and filgotinib in patients with ulcerative colitis, with a specific focus on adverse drug reactions and treatment discontinuation due to safety events.

Method: We conducted an ambispective cohort study including patients with ulcerative colitis who initiated treatment with upadacitinib, tofacitinib or filgotinib between July 2020 and November 2025, with a minimum follow-up of 6 months (median 690 days).

The following variables were collected: age, sex, treatment duration, comorbidities, concomitant therapies and adverse drug reactions, with specific safety assessment at week 54.

Data were obtained from the electronic health record systems Diraya® and Prisma®.

Results: Forty adult patients with ulcerative colitis (70% men) were included, mean age 42 years (IQR 35–37). Thirteen patients received upadacitinib (84.6% men, mean treatment duration 603 ± 140 days), 13 tofacitinib (54% men, 910 ± 601 days) and 14 filgotinib (71.5% men, 555 ± 338 days). In the upadacitinib group, at least one adverse drug reaction (ADR) was documented in 5 patients: cytomegalovirus reactivation in 2 (15.4%), herpes infection in 1 (7.7%), bruising in 1 (7.7%), cutaneous lesions in 1 (7.7%) and paresthesias in 1 (7.7%). Overall, 1 patient (7.7%) permanently discontinued upadacitinib due to ADRs. In the tofacitinib group, 2 patients developed ADRs: nausea in 2 patients (15.4%) and headache in 1 (7.7%); 2 patients (15.4%) discontinued tofacitinib because of these events. In the filgotinib group, 3 patients (21.4%) reported headache and 1 (7.1%) generalized pain; 3 patients (21.4%) discontinued filgotinib due to ADRs, with treatment withdrawal attributed to safety concerns in the clinical record.

Conclusion: In this real-world cohort of ulcerative colitis patients treated with JAK inhibitors, clinically relevant adverse drug reactions and safety-related discontinuations were observed with all three agents. Upadacitinib was mainly associated with infectious and neurological events, tofacitinib with gastrointestinal and neurological symptoms, and filgotinib with headache and generalized pain. These data suggest differentiated safety profiles among JAK inhibitors and highlight the need for pharmacovigilance and close monitoring in routine clinical practice.

Email address: alvaro.garcia.lopez.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP004

EFFECTIVENESS AND SAFETY ANALYSIS OF LEBRIKIZUMAB IN MODERATE-SEVERE ATOPIC DERMATITIS

M. Á. Urbano Fernández ¹, Á. G. López ^{2,*}, S. Cano Domínguez ¹, J. Pérez Cruz ¹, J. Cabeza Barrera ¹

¹Pharmacy, San Cecilio Hospital, ²Pharmacy, Virgen de las Nieves Hospital, Granada, Spain

Background: Atopic dermatitis (AD) is a chronic inflammatory skin disease characterized by intense pruritus, eczema, and xerosis. The aim of treatment is to reduce symptoms and prevent exacerbations. A recently approved (August 2024) systemic option for moderate-severe AD in Spain is lebrikizumab, a human monoclonal antibody specifically targeting IL-13.

Aim: The aim of the study is to evaluate the effectiveness and safety of lebrikizumab in patients with moderate-to-severe AD at a secondary-level hospital.

Method: Ambispective observational study of patients treated with lebrikizumab from Oct 2024 to Jun 2025. Collected variables: age, sex, previous and concomitant treatments, initiation and duration of treatment, adverse events (AEs), and AD severity assessed by *Eczema Area and Severity Index* (EASI), *Investigator Global Assessment* (IGA), and *Body Surface Area* (BSA). Effectiveness was evaluated by assessing the number of patients with at least 50% or 75% reduction in EASI scores (EASI50 and EASI75), number of patients achieving IGA scores of 0-1, number of patients reducing BSA, all around week 16. Data sources: electronic prescription Prisma® and clinical history Diraya®.

Results: We included 9 patients, of whom seven (six men, one woman) had reached week 16 of treatment or more, with a mean age of 46 years (range 32–63 years) and a median follow-up of 28 weeks. All but one patient (due to contraindication) had previously received treatment with topical corticosteroids (TCS) and cyclosporine; where 2 of them had been treated with dupilumab and 2 with upadacitinib. The dosage used was as indicated in the summary of product characteristics. All patients were treated concomitantly with TCS, and 1 also with cyclosporine. The baseline mean EASI was 21, and after the assessment carried out around week 16, 85% (6/7) achieved EASI50 and EASI75. Regarding IGA, starting from seven patients with scores greater than 3, 71% (5/7) achieved scores of 0 or 1. The baseline median BSA was 14, and all patients reduced it, with 5 reaching a BSA of 0. In relation to AEs, 3 cases were reported: one patient experienced an urticarial reaction (which led to treatment discontinuation), another reported xerophthalmia, and a third developed conjunctivitis, both AEs being limited in time.

Conclusion: Lebrikizumab is a novel alternative for patients with moderate-to-severe AD refractory to other therapies. However, due to the recent approval of this drug, more data on long-term efficacy and safety are needed.

Email address: maria.urbano.fernandez.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP005

TELECONSULTATION AS A TOOL TO STRENGTHEN MEDICATION SAFETY IN GERIATRIC ONCOHEMATOLOGIC PATIENTS

Á. García López ^{1,*}, A. Gómez Balazote ¹, C. Alarcón Payer ¹, A. Jiménez Morales ¹

¹PHARMACY, VIRGEN DE LAS NIEVES HOSPITAL, GRANADA, Spain

Background: Teleconsultation enhances medication safety by maintaining continuous pharmaceutical monitoring in vulnerable patients unable to attend regular appointments. Remote follow-up reduces the risk of drug errors, ensures treatment adherence and supports safe management of complex oncohematologic therapies.

Aim: To evaluate the role of pharmacist-led teleconsultation in promoting safe pharmacotherapy among elderly oncohematologic patients through remote assessment of adherence, drug interactions and treatment-related adverse events during hospital pharmaceutical follow-up.

Method: As part of a prospective observational study (Dec 2023–Sept 2025), a telepharmacy service was implemented for geriatric oncohematologic patients with mobility limitations. Pharmacists conducted structured remote consultations via telephone, focusing on medication use, storage and emerging safety concerns after changes in therapy. Patients and caregivers were counseled on potential interactions, adverse effects and adherence strategies. Clinical information was recorded in the electronic health record to ensure continuity of care. Pharmacists also coordinated with prescribers to manage reported safety issues promptly.

Results: A total of 45 teleconsultations were conducted among elderly patients included in the pharmaceutical care program. Thirty calls focused on potential interactions following new prescriptions, including immunosuppressants, antibiotics and herbal products. Fifteen teleconsultations addressed treatment safety, particularly the appearance of adverse effects such as nausea, fatigue, rashes or hematologic alterations. Pharmacists resolved queries, recommended monitoring parameters and communicated critical cases to clinicians for dose modification or temporary discontinuation. Telepharmacy enhanced early detection of safety issues and reinforced patient education. It also facilitated care continuity for patients living in rural areas or with reduced mobility. No medication errors or serious events were reported during remote follow-up.

Conclusion: Teleconsultation proved to be an effective and safe extension of hospital pharmaceutical care, enabling continuous surveillance, early detection of drug-related problems and improved adherence. Integrating telepharmacy into routine oncology practice strengthens medication safety, ensures care continuity and supports elderly patients in complex treatments.

Email address: alvaro.garcia.lopez.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP006

PREVALENCE OF POTENTIALLY INAPPROPRIATE PRESCRIPTIONS IN ELDERLY PATIENTS WITH RHEUMATIC DISEASES

B. González Sánchez ^{1,*}, Á. García López ¹, A. Gómez Balazote ¹, E. I. Tena Sánchez ¹, M. R. Cantudo Cuenca ¹

¹Pharmacy, Hospital Universitario Virgen de las Nieves, Granada, Spain

Background: Polypharmacy is common in older patients with rheumatic diseases. It is associated with an increased risk of morbimortality. Potentially inappropriate medications should be avoided so it is necessary to review medication use in these patients. Also drugs with anticholinergic properties have harmful effects among older people.

Aim: To identify the prevalence of inappropriate medication prescriptions (PIM) in polymedicated patients with rheumatic diseases using the START-STOPP and LESS-CHRON criteria, as well as, to analyse the anticholinergic risk.

Method: Cross-sectional study was conducted in September 2025. Patients ≥ 65 years on ≥ 5 medications attending the hospital pharmacy were included. We assessed patients' treatment and clinical status, considering the risks and benefits of medication withdrawal. Collected variables included age, sex, number of medications, dependency (Barthel index), cognitive function (Pfeiffer scale), anticholinergic risk (ARS), potentially inappropriate prescriptions, therapeutic groups, and other therapeutic inadequacies. We used the STOPP and LESS-CHRON criteria to evaluate deprescribing. Data were collected from digital medical records and the electronic dispensing system.

Results: 83 patients were included, median age: 74 years (IQR:68-78), 68.7% women. Median number of prescribed medications: 10 (IQR: 9-12). Barthel index: 90 (IQR: 75-100) (moderate dependency); Pfeiffer scale: 1 (IQR: 0-1) (normal). 25.3% patients had low risk (ARS=1), 16.7% medium risk (ARS=2) and 6.2% high risk (ARS= 3). We identified 63 PIM. START-STOPP (39 PIM, 61.9%): central nervous system (CNS) (n=19, 48.7%), cardiovascular and blood systems (n=8, 20.5%), musculoskeletal system (n=7, 18%), endocrine system (n=5, 12.8%). LESS-CHRON (24 PIM, 38.1%): CNS (n=9, 37.5%), cardiovascular and blood systems (n=7, 29.1%), endocrine system (n=7, 29.1%), musculoskeletal system (n=1, 4.3%). Other inadequacies included 8.4% therapeutic duplications, 6% drug interactions, 2.7% toxicity to methotrexate without folic acid, and 2.7% due to adverse effects.

Conclusion: The elderly patients with rheumatic conditions analysed has a considerably high degree of polypharmacy. The prevalence of PIM is also elevated. CNS medications are most frequently involved. The START-STOPP and LESS-CHRON criteria are useful tools in clinical practice. These criteria could help professionals to optimise treatment, contributing to patient safety and improving their quality of life.

References/Acknowledgments: O'Mahony D, Cherubini A, Guiteras AR, et al. STOPP/START criteria for potentially inappropriate prescribing in older people: version 3. *Eur Geriatr Med.* 2023;14(4):625-632.

Email address: beagnz95@gmail.com

Disclosure of Interest: None Declared

ELECTRONIC ORDERSSET FOR HYPERKALAEMIA MANAGEMENT: COHORT ANALYSIS OF GUIDELINE ADHERENCE AND SAFETY IN A UK TEACHING HOSPITAL

B. Levkovich ^{1 2 3,*}, G. Alrashdi ^{1 4}, S. Sawieres ^{1 2}

¹Pharmacy, Kings College Hospital NHS Foundation Trust, ²School of Cancer & Pharmaceutical Sciences, Kings College London, London, United Kingdom, ³Faculty of Pharmacy & Pharmaceutical Sciences, Monash University, Melbourne, Australia, ⁴School of Pharmacy, University College London, London, United Kingdom

Background: Hyperkalaemia is a life-threatening condition requiring rapid and effective management. Concerns about effective management led to a national safety mandate in England in 2023. Ordersets in electronic health records (EHRs) are digital solutions to translate guidelines into practice, but real-world evaluation in hyperkalaemia management is limited.

Aim: In response to the national safety alert, this work aimed to evaluate the impact of an electronic orderset on guideline adherence, efficacy and safety of hyperkalemia treatment in a UK teaching hospital.

Method: A retrospective cohort study was conducted using data from the local EHR. Adult inpatients (≥ 18 years), admitted between July and December 2024, treated for hyperkalaemia were included. The orderset included prescriptions for all first and second line medication and an as required order for glucose monitoring; prescribers selected required components for individual patients. Prescribing via electronic orderset was compared with orders entered manually in the EHR. Prescriptions for calcium gluconate and insulin-glucose dosing and post-insulin glucose monitoring were analysed for adherence, hyperkalaemia resolution for efficacy and glycaemic events for safety.

Results: A total of 234 episodes of hyperkalaemia management involving 379 prescriptions were analysed: 298 prescriptions were entered via the orderset and 81 were entered manually. Overall adherence to recommended calcium gluconate dosing was 93.4% (199/213), with a trend towards higher adherence with orderset use (94.6% vs. 85.7%, $p = 0.094$). Insulin-glucose therapy adherence was near universal (99.1%, 341/344), with higher adherence with orderset use (100% vs. 94.4%, $p = 0.004$). Glucose monitoring was poor: 1.7% (6/344) of prescriptions achieved the guideline mandated checks, 10.8% (37/344) had none, with no difference between prescribing methods. Hypoglycaemia occurred in 17.2% (35/203) and hyperglycaemia in 28.6% (58/203) of episodes. Treatment effectiveness showed that in 65.8% (154/234) of episodes, patient achieved normokalaemia after a single prescription, with outcomes more influenced by baseline potassium level than prescribing method.

Conclusion: EHR orderset use supported adherence to recommended prescribing of hyperkalaemia management but failed to support safe treatment as monitoring was inadequate. Refinement and evaluation of digital interventions, particularly automated monitoring prompts, and integrated user-centred design, are required to fully address safety risks in management of hyperkalaemia and similar complex emergent scenarios. Locally the orderset is undergoing update to address these issues.

Email address: bianca.levkovich@nhs.net

Disclosure of Interest: None Declared

PP008

IMPLEMENTATION AND EVALUATION OF A SMART INFUSION SAFETY SYSTEM TO PREVENT MEDICATION ERRORS IN PAEDIATRIC ONCOLOGY

E. I. TENA SÁNCHEZ ^{1,*}, M. J. GÁNDARA LADRÓN DE GUEVARA ¹, M. I. SIERRA TORRES ¹, B. GONZÁLEZ SÁNCHEZ ¹, A. JIMÉNEZ MORALES ¹

¹PHARMACY, HOSPITAL UNIVERSITARIO VIRGEN DE LAS NIEVES, GRANADA, Spain

Background: Medication errors in paediatric oncohaematology carry high risk due to narrow therapeutic margins and weight-based dosing. Smart infusion and traceability systems are essential to enhance medication safety and reduce administration errors.

Aim: To evaluate the impact of implementing a smart infusion safety system on medication error prevention and treatment traceability in paediatric oncohaematology patients.

Method: Prospective observational study conducted in a tertiary hospital (Feb 2021–Sep 2025). The smart infusion system was integrated within the electronic medication management system to enable real-time verification and traceability of cytotoxic treatments. Data were collected on alerts, near misses and confirmed administration errors. A descriptive analysis was conducted to evaluate safety outcomes.

Results: A total of 190 paediatric patients received 1.900 chemotherapy cycles and 10,500 administrations. The system generated 1.201 alerts (0.6 per treatment): 498 critical (4.7%) related to cytotoxic drug administration and dose discrepancies, 281 semi-critical (2.7%) linked to supportive medication such as premedication or hydration infusions, 153 dosing deviations (1.5%), and 128 non-recommended pressures (1.2%). After implementation, no administration errors were recorded. Overall traceability and workflow control improved substantially, eliminating manual transcription and allowing immediate data access. The medical, nursing and pharmacy teams reported improved safety perception and coordination between pharmacy and nursing.

Conclusion: Implementation of a smart infusion safety system in paediatric oncology eliminated administration errors and optimised traceability. This technology enhances patient safety, improves care quality and represents a replicable model for safe administration of high-risk medicines in vulnerable populations.

Email address: elenaitenasan@gmail.com

Disclosure of Interest: None Declared

ANALYSIS OF CARDIOVASCULAR RISK ASSOCIATED WITH JANUS KINASE INHIBITORS TREATMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS

A. Martín Roldán ¹, M. D. M. Sánchez Suárez ², E. I. Tena Sánchez ^{3,*}, A. García Lopez ³, A. Jiménez Morales ³

¹Pharmacy, Hospital Clínico Universitario de Valladolid, Valladolid, ²Pharmacy, Hospital Comarcal de Baza, ³Pharmacy, Hospital Universitario Virgen de las Nieves, Granada, Spain

Background: Rheumatoid arthritis(RA) is associated with an increased risk of cardiovascular morbidity and mortality, possibly due to chronic systemic immune-mediated inflammation. Despite increasing evidence of increased risk of cardiovascular events from Janus kinase(JAK) inhibitors, the association between them is unclear.

