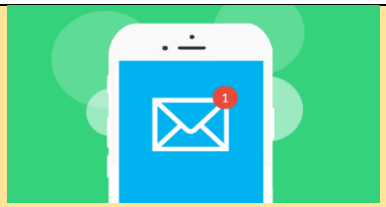
EuroDURG bulletin

No. 30 February 2021

NEWSLETTER OF THE EUROPEAN CHAPTER OF THE SPECIAL INTEREST GROUP OF DRUG UTILISATION RESEARCH (SIG-DUR) OF THE INTERNATIONAL SOCIETY OF PHARMACOEPIDEMIOLOGY (ISPE)

Editors The Bulletin was prepared by the EuroDURG board members. See contributors below each paragraph. Edited by Ria Benko. Send reactions to: benkoria@gmail.com



The Chair's message

Dear colleagues,

It is my pleasure to write this message to you all as the new chair of EuroDURG. After taking one year break in sending you the Bulletin, because of all the work around the EuroDURG conference in Hungary and the COVID pandemic, we are happy that the Bulleting is again ready for you! We have changed the format slightly in leaving out country/continental use, since we hope to communicate those news items through other channels in the future, more about this later on.

I am honoured to have taken up the position as the new Chair of EuroDURG last year during the conference in Hungary. Firstly, I would like to thank Marion Bennie, personally, and on behalf of the EuroDURG Executive Committee for all the work she has done in the past years as a Chair of EuroDURG. There is only space to name a few highlights where she was crucial to make it happen, such as the fantastic conference on her homegrounds in Glasgow in 2017, the succesful summer school in Stockholm in 2019 and the great conference in Szeged, Hungary. Luckily, Marion has not stopped and will further contribute to the EuroDURG work as Past Chair, with her wise ideas, creativity and pragmatism to get us moving forward. I am delighted that Anna Birna Almarsdóttir is the next Chair-elect. She brings in her experience, being involved in EuroDURG matters for some time and her important focus on the patient perspective on DUR. I look forward to work with Marion and Anna Birna closely in the years ahead! Also, I am very pleased that we have numerous new members to the EuroDURG executive committee who have brought many bright ideas during our meetings in 2020. You have a chance to get to know the new members further on in this Bulletin. The full elected EuroDURG committee and positions are detailed at the report on General Assembly in Szeged.

What happened since we send out our last Bulletin? A significant amount of our time as an Executive Committee in 2019 was taken up with the planning for EuroDURG 2020 in Szeged. With Marion leading the Scientific Committee, together with numerous session chairs made an excellent education and science

programme over 3 days - more detail later in the bulletin and on the website (https://www.pharmacoepi.org/eurodurg/) . Ria Benko, secretary to the EuroDURG executive committee was essential as Chair of the Local Organizing Committee to ensure we had a great venue and all practical affairs ran smoothly. She also gave us all insights into local flavours and traditions with the exciting and lively social programme. Special thanks also to Bjorn Wettermark and Monique Elseviers who were again essential in getting together the whole conference programme with a big thank you to Monique for organising the posterwalks so expertly. The lifetime award to Monique from EuroDURG which we gave her in Szeged is very well deserved.

Applause for Monique Elseviers who was granted EuroDURG Lifetime Award during the Szeged conference, 2020

Big thank yous to all the Local and Scientific Committee members who put in a huge effort to make our conference a success. The evaluation report is available on the website with much more details on how the participants appreciated the educational and scientific programme. In hindsight, of course we were so lucky that the conference could get through as originally planned. I think for many of us, EuroDURG in Hungary was the last conference we attended physically in 2020, before the pandemic took hold of Europe.