Aim: Outcome analysis of the occurrence of cardiovascular adverse events and cardiovascular risk in RA patients on treatment with JAK inhibitors.

Method: Observational, retrospective, multicentre study of all patients with RA treated with JAK inhibitors for a minimum duration of 12 months. Clinical variables: sex, age, smoking, Charlson Comorbidity Index, cardiovascular risk score(1), previous cardiovascular pathologies, Jak inhibitor treatment, duration, adverse effects or dose modifications. Major adverse cardiac events (MACE) were recorded and when they occurred as well as their outcome (emergency visit, hospitalization, death). Data was obtained from oncology electronic prescription and electronic medical records. R commander® was used for the statistical analysis.

Results: 71 patients on JAK inhibitors were included (85.9% female, median age 58 [IQR 48.5–65.5]). Median Charlson Index 1 [IQR 1–2]. 47.8% ex-smokers, 18.3% smokers. Median 10-year CV risk 1.5% [IQR 1–3]. Baseline comorbidities: 32.4% hypertension, 25.3% dyslipemia, 11.2% diabetes, 4.2% ischemic heart disease, 4.2% cerebrovascular disease, 2.8% myocardial infarction. Treatments: tofakinib 38, baricitinib 17, upadacitinib 12, filgotinib 4. Median treatment 31 months [IQR 15.1–40.9]. 12.6% dose reduction, 7% dose increase, 54.9% discontinuation (48.7% secondary failure, 23% adverse effects, 17.9% primary failure, 10.2% other). 56.4% of those discontinued switched to another JAK inhibitor. Upadacitinib was the most prescribed (50%). MACE occurred in 12 patients (16.9%): 6 dyslipemia, 3 hypertension, 1 diabetes, 1 ischemic heart disease, 1 deep vein thrombosis; 2 hospitalized. Median time to MACE: 2 years [IQR 1–3]. MACE correlated with smoking (p=0.01). After discontinuation, 2 MACE occurred (atrial fibrillation at 1 year, pulmonary thromboembolism at 4 years). No MACE-related deaths.

Conclusion: The development of MACE occurs in a modest number of patients with no associated mortality in this study. A statistically significant association was found with smoking habit. It is necessary monitoring and management of modifiable risk factors in this patient population.

References/Acknowledgments: [\(1\) EULAR evidence-based recommendations for cardiovascular disease management in patients with rheumatoid arthritis and other forms of inflammatory arthritis.](#)

[Peter MJ et al. Ann Rheum Dis 2010; 69: 325-31.](#)

Email address: mariadmar157@gmail.com

Disclosure of Interest: None Declared

PP010

HEMATOLOGICAL TOXICITY IN PATIENTS TREATED WITH TRASTUZUMAB DERUXTECAN

M. M. Lázaro ¹, A. F. Prieto ¹, M. E. C. García ¹, S. M. Garrido ¹, E. I. T. Sánchez ^{2,*}, M. T. S. Sánchez ¹

¹Pharmacy, Hospital Clínico Universitario de Valladolid, Valladolid, ²Pharmacy, Hospital Universitario Virgen de las Nieves, Granada, Spain

Background: Trastuzumab deruxtecan (T-DXd) is an antibody-drug conjugate targeting the human epidermal growth factor receptor 2 (HER2). Its use is associated with hematological toxicity, which may require treatment adjustments. Evaluating and monitoring these effects is crucial to ensure patient safety and treatment continuity.

Aim: To evaluate hematological toxicity in patients treated with T-DXd.

Method: This observational, retrospective, descriptive study included patients who started T-DXd treatment at a dose of 5.4 mg/kg between August-2021 and September-2025 at a tertiary hospital. Variables collected included sex, age, diagnosis, treatment start and end dates, treatment delay, dose reduction and discontinuation due to hematological toxicity, baseline neutrophils, platelets and hemoglobin, as well as hematological toxicity and severity according to the National Cancer Institute's Common Terminology Criteria for Adverse Events (CTCAEv.6.0).

Results: Thirty-four patients were included, median age 69 years(range 45–84), 91.2% female. Diagnoses included: 15/34(44%) unresectable/metastatic HER2-positive breast cancer, 16/34(47%) unresectable/metastatic breast cancer with HER2-low expression, 2/34(6%) bladder cancer, 1/34(3%) parotid gland cancer, the latter two as off-label prescribed indications. A total of 55 hematological toxicities were recorded in 31/34(91.2%) patients. 17/34(50%) patients had grade 1 neutropenia, of which 4/17(23.5%) also had grade 2 neutropenia. 12/34(35.3%) developed grade 1 thrombocytopenia, with 2/12(16.7%) also experiencing grade 2. 26/34(76.5%) experienced anemia, 25/34(73.5%) grade 1 and 1/34(3%) grade 2 only. Among those with grade 1 anemia, 6/25(24%) also had grade 2 anemia and 3/25(12%) developed grade 2 and 3 anemia. No patients experienced grade ≥ 3 neutropenia or thrombocytopenia, nor grade ≥ 4 anemia. Due to hematological toxicity, 9/34(26.5%) patients delayed treatment and 4/34(11.8%) required dose reduction. Treatment was discontinued in 1/34(3%) patient due to thrombocytopenia and anemia. 6/34(17.6%) patients experienced toxicity in all three hematologic lineages.

Conclusion: Hematological toxicity observed with trastuzumab deruxtecan (5.4 mg/kg) aligns with Product Information. Most patients developed anemia, followed by neutropenia and thrombocytopenia. Hematological toxicity caused treatment delays, trastuzumab deruxtecan dose reduction and one case of treatment discontinuation. Our work underscores the importance of monitoring hematological toxicity to ensure patient safety during therapy.

Email address: mmmonterol@saludcastillayleon.es

Disclosure of Interest: None Declared

PP011

COMPARATIVE SAFETY OF INITIAL UPADACITINIB DOSES IN THE TREATMENT OF ATOPIC DERMATITIS: A REAL-WORLD STUDY

M. D. M. Sánchez Suárez¹, A. Martín Roldán², E. I. Tena Sánchez^{3,*}, A. García Lopez³, A. Jiménez Morales³

¹Pharmacy, Hospital Comarcal de Baza, Granada, ²Pharmacy, Hospital Clínico Universitario de Valladolid, Valladolid, ³Pharmacy, Hospital Universitario Virgen de las Nieves, Granada, Spain

Background: Upadacitinib, a selective Janus kinase inhibitor, is approved for the treatment of moderate-to-severe atopic dermatitis(AD). The European Public Assessment Report recommends 15 mg or 30 mg daily based on the patient's clinical status. Real-world data comparing the safety of these doses are limited.

Aim: To assess the real-world safety of initial upadacitinib doses in AD

Method: A retrospective, multicentre study in adults with AD treated with upadacitinib. Variables: sex, age, comorbidities, previous treatments, adverse events(AEs), dose changes, and discontinuations. Data from electronic records, analysis with R Commander®.

Results: 45 patients were included:18 started on 15 mg and 27 on 30 mg daily. At baseline, patients in the 30 mg group(n=27) were predominantly female (62.9%) with a median age of 32 years(IQR 25–40).In the 15 mg group(n=18) were 44.4% female with a median age of 27 years(IQR 17.2–33.7). Atopic comorbidities were present in 33.3% and 16.6% of patients, respectively.Previous treatments included cyclosporine(88.8% vs. 94.4%) and methotrexate(25.9% vs. 22.2%). Prior biologic therapy mainly involved dupilumab(44.4% vs. 50%) and tralokinumab(11.1% vs. 5.5%).The median treatment duration was 16 months in both groups.In the 15 mg group, 72.2% of patients required a dose change(7 increased to 30 mg, 5 decreased) and 8/18(44.5%) discontinued treatment:4 due to lack of efficacy, 3 to AEs and 1 other reason.In the 30 mg group,33.3% required a dose adjustment(9 decreased to 15 mg, 3 resumed 30 mg) and 6/27(22.2%) discontinued treatment:4 to AEs, 2 due to lack of efficacy.Reported AEs:gastrointestinal disorders(22%), upper respiratory infections(19%), acne(15%) and lipid elevation(11%). No major cardiovascular events or malignancies were recorded during follow-up.

Conclusion: Both initial upadacitinib doses showed an acceptable safety profile in real-world clinical practice. While the 30 mg dose achieved greater and more sustained clinical improvement, the 15 mg dose was associated with a higher rate of discontinuation due to lack of efficacy but fewer safety-related adjustments.

Email address: mariadmar157@gmail.com

Disclosure of Interest: None Declared

PP012

REAL-WORLD EFFECTIVENESS AND SAFETY OF SACITUZUMAB GOVITECAN IN METASTATIC TRIPLE-NEGATIVE BREAST CANCER

E. I. TENA SÁNCHEZ ^{1,*}, M. I. SIERRA TORRES ¹, M. J. GÁNDARA LADRÓN DE GUEVARA ¹, B. GONZÁLEZ SÁNCHEZ ¹, A. JIMÉNEZ MORALES ¹

¹PHARMACY, Virgen de las Nieves University Hospital, GRANADA, Spain

Background: Sacituzumab govitecan significantly improved progression-free survival, overall survival and objective response rate vs chemotherapy in the pivotal trial (ASCENT) for metastatic triple-negative breast cancer (mTNBC). Real-world evidence is needed to characterise its performance and safety in routine clinical practice.

Aim: To describe real-world effectiveness and safety of Sacituzumab govitecan in heavily pretreated mTNBC patients treated at a tertiary hospital and compare key outcomes with those reported in the ASCENT trial.

Method: Retrospective observational study conducted in a tertiary hospital including adult women patients with mTNBC treated with Sacituzumab govitecan (06-Feb-2023 to 13-Aug-2025).

Demographics data, previous treatments, duration, effectiveness and adverse events (AEs) were collected. Effectiveness was defined as progression-free survival and overall survival at data cut-off. Outcomes were compared with those reported in the ASCENT trial.

Results: Eighteen patients (median age 58.8 years (37-80)) received Sacituzumab govitecan in third or later lines. Median treatment duration was 4.3 months (0.26-8.2). Four patients (22.2%) remained progression-free at analysis, while 77.78% showed disease progression or death. Dose reductions were implemented in 50% of patients. One third began treatment at a reduced dose owing to baseline clinical status, and the rest required subsequent reductions due to AEs. Most frequent adverse events were asthenia (33%), alopecia (22%), neutropenia (17%; including grade 3), nausea (11%), and mucositis (11%). Real-world effectiveness was lower, while the safety profile was consistent with the pivotal trial.

Conclusion: In this small real-world cohort, Sacituzumab govitecan showed modest effectiveness in heavily pretreated metastatic triple-negative breast cancer, with safety outcomes mirroring those described in the ASCENT trial. Neutropenia and gastrointestinal toxicity were the most relevant AEs, and dose adjustments were frequent. The lower effectiveness compared with pivotal trial may be explained by treatment in later lines and a more advanced disease stage.

References/Acknowledgments: Bardia A, Tolaney SM, Loirat D, et al. Sacituzumab govitecan in metastatic triple-negative breast cancer. *N Engl J Med.* 2021;384(16):1529–1541.

<https://doi.org/10.1056/NEJMoa2028485>

Email address: elenaitenasan@gmail.com

Disclosure of Interest: None Declared

PP013

REAL-WORLD OUTCOMES OF RAMUCIRUMAB AND PACLITAXEL FOR ADVANCED GASTRIC ADENOCARCINOMA IN A TERTIARY LEVEL HOSPITAL.

A. M. Roldán¹, M. I. S. Torres², M. J. G. Ladrón de Guevara², M. D. M. S. Suárez³, E. I. T. Sánchez^{2,*}

¹Pharmacy, Hospital Clínico Universitario de Valladolid, Valladolid, ²Pharmacy, Hospital Universitario Virgen de las Nieves, ³Pharmacy, Hospital Comarcal de Baza, Granada, Spain

Background: Gastric adenocarcinoma represents an aggressive malignancy with limited treatment options. The combination of ramucirumab(VEGFR-2 inhibitor) and paclitaxel has emerged as a standard second-line demonstrating improved survival. However real-world data on the efficacy and tolerability of this combination, remains limited.

Aim: To evaluate the outcomes of patients with advanced stage IV tumors treated with ramucirumab and paclitaxel at our institution.

Method: Retrospective observational study that analyzed data from all patients with gastric stage IV cancer who had received ramucirumab and paclitaxel as second-line or later treatment since the inclusion in the hospital of this treatment. Data collected: sex, age, prior therapies, number of cycles administered, duration, overall survival (OS), response (complete or partial), adverse events, treatment interruptions, dose reductions, and subsequent treatment changes. Statistical analysis was performed with R commander software.

Results: Thirty-three patients were analyzed, 22 men and 11 women with median age 61[70-56] years. Median number of prior treatments was 1. The median number of administered cycles was 4[8,5-2]. Median treatment duration was 4.3[6.9-2] months and median OS was 7[13.7-3.6] months. No patient reached a complete response and only two got partial response. Most patients did not experience interruptions of treatment(30). However 3 interrupted due to paclitaxel neurotoxicity. Ten patients needed dose reduction due to paclitaxel and only one due to ramucirumab. Most common adverse effect was neurotoxicity associated with paclitaxel(8 cases) followed by atrial fibrillation(AF) in 1 patient. Eight patients progressed and needed treatment change after a median of 5.7[13.4-3.5] months.

Conclusion: Ramucirumab+paclitaxel as a second-line or later treatment is an option for advanced gastric adenocarcinoma. Combination modestly increases OS. Given the difference between population and treatment used in the pivotal studies that led to the approval of the drug in Spain and the one in our analysis a direct comparison cannot be made. Choice of treatment must be made considering individual patient characteristics, toxicity and previous treatments received. Further research is needed to identify predictive biomarkers for response and to optimize the sequencing of therapies.

Email address: aliciamartinroldan@gmail.com

Disclosure of Interest: None Declared

PP014

REAL-WORLD EFFECTIVENESS AND SAFETY OF LIPOSOMAL DAUNORUBICIN AND CYTARABINE IN HIGH-RISK OR SECONDARY ACUTE MYELOID LEUKAEMIA

B. GONZÁLEZ SÁNCHEZ ¹, E. I. TENA SÁNCHEZ ^{1,*}, A. MARTÍN ROLDÁN ¹, M. J. GÁNDARA LADRÓN DE GUEVARA ¹, A. JIMÉNEZ MORALES ¹

¹PHARMACY, HOSPITAL VIRGEN DE LAS NIEVES, GRANADA, Spain

Background: High-risk and secondary acute myeloid leukaemia (AML) have poor prognosis and limited treatment options in older adults. While liposomal daunorubicin and cytarabine improved survival in trials versus non-liposomal chemotherapy, under Spanish financial conditions, real-world effectiveness evidence is scarce.

Aim: To evaluate real-world effectiveness and safety of liposomal daunorubicin and cytarabine in adult patients with high-risk or secondary AML treated in a tertiary hospital, and to assess alignment with the national therapeutic positioning report (TPR) financing conditions.

Method: A retrospective observational study including all adults treated with liposomal daunorubicin and cytarabine between February 2023 and August 2025. Demographics, disease aetiology, treatment response, relapse, allogeneic stem cell transplantation (allo-HSCT), and adverse events were collected. Descriptive statistics (median, range, %) were used. Eligibility according to the national TPR criteria (age \geq 60 years, ECOG 0–1, absence of FLT3 mutation, no prior hypomethylating therapy, transplant candidate) was reviewed.

Results: Nine patients were treated with liposomal daunorubicin and cytarabine, 78% (n=7) were women, all over 60 years (median age was 67 years (61–74) and with ECOG 0–1. Most cases corresponded to de novo AML with myelodysplasia-related changes (n=5), followed by AML secondary to MDS (n=2), therapy-related AML (n=1) and AML evolving from CMML (n=1). All patients fulfilled national funding and institutional criteria for treatment initiation. During follow-up, eight patients (89%) experienced relapse, with a median time of two months (1–5). Only one patient remained in remission at data cut-off, successfully proceeding to allo-HSCT with this treatment. Seven patients required rescue therapy in order to reach allogeneic transplantation. Adverse events were frequent and consistent with expected toxicity. The most common were grade IV haematologic toxicity (100%), often accompanied by febrile neutropenia or respiratory failure. Other relevant events included diarrhoea (50%), asthenia (33%), mucocutaneous manifestations (33%) and oral candidiasis (11%). Despite the intensity of adverse reactions, no treatment-related deaths occurred during induction.