Looking to 2021 – another busy year on the horizon with lots of activities. The pandemic still affects many of us in different ways and has an impact on the EuroDURG activites. We have a Summer School planned in June, this time online, coordinated jointly with colleagues from Vilnius University in Lithuania. You can read more about it in the Bulletin. Monique Elseviers and Bjorn Wettermark have started with the work on the second edition of our Book, Drug Utilization Research: Methods and Applications. They have established the new editorial board and we are all excited to work on an this update, to be published again by Wiley. EuroDURG together with the University of Groningen is one of the work package leaders in a large European consortium, funded by the European Commission to work on rational use of antibiotics (see www.happypatient.eu for more details). We will continue collaborating with the International Society of Pharmacoepidemiology, especially, with the SIG DUR, with colleagues from all around the globe. You can also find announcement of ISPE's next conference in this Bulletin, all online.

We will increase our visibility on social media, to be more frequently in contact with the whole community of DUR researchers. So watch our space through the LinkedIN profile (https://www.linkedin.com/company/euro-durg/) which we have created. If you are an early career researcher, you can join the LinkedIn network of DUR early career researchers . If you have any queries

please contact Ana Thomas or Irina Iaru (see contact details at the end) Please continue to build our community both at home and internationally. There are many challenges of this pandemic for DUR in many different facets. Providing information on the treatment of COVID-19 patients and information on changes in treatment of other diseases as a consequence of the pandemic. There are other challenges such as the global increasing burden of disease in an ageing society, multimorbidity, polypharmacy and the rising costs of new treatments. These are just a few of the many topics that our growing EuroDURG communities work on. These are opportunities to move towards personalized medicine and tailored treatment choices to maximize resource use, inform health policies and improve public health. Please take time to read the Bulletin to learn more about our activities. I hope to see many of you through 2021 at some of the key events (online).

Katja Taxis
Chair of EuroDURG
European chapter of ISPE SIG DUR

Report on EuroDURG conference Szeged 2020

Almost one year has passed since we met in Szeged, probably the last physical international conference for many of you since that time. We had to apply many restrictions at that time (e.g. we could not welcome Italien collegues), and cope with significant number of cancellations (e.g. many delegates/speakers were not allowed to come by their agencies) we tried to run smoothly and safely the conference, without any disturbance. We used Webex and other platforms to connect some speakers, a novel way of presentation that time, a routine solution nowdays. Overall, we welcomed over 170 collegues interested in drug utilisation research. With 6 pre-conference educational sessions, 4 plenaries, 14 thematic sessions with 54 oral presentations, 2 symposiums, 2 workshops and 2 poster walks we had a rich scientific programme. With the leadership of Monique Elseviers, we always put the poster walks as central activity of the conference, so each abstract submitters can present their work one by one and answer to emerging questions. Posters were mounted over the whole conference which enabled more interaction and networking between presenteres and interested audiance. More information on poster nominations and poster prices can be found below. We also organized also a General Assembly, where achievements and future plans were communicated to interested people (see more info below). We sent out an evaluation questionnaire after the conferece and feedbacks showed the satisfaction of attendants. Detailed statistics, the programme overview and participants evaluation can be found in the conference report, available at the EuroDURG website (https://www.pharmacoepi.org/eurodurg/). Link to conference photos can be also found there, so you can get a hint of the athmosphere. The conference webpage (https://www.eurodurg2020.com/) will function three more years, so related documents can be downloaded.

CONFERENCE IN ACTION

Poster nominations and poster prices	

Over 200 abstracts were submitted to the Szeged conference bureau anf finally 135 of them were presented as posters and 54 were selected for oral presentation. Fourteen poster walks were organized, seven parallel at two conference days. Below please find those works that were nominated for poster price, and those (highlighted in bold) that finally received the poster price. Congratulation to the winners, who will receive free registration to a future ISPE meeting!

THURSDAY POSTER WALK:

- AD7 Caroline Walsh – Royal College of Surgeons in Ireland, Ireland. Identifying adherence patterns across multiple medications and their association with health outcomes in older community-dwelling adults with multimorbidity
- AB9 Réka Bordás – Department of Clinical Pharmacy, University of Szeged, Hungary. Antibacterial consumption among the elderly in community care in Hungary and Sweden
- MH4 Ana Araujo – Institute for Evidence Based Health, University of Lisbon, Portugal. Morbi-mortality consequences of misuse of psychoactive prescription drugs in Portugal: A retrospective observational study - the MisuMedPT project
- CD6 Zuzana Mačeková – Hospital Pharmacy, Lúčna, Slovakia. The role of pharmacists in assessing the cognitive functions of patients with metabolic syndrome

- DH9 Tatiana Luz – Oswaldo Cruz Foundation, Brazil. Neuropsychiatric drug expenditures' trends and drivers in Minas Gerais, Brazil, from 2010 to 2017
- EL1 Monika Pury Oktora – Clinical Pharmacy and Pharmacology, University of Groningen, Netherlands. Neuropsychiatric drug expenditures' trends and drivers in Minas Gerais, Brazil, from 2010 to 2017
- SF8 Carla Sans – Clinical Pharmacology Service, Vall d'Hebron University Hospital, Spain. Off-label use of rituximab in patients with glomerulonephritis in a tertiary hospital

FRIDAY POSTER WALK

- AB13 Verica Ivanovska – World Health Organization, Switzerland. Updates on WHO tools for monitoring and reporting global antibiotic use
- DH20 Carlos E. Durán – Clinical Pharmacology, Ghent University, Belgium. Do Latin American regulators directly recognize new drugs approved by internationally known regulators?
- EL22 Stijn Crutzen – Department of Clinical Pharmacology, University of Groningen, Netherlands Causes of hypoglycemia in type 2 diabetes patients from patients' perspective: a qualitative interview study
- EL30 Luciane Cruz Lopes – University of Sorocaba, UNISO, Brazil. Factors associated with potentially inappropriate medications among elderly with Alzheimer's disease in the brazilian public health system
- II6 Noura Bawab – Center for Primary Care and Public Health (Unisanté), Switzerland. Implementation and effectiveness of an interprofessional support program for patients with type 2 diabetes in Swiss primary care setting.
- **PV3 Elyne De Baetselier – Centre for Research and Innovation in Care, University of Antwerp, Belgium. EUPRON - Nurses' practices in interprofessional pharmaceutical care in Europe: A cross-sectional survey in 17 countries**
- SF12 Ana Tomas – Department of Clinical Pharmacology, University of Novi Sad, Serbia. EUPRON - Nurses' practices in interprofessional pharmaceutical care in Europe: A cross-sectional survey in 17 countries

Poster price nominations during the Szeged EuroDURG conference, 2020
Left edge: Monique Elseviers, lead organisor of poster session, past chair of EuroDURG
Right edge: Marion Bennie, chair of EuroDURG 2018-2020, scientific commitee chair of the conference

Ria Benko
secretary of EuroDURG, lead of the local organisor team

GENERAL ASSEMBLY	

The General Assembly of EuroDURG took place during the Szeged conference. Due to the optimal timing, it was visited by many conference attendees. Marion Bennie, the chair of EuroDURG welcomed everybody, than gave overview of achievements for the last years, which were many: formation of working groups within the EuroDURG, the success of the DUR book (over 600 sold copies!) and summer school in Stockholm. The state of the art of the Glasgow declaration, first results of the IQVIA project, presented during the conference, and international networking activities: leadership and support to estabilish MURIA, ISPE Africa chapter, the Latin American network, cooperate with our mother organisation, ISPE-SIGDUR, lead by Douglas Steinke, and the finalised guideline for cross national comparison studies.
After, Marion presented the current EuroDURG board and announced the step-down of the following members.

- Brian Godman (UK)
- Robert Vander Stichele (Belgium)
- Jolanta Gulbinovic (Lithuania)
- Vera Vlahovic Palcevski (Croatia)
- Catherine Sermet (France)
- Begler Begovic (Bosnia)

We thank all of them for their continuous support and activity throug the years, and we count on their cooperation in the future! A special thanks was given to Bob (Robert Vander Stichele) who was the only one from above, who were present at the conference physically, and who were among the funders of EuroDURG, and member of the EuroDURG executive commitee since the beginning (please check the first Bulletin at our website!). After we proposed to reinvite Hege Salvesrsen Blix from Norway to the board, as a liason person with WHO collaborating centre on drug statistics, who served as secretary for EuroDURG before, and Indre Treciokiene from Lithuania. Afterwards, an open invitation was announced to invite members from countries, not presented at the board. Finally, the following EuroDURG board was elected for the next 3 years.