Conclusion: In this real-world cohort, liposomal daunorubicin and cytarabine showed manageable toxicity but modest effectiveness in a population with poor-prognosis AML. Although the safety profile was consistent with that observed in clinical trials, treatment effectiveness under current national funding and selection criteria was outstandingly lower than in the pivotal study. The high relapse rate and mortality from disease progression highlight the need for early donor identification and proactive management to optimise outcomes.

Email address: elenaitenasan@gmail.com

Disclosure of Interest: None Declared

PP015

DRUG-INDUCED HEMODYNAMIC IMPAIRMENT IN HEPATORENAL SYNDROME: ALGORITHMIC PATHWAYS TOWARD MEDICATION SAFETY

E. Dvorackova ^{1,2,*}, M. Halacova ^{1,3}, H. Gottfriedova ⁴, S. Dusilova-Sulkova ⁵, D. Fialova ^{1,6}

¹Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Kralove, Charles University, Hradec Kralove, Hradec Kralove, ²Department of Pharmacology, 1st Faculty of Medicine, ³Clinical Pharmacy, Na Homolce Hospital, ⁴Department of Hepatogastroenterology, Institute for Clinical and Experimental Medicine, Prague, ⁵Department of Nephrology, Faculty Hospital and Faculty of Medicine Hradec Kralove, Hradec Kralove, ⁶Department of Geriatrics and Internal Medicine, 1st Faculty of Medicine, Charles University, Prague, Prague, Czech Republic

Background: Current HRS guidelines focus on treatment but often neglect drug-induced hemodynamic impairment. This work proposes an algorithmic approach to identify medications compromising renal hemodynamics at different HRS stages, aiming to optimize pharmacotherapy and enhance medication safety in multimorbid older adults (NETPHARM WP4).

Aim: To systematically identify pharmacologic agents adversely affecting renal hemodynamics in HRS and highlight actionable pathway algorithms helping to improve the safety of hemodynamically active drugs in combined drug regimens.

Method: Systematic review identified studies on hepatorenal syndrome (HRS) and drugs worsening renal hemodynamics. PubMed and Web of Science were searched (2019–2024) using Boolean logic and MeSH terms. Data were screened and analyzed in Rayyan and EndNote. High-quality reviews and guidelines were included. Focus was on drug classes impairing renal perfusion—NSAIDs, ACEIs, ARBs, β -blockers, diuretics, and calcium channel blockers—potentially aggravating HRS.

Results: Systematic search of PubMed (2,903) and Web of Science (4,378) identified 1,286 records; after duplicates, 72 reviews/meta-analyses, 13 guidelines, and 66 reviews met criteria. HRS-AKI was defined by ICA-AKI criteria: creatinine rise ≥ 0.3 mg/dL/48 h or $\geq 50\% / 7$ days, excluding pre-, intrinsic, and post-renal causes, with urine output, albumin response, and hemodynamic evaluation. Risk factors: advanced cirrhosis, ascites, infection, hypovolemia, hypotension. Drugs worsening HRS: diuretics, β -blockers, vasodilators, NSAIDs, ACEIs/ARBs, aminoglycosides, vancomycin, colistin, cotrimoxazole, amphotericin B, antivirals; non-traditional— β -lactams, PPIs, ciprofloxacin, α_1 -blockers, dipyridamole, sacubitril/valsartan, SGLT2 inhibitors, contrast media. Management: stop or optimize offending drugs, correct volume (albumin), use vasoconstrictors (terlipressin \pm albumin, norepinephrine, midodrine/octreotide), ICU triage as needed.

Conclusion: Algorithmic pathways emphasizing optimization of hemodynamically active drugs at different stages of HRS, hemodynamic monitoring, volume optimization, and stepwise vasoconstrictor therapy provide a practical framework to prevent iatrogenic HRS-AKI. Early identification of high-risk medications and algorithm-based structured interventions help reducing negative renal outcomes and enhance patient safety.

References/Acknowledgments:

1. Moreau R, Tonon M, Krag A, et al. EASL Clinical Practice Guidelines on acute-on-chronic liver failure. *Journal of Hepatology*. 2023;79(2): 461–491.

2. Kanduri SR, Velez JCQ. Kidney Dysfunction in the Setting of Liver Failure: Core Curriculum 2024. *American Journal of Kidney Diseases*. 2024;83(3): 386–401.

Supported by NETPHARM project: CZ.02.01.01/00/22_008/0004607, co-financed by the European Union, and Cooperatio research program at the Faculty of Pharmacy, Charles University (KSKF-1 Research Unit Chair: Assoc. Prof. D. Fialová, PharmD, Ph.D.).

Email address: eliskadvorackova@seznam.cz

Disclosure of Interest: None Declared

INTEGRATION OF CLINICAL PHARMACISTS INTO THE PREOPERATIVE ANAESTHESIOLOGICAL ASSESSMENT PROCESS

G. Brunhofer-Bolzer^{1,*}, M. Anditsch¹, M. Amtmann¹, M. Bachmann¹, L. Boeck¹, B. Datterl¹, M. Hana¹, E. Harbach-Sala¹, M. Holbik¹, C. Jbara¹, A. Katic¹, C. Labut¹, G. Laml-Wallner¹, F. Nagele¹, I. Pointner¹, N. Riesenhuber¹, K.-N. Singeorzan¹, S. Steininger¹, G. Stemer¹, E. Tudela-Lopez¹, R. Wiellandt¹, S. Zotter¹, F. Toemboel², D. M. Baron²

¹University Hospital Vienna, Hospital Pharmacy, ²Medical University of Vienna, Department of Anaesthesia, Intensive Care Medicine and Pain Medicine, Anaesthesia Outpatient Clinic, Vienna, Austria

Background: Polypharmacy in older surgical patients increases postoperative risks, highlighting the need for systematic preoperative medication review (MR). Thus, we introduced a preoperative MR with clinical pharmacists reviewing selected patients' medication lists per protocol and provide written recommendations following preoperative anaesthesiologic consultations.

Aim: The aim of this study was to systematically evaluate the implementation rate and interventions resulting from this newly implemented service.

Method: A quantitative descriptive study was conducted including all patients who received a pharmacist-led medication review after anaesthesiologic informed consent between January and December 2024. Patient data (sex, age, ASA classification) and pharmacy-related parameters (number and type of interventions, number of written consultation reports) were analyzed. The implementation rate of pharmacist recommendations was determined retrospectively. Descriptive statistics were used for data analysis.

Results: A total of 2,251 patients underwent preoperative medication review. Clinical pharmacists issued 2,844 therapy recommendations in 1,272 consultation reports. The overall implementation rate was 74%. Qualitatively, the most frequent medication-related problems were drug–patient monitoring issues (17%), documentation errors (16%), and deviations from clinical guidelines (10%), in addition to therapy discussions and specific information needs (26%). The top four interventions included providing medication-related information (30%), performing drug–patient monitoring (20%), improving documentation (15%), and discontinuing medications (8%).

Conclusion: The pharmacist-led preoperative medication review was successfully implemented and well accepted, with a 74% recommendation implementation rate. Pharmacists effectively identified and resolved medication-related problems, improving documentation, monitoring, and adherence to guidelines. This service enhances medication safety and supports interdisciplinary collaboration in the perioperative setting.

References/Acknowledgments: ChatGPT was used as spelling/grammar check tool.

Email address: gerda.brunhofer-bolzer@akhwien.at

Disclosure of Interest: None Declared

PP017

PREVENTABLE FACTORS OF MEDICATION ERRORS DURING PHARMACOTHERAPEUTIC FOLLOW-UP IN COMMUNITY PHARMACIES: A DESCRIPTIVE STUDY.

G. Delgado-Pérez ^{1,*}, X. Munayco-Ortiz ¹, P. Flores-Choque ¹

¹Grupo de Investigación Servicios Farmacéuticos Clínicos, Facultad de Farmacia, Universidad Nacional Mayor de San Marcos, Lima, Peru

Background: The “P method” proposed by the WHO to detect medication errors (ME) in ICRSs offers a useful tool for identifying preventable ADRs^{1,2}. When applied during the monitoring of drug therapy, this tool helps pharmacists mitigate potential patient safety issues as part of the key moments for the safe use of medications

Aim: Determine the preventable factors of ME during pharmacotherapy monitoring in community pharmacies using preventability

Method: An analysis was performed on health and pharmacotherapy data obtained from the pharmacotherapeutic histories of a primary study involving a sample of 30 patients receiving medication, with the aim of evaluating ME using the WHO preventability tool. This consisted of a 20-question questionnaire, whose affirmative answers allow the cause of MEs to be determined in 4 categories: drug dose: 1,2,3,4,5,10,12,13,16; time of drug administration: 3,4,7,15; patient susceptibility: 9,10,11; patient behavior: 5,6,17,18,19,20. Qualitative variables were expressed as absolute and relative frequencies, and quantitative variables were expressed as median and interquartile range

Results: Thirty patients were included in the study, 22 females and 8 males, with a median age of 61 years (Q1-Q3: 52.75-73.30). It was found that 18 patients had 21 ADRs. The preventability tool was applied to these 21 ADRs, revealing that 16 ADRs were preventable, while five were not preventable. Among the 16 preventable ADRs, 37 preventable factors of ME were identified and classified according to the four categories proposed by the WHO, obtaining factors related to: medication dose (16); medication administration time (1); and patient susceptibility (11). Likewise, the most frequently recurring factors were: inappropriate prescription according to patient characteristics, drug-drug interaction described on the labeling, and incorrect clinical or laboratory monitoring of the medication. These results allow future measures to be taken to mitigate errors in other patients

Conclusion: Thirty seven factors of ME were detected during pharmacotherapeutic follow-up in primary care patients

References/Acknowledgments:

1. WHO. Reporting and learning systems for medication errors: the role of pharmacovigilance centers. 2014.<https://iris.who.int/server/api/core/bitstreams/9d2dc1b8-119c-4573-b420-12324741be89/content> Accessed 02 Nov 2025.
2. Benkirane R, et al. Assessment of a new instrument for detecting preventable adverse drug reactions. *Drug Saf.* 2015;38(4):383-393. doi:10.1007/s40264-014-0257-5

Acknowledgments:

This research was supported by Universidad Nacional Mayor de San Marcos – RR N°005446-2025-R/UNMSM. Project number A25042101

PCONFIGI - 2025

Email address: gdelgadop@unmsm.edu.pe

Disclosure of Interest: None Declared

PP018

COMPARISON OF DRUG-DRUG INTERACTIONS PREDICTORS TO IDENTIFY DRUG-RELATED PROBLEMS IN PRIMARY CARE: AN OBSERVATIONAL STUDY

G. Delgado-Pérez ^{1,*}, P. Flores-Choque ¹, X. Munayco-Ortiz ¹

¹Grupo de Investigación Servicios Farmacéuticos Clínicos, Facultad de Farmacia, Universidad Nacional Mayor de San Marcos, Lima, Peru

Background: Drug-drug Interactions (DDI) predictors are tools to assist pharmacists in monitoring therapeutic medication, to improve in optimizing patient effectiveness and safety as part of the 5 key moments for the safe use of medications

Aim: Compare the use of two DDI Predictors in identifying drug-related problems (DRPs) in primary care

Method: A sub-analysis was conducted using data obtained from a randomized clinical trial, with a sample of 30 patients who were taking more than two medications, aiming to evaluate two DDI predictors, one freely accessible and the other with institutional subscription (Drug.com and Micromedex) to identify DRPs (real and potential) in each of the evaluated patients. Qualitative variables are expressed as absolute and relative frequencies, and quantitative variables are expressed as median and interquartile range. To assess concordance, the Kappa statistic was used

Results: Thirty patients were included in the study, 22 females and 8 males, with a median age of 61 years (IQ1-IQ3: 52.75-73.30). A total of 68 DDI were identified, of which 63 DDI were identified using Drug.com (4 Major, 56 Moderate, and 3 Minor) and 42 DDI were identified using Micromedex (24 Major, 16 Moderate, and 2 Minor). From these identified DDI, the DRPs were determined: 20 (29.4%) actual (8 related to effectiveness and 12 related to safety) and 48 (70.6%) potential (15 related to effectiveness and 33 related to safety), which allowed for interventions to be proposed for the patients. Of the identified DRPs, 37 (54.4%) were identified by both databases, each predictor additionally identified 26 DRPs (38.2%) and 5 (7.5%) by Drug.com and Micromedex respectively. According to the concordance analysis, a Kappa value of 0.19 was obtained, indicating that both databases disagree on the severity level assigned

Conclusion: With the use of the Drug.com predictor, a greater number of DRPs, both actual and potential, are identified in primary health care patients

References/Acknowledgments: Reference:

1.-Abbas A, Al-Shaibi S, Sankaralingam S, et al. Determination of potential drug-drug interactions in prescription orders dispensed in a community pharmacy setting using Micromedex® and Lexicomp®: a retrospective observational study. *Int J Clin Pharm.* 2022;44(2):348-356.

Acknowledgments:

This research was supported by Universidad Nacional Mayor de San Marcos – RR N°005446-2025-R/UNMSM. Project number A25042101–

PCONFIGI - 2025.

Email address: gdelgadop@unmsm.edu.pe

Disclosure of Interest: None Declared

ANALYSIS OF THE ADVERSE REACTIONS PROFILE OF OPIOIDS USING THE PORTUGUESE PHARMACOVIGILANCE SYSTEM DASHBOARD

J. Figueirinha ^{1,2,*}, J. Conceição ^{1,2,3}

¹Faculty of Sciences and Technology, ²Algarve Biomedical Center Research Institute (ABC-Ri), Universidade do Algarve, Faro, ³Center for Interdisciplinary Studies (CEIS20), Universidade de Coimbra, Coimbra, Portugal

Background: Pharmacovigilance is essential for the detection, assessment, understanding and prevention of adverse drug reactions (ADR), ensuring continuous monitoring of drug safety (1). Opioids are analgesic drugs with great pharmacotherapeutic relevance, as they are used in the treatment of moderate to severe nociceptive pain.

Aim: This work aimed to analyse the notifications of ADR of opioids (i.e., alfentanil, buprenorphine, codeine, dihydrocodeine, fentanyl, hydromorphone, methadone, morphine, oxycodone, remifentanil, sufentanil, tapentadol, tramadol, naloxone, naltrexone, buprenorphine + naloxone, and naloxone + oxycodone) in Portugal, from 1992 to 2024.

Method: A retrospective analysis of notifications of suspected adverse reactions was performed using the Portuguese Pharmacovigilance System Dashboard (2). The data were collected on January 1, 2025, and considered five variables, namely: i) year of notification; ii) age of the patient; iii) sex of the patient; iv) system organ class (SOC); and v) preferred term (PT). The SOC and PT are in accordance with the Medical Dictionary for Regulatory Activities (MedDRA). Additionally, the data of consumption of opioids in Portugal (2012-2024) were analysed to verify the relationship between the number of notifications of adverse reactions and the consumption of drugs.

Results: In total, 1202 notifications of suspect adverse reactions for fifteen opioids and two combinations of opioids were analysed. Tramadol presented the highest number of reports (n=330; 27.5%), followed by fentanyl (n=210; 17.5%) and tapentadol (n=198; 16.5%). Most notifications occurred in adults (n=653; 54.3%), with women being the most affected (n=757; 63.0%). As far as SOCs are concerned (n=3428), general disorders and clinical conditions at the administration site (n=644; 18.8%) and nervous system disorders (n=603; 17.6%) were the most cited. Regarding PT (n=1690), the most reported were nausea (n=120; 7.1%), vomiting (n=113; 6.7%) and dizziness (n=107; 6.3%). Analysing each drug individually, it can be stated that: i) cardiorespiratory arrest was the only PT described for codeine; ii) serotonergic syndrome was observed for tramadol and tapentadol; and iii) sufentanil presented Horner syndrome as a characteristic PT. There was also a strong link between the number of notifications of suspect adverse reactions and opioids consumption measured by the number of packages and Defined Daily Dose (DDD) between 2012 and 2024.

Conclusion: The main conclusions obtained were as follows: i) the number of notifications of suspect adverse reactions gradually increased over the years (1992-2024); ii) tramadol had the highest number of reports of suspected adverse reactions; iii) most of suspected adverse reactions occurred in adults, with women being the most affected; iv) general disorders and clinical conditions at the administration site were the most reported SOC; v) nausea was the most reported PT; and vi) each opioid presented a distinct and specific profile of adverse reactions according to the PTs.

References/Acknowledgments:

1. Rudnisky E, Paudel K. Pharmacovigilance in the Era of Artificial Intelligence: Advancements, Challenges, and Considerations. *Cureus*. 2025;17(6):e86972.
2. Pharmacovigilance Bulletin, volume 28, numbers 11 and 12. Lisbon: Portuguese National Authority for Medicines and Health Products (INFARMED); 2024.

We would like to thank INFARMED for providing the data from the Portuguese Pharmacovigilance System and opioid consumption (2012-2024).

Email address: a75722@ualg.pt

Disclosure of Interest: None Declared

PP020

FOOD AND MEDICINES: WHEN EVERYDAY HABITS SUCH AS EATING AFFECT THE SAFETY OF MEDICINES

A. Martí Patiño ¹, N. Miserachs-Aranda ^{1,2}, M. Viñas-Bastart ^{1,*}, E. Fernández-Cañabate ^{1,2}, A. J. Braza ¹, C. F. Lastra ¹, E. L. Mariño ¹, P. Modamio ¹

¹Clinical Pharmacy and Pharmaceutical Care Unit. Department of Pharmacy and Pharmaceutical Technology, and Physical Chemistry, Faculty of Pharmacy and Food Sciences, University of Barcelona, Barcelona, ²Pharmacy Service, Fundació Hospital de l'Esperit Sant, Santa Coloma de Gramenet, Spain

Background: Drug–food interactions (DFIs) represent an important and, often underestimated aspect, of pharmacotherapy that can lead to therapeutic failure or the occurrence of adverse effects [1]. Given the growing prevalence of polypharmacy, particularly among older adults, their detection and management are essential [2].

Aim: 1) To provide an updated overview of DFIs, emphasizing those of clinical relevance. 2) To design an audiovisual resource aimed at both the general public and healthcare professionals to inform about the relevance of major DFIs.

Method: A bibliographic review was carried out on the potential DFIs of hospitalized patients who were taking at least one oral medication and had a prescribed diet. The databases consulted (period covered 2010–2024) were PubMed and ScienceDirect, along with official sources of drug information. Interactions were classified according to the mechanism of the DFI (physicochemical, pharmacokinetic, and pharmacodynamic), the Anatomical Therapeutic Chemical (ATC) group of the drug involved, and their clinical relevance. Based on this framework, a short informative video was designed, selecting the most relevant DFIs.

Results: A 70% (57/81) of patients presented ≥ 1 potential DFI. Overall, 123 drugs were analyzed, of which 75 (60.9%) showed clinically relevant interactions reported in the literature. The drugs mainly belonged to 5 ATC groups: **N**: 34 drugs (45.3%) and 36 pharmacodynamic and pharmacokinetic interactions related to caffeine or protein-rich foods; **C**: 37 drugs (49.3%) and 34 pharmacokinetic interactions affecting absorption or metabolism such as potassium-ACE inhibitors; **H**: 2 drugs (2.7%) and 26 interactions due by foods rich in calcium, fiber, or soy that reduce intestinal absorption; **B**: 9 drugs (12%) and 10 interactions, mainly absorption-related with dairy, coffee or tea; **J**: 10 drugs (13.3%) and 10 interactions, especially affecting absorption and metabolism (linezolid-tyramine).

Based on results, a short (3 min) video entitled "*Interactions between Food and Medicines*" was created as an outreach tool for displaying on hospital information screens. The video presents key aspects of DFIs in a clear, accessible format with practical examples of commonly prescribed medicines such as anticoagulants, thyroid hormones, iron supplements and antihypertensives.

Conclusion: The bibliographic review made it possible to identify the most relevant DFIs based on their observed prevalence among patients and their clinical significance, highlighting those involving drugs in ATC groups N, C, H, B, and J. Pharmacokinetic interactions affecting the absorption and metabolism of drugs predominated. The video is expected to be a useful tool to raise awareness

among both healthcare professionals and the general population about the importance of preventing DFIs and promoting the safe use of medicines.

References/Acknowledgments:

[1] Osuala EC, Ojewole EB. Knowledge, attitudes and practices of healthcare professionals regarding drug-food interactions: a scoping review. *Int J Pharm Pract.* 2021;29(5):406-415. doi: 10.1093/ijpp/riab049

[2] Péter S, Navis G, de Borst MH, von Schacky C, van Orten-Luiten ACB, Zhernakova A, Witkamp RF, Janse A, Weber P, Bakker SJL, Eggersdorfer M. Public health relevance of drug-nutrition interactions. *Eur J Nutr.* 2017;56(Suppl 2):23-36. doi: 10.1007/s00394-017-1510-3

Email address: mvinasbastart@ub.edu

Disclosure of Interest: None Declared

PP021

EVALUATION OF DRUG RISK SCORES AND POTENTIAL DRUG INTERACTIONS IN PSYCHIATRIC INPATIENTS: A PROSPECTIVE OBSERVATIONAL STUDY

P. Herkert ^{1,*}, P. Darm ², C. Scholl ³, A. Reif ², S. Oppermann ¹, M. Hahn ^{2,4,5}

¹Institute of Pharmacology and Clinical Pharmacy, Goethe University Frankfurt am Main, ²Department of Psychiatry, Psychosomatics and Psychotherapy, University Hospital Frankfurt, Frankfurt/Main,

³Research Department, Federal Institute for Drugs and Medical Devices, Bonn, ⁴Department of Mental Health, Varisano Hospital Frankfurt Höchst, Frankfurt/Main, ⁵Institute of Clinical Pharmacy and Pharmacology, Philipps University Marburg, Marburg, Germany

Background: Drug risk scores and medication safety tools are widely used but often unreliable in predicting clinical outcomes. They frequently generate excessive, nonspecific alerts, leading to alert fatigue and overreliance on digital systems. Existing tools must be critically evaluated to confirm their reliability and clinical impact on patient safety.

Aim: This prospective observational study aimed to investigate the association between drug risk scores and the occurrence of subjective adverse effects among psychiatric inpatients, with additional evaluation of potential drug-drug interactions and therapeutic drug monitoring (TDM).

Method: This prospective observational study included 84 adult inpatients diagnosed with depressive disorders and is associated with the PharmGen-TRD Study (DRKS00036105). Medication lists, QTc intervals, and subjective adverse effects assessed via the *Besen-direkt* questionnaire were collected at hospital admission. TDM data were collected during hospitalization. The Anticholinergic Cognitive Burden (ACB) score was determined using the ACB calculator. Potential drug-drug interactions and QT-risk scores (MSS/Tisdale) were analyzed using MediCheck (pharma4u). Statistical analysis (Spearman correlation) and figure generation were performed using GraphPad Prism (10.5.0).

Results: Although overall anticholinergic adverse effects correlated weakly with the ACB score ($n = 70$; $p = 0.302$; $p = 0.011$), only the intensity of medication-related xerostomia (32% of patients) showed a weak but significant association ($p = 0.258$; $p = 0.031$). No significant correlations were found for constipation (11%; $p = 0.075$; $p = 0.537$), blurred vision (8%; $p = 0.113$; $p = 0.353$), or urinary retention (6%; $p = 0.036$; $p = 0.768$). Among 84 participants (39 men, 45 women; mean age 47 y), 110 potential drug-drug interactions were identified, affecting 43% of patients. Of these, 60% were classified as severe, 33% as moderately severe, and 7% as low risk. The most frequent severe interactions involved increased risk of serotonin syndrome (47%) and QTc prolongation (17%). However, no clinically relevant events occurred, and there was no significant correlation between QT-risk score and QTc interval ($p = 0.167$; $p = 0.163$). TDM was performed 131 times, revealing subtherapeutic levels in 30% and supratherapeutic in 13% of samples. Notably, 80% of subtherapeutic escitalopram levels occurred in CYP2C19 rapid metabolizers. Updated data will be presented.

Conclusion: While the ACB score showed weak correlations with total anticholinergic adverse effects and xerostomia intensity, it did not reliably indicate symptom severity. The QT-risk score did not reflect the measured QTc interval. Likewise, potentially severe drug-drug interactions did not translate into clinically relevant outcomes. Risk scores can support medication safety assessments, but they are not

reliable predictors of adverse events. Individualized clinical evaluation and therapeutic drug monitoring remain essential for safe and effective psychiatric pharmacotherapy.

Email address: herkert@em.uni-frankfurt.de

Disclosure of Interest: None Declared

PP022

PATIENTS' KNOWLEDGE ABOUT THEIR INHALED THERAPY: A COMMUNITY PHARMACY STUDY

R. Ticó-Picatoste ^{1,*}, A. Braza ¹, C. Mariño ¹, M. Viñas ¹, P. Modamio ¹, E. Mariño ¹, C. Lastra ¹

¹Clinical Pharmacy and Pharmaceutical Care Unit, Faculty of Pharmacy and Food Sciences, University of Barcelona, Barcelona, Spain

Background: The patient's knowledge of their medication is a key factor in achieving successful outcomes in the management of chronic respiratory diseases.

Aim: This study aims to assess the level of knowledge that patients attending a community pharmacy have regarding their inhaled medication and to evaluate the effect of an educational intervention led by a pharmacist.

Method: In a prospective observational study, a validated questionnaire — the CPM questionnaire¹ — was used to assess the level of knowledge patients have about their medication. Four dimensions of knowledge, therapeutic objective, process of use, safety and storage, were assessed using as reference information the technical data sheet of their inhaled medications. Following the baseline assessment, participants received individualized justifications on correct inhaler technique and the importance of following the prescribed pharmacological regimen. During a second visit, the same questionnaire was handed in again, and pre- and post-intervention data were compared.

Results: Two community pharmacies and nineteen patients participated in the study; 74% were women, mean age was 70.7 ± 15.2 years old and 79% had been using an inhaler for more than 24 months. In the first interview, safety and storage dimensions showed the lowest levels of knowledge, with 5% and 53%, respectively. On the other hand, these were the ones in which the most notable improvement in knowledge was observed after the pharmaceutical intervention. Precautions and interactions' items showed the greatest improvement, with increases of +35% and +31%, respectively. Better knowledge was observed regarding therapeutic objective and process of use dimensions after the first contact with patients. Items such as dosage regimen, route of administration, and effectiveness showed levels of knowledge above 80% and improved after the intervention. The percentage of patients rated as having optimum and sufficient knowledge about their inhaled medication was 47% at baseline and rose to 74% following the pharmaceutical intervention. On the other hand, those patients with insufficient knowledge decreased from 53% to 26%.

Conclusion: The results showed that, after several months, patients' sufficient knowledge of inhalation therapy increased, with significant advances observed in many items of the questionnaire, especially in topics such as precautions, interactions, contraindications, or storage of medication. The success of the patient-tailored pharmaceutical intervention in this study was confirmed.

References/Acknowledgments: ¹García-Delgado P, Gastelurrutia MA, Baena MI, et al. Validación de un cuestionario para medir el conocimiento de los pacientes sobre sus medicamentos. Aten Primaria, 2009; 41(12):661-669. doi: 10.1016/j.aprim.2009.03.011

Email address: tico.picatoste@cofb.net

Disclosure of Interest: None Declared

ASSOCIATION BETWEEN MEDICATION ADHERENCE AND HOSPITAL ADMISSION AFTER KIDNEY TRANSPLANTATION

S. Phacharoen ^{1,*}, T. Likitapiwat ², A. Prawang ², P. Santipas ², P. Katato ², N. Kotrbuppha ²

¹Clinical Pharmacy Services, Pharmacy Department, Rajavithi Hospital, Bangkok, ²College of Pharmacy, Rangsit University, Pathum Thani, Thailand

Background: Clinical pharmacists play a vital role in the management of kidney transplant recipients (KTRs) by optimizing immunosuppressive therapy through therapeutic drug monitoring and minimizing drug related problems, ensuring medication safety, monitoring for drug interactions, and promoting medication adherence (MA) through counseling and education.

Aim: The primary objective was to examine the relationship between MA and hospital readmission within six months after kidney transplantation (KT). Secondary objectives included evaluating six-month graft and patient survival rates and assessing MA following pharmacist-led counseling during post-transplant follow-up at the KT clinic.

Method: Both retrospective and prospective data were collected from all KTRs who underwent transplantation between May 2024 and March 2025. Each patient was followed for a duration of six months post-transplantation. MA was evaluated using the Medication Adherence Scale for Thais (MAST).

Results: Twenty-seven KTRs were included between May 2024 and March 2025. Of these, 18 (66.7%) showed good MA (MAST ≥ 34), and 9 (33.3%) were non-MA (MAST < 34). Within six months post-transplant, 14 patients (51.9%) were readmitted, with rates of 44.4% in the MA group and 66.7% in the non-MA group (OR = 0.40; 95% CI: 0.08–2.12; $p = 0.42$). Infections were the leading cause of readmission (60%), followed by renal complications (25%), mainly pneumonia, pyelonephritis, and early allograft dysfunction. At six months, both graft and patient survival rates were 92.6%. Pharmacist-led counseling improved MA scores (37.75 ± 3.28 vs. 35.5 ± 5.54), with 91.7% achieving good MA post-intervention.

Conclusion: Good medication adherence was associated with a lower readmission rate, although the difference was not statistically significant. Therefore, pharmacists, as integral members of the multidisciplinary transplant care team, play a pivotal role in promoting and evaluating patients' MA. Their involvement contributes to reducing the risk of hospital readmission, alleviating healthcare costs, and ultimately improving long-term graft survival and overall patient outcomes.

References/Acknowledgments:

1. Kamonchanok Jongwilaikasem, Sanguan Lerkiatbundit. of the Medication Adherence Scale for Thais (MAST). Thai Journal of Pharmacy Practice 2021; 13(1): 17-30.
2. Covert KL, Fleming JN, Staino C, Casale JP, Boyle KM, Pilch NA, et al. Predicting and preventing readmissions in kidney transplant recipients. Clin Transplant 2016; 30: 779-86.

Email address: pharmdnnavi@gmail.com

Disclosure of Interest: None Declared

PP024

RETROSPECTIVE COMPARISON OF ADMINISTERED DRUG DUPLICATIONS AND DRUG DUPLICATIONS DETECTED BY AN ELECTRONIC ALGORITHM

S. Herzig ^{1,*}, C. Zaugg ¹, R. Fiumefreddo ²

¹Clinical Pharmacy, ²Department of Internal Medicine, Cantonal Hospital of Aarau, Aarau, Switzerland

Background: A high number of irrelevant duplication alerts generated by clinical decision support systems can lead to alert fatigue. We developed an algorithm within our multialgorithm system (MAS) that should generate alerts only for relevant duplications. A pharmacist first assesses these alerts before forwarding them to the physician if necessary [1].

Aim: This descriptive, retrospective study examined all administered drug duplications (DD) and assessed their intention. The DD reported by the MAS were analyzed and compared with the detected administrated DD, in order to evaluate the assumptions underlying the MAS.

Method: Retrospective study (01.08.2024-31.03.2025) at a tertiary hospital. All drug administrations to inpatients > 18 years, hospitalized for > 48 h, and who had given general consent were checked for DD. Excluded: NSAIDs (separate algorithm), anticoagulants and paracetamol (already investigated), on-demand medications, topical drugs. A DD is an administration of 2 alternating drugs with the same active ingredient but different brand, strength or formulation within 2 consecutive calendar days.

Patient records were manually reviewed to assess the intention of each DD (intentional, unclear, unintentional). Administered DD were compared with DD found by the MAS.