EuroDURG ExCO 2020-2023	
Katja Taxis (the Netherlands) – chair Anna Birna Almarsdottir (Denmark) – chair elect Marion Bennie (Scotland) – past chair Björn Wettermark (Sweden) – past chair Monique Elseviers (Belgium) – past chair Elisabetta Poluzzi (Italy) – webmaster Ria Benko (Hungary) – secretary Luisa Ibanez (Spain) - liason with EnCEPP Ana Thomas (Serbia) Gabriel Sanfélix-Gimeno (Spain)	Gisbert Selke (Germany) Hege Salvesen-Blix (Norway) Irina Iaru (Romania) Indre Trečiokienė (Lithuania) Katarina Gvozdanovic (Croatia) Lucas Morin (France) Paraskevi Voula Papaioannidou (Greece) Sabine Vogler (Austria) Seán MacBride-Stewart (UK) Verica Ivanovska (Macedonia)

We welcome all new board members are looking forward working together (which has already started!).

Ria Benko
secretary of EuroDURG,
lead of the local organisor team

SHORT SUMMARIES FROM ONGOING PROJECTS	

Guideline for Cross-National-Comparison (CNC) studies	

During the last decades EuroDURG and many individual members of the EuroDURG Board were highly involved in drug utilization studies comparing medication use in different countries or regions. Five years ago, we received a research grant from ISPE to summarize our experiences in the development of A Guideline for Designing, Conducting, Analyzing, Reporting, and Reviewing Cross-National Comparison of Drug Utilization Studies. After final editing, we received final comments of all authors involved and plan to resubmit the Guideline next month for final approval by ISPE before submission for publication.

Monique Elseviers

Increasing access to Drug Utilization data: Glasgow declaration	

During our 2017 conference in Glasgow, EuroDURG has taken the initiative to develop a declaration aiming to improve the availability and accessibility of drug utilization data worldwide. This *Glasgow Declaration* was further discussed during a workshop at the ISPE conference in Prague in 2018 and the EuroDURG conference in Szeged last year. The board of EuroDURG now seeks the official endorsement of ISPE for this declaration and expect to receive an answer by the end of this month.

After the ISPE endorsement, we plan to take the following steps to gain support for the declaration:

- To obtain the endorsement of important organizations in the field of drug utilization (WHO)
- To develop a website to communicate the declaration to a wider audience (individual researchers / organizations) in the field of drug utilization and pharmacoepidemiology to secure their support through a subscriber endorsement process
- To bring the Glasgow Declaration to the attention of health policy makers using social media techniques to improve the visibility of the document for those who are able to initiate actions for a better availability and access to drug utilization data .

Monique Elseviers

IQVIA project	

The prevalence of polypharmacy and the use of potentially inappropriate medications – a cross-national study in 5 European countries

Marion Bennie and Katja Taxis lead a EuroDURG project, collaborating with IQVIA (www.iqvia.com) to measure the prevalence of polypharmacy in primary care in five European countries: Belgium, Germany, Italy, United Kingdom and France. IQVIA data from medical records from general practice from the five countries are analysed to determine the prevalence of polypharmacy and explore potentially inappropriate medication use. In collaboration with members from the EuroDURG community we interpret the drug utilization data in the context of the health care systems of the five countries. First results of the project have been presented at the EuroDURG conference in Hungary.