Results: A total of 588408 drug administrations to 8618 patient cases were examined for DD. 1437 administered DD were found in 957 patient cases. The MAS generated 623 DD alerts whereof 324 (52%) alerts were terminated by the MAS itself as triggering prescriptions were stopped. After a first revision by a clinical pharmacist 183 (29%) alerts were classified as "currently irrelevant" and 113 (18%) were sent to the physician. In 100 (88%) of these alerts sent no drug duplication was administered.

The intention could not be determined in 488 DD administered via same administrations route (SAR) and in 41 via different administrations routes (DAR). Most administered DD were intentional (n=691 [SAR]; n=172 [DAR]) and wrongly reported by the MAS in 9% (SAR) and 4% (DAR) of cases. 14 of 34 (SAR) and 4 of 11 (DAR) unintentionally administered DD were detected by the MAS. In 7 (SAR) and 3 (DAR) cases, the alerts were terminated by the MAS before seen by a pharmacist. In 3 (SAR) and 1 (DAR) case, the alerts were sent to physicians but led to an administered DD before underlying prescriptions were corrected later.

Conclusion: The MAS assumptions reduce alerts related to intentional DD. The system terminated half of the alerts before pharmacists' assessment, demonstrating that many DDs are rectified promptly. A clinical pharmacist can help reduce alert fatigue further by evaluating the alerts before forwarding them to the physician. However, more than 50% of unintentional DD are not detected by the MAS. This highlights the challenge of balancing specificity and sensitivity. Nevertheless, the reason for missed unintentional duplications needs to be further investigated.

References/Acknowledgments:

[1] Dahmke H, Fiumefreddo R, Schuetz P, et al. Tackling alert fatigue with a semi-automated clinical decision support system: quantitative evaluation and end-user survey. *Swiss Med Wkly*. 2023;153:40082. doi:10.57187/smw.2023.40082.

We thank Manuela Hofer for her contribution to the RScript.

Email address: seraina.herzig@ksa.ch

Disclosure of Interest: None Declared

PP025

PERSON-CENTRED TEAM-BASED TREATMENT FOR PATIENTS USING OPIOIDS FOR CHRONIC PAIN IN PRIMARY CARE: A FEASIBILITY STUDY

A. Svensson ¹, N. Ljungdahl ¹, H. Ljungvall ¹, T. Kempen ^{1,2,*}, S. Kälvemark Sporrong ¹, M. Peterson ¹

¹Uppsala University, Uppsala, Sweden, ²Utrecht University, Utrecht, Netherlands

Background: Chronic pain is a major societal challenge and a leading reason for primary care visits. Long-term opioid treatment is common, despite limited evidence supporting its effectiveness for non-cancer pain. Instead, person-centred and multiprofessional approaches are recommended.

Aim: To assess the feasibility of a planned clinical trial aimed at optimizing pain management in patients on long-term opioid therapy for chronic non-cancer pain through a person-centred, team-based model in primary care. The intervention involved coordinated care from a general practitioner, pharmacist, psychologist, physiotherapist and case manager.

Method: A feasibility study was conducted in two primary care centres in Sweden. One centre implemented the intervention. The other centre provided usual care (control). Each centre recruited five patients aged 18–70 years with opioid use for chronic pain. The primary outcome of the future trial is patient-reported pain interference. Secondary outcomes include other patient-reported outcome measures (PROMs), such as pain intensity and quality of life. Feasibility outcomes included recruitment, intervention delivery, fidelity, and completion of PROMs at baseline and three months. Data were analysed descriptively.

Results: All five invited patients (aged 28–69 years) agreed to participate in the intervention group. In the control group, three of five invited patients (aged 51, 52 and 71 years) consented and participated. All intervention patients received the full intervention according to protocol. PROM completion at baseline was 100% in both groups. At three months, completion was 80% in the intervention group and 100% in the control group. Mean (SD) pain interference scores decreased from by 18.8 (14.8) points in the intervention group and increased by 8.3 (12.6) points in the control group.

Conclusion: The planned clinical trial and its person-centred team-based intervention appear feasible. However, increased efforts are needed to enhance recruitment and retention, particularly in the control arm. Intervention delivery and protocol fidelity during the full six-month follow-up, and areas for improvement based on qualitative data analyses, are yet to be established.

References/Acknowledgments: This abstract has also been submitted for poster presentation at the PCNE Working Symposium, 17-18 February 2026, Innsbruck.

Email address: t.g.h.kempen@uu.nl

Disclosure of Interest: None Declared

PP026

FACTORS ASSOCIATED WITH TREATMENT BURDEN AND MEDICATION ADHERENCE AMONG OLDER ADULTS: A CROSS-SECTIONAL STUDY.

W. Akande-Sholabi ^{1,*}, I. F. Ogunfeitimi ¹, L. Adebusoye ²

¹Clinical Pharmacy and Pharmacy Practice, University of Ibadan, ²Chief Tony Anenih Geriatric Centre, University College Hospital, Ibadan, Nigeria

Background: Older adults often manage comorbidities, leading to multiple medications, among other factors. This can be linked to a higher risk of non-adherence and, consequently, poor health outcomes. Hence, for the effective care of older adults, assessing treatment burden and medication adherence is paramount.

Aim: To assess the level of treatment burden and medication adherence among older adults managing chronic conditions.

Method: A multi-center cross-sectional study was conducted in two tertiary geriatric centers in Nigeria from April 2025 to August 2025. Adults ≥ 60 years with chronic conditions were consecutively recruited. An interviewer-administered, semi-structured, validated Multimorbidity Treatment Burden Questionnaire (MTBQ) and General Medication Adherence Scale (GMAS) were used to assess treatment burden and medication adherence, respectively. Data analysis was conducted using SPSS. Linear and binary regressions were used to analyze treatment burden and medication adherence, respectively, in relation to their determining factors. Statistical significance was set at $p \leq 0.05$.

Results: 722 older adults took part in this study. 60.7% reported the presence of treatment burden, whereas 39.3% reported no burden. Regarding medication adherence, 82.8% had partial adherence. From the univariate regression analysis, there was a significant negative association between exercise and treatment burden ($\beta = -1.570$, 95% CI: -2.985 to -0.155, $p = 0.030$). This implies that those who engaged in regular physical exercise had a lower treatment burden compared to those who did not exercise. The source of medicine was significantly linked with medication adherence.

Participants sponsored by someone had greater odds of adherence (AOR = 28.760, 95% CI: 2.227 to 371.329, $p = 0.001$). Variables that are linked with medication non-adherence were: number of comorbidities (AOR = 0.186, 95% CI: 0.047 to 0.734, $p = 0.007$). Older adults with comorbidities had reduced odds of being adherent. Poly pharmacy (AOR = 0.143, 95% CI: 0.024 to 0.836, $p = 0.031$) was also significantly associated with reduced odds of medication adherence.

Conclusion: Among the older adults enrolled in this study, many reported treatment burden, and a larger proportion adhered partially to their medications. These findings highlight the need for healthcare professionals to address factors that contribute to treatment burden and medication non-adherence. Simplifying regimens, providing financial aid, daily exercise, may ease this burden. Health professionals must comply with prescribing guidelines for adults to avoid burdening them with extensive regimens that lead to non-adherence and reduced quality of life.

References/Acknowledgments:

Gallacher, K., May, C.R., Montori, V.M., et. al. Understanding patients' experiences of treatment burden in chronic heart failure using normalization process theory. 2011. *Annals of Family Medicine*, 9, 235–243. <https://doi.org/10.1370/afm.1249>

Spencer-Bonilla, G., Quiñones, A.R. and Montori, V.M. Assessing the burden of treatment. 2017. *Journal of General Internal Medicine*, 32, 1141–1145. <https://doi.org/10.1007/s11606-017-4117-8>

Email address: wuradol@gmail.com

Disclosure of Interest: None Declared

ACCEPTABILITY OF DIGITAL MEDICATION MANAGEMENT TOOLS AMONG ADULTS WITH CHRONIC ILLNESS: A CROSS-SECTIONAL STUDY

W. Akande-Sholabi ^{1,*}, E. D. Oluwayomi ¹

¹Clinical Pharmacy and Pharmacy Practice, University of Ibadan, Ibadan, Nigeria

Background: Digital tools can improve adherence and reduce preventable medication harm in chronic illness care [1] but their adoption is low in resource limited settings like Nigeria. There is need to understand patients and providers readiness to use these solutions for safer medication use.

Aim: To assess the knowledge, willingness to use and predictors of acceptability of digital tools for medication management among adults with chronic illness in a cross-sectional study and to explore providers' perspectives on factors influencing their adoption.

Method: A cross-sectional study was conducted within 12 weeks among 400 adults attending two outpatient clinics in Ibadan. Participants were recruited consecutively and completed a semi-structured questionnaire assessing their perspective, knowledge, willingness to use, motivators and concerns. Acceptability was measured using the Unified Theory of Acceptance and Use of Technology (UTAUT) framework including Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC) and Behavioral Intention (BI) [2]. Data were analyzed using descriptive statistics and multivariable regression to identify predictors of acceptability.

Results: Of the 400 respondents, 59.2% are aware of digital health tools and 48.5% have used a phone for health. The mean knowledge scores were 5.8/10 and only 47% had high knowledge score (≥ 8). Knowledge level differs significantly across age groups, education level and smartphone experience (p value < 0.001). UTAUT construct scores were high with a range of 3.89 – 4.25/5. 57.5% of the respondents reported moderate intention while only 20.3% reported high intention. Multivariate regression shows that PE ($\beta = 0.15$, $p = 0.020$), EE ($\beta = 0.20$, $p = 0.002$) and privacy trust ($\beta = 0.14$, $p = 0.004$) significantly predict behavioural intention ($R^2 = 0.21$). Ease of use (31.1%), and providers' recommendation (59.8%) were the leading motivators noted by respondents while the common concerns were accuracy or reliability concerns (53.9%) and affordability (21.3%). Among 68 providers, 94.1% were aware of digital tools for medication management, 69.1% are willing to recommend mobile apps to their patients and 76.5% are willing to use these tools in their practice. Willingness to recommend digital tools is significantly predicted by awareness (71.9%, $p = 0.009$).

Conclusion: Acceptability of digital medication management tools among adults with chronic illness was moderate and associated with perceived effectiveness, ease of use and privacy trust. Knowledge varied across demographic groups. Providers showed strong awareness and strong willingness to recommend and integrate these tools into their practice, aligning with patient reported motivators. These finding provide insights and opportunities to improve digital readiness and support uptake of digital medication management in resource limited settings like Ibadan.

References/Acknowledgments:

World Health Organization. Classification of digital interventions, services and applications in health: a shared language to describe the uses of digital technology for health. 2nd ed. Geneva: WHO; 2023.

Licence: CC BY-NC-SA 3.0 IGO.

Venkatesh V, Morris MG, Davis GB, et al. User acceptance of information technology: toward a unified view. *MIS Q.* 2003;27(3):425–478. <https://doi.org/10.2307/30036540>

Email address: wuradol@gmail.com

Disclosure of Interest: None Declared

PP028

THERAPEUTIC DRUG MONITORING OF PIPERACILLIN/TAZOBACTAM IN HOSPITALISED PATIENTS – A PILOT PROSPECTIVE STUDY

J. Piestansky ^{1,2}, A. Olearova ³, I. Cizmarova ^{2,4}, A. Kovac ^{1,5}, K. Bilikova ³, L. Bies Pivackova ⁶, Z. Kilianova ^{6,*}

¹Department of Galenic Pharmacy, ²Toxicologic and Antidoping Centre, Comenius University Bratislava Faculty of Pharmacy, ³Department of Clinical Pharmacology, University Hospital Bratislava Ružinov, ⁴Department of Pharmaceutical Analysis and Nuclear Pharmacy, Comenius University Bratislava Faculty of Pharmacy, ⁵Institute of Neuroimmunology, Slovak Academy of Sciences, ⁶Department of Pharmacology and Toxicology, Comenius University Bratislava Faculty of Pharmacy, Bratislava, Slovakia

Background: Beta-lactam antibiotics are widely used in critically ill patients. Piperacillin/tazobactam offers high efficacy but shows marked pharmacokinetic variability. Effective therapy requires optimal therapeutic serum levels; the recommended minimal plasma concentration is above 64 mg/L (1).

Aim: The aim of this study was to determine piperacillin plasma concentrations in hospitalised patients and to assess whether they fell within the therapeutic PK/PD target range.

Method: This prospective study included 26 patients hospitalised at the University Hospital Bratislava-Ružinov and treated with intravenous piperacillin/tazobactam. Minimal plasma concentrations of piperacillin were measured using an innovative LC-MS method (2). Pharmacokinetic modelling of piperacillin concentrations was performed using MW Pharm++ software, considering patients clinical characteristics such as age, BMI, and renal function. Recommendations for dosage adjustments and infusion type were subsequently proposed.

Results: Of the 26 monitored patients, only three (12%) achieved optimal piperacillin plasma concentrations. One sample was excluded due to incorrect sampling time. Twenty-two patients (85%) had subtherapeutic piperacillin concentrations. Based on pharmacokinetic modelling, extending the infusion duration to prolonged or continuous infusion is recommended to achieve the therapeutic PK/PD target in most cases, without requiring an increase in total daily dose.

Conclusion: Most hospitalised patients in this cohort had subtherapeutic piperacillin plasma concentrations when dosed according to the SmPC. Based on the pharmacokinetic modelling we suggest prolongation of infusion administration while maintaining the same dosage in most cases. This simple measure may help ensure achievement of the therapeutic PK/PD target, improve patient outcomes and reduce the spread of antimicrobial resistance.

References/Acknowledgments: 1) Guilhaumou, R. et al., Critical Care, 2019, 23: 104, doi:

10.1186/s13054-019-2378-9

2) Piestansky, J. et al., The Drug Monitoring, 2022, 44:784–790, doi:

10.1097/FTD.0000000000001017

The project was supported by VEGA grant 1/0302/24

Email address: kilianova@fpharm.uniba.sk

Disclosure of Interest: None Declared

PP029

ANTIBIOTIC DE-ESCALATION AND CLINICAL OUTCOMES IN CRITICALLY ILL PATIENTS WITH BLOODSTREAM INFECTIONS

S. Sadyrbaeva-Dolgova ^{1,2}, A. García López ^{1,*}, A. M. Valle Díaz de la Guardia ¹

¹Servicio de Farmacia, Hospital Universitario Virgen de las Nieves, ²IBS.GRANADA Instituto de Investigación biosanitaria , Granada, Spain

Background: Antibiotic de-escalation is a common stewardship strategy in the management of bloodstream infections in the ICU, yet its impact on mortality remains uncertain.

Aim: This study aimed to describe the clinical and microbiological characteristics of ICU patients with bacteremia and to evaluate the association between antibiotic de-escalation and 28-day mortality

Method: A retrospective observational study was conducted including all episodes of bacteremia admitted to a mixed ICU from 1Jan to 31Dic of 2024. Demographic variables, comorbidities (Charlson index), severity scores (Pitt, APACHE II, SOFA), source of infection, microbiological etiology, and antimicrobial therapy were collected. Antibiotic de-escalation was defined as switching from broad-spectrum therapy to narrower-spectrum agents after microbiological results. Descriptive and bivariate analyses were performed. The association between de-escalation and 28-day mortality was evaluated using multivariable logistic regression adjusted for APACHE II.

Results: 64 episodes of bacteremia were included. Median age was 64 years (IQR 55–73), with a median Charlson index of 5 and median APACHE II of 18. A median Pitt score of 3 and SOFA score of 3.5. An abdominal (19.7%) and respiratory (13.6%) sources being the most frequent identifiable foci. In 36.4% of episodes, no clear source was identified. The most prevalent pathogens were *Staphylococcus aureus* (15.9%), *Escherichia coli* (11.1%), *Klebsiella pneumoniae* (7.9%), and *Enterococcus faecium* (7.9%). Additional relevant isolates included *Enterococcus faecalis* (4.8%), *Enterobacter hormaechei* (4.8%), ESBL-producing *E. coli* (4.8%), and *Pseudomonas aeruginosa* (4.8%). Antibiotic de-escalation was applied in 11 episodes (16.7%). No significant differences were observed between survivors and non-survivors in age, comorbidities, severity scores, microbiological profile, or infection source. 28 day mortality was 23.6% in patients without de-escalation, compared with 45.5% in those undergoing de-escalation ($p=0.26$). After adjustment for APACHE II, de-escalation was not significantly associated with mortality (adjusted OR 2.22; 95% CI 0.57–8.70; $p=0.25$).

Conclusion: In this cohort of critically ill patients with bacteremia, disease severity and microbiological profile were similar between survivors and non-survivors. Antibiotic de-escalation was infrequent and showed no statistically significant association with 28-day mortality, even after adjusting for severity

Email address: sadyrbaeva@gmail.com

Disclosure of Interest: None Declared

PP030

REAL-WORLD EFFECTIVENESS AND SAFETY OF LONG-ACTING CABOTEGRAVIR/RILPIVIRINE FOR HIV TREATMENT

Á. García López ^{1,*}, A. Gomez Balazote ¹, B. González Sánchez ¹, A. Jimenez Morales ¹

¹Pharmacy, Virgen de las Nieves Hospital, Granada, Spain

Background: The combination of cabotegravir and rilpivirine is an innovative long-acting treatment for HIV-1 that could improve adherence. Real-world data may also help to better characterize adherence, and the occurrence of virological failure in non-trial conditions, providing complementary information to guide clinical decision-making.

Aim: To evaluate the effectiveness, safety, and adherence in real life of the first injectable long-acting antiretroviral regimen in the treatment of HIV, by analysing virological outcomes, incidence of adverse events, and persistence on treatment over time in routine clinical practice

Method: Observational and ambispective study that included all patients who started cabotegravir along with intramuscular rilpivirine between April and September 2023, with follow-up until October 2025. The evaluated variables were: age, sex, resistances, duration of treatment, adverse effects, lack of adherence, reasons and date of discontinuing treatment. Treatment was considered effective when patients achieved or maintained virological suppression. Additionally, adherence was assessed through visits for treatment administration. Quantitative variables by mean ± standard deviation and median (interquartile range).

Results: A total of 88 patients were included(88.6% male) with a median age of 48.3 years(IQR 42-56).75 patients reached at least 24 months of treatment, while 13 discontinued treatment earlier. 88.7% of patients had a previous viral load that was undetectable or less than 20 copies/ml, while 11.3% had an average viral load of 33.8($SD \pm 13.7$) copies/ml. The median CD4 lymphocyte count prior to treatment was 829.5(IQR 649.5-1019.5), and the CD4/CD8 ratio was 0.9(IQR 0.7-1.2). After follow-up the median CD4 lymphocyte count was 850.5(IQR 670.5-1120.5) and the CD4/CD8 ratio was 0.9(IQR 0.8-1.2).94.3% of the patients had less than 20 copies/ml, while 5.7% had an average of 31.4($SD \pm 10.5$)copies/ml. 14.7% discontinued treatment: 2.7% due to impotence, 2.7% had gluteal pain, 2.7% had an allergic reaction(urticaria), 2.7% asthenia, 2.7% myalgias, 1.1% attempted suicide, 1.1% due to personal reasons, and 1.1% switched to Biktarvy® due to hepatitis B reactivation. Regarding adherence, 3 patients (3.4%) received injections outside the 7-day window period, with a mean delay of 10 days, whereas 14% had previously missed doses of their oral antiretroviral therapy.

Conclusion: Cabotegravir/rilpivirine is an innovative therapy that appears to be an effective and safe option for the treatment of HIV-1 in real life; additionally, it allows for more accurate assessment of patient adherence.

Email address: garcialopezalvaro.29@gmail.com

Disclosure of Interest: None Declared

PP031

LONG-TERM, MULTICENTER STUDY OF THE EFFICACY AND SAFETY OF SUBCUTANEOUS BELIMUMAB IN SYSTEMIC LUPUS ERYTHEMATOSUS

Á. García López ^{1,*}, A. Gómez Balazote ¹, M. A. Urbano Fernandez ², B. Gonzalez Sanchez ¹, A. J. Morales ¹

¹Pharmacy, Hospital Virgen de las Nieves, ²Pharmacy, San Cecilio Hospital, Granada, Spain

Background: Belimumab is a monoclonal antibody used for active Systemic Lupus Erythematosus (SLE) with positive autoantibodies and a high degree of disease activity despite standard treatment.

Aim: To assess long-term effectiveness , safety and persistence of subcutaneous (SC) belimumab.

Method: Multicentre, retrospective and observational study (February 2018 - October 2025). Variables collected included: sex, age, concomitant therapy for SLE, SELENA-SLEDAI activity index, levels of anti-dsDNA antibodies, C3, C4, and glucocorticoid doses before and after treatment. Effectiveness was measured by the reduction in corticosteroid doses and changes in levels of anti-dsDNA, C3, C4 and in the SELENA-SLEDAI scale before treatment and at the last visit. Safety was assessed by the occurrence of adverse events. Treatment persistence was measured, by recording the start and end dates and adherence. Also, the reasons for discontinuing treatment

Results: 63 patients (96.8% women) with a median age of 48 (IQR:35-50) years and a median follow-up of 162 (IQR:102.9- 195.8) weeks were included. Concomitant treatments: hydroxychloroquine in 28 patients, mycophenolate in 13, azathioprine in 8 and tacrolimus in 1. The percentage of patients using corticosteroids decreased from 100% to 48.8%, with a median dose per patient prior to treatment of 8.75 mg (5-10) and at after follow-up it was 2.5 mg (0-3.1) The median levels of anti-dsDNA decreased from 45 (IQR:26-106) U/L to 18.5 (IQR:8.5-30) U/L, C3 increased from 68.5 (IQR:55.4-79.7) mg/dL to 90.1 (IQR:77.7-112.6) mg/dL and C4 from 12.8 (IQR:8.3-15.9) mg/dL to 22.5 (IQR:14.5-24.3) mg/dL. The SELENA-SLEDAI score level decreased from a baseline median of 12 (IQR:11-15,5) to 6 (IQR:2-8). 92.1% of patients continued treatment after a median of 40.5 months, and patient adherence was 98%. 7.9% of patients (n=5) discontinued belimumab after a median of 79.5 (IQR:55.3-90.1) weeks. 4 of them due to adverse reactions: 25% experienced angioedema, 25% gastrointestinal discomfort, 25% headaches and 25% leukopenia, and another one due to loss of response.

Conclusion: SC belimumab appears to be effective and safe in SLE. In our patients the need for corticosteroids and SELENA-SLEDAI scale has been reduced, as well as contributing to the improvement of analytical parameters affected by the disease.

Email address: garcialopezalvaro.29@gmail.com

Disclosure of Interest: None Declared

PP032

ESTABLISHING PHARMACEUTICAL SPECIAL INTEREST GROUPS - FIRST STEPS IN AUSTRIA

A. Sonnleitner-Heglmeier ^{1,*}, K. Patek ², C. Müllner ³, M. Nagano ⁴

¹Pharmacy, Tirol Kliniken Innsbruck – University Hospital Innsbruck, Innsbruck, ²Pharmacy, Ordensklinikum Linz Barmherzige Schwestern, Linz, ³Pharmacy, Burgenländische Krankenanstalten GesmbH - Klinik Oberwart, Oberwart, ⁴Pharmacy, Vienna Healthcare Group - Clinic Donaustadt, Vienna, Austria

Background: In Austria, national continuing education on special interests in clinical pharmacy is not available. Since 2014, five special interest groups (SIGs) have been founded to fill the gap. Most recently, a new platform for intraprofessional exchange of knowledge was built and guidelines on how to create new SIGs were formed to enhance collaboration.

Aim: The objective was to assess the need to establish SIGs among clinical pharmacists in Austria and to gather feedback from users on the new platform for exchange of specialized knowledge. This was done by conducting two time-series cross-sectional surveys.

Method: This project was executed by the working group for clinical pharmacy. The first time-series cross-sectional survey among clinical pharmacists who are members of aahp (Austrian association of hospital pharmacists) was conducted online from 05.12.2024 to 04.03.2025. It queried the level of competence and area of expertise on which a web-based platform was built using Microsoft Excel. A guideline on how to create new SIGs was provided. The second online survey assessed feedback among users six months after implementation and the need for more SIGs from 18.10.2025 to 31.10.2025. The questionnaire was designed via Google forms and evaluated using Microsoft Excel.

Results: In the first survey 75 clinical pharmacists from 21 Austrian hospitals participated. They defined their level of competence as junior (39), intermediate (56) or senior (86) as multiple answers were allowed for each area of expertise. Open-ended questions were used to enable individual answers on special interests. Antimicrobial stewardship, surgery/orthopedics and internal medicine lead the ranking. A web-based platform using Microsoft Excel was created based on these replies and is accessible for aahp members. A total of 15 pharmacists (18%) gave feedback in the second survey. About 87% of which found the platform helpful or very helpful to rapidly identify an expert. More than 80% valued the easy access to contact pharmacists of the same or a different special interest to discuss complicated patient cases with. It was commented that the new possibility for intraprofessional collaboration was highly appreciated and should be developed further. Regarding the establishment of a new SIG, about 20% felt ready to take the lead and as many as 73% would consider contributing. Comments included that some are already an active participant of a SIG.

Conclusion: The results confirm the clinical pharmacists in Austria indeed have a need for intraprofessional collaboration and exchange of knowledge in special areas of expertise. Some have already founded or participate in SIGs, while others are highly interested in doing so in the future. Therefore, the working group resolves to support this cause by refining the platform and guidelines and connecting specialized pharmacists.

Email address: angelina.sonnleitner-heglmeier@tirol-kliniken.at

Disclosure of Interest: None Declared

PP033

OZANIMOD IN RELAPSING-REMITTING MULTIPLE SCLEROSIS: EFFECTIVENESS AND SAFETY IN CLINICAL PRACTICE

M. Fernández Muñoz ¹, B. González Sánchez ^{1,*}, M. Piñero García ¹, A. Jiménez Morales ¹

¹HOSPITAL PHARMACY, VIRGEN DE LAS NIEVES UNIVERSITY HOSPITAL, GRANADA, Spain

Background: Relapsing-remitting multiple sclerosis (RRMS) is a chronic demyelinating disease of the central nervous system (CNS), characterized by recurrent relapses and progressive disability.

Ozanimod is a selective sphingosine-1-phosphate (S1P) receptor modulator that limits lymphocyte migration into the CNS, decreasing inflammation and slowing disease progression.

Aim: To evaluate the effectiveness and tolerability of ozanimod in patients with RRMS treated at a tertiary care hospital.

Method: A retrospective observational study of RRMS patients treated with ozanimod between December 2022 and November 2025. Collected variables included age, sex, disease duration, prior therapies, reason for switching to ozanimod, and overall treatment duration. Effectiveness was assessed using the Expanded Disability Status Scale (EDSS), Modified Fatigue Impact Scale (MFIS-5), and Symbol Digit Modalities Test (SDMT) at follow-up (3 and 6 months, 1, 1.5, and 2 years), relapse rate before and after ozanimod, and new lesions on magnetic resonance imaging. Safety was evaluated via hematology, liver function tests, adverse events, and hospital or emergency visits.

Results: Eleven patients were included (75% women), mean age 42 ± 10 years and median disease duration 2.7 years (IQR:2.4–6.6). Median ozanimod treatment was 13 months (IQR:7–26). Six patients had prior therapies (teriflunomide, dimethyl fumarate, interferon β -1a, glatiramer acetate); main reasons for switching were cognitive impairment, analytical abnormalities, and suboptimal radiological response. Five received ozanimod as first-line therapy. Median baseline EDSS was 1 (IQR:1–2), remaining stable throughout follow-up. Mean MFIS-5 was 11.43 ± 4.61 at baseline, slightly improving (11.33 ± 3 at 6 months; 10 ± 4 at 1 year). Mean SDMT improved from 38.83 ± 14.74 (baseline) to 42.75 ± 15.65 (3 months), 43.25 ± 16.46 (6 months), 55.67 ± 13.32 (1 year), 51.33 ± 6.66 (2 years). All had ≥ 1 relapse pre-treatment; three had ≥ 3 . Post-ozanimod, only three relapsed (2, 6, 18 months) and discontinued. Safety was favorable: good (54.5%), very good (27.3%), or excellent (18.2%) tolerability. Adverse events included urinary incontinence (63.6%), depressive symptoms (36.4%), and fatigue (27.3%). No significant hepatic or severe lymphopenia; three emergency visits, no hospitalizations.

Conclusion: In our experience, ozanimod showed sustained effectiveness on disability and disease activity, with a favorable safety and tolerability profile. These findings support its use in real-world clinical practice for RRMS patients; however, further studies with larger cohorts and longer follow-up are warranted.

Email address: marta.fernandez.munoz.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP034

ASSESSMENT OF THE COMPLEXITY OF ONCOLOGY CLINICAL TRIALS FROM THE PERSPECTIVE OF THE PHARMACY SERVICE

A. M. Valle Díaz De La Guardia ¹, B. González Sánchez ^{1,*}, S. Sadyrbaeva Dolgova ¹

¹Servicio de Farmacia, Hospital Universitario Virgen de las Nieves, Granada, Spain

Background: Effective management of clinical trials requires rigorous pharmaceutical involvement, particularly in oncology studies. The increase in recent years of clinical trials involving investigational products that require prior conditioning by the pharmacist highlights the need to maximize efficiency and minimize risks.

Aim: To evaluate the complexity of active clinical trials (CT) in the Oncology Service with subjects recruited as of September 2025 in the Clinical Trials Unit of a tertiary hospital, from the perspective of the Pharmacy Department of this Unit, in order to determine the relevance of the work of the responsible pharmacist.

Method: Descriptive observational study analysing the degree of complexity of each CT using the scale published by Calvin-Lamas M, et al. This system assigns a specific score to each activity related of pharmaceutical management. Notably: type of blinding, number of investigational products involved, type of preparation, storage requirements, use of an interactive web-based response system, etc. According to this scale, the complexity of a clinical trial can be low (6-10 points), medium (11-19 points) or high (20-33 points). Our study was conducted in phases: 1) Description of active CT, 2) Collection of general data, 3) Scores and assessment of complexity.

Results: At the time of data collection, 32 active clinical trials were identified, with a total of 79 subjects recruited and in treatment. Most were breast cancer studies (57%). 20 trials obtained a score corresponding to a level of medium complexity. Three studies were classified as high complexity, all involving subjects diagnosed with melanoma. The item that contributed most to increasing the difficulty was the type of preparation of the investigational product (the need to work under sterile conditions showed the highest score in 9 trials). This preparation by the pharmacist requires specific training, enough time, an efficient labelling system and special logistics. In addition, in all the selected trials, the investigational product is managed with kit numbers, which requires accurate accountability. The identification of these highly complex trials has resulted in the hiring of a pharmacist back-up.

Conclusion: Measuring the level of complexity of EECCs from the point of view of the hospital pharmacist can be very useful for identifying and detecting areas for improvement or specific situations where support is needed in the healthcare work of the pharmacy area of a clinical trials unit. This study shows that oncology trials are highly complex in terms of their management, which requires greater dedication on the part of the pharmacist in charge.

Email address: anam.valle.sspa@juntadeandalucia.es

Disclosure of Interest: None Declared

PP035

OFF-LABEL USE OF ORITAVANCIN IN SEVERE INFECTIONS IN HOSPITALIZED PATIENTS: CASE SERIES

S. Sadyrbaeva-Dolgova ^{1,2}, A. M. Valle Díaz de la Guardia ¹, B. González Sánchez ^{1,*}

¹Servicio de Farmacia, Hospital Universitario Virgen de las Nieves, ²IBS.GRANADA Instituto de Investigación biosanitaria , Granada, Spain

Background: Oritavancin is a long-acting lipoglycopeptide used to treat infections caused by Gram-positive bacteria. It has been approved for the treatment of skin and soft tissue infections in adults, but is increasingly used off-label to treat invasive bacterial infections. It has rapid bactericidal activity, along with a post-antibiotic effect (for *E. faecium*).

Aim: The objective was to describe our clinical experience with oritavancin in severe infections in hospitalized patients, clinical and microbiological cure rates.

Method: This is a retrospective study of patients treated with oritavancin during hospitalization throughout 2024 (since the antibiotic was introduced in the hospital). We analyzed the site of infection, type of microorganism, creatinine levels, INR, and previous treatments.