Katja Taxis

ISPE SIG-DUR SUMMARY	
The photo was taken in Philadelphia, during the ISPE congress, 2019	

Officers for 2020-2021:

a. Chair:	Douglas Steinke	Douglas.Steinke@manchester.ac.uk
b. Vice/Co-Chair:	MinaTadrous	Mina.Tadrous@wchospital.ca
c. Education Chair :	Gillian Caughey	Gillian.Caughey@sahmri.com

Below please find a short summary of activities from the last 2 years:

- SIG meeting in August 2019 at ICPE – new members in attendance, updates from the medication utilisation groups around the world (MURIA- Africa, Asian DURG, EuroDURG, BDURG – Brazil). Update from the GOUR (Opioid) research group.

- Pre-conference education program August 2020 – this was a virtual education session presenting a combination of the Introduction and Advance courses in one 90 minute session. A Q&A session was held in December. There is an evaluation of the session by ISPE for improvements for next annual ICPE meeting in August (Seattle).

- SIG newsletter (the Monthly Dose) continues to be sent out, perhaps not on a monthly basis but when news is available. This is a great opportunity to communicate with members. The newsletter is distributed to SIG members and other interested ISPE and EuroDURG members through the Communities My ISPE portal.

Progress of the SIG

- SIG joint research project on Global Opioid Utilization Research (GOUR) (Responsible: Li-Chia Chen) Manuscript in review by journal.
- Drug utilization in Pharmacy Education (Responsible: Mina Tadrous)
- SIG member presentations at the open webinar
- SIG manuscript submission on the effects of Covid-19 pandemic on global drug utilisation research (Juan Hicapie-Castillo)

Douglas Steinke

Insight into ENCePP activities

A new ENCePP Steering Group for the period 2021-2023 has been elected. Its composition has been published on the ENCePP Steering Group page. The ENCePP SG includes representatives from ENCePP partners, the EMA, EMA Scientific Committees and learned societies (International Society of Pharmacovigilance (ISoP), International Society for Pharmacoepidemiology (ISPE), International Society for Pharmacoeconomics and Outcomes Research (ISPOR), and observers from the Food and Drug Administration (FDA), Health Canada and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

The **ENCePP Plenary** Meeting was held in 20 November 2020 virtually as a webinar. It was chaired by Xavier Kurz. Its focused on COVID-19 vaccination involving methodological questions on the published studies on the topic, the development and authorisation status of Covid-19 vaccines, and the EU network vaccine monitoring strategy. Other topics were the Achievements of the current ENCePP Steering Group, 2016-2020 and the introduction of the New ENCePP Steering Group 2021-2023, as well as the presentation of the proposal for a new ENCePP mandate. Finally, several presentations on Review of post-authorisation studies registered in the EU PAS register, HMA-EMA Big Data Task Force - Recommendations and workplan, The Data Analysis and Real-World Interrogation Network in the European Union (DARWIN EU), and Meta-data - data discoverability and data quality were held.

Other activities

The ENCePP Steering Group endorsed a mandate for ENCePP activities in relation to the COVID-19 pandemic. The aim was to facilitate access to high quality data and their analysis to support research and regulatory decisions in relation to the COVID-19 pandemic, to support collaborations aiming to design and conduct high quality multicentre observational research, and to improve regulatory science by promoting use and dissemination of valid and reliable methodologies appropriate to COVID-19.

Registration of COVID-19 related studies in the EU PAS Register was encouraged to support the sharing of information on performed or planned studies and increase the efficiency of research. Researchers were encouraged to upload and make public the study protocol with a description of the data collected or planned to be collected to facilitate and speed-up the design of observational studies by others. In order to facilitate the retrieval of studies related to the Covid-19 pandemic, investigators were advised to include the term "COVID-19" in the study title.

Eighth revision of the ENCePP Guide on Methodological Standards Pharmacoepidemiology was published on the website, July 2020. It outlines the importance of the pharmacoepidemiological studies carried-out in the context of the COVID-19 pandemic.