Results: A total of nine patients were treated, of whom six (66.67%) were men. Six of the nine patients belonged to the Hematology department. The mean age was 43.9 years. The mean baseline clearance before starting treatment with oritavancin was 109 ml/min and 96 ml/min 48 hours after starting treatment. The INR remained the same in all patients (mean 1.22 before and 1.28 after). In 8/9 patients, oritavancin was prescribed to treat infections caused by *E. faecium*, 55.6% of which were bacteremias. In all cases, the prescriptions were as rescue treatment (3rd or 4th line). In two (patients 8 and 9), conventional treatment failed. The rest were resistant to the antibiotic of choice combined with focus incompatibility: 3 cases with resistance to linezolid and respiratory focus, and two cases resistant to daptomycin in patients with bacteremia. Patient 2 had an allergic reaction to daptomycin and was switched to oritavancin to facilitate discharge. Only one patient had a perfusion-related reaction associated with erythema and pruritus (patient 6). Clinical cure was achieved in 8 of 9 patients, and microbiological cure in 9 patients.

Conclusion: The off-label use of oritavancin can be considered effective and safe in cases of severe infections with few therapeutic alternatives.

Email address: sadyrbaeva@gmail.com

Disclosure of Interest: None Declared

PP036

QUALITATIVE EVALUATION OF A GUIDE FOR DOSE ADJUSTMENT FOR PATIENTS WITH CKD AT THE INTERNAL WARD OF AN AUSTRIAN HOSPITAL

B. Gradwohl^{1 2 3 4,*}, G. B. Bolzer^{1 2 5}

¹Postgraduate Center, Faculty of Life Sciences, University of Vienna, ²Pharmaceutical Sciences, University of Vienna, Vienna, ³Hospital of Melk, Melk, ⁴Hospital Pharmacy, Hospital of Amstetten, Amstetten, ⁵Hospital Pharmacy, University Hospital Vienna, Vienna, Austria

Background: Adjustment of drug dosage in patients with chronically impaired renal function (CKD) is highly relevant for medication safety but a daily challenge in the clinical setting. A compendium of recommendations concerning dose adjustment in patients with CKD was developed for the internal medicine ward of an Austrian second level hospital to improve this process

Aim: The aim of this study was to explore physicians' use of this compendium in their professional work in terms of its applicability, practicality, and benefit in clinical daily practice. Accordingly, this study presents the results of a qualitative evaluation of the newly introduced compendium.

Method: Face-to-face semi-structured interviews were conducted with the medical staff of the internal medicine ward of an Austrian second level hospital. The semi-structured interview guide was developed, validated and piloted. All interviews were audio-recorded, transcribed verbatim and analysed according to the method developed by Braun and Clark 2006. Data collection continued until data saturation was obtained.

Results: Twelve face-to-face interviews were conducted, comprising an equal number of male and female participants. The study cohort included medical students in their final practical year, resident physicians, medical officers, and senior physicians. The dosage adjustment of medications was collectively regarded as highly important. The scope, structure, and design of the guideline were evaluated as appropriate and helpful for clinical practice. Constructive feedback provided by participants offers valuable input for the ongoing optimization process. Overall, the majority of participants perceived the compendium as a valuable and reliable reference source.

Conclusion: Building upon the demonstrated importance of interdisciplinary collaboration, the implementation of this study not only supported the further dissemination and acceptance of the guideline but also strengthened the visibility and perceived relevance of the clinical pharmacist's role within the ward setting of a second level hospital

References/Acknowledgments:

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

ChatGPT was used for spelling/grammar check.

Email address: bernadette.gradwohl@aon.at

Disclosure of Interest: None Declared

THE COLLABORATIVE FALL PREVENTION SERVICE FOR OLDER ADULTS: USING A FACTORIAL VIGNETTE DESIGN AND A THEORY OF PLANNED BEHAVIOUR

Z. Sayın ¹, I. A. Cebeci ², M. A. Sezerol ³, Y. Tasçi ⁴, M. Sancar ⁵, B. Okuyan ^{5,*}

¹Marmara University Health Science Institute, Istanbul, ²Hacettepe University, Ankara, ³Sultanbeyli District Health Directorate, ⁴Üsküdar District Health Directorate, ⁵Marmara University, Istanbul, Türkiye

Background: Falls are a critical health concern for older adults worldwide. A collaborative fall prevention service for older adults in primary care could be developed through the involvement of community pharmacists (CPs) and family physicians (FPs).

Aim: To identify factors related to CPs' and FPs' intention to provide a collaborative fall prevention service for older adults in primary care by using a factorial vignette and a theory of planned behaviour-(TPB) based survey

Method: This cross-sectional study was conducted between November 2023 and February 2024 among CPs and FPs. CPs and FPs received an invitation with a link to a web-based survey including demographic and workplace questions, knowledge test, TPB-based questionnaire, and five factorial vignettes and one standard vignette. A factorial vignette design was used to test the effect of vignette-level factors and respondent-level factors on the likelihood of performing the behaviours in response to the vignettes. Multivariable multilevel linear regression modelling was done using R (v4.4.2).

Results: A total of 398 CPs and 407 FPs completed the survey. While the history of falls in older adults (vignette-level) significantly increased the CPs' intention to provide this service ($\beta = 0.73, p < 0.001$), the number of patients waiting in the community pharmacy significantly decreased the intention ($\beta = -0.35, p < 0.001$). At respondent-level, high knowledge test scores ($\beta = 0.25, p = 0.006$) had a significant positive effect on CPs' intention. Subjective norm ($\beta = 0.37, p = 0.005$), self-efficacy ($\beta = 0.41, p = 0.001$), and perceived behavioural control ($\beta = 0.44, p < 0.001$) had significant positive effects on CPs' intention. At vignette-level the history of falls in older adults significantly increased the FPs' intention to evaluate the fall risk in older adults referred by CPs ($\beta = 0.60, p < 0.001$). The number of patients waiting had a significant negative effect ($\beta = -0.17, p < 0.001$) on FPs' intention. At respondent-level, knowledge test scores had a strong positive effect ($\beta = 0.56, p < 0.001$) and attitude ($\beta = 0.84, p < 0.001$) and perceived behavioral control-general ($\beta = 0.48, p < 0.001$) had the strongest positive effects on FPs' intention.

Conclusion: To implement this service, an interprofessional continuous professional development program should be designed for both CPs and FPs. This program would help overcome barriers related to their intention to provide collaborative fall prevention services to older adults.

Email address: none

Disclosure of Interest: None Declared

PP038

DEPRESCRIBING PROCESSES IN FRAIL PATIENTS: A CASE SERIES FROM A SPECIALIST FALLS SERVICE

D. Alshatti ^{1,*}, J. Aston ², W. Hussian ³, R. Walker ⁴, A. R. Cox ⁵

¹School of Pharmacy, PhD student in Clinical Pharmacy, School of Pharmacy, University of Birmingham , ²NHS, Associate Chief Pharmacist- Clinical Services at University Hospitals Birmingham , ³Pharmacy Department, Pharmacist- Community Services at Solihull Hospitals, ⁴School of Pharmacy, Associate Professor in Clinical Pharmacy, University of Birmingham, ⁵School of Pharmacy, Professor in Clinical Pharmacy and Drug Safety, University of Birmingham, Birmingham, United Kingdom

Background: Frailty is a multidimensional, reversible syndrome of decreased physiological ability and increased patient vulnerability to adverse outcomes such as falls, cognitive impairments and disability. Deprescribing offers a potential approach to controlling frailty and its related adverse outcomes'

Aim: To provide better understanding of the outcomes of deprescribing in frail patients referred to a Falls Service and the effect of deprescribing after its implementation through follow-up.

Method: A case series study of frail patients who had been referred to the Falls Service at Solihull Hospital (West Midlands, UK) between May 2024 - January 2025 (9 months).The frail patients who referred to the Falls Service were observed. The Falls Service is a multidisciplinary team consisting of a therapist, nurse and pharmacist. Anonymised data on patients' demographic, deprescribing information and deprescribing outcomes, were extracted by the researcher based on observation and inclusion and exclusion criteria. Data were subjected to descriptive statistical analysis using SPSS and Microsoft Excel.

Results: Of the 269 frail patients referred to the Falls Services, 244 met the inclusion criteria for this study. 165 patients (67.6%) underwent deprescribing of at least one medication. In total, 221 interventions were recommended by the pharmacist in the Falls team, which led to the deprescribing of 295 medications. The most common reason for deprescribing was adverse effects of medications, with cardiovascular medications the most deprescribed medications.

Conclusion: This study concludes that deprescribing in frail patients can be effective in reducing the number of prescribed medications. As deprescribing is so common in falls patients, greater focus needs to be given to proactive deprescribing or review of frail patient's medications to prevent falls, with particular attention given to review of cardiovascular medications.

Email address: daa173@student.bham.ac.uk

Disclosure of Interest: None Declared

PP039

EXPLORING PSYCHOSTIMULANT USE AND ADHERENCE PATTERNS IN COMMUNITY PHARMACY USERS

M. Murteira ¹, M. Martins ^{2,*}, J. Gregório ^{1,2}

¹ECTS - School of Science and Health Technologies, ²CBIOS - Research Center for Biosciences and Health Technologies, Universidade Lusófona, Lisboa, Portugal

Background: Real-world data on ADHD medication use and adherence—especially outside clinical settings—is limited. Community pharmacies offer a unique opportunity to capture behavioural patterns, identify gaps in follow-up, and understand caregiver perspectives, particularly for underage users in routine care contexts.

Aim: To characterise ADHD medication use, adherence patterns and clinical follow-up through a cross-sectional survey in community pharmacies, exploring associations with duration of treatment, type of prescriber, user age group, and patterns of seasonal or unsupervised medication interruption.

Method: A cross-sectional study was conducted in four Portuguese community pharmacies (April–June 2024). A structured, anonymous questionnaire was offered to adult users or caregivers of underage ADHD patients collecting prescriptions. Data included demographics, medication type, duration of use, prescribing and renewing professionals, follow-up frequency, and adherence patterns. Descriptive and inferential analyses (chi-square, Fisher's exact, $\alpha = 0.05$) were performed using R. Ethical approval was obtained (CE-ECTS, Universidade Lusófona (Ref. 22-24)).

Results: Twenty-seven valid responses were obtained; 48.1% ($n=13$) were patients/users and 51.9% ($n=14$) were caregivers of underage patients. Overall, most users were male (61.5%). Treatment was initiated by psychiatrists in 73.1% of cases, but 53.8% reported renewals by general practitioners. Methylphenidate was the most used medication (61.5%), followed by lisdexamfetamine (38.5%). Most participants (53.8%) had been on treatment for two years or more. Treatment was commonly initiated between ages 6–9 and 15–18. 30.8% ($n=8$) reported interrupting medication, all of them during school holidays. Non-daily use was reported by 26.9%, with 71.4% doing so without prescriber knowledge ($p=0.081$). Longer treatment duration was associated with less frequent follow-up ($p=0.006$). Findings reveal relevant behavioural patterns in ADHD pharmacotherapy, including unsupervised interruptions and seasonal non-adherence during school breaks. The reliance on general practitioners for treatment renewal and the reduced clinical monitoring over time highlight potential risks to long-term adherence.

Conclusion: ADHD medication use in Portuguese pharmacies reveals key adherence challenges, including unsupervised interruptions and seasonal patterns linked to school schedules. Findings highlight the need for sustained monitoring, improved patient education and the strategic role of pharmacists in long-term treatment follow-up.

Email address: joao.gregorio@ulusofona.pt

Disclosure of Interest: None Declared

PP040

PATTERNS AND MOTIVATIONS FOR STIMULANT USE AMONG UNIVERSITY STUDENTS: A CROSS-SECTIONAL SURVEY

M. Martins ^{1,*}, P. Monteiro ², R. Moura ², J. Gregório ^{1,2}

¹CBIOS - Research Center for Biosciences and Health Technologies, ²ECTS - School of Science and Health Technologies, Universidade Lusófona, Lisboa, Portugal

Background: The non-medical use of stimulants by university students to enhance academic performance has become a global public-health concern. Evidence from Portugal remains limited, particularly regarding differences between health-related and non-health-related study areas.

Aim: To determine the prevalence, motivations, and perceived effects of stimulant consumption among Portuguese university students, comparing those enrolled in health sciences with those in other disciplines, through a cross-sectional online survey.

Method: An observational cross-sectional study was conducted using an anonymous online questionnaire (approved by the School of Science and Health Technologies Ethics Committee CE.ECTS/P28-24). The survey, open between February and April 2025, supported on a previously published one aimed at medical students,[1] collected sociodemographic data, stimulant use patterns, motives, and self-perceived stress. Descriptive statistics, Chi-square and Spearman correlation tests were applied ($\alpha = 0.05$).

Results: A total of 427 students participated (240 health-related, 187 non-health). The mean age was 21.9 ± 6.5 years; 74.3% were female. Overall, >90% reported caffeine use, followed by energy drinks (61%) and supplements (38%). Psychostimulant medicines (mainly methylphenidate and lisdexamfetamine) were used by 12% of non-health students and 5% of health-science students, most often during examination periods. Main motives were improved concentration (78%), reduced fatigue (63%) and enhanced academic performance (52%). Caffeine consumption correlated with higher perceived stress ($p = 0.037$). Positive correlations were observed between use of caffeine, nicotine, alcohol, and cannabis, indicating multi-substance patterns.

Conclusion: Stimulant use for academic purposes is widespread among Portuguese university students, with legal stimulants predominating and prescription psychostimulants used by a minority under variable supervision. Preventive and educational strategies are needed to promote health literacy and safer approaches to stress and performance management in academic settings.

References/Acknowledgments:

[1] Miranda M, Barbosa M. Use of cognitive enhancers by Portuguese medical students: Do academic challenges matter? *Acta Med Port*. 2022;35(4):299–306. <https://doi.org/10.20344/amp.14220>

Email address: joao.gregorio@ulusofona.pt

Disclosure of Interest: None Declared

PP041

DEPRESCRIBING AND DOSE ADJUSTMENT OF ORAL ANTIDIABETICS IN OLDER ADULTS

M. Maříková ^{1 2 3*}, K. Skopalová ^{3 4}, D. Fialová ^{3 5}

¹Department of Clinical Pharmacy, Regional Hospital in Trutnov, Trutnov, ²Department of Clinical Pharmacy, Institute for Postgraduate Education in Health Care, Prague, ³Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University, Hradec Králové,

⁴Department of Clinical Pharmacy, Kroměříž Hospital, Kroměříž, ⁵Department of Geriatrics and Internal Medicine, First Faculty of Medicine, Charles University, Prague, Czech Republic

Background: Older adults with type 2 diabetes (T2D) often have multimorbidity and organ dysfunction, which raise risk of adverse drug events. Tight glycemic control gives limited benefit in frail patients. Organ-protective antidiabetic agents should be preferred and a simple bedside algorithm for appropriate choice, dose selection and rational deprescribing is needed.

Aim: To develop a pragmatic, phenotype-led pharmacotherapy and deprescribing algorithm for older adults with T2D that aligns glycemic targets with frailty, cognition and older patient prognosis, prioritizes cardio-renal benefit to risks and offers a stepwise guidance on dose adjustment and deprescribing and dose adjustment of oral antidiabetics in older adults.

Method: We conducted a narrative synthesis of the ADA Standards of Care in Diabetes 2025 (older adults, cardio-renal dysfunction), the KDIGO 2024 CKD guideline and major cardio-renal outcome trials with SGLT2 inhibitors and GLP-1 receptor agonists (e.g. EMPA-KIDNEY, FLOW). We integrated contemporary CKD dose-adjustment advice for metformin and sulfonylureas, safety warnings in heart failure and chronic liver disease, and modern deprescribing frameworks for geriatric treatment of T2D. These sources were refined into a six-step deprescribing pathway and a phenotype-led treatment algorithm for older adults with T2D.

Results: Phenotype-led HbA1c targets in older adults with T2D: functional/active, 6.7–7.5%; CV/renal disease, ≤7.5% and symptom-guided; frail (CFS ≥5), 7.5–8.0%; dementia, 7.5–8.5%; palliative/advanced, 8.0–9.0%. Across all groups is recommended to avoid hypoglycemia and prioritize functioning and quality of life. Therapy: active patients – SGLT2i, GLP-1 RA and metformin if tolerated; CV/renal disease – SGLT2i from eGFR ≥20 plus GLP-1 RA or DPP-4i (linagliptin in CKD); frail – DPP-4i ± very low-dose basal insulin; dementia – simple once-daily DPP-4i ± basal insulin; palliative – symptom-driven therapy DPP-4i or low-dose basal insulin. Six-step deprescribing algorithm is: (1) assess frailty and goals; (2) flag high-risk drugs (sulfonylureas, complex insulin, TZDs, acarbose in low eGFR); (3) adjust by eGFR (restrict/stop metformin, prefer linagliptin, avoid long-acting SUs); (4) adapt choice to HF and liver disease (avoid TZDs, use SGLT2i in HF); (5) deprescribe when HbA1c <6.5%, frequent hypoglycemics, falls, weight loss, high burden or limited prognosis; (6) stop/taper one drug at a time, monitor, review targets and educate patients/carers.

Conclusion: A phenotype-led, organ-protective algorithm for older adults with T2D aligns with HbA1c targets, drug choice and deprescribing in patients with frailty, impaired cognition, reduced major organ functioning and shorter life expectancy. Modern low-hypoglycemia agents (SGLT2i, GLP-1 RA, DPP-4i) are preferred, sulfonylureas and complex insulin schemes should be reduced.

References/Acknowledgments:

ADA. Standards of Medical Care in Diabetes—2025. Diabetes Care. 2025;48(Suppl 1):S1–S352. KDIGO CKD Work Group. KDIGO 2024 CKD Guideline. Kidney Int. 2024;105(4S):S117–S314. Grant support: NETPHARM project CZ.02.01.01/00/22_008/0004607, co-financed by the European Union and Cooperatio research program of the Faculty of Pharmacy, Charles University (Research Unit KSKF-1, Chair: Assoc. Prof. Fialová)

Email address: marikova.martina@nemtru.cz

Disclosure of Interest: None Declared

PP042

IMPROVING RARE DISEASE CARE THROUGH HOSPITAL PHARMACY PRACTICE: THE ASST MELEGNANO E MARTESANA EXPERIENCE

T. Garraffa ^{1,*}, B. Pantolini ¹, G. Pavanello ¹, G. Di Lauro ¹, E. Dalla Fontana ¹, T. Merlo ¹, P. Montruccio ¹, A. Pirrone ¹, P. Pavesi ¹, R. Cursano ¹

¹Farmacia ospedaliera, ASST Melegnano e Martesana, Milano, Italy

Background: The management of rare diseases in Italy is defined by Law 175/2021, which covers some treatments under the Essential Levels of Assistance (LEA), while others are classified as extra-LEA and normally charged to patients. In Lombardy, management is guided by over 120 regional Diagnostic, Therapeutic and Care Pathways (PDTA) supporting appropriate care.

Aim: The aim of this study is to evaluate the rare disease monitoring model adopted by ASST Melegnano e Martesana, examining the use of regional PDTAs, the supporting scientific evidence, the LEA/extra-LEA classification, and the organisational and economic impact on local healthcare management.

Method: We analysed 2025 data from patients with rare diseases managed by Hospital Pharmacy through Direct Distribution. Prescriptions are issued by the Reference Centre which may be located at a considerable distance from patient's residence; to ensure proximity of care, dispensing occurs at the hospital pharmacies closest to patient's domicile. The Hospital Pharmacy manages the distribution of both LEA-covered treatments and extra-LEA products, which, without dedicated authorisation, would otherwise be fully charged to the patient. Demographic data (age and sex), types of extra-LEA products dispensed, and the corresponding economic value were collected.

Results: The cohort consists of 247 patients with rare diseases, including 137 females (55.5%) and 110 males (44.5%), with a mean age of 39.4 years (range 1–86). The most frequent exemption codes were RL0060 (lichen sclerosus), RCG130 (amyloidosis) and RCG040 (amino acid metabolism disorders). Extra-LEA requests—which, without authorisation, would be charged to the patient—were overall limited, involving 40 patients (16.2%). The most frequently dispensed items included emollient creams, cleansing oils, medical devices and foods for special medical purposes, for a total authorised cost of €11,869.94 from January to October 2025. Procurement through the hospital channel, which enables lower purchase prices, combined with appropriateness assessment, allows these products to be dispensed at no cost to the patient. The low economic impact of extra-LEA care is attributable to the robust structure of the regional PDTAs, which guide therapeutic choices towards appropriate treatments largely covered within the LEA.

Conclusion: The implementation of regional PDTA, systematic LEA/extra-LEA assessment, and structured organisational monitoring represents an effective governance model for rare diseases. The experience of ASST Melegnano e Martesana demonstrates how Hospital Pharmacy services can provide timely and comprehensive support to domiciled patients, ensuring appropriateness, equity of access and sustainability of care. This approach exemplifies a health policy model that places patient well-being at the centre of care delivery.

Email address: teresa.garraffa@unimi.it

Disclosure of Interest: None Declared

PP043

EVOLVING TRENDS IN ORAL ONCOLOGY MEDICINE USE: A THREE-YEAR RETROSPECTIVE STUDY

Z. Ćetković ^{1,*}, I. Popović ²

¹University Clinical Center of Serbia, ²Institute of Oncology and Radiology of Serbia, Belgrade, Serbia

Background: In recent years, the field of oncology has changed rapidly, with a wider range of oral oncology medicines available for different types of cancer, providing more personalised care and greater convenience for patients. Understanding these trends is important for optimising clinical outcomes.

Aim: This retrospective observational study reviewed the use of oral oncology medicines in three hospital units at the tertiary-care institute between 2022 and 2024, offering insight into patient numbers and utilisation trends in routine clinical practice.

Method: Data on oral oncology medicines and the number of patients were obtained from the hospital information system for the period 2022-2024. All medicines were categorised by pharmacological class, and consumption data were standardised using the Defined Daily Doses (DDDs) methodology to allow comparisons between classes and over time. Descriptive statistical analyses were applied to evaluate medicine use patterns and illustrate changes in prescribing behaviour during the study period.

Results: Oral oncology medicine use increased from 537,151 dispensed units in 2022 to 823,527 dispensed units in 2024, representing a 53% increase. The number of patients receiving oral oncology therapy rose by 148% from 1,773 to 4,399 in 2024. The use of hormonal agents abiraterone, enzalutamide, and apalutamide increased significantly, which aligns with a 302% rise in the number of prostate cancer cases. Changes in prescribing patterns were observed, as enzalutamide was prescribed to 52% of patients, while apalutamide, the most recent treatment option, was prescribed to 42% of patients in 2024. Among CD4/6 inhibitors, ribociclib exhibited the highest DDDs (59,201) and remained the most prescribed medicine for breast cancer (56% of patients), whereas abemaciclib, the newest therapy, was prescribed to 16% of patients in 2024. In the ALK tyrosine kinase inhibitor (TKI) class, crizotinib and lorlatinib were added last year to the existing alectinib and brigatinib for lung cancer therapy. In the EGFR-TKI class, the consumption of osimertinib increased while afatinib decreased, reflecting changes in prescribing patterns.

Conclusion: The use of oral oncology medicines has been increasing substantially, along with the number of cancer patients each year. A systematic review of consumption provides valuable perspective on therapy trends and prescribing dynamics, which is essential for promoting the rational use of high-cost oral oncology medicines in clinical practice.

Email address: zoracetkovic@gmail.com

Disclosure of Interest: None Declared

Abstract Author Index

Last name and first name	Abstract no.
ABADIER M.	OC4.2
ACQUISTAPACE G.	OC3.1
AIRAKSINEN M.	OC2.3
ALABOUD N.	OC2.1
ALARCÓN PAYER C.	OC3.2, PP002, PP005
ALCOBIA A.	OC2.2
ALRASHDI G.	PP007
AMTMANN M.	PP016
ANDITSCH M.	PP016
BACHMANN M.	PP016
BARON D. M.	PP016
BOECK L.	PP016
BONO F.	OC3.1
BOUVY M.	OC4.2
BRAZAA J.	OC1.3, PP020
BRUNHOFER-BOLZER G.	PP016
CABEZA BARRERA J.	PP001, PP004
CANO DOMÍNGUEZ S.	PP001, PP004
CANTUDO CUENCA M. R.	PP006
CINAKOVA A.	OC1.2
COLTHORPE A.	OC4.1
CONCEIÇÃO J.	PP019
DALTON K.	OC4.1
DARM P.	PP021
DATTANI R.	OC3.3
DATTERL B.	PP016
DELGADO-PÉREZ G.	PP017, PP018
DEWAN A.	OC3.3
DIOGO C.	OC2.2
DUARTE M. H.	OC2.2
DUSILOVA-SULKOVA S.	PP015
DVORACKOVA E.	PP015

FERNÁNDEZ-CAÑABATE E.	OC1.3, PP020
FIALOVA D.	OC4.3, PP015
FIGUEIRINHA J.	PP019
FLEMING A.	OC4.1
FLORES-CHOQUE P.	PP017, PP018
FRANKLIN B. D.	OC2.1
FULLER O.	OC3.3
GÁNDARA LADRÓN DE GUEVARA M. J.	PP008, PP012, PP013, PP014
GARCÍA LÓPEZ Á.	OC3.2, PP001, PP002, PP003, PP004, PP005, PP006, PP009, PP011
GARCÍA M. E. C.	PP010
GARFIELD S.	OC2.1
GARRIDO S. M.	PP010
GLAMOČLIJA S.	OC1.1
GÓMEZ BALAZOTE A.	OC3.2, PP002, PP003, PP005, PP006
GONZÁLEZ SÁNCHEZ B.	PP002, PP003, PP006, PP008, PP012, PP014
GOTTFRIEDOVA H.	PP015
HAHN M.	PP021
HALACOVA M.	PP015
HANA M.	PP016
HARBACH-SALA E.	PP016
HAYKIR T.	OC2.1
HEHENBERGER S.	OC1.1
HERKERT P.	PP021
HOLBIK M.	PP016
JBARA C.	PP016
JIMÉNEZ MORALES A.	OC3.2, PP002, PP003, PP005, PP008, PP009, PP011, PP012, PP014
JONES S.	OC3.3
KALLIO M.	OC2.3
KATIC A.	PP016
KEATING J.	OC4.1
KEMPEN T.	OC4.2
KUITUNEN S.	OC2.3
KUMPU-HUHTALA A.	OC2.3

KVARNSTRÖM K.	OC2.3
LABUT C.	PP016
LAGOJA I.	OC1.1
LAML-WALLNER G.	PP016
LAPATTO-REINILUOTO O.	OC2.3
LASTRA C. F.	OC1.3, PP020
LÁZARO M. M.	PP010
LEVKOVICH B.	OC3.3, PP007
LOURENÇO M.	OC2.2
MARIÑO E. L.	OC1.3, PP020
MARTÍ PATIÑO A.	OC1.3, PP020
MARTÍN ROLDÁN A.	PP009, PP011, PP013, PP014
MARTÍNKOVÁ A.	OC4.3
MCCARTHY S.	OC4.1
MCMANUS E.	OC4.1
MINOLFO A.	OC3.1
MISERACHS-ARANDA N.	OC1.3, PP020
MODAMIO P.	OC1.3, PP020
MUNAYCO-ORTIZ X.	PP017, PP018
MUSTACCIO C.	OC3.1
NAGAMOOTOO Y.	OC3.3
NAGELE F.	PP016
NANI F.	OC3.1
NIITTYNEN I.	OC2.3
OBORNE C. A.	OC3.3
OPPERMANN S.	PP021
PAGLIA S.	OC3.1
PATEL R.	OC3.3
PECHANDOVÁ K.	OC4.3
PÉREZ CRUZ J.	PP001, PP004
POINTNER I.	PP016
PRIETO A. F.	PP010
REIF A.	PP021
RESENDE B.	OC2.2
RICEVUTI G.	OC3.1

RIESENHUBER N.	PP016
RIHOVA Z. J.	OC1.2
SALEEB A.	OC4.2
SÁNCHEZ M. T. S.	PP010
SÁNCHEZ SUÁREZ M. D. M.	PP009, PP011, PP013
SAWIERES S.	PP007
SCHEPEL L.	OC2.3
SCHOLL C.	PP021
SIERRA TORRES M. I.	PP008, PP012, PP013
SILVA R.	OC2.2
SIMÕES A. M.	OC2.2
SINGEORZAN K.-N.	PP016
STEININGER S.	PP016
STEMER G.	PP016
STOLLAROVA N.	OC1.2
TAN L. L.	OC3.3
TAŠKOVA I.	OC4.3
TENA SÁNCHEZ E. I.	PP006, PP008, PP009, PP010, PP011, PP012, PP013, PP014
TOEMBOEL F.	PP016
TUDELA-LOPEZ E.	PP016
URBANO FERNÁNDEZ M. Á.	PP001, PP004
VIÑAS-BASTART M.	OC1.3, PP020
WIELLANDT R.	PP016
ZOTTER S.	PP016

Upcoming ESCP events

The 54th ESCP Symposium will take place in Almada, Portugal from 12th October – 14th October 2026. This Symposium will be focused on Transition of Care.

For further information about ESCP and to keep updated, please visit www.escpweb.org

SPONSORSHIP - We gratefully acknowledge the support of the following sponsors.



ÖSTERREICHISCHE
APOTHEKERKAMMER

The **Austrian Chamber of Pharmacists** is the statutory professional body representing more than 7,000 pharmacists working in both community and hospital pharmacies. We play a key role in protecting and promoting the health of the population in Austria. Ensuring the reliable supply of medicines and the safety of pharmaceutical care is our highest priority. Accordingly, we ensure that both independent and employed pharmacists provide secure and professional medication supply and counseling through pharmacies.

<https://www.apothekerkammer.at/>



DoseMe

DoseMe is a leading dosing platform designed to optimize therapeutic drug monitoring and improve patient outcomes. By leveraging Bayesian dose individualization, it provides precise dosing tailored to each patient's characteristics, enhancing treatment efficacy and reducing adverse events. The platform supports various clinically validated drug models across infectious diseases, oncology, transplant medicine, and pediatrics. It simplifies AUC-based vancomycin dosing, streamlining workflows for pharmacists.

DoseMe offers real-time visualization of pharmacokinetic data, predictive simulations, and alternative dosing regimens. As the only HITRUST CSF-certified Bayesian dosing platform, it ensures the highest security standards. With 24/7 customer support, DoseMe integrates seamlessly into clinical workflows, improving precision in medication dosing and patient care.

<https://doseme-rx.com/>



Novartis is an innovative medicines company. Every day, we work to reimagine medicine to improve and extend people's lives so that patients, healthcare professionals and societies are empowered in the face of serious disease. Our medicines reach 296 million people worldwide. Our purpose: Reimagine medicine to improve and extend people's lives. Our vision: Become the most valued and trusted medicines company in the world. Our strategy: Deliver high value medicines that alleviate society's greatest disease burdens through technology leadership in R&D and novel access approaches.

<https://www.novartis.com/>



At Bayer, our mission is straightforward: Health for all, Hunger for none. As a global leader in health and nutrition, we are committed to tackling the pressing challenges of our time, including a growing and aging population and the strain on our planet's ecosystems. We have reimagined our entire operating model to ensure that we stay focused on our mission while driving sustainable growth and value for our customers, employees, and stakeholders.

<https://www.bayer.com/>



Creating better health for people and a brighter future for the world is our purpose. The science and technology we advance are constantly evolving. But through our enduring values, our ambition remains steadfast. We strive to deliver truly transformative treatments, contributing significant value to society while creating an exceptional experience for our people.

<https://www.takeda.com/>

All activities of the ESCP must be considered, directly or indirectly, as patient oriented. The objective for which the Society is established is to develop and promote the rational and appropriate use of drugs and medical devices for the benefit of individuals and of society.

The European Society of Clinical Pharmacy is registered at the Chamber of Commerce in Amsterdam, Netherlands, under number 40532427.

ESCP International Office
Snijderseweg 5
NL-4861 PJ CHAAM
Netherlands
international.office@escpweb.org
www.escpweb.org

Disclaimer:

All information in this Program and Abstract Book is put together with great care. No one can claim any rights if there is a mistake.