Luisa Ibanez

Insight into EMA activities

EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

EMA sets up infrastructure for real-world monitoring of COVID-19 treatments and vaccines

From the beginning of Sars-Cov-2 virus pandemic, EMA had a pivotal role in assessing possible COVID-19 treatments and vaccines, however, post-authorisation monitoring of their safety and efficacy is a huge challenge that is yet to be tackled. To be able to promptly detect and evaluate new information on the benefit-risk balance of COVID-19 treatments and vaccines, EMA has already set up infrastructure to support the monitoring of their efficacy and safety when used in real-life setting. This observational research will be undertaken by academic and private partners through commissioned/contracted EU projects ACESS and CONSIGN.

The ACCESS project ('vACcine Covid-19 monitoring readinESS') is led by the University Medical Center Utrecht (UMCU) and Utrecht University. It is intended for preparatory research into data sources and methods that can be used to monitor the safety, effectiveness and coverage of COVID-19 vaccines in clinical practice.

Utrecht University and the UMCU are also coordinators of the CONSIGN project ('COVID-19 infectiOn aNd medicineS In preGNancy'). This project will collect data on the impact of COVID-19 in pregnancy. CONSIGN will analyse existing data sources (e.g. electronic health records, hospital data) and cohorts of pregnant women to provide information on the effect of infection and its treatments in different trimesters of pregnancy and on neonates. The project will be carried out in collaboration with the ConcePTION consortium, the COVI-PREG project and the International Network of Obstetric Survey Systems (INOSS) network.

In addition, EMA contracted IQVIA to establish a European framework and research network for the conduct of multicentre cohort studies on the use of medicines in COVID-19 patients. This activity will be carried out in collaboration with the European Health Data & Evidence Network (EHDEN) consortium.

Complementary to the contracts put in place, EMA is also contributing to methods guidance, strengthening of transparency and international collaboration on COVID-19 work through the European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP).

Katarina Gvozdanović

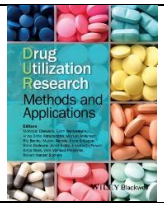
FUTURE PLANS & ACTIVITES

EuroDURG Online Summer School in Drug Utilization Research	

Summer school is planned for 22-25 June, 2021. Due to COVID situation, summer school will be organised online in cooperation with Vilnius University, Lithuania The summer school will offer valuable and memorable learning as well as social experience. While the drug utilization research methods and application possibilities will broaden participants' skills and knowledge, the online social programme will offer fun and engage into cultural activities, introducing to Lithuanian culture and the opportunity to interact and network with peers in a fun way. This is a great opportunity for international students, researchers and partners to connect and engage. Up to 30 international participants interested in drug utilization are welcome. Should you be interested, please note the date Registration starts in March, 2021.

Indrė Trečiokienė

Second edition of the DUR book



It is with great pleasure that we can announce the preparation of the second edition of our DURbook: *Drug Utilization Research: Methods and Applications.* The preparatory questionnaire distributed in autumn of last year resulted in 65 valid completed questionnaires and offered an excellent base to re-start writing. We learned that the book is mainly used as a reference book (72%), as source for teaching material (38%) and as teaching material recommended to students (40%). Most respondents preferred a second edition in digital as well as in printed format. We received many suggestions for improvement and for new topics to be added to the new edition.
Meanwhile we organized editorial board meetings for each section of the book under the responsibility of two section leaders (each time a senior and a junior member of the EuroDURG board). We expect to have a complete proposal of the content for the second edition ready by the end of February. After a review by our advisory board, the proposal will be sent to Wiley Ltd for external review and contract negotiations. We expect to start contacting candidate authors in April-May.
Hopefully, we look forward to presenting you a new edition of the DURbook by the end of 2022.

Monique Elseviers

Upcoming conferences…

Below we list all forthcoming English language international conferences that may interest DUR people.

ISPE 2019 Mid-year meeting: https://www.pharmacoepi.org/meetings/mid-year-meeting/
ISPE 2019 Annual conference: https://www.pharmacoepi.org/meetings/37icpe/
International Society of Pharmacovigilance (https://isoponline.org/)
http://www.isop2020oman.org/
European Association for Clinical Pharmacology and Therapeutics (https://www.eacpt.eu/)
https://www.eacpt.eu/the-15th-congress-of-the-european-association-for-clinical- pharmacology-and-therapeutics-eacpt/
European Society of Clinical Pharmacy (https://www.escpweb.org/)
ESCP Virtual International Workshop 2021: https://www.escpweb.org/Zurich
ESCP Symposium 2021 in Lisbon: https://www.escpweb.org/events
Health Technology Assessment International (https://htai.org/)
https://htai.org/annual-meetings/htai-2021-manchester/
European Society for Patient Adherence, Compliance, and Persistence (https://www.espacomp.eu/)
https://www.espacomp.eu/annual-meetings/
Nordic Pharmacoepidemiologic Network (www.norpen.org)
http://www.norpen.org/pages/meetings.html

Future/ongoing European projects	

New pan-European project on medication adherence

As part of the European COST program, Action COST No. CA19132 ENABLE – European Network to Advance Best practices & technoLogy on medication adherencE recently started. The project is led buy Job van Boven at the university of Groningen, the Netherlands, and gathers researchers and health professionals in all 39 European countries that are interested in medication adherence. The key aims of the project are to (1) raise awareness of adherence enhancing technological solutions, (2) foster and extend multidisciplinary knowledge on medication adherence at patient, treatment and system levels, (3) accelerate translation of this knowledge to useful clinical application and (4) work collaboratively towards economically viable implementation of adherence enhancing technology across European healthcare systems.
Drug utilization studies are important tools in improving adherence and a close collaboration between the project and EuroDurg is planned. Anyone interested are welcome to contact Björn Wettermark, member of EuroDurg board and senior communication manager in the Enable project for further information.

Björn Wettermark

Happy Patient project

EuroDURG participates in the EU Happy Patient project aimed at researching health care professional-patient strategies to reduce inappropriate antibiotic consumption. The 3-year project's consortium consists of 16 scientific, university and clinical organizations. We will generate studies, research and training materials in order to prevent the incorrect and excessive prescription of antibiotics at various levels of care.

Professionals and patients will be the targeted audience for interventions and for monitoring the effects before and after the intervention. Family doctors, nurses, dentists and pharmacists working in general practice, out of hours services, nursing homes and community pharmacies will participate. The five target countries for the project are Spain, France, Poland and Greece that hold the highest positions in the European antibiotic consumption statistics, and Lithuania, whose consumption data is at the lowest part of the scope. EuroDURG contributes to the work package which will focus on the adaptation of EU Guidelines for community pharmacies in the target countries. Katja Taxis from University of Groningen will lead this work package. Ria Benko and Marion Bennie are also involved in the project. We hope that many members of EuroDURG, especially from the target countries will also contribute.

Katja Taxis

Biologics Project		European data source inventory

This project aims to produce an European data source inventory of data sources containing biological and biosimilar medicine information at a hospital level to ease the process of undertaking cross-national studies in the future. It will be focused on hospitals from the European University Hospital Alliance (EUHA) and other European hospitals with a capacity of 500 beds or more selected from EuroDURG hospital related participants and others. The project will be coordinated by Vall d'Hebron Hospital. Barcelona. Spain.

This project will support a straight collaboration within the European hospital network to perform cross-national biologic-biosimilar medicine studies of a pharmacological group of extended use and that represents high costs to the national health systems. Our proposal should strengthen in-hospital and cross-national hospital research.

A study protocol is being finalized as well as a REDCap on-line questionnaire to retrieve the required hospital information. More information can be obtained from Luisa Ibáñez.

Luisa Ibáñez.

SHORT BIOS for new EuroDURG board members

Dr Ana Tomas Petrovic is a licensed physician and a teaching assistant at the Department of pharmacology, toxicology, and clinical pharmacology at the University of Novi Sad, Faculty of Medicine, where she gained an MD degree in 2013. She has since worked as a researcher in pharmacology and gained in-depth knowledge about Balkan countries regarding pharmaceutical policy, drug spending and reimbursement, and access and affordability issues. Her research focuses on various drug utilization topics such as, international comparisons of drug utilization, evaluation of prescriber adherence to guidelines, and general public perspective to promote rational use of drugs. During her three-month stay in Curtin Health Innovation and Research Institute in Australia, Ana has received intensive training in advance data analysis through the MSC rise Horizon 2020 funded project she participated in. She is in the final stages of completing a Ph.D. in clinical medicine. She has participated in 7 national and one international scientific project regarding appropriate medication use, precision medicine, and medication adherence. She has received a grant from L'Oréal-UNESCO For Women in Science program and currently works on a project dealing with multifactorial aspects of antimicrobial resistance.

	Indrė Trečiokienė is a pharmacist by background. She is a PhD candidate at Groningen University, Netherlands, and researcher at Vilnius University, Lithuania. Her main interest is in the effective and efficient pharmacotherapy and pharmaceutical services for chronic diseases. Her PhD thesis are on evidence of non-pharmacological interventions and pharmacological management of hypertension. Indrė is also a pharmacist program coordinator at Vilnius university. Her responsibility is to introduce best study practices and science based materials into undergraduates' pharmacy program. Being a board member of Lithuanian Pharmaceutical Association Indrė is involved in pharmacy policy working groups organised by Ministry of Health of the Republic of Lithuania.
	Dr. Irina Iaru (Cazacu) is a Lecturer at the Department of Pharmacology, Physiology and Pathophysiology, Faculty of Pharmacy of the University of Medicine and Pharmacy "Iuliu Hatieganu" in Cluj-Napoca, Romania. After her graduation as a pharmacist in 2010, she specialized in Clinical Pharmacy. Also, she has a Master degree in Drugs and Environmental Toxicology from the same University. The PhD thesis she defended in 2016, on the use and safety of analgesic medicines, was in co-direction with the University of Bordeaux, France. Her main areas of interest are pharmacovigilance, pharmacoepidemiology and pharmacoeconomics. Related to these areas, she teaches the course "Introduction to pharmacoepidemiology and pharmacoeconomics" for pharmacy students. She published her research, mainly safety and drug utilization studies, in international peer-reviewed journals. She collaborates with the National Agency for Medicines and Medical Devices of Romania regarding safety evaluation research related to medicine use. She trained in pharmacoepidemiology and drug utilization research at the Pharmacology Department of the Bordeaux teaching hospital and the University of Bordeaux, and also by attending the International Society of Pharmacoepidemiology Courses and the European Drug Utilization Research Group Summer School.
	Katarina Gvozdanović graduated from the Faculty of Pharmacy and Biochemistry (FBF) University of Zagreb, Croatia majoring in Medical Biochemistry. After graduation, she worked as a research assistant at the FBF's Department of Biochemistry and Molecular Biology, after which she pursued a carrier in the pharmaceutical industry. Since 2012, she has been working at the Croatian regulatory agency, currently in the role of the principal coordinator for new drug safety issues. In 2018. she completed postgraduate specialist study Clinical Pharmacology with Toxicology at the Faculty of Medicine in Rijeka. Her area of expertise is pharmacovigilance. In recent years, the focus of her interest has been applicability of real-world evidence in drug regulatory decision-making. She is an invited lecturer in several courses at the Faculty of Medicine and the Faculty of Pharmacy and Biochemistry in Zagreb.

Lucas Morin, PhD, is an epidemiologist at the Clinical Investigation Center (CIC) of the University Hospital of Besançon, France. He uses routinely collected administrative and healthcare data to evaluate the effectiveness and safety of drug treatments among older adults in real-life conditions, for instance in the context of chronic multimorbidity, polypharmacy, serious illness or in situations of limited life expectancy. Lucas collaborates closely with the Department of Medical Epidemiology and Biostatistics at Karolinksa Institutet (Stockholm, Sweden) and with the "High-Dimensional Biostatistics for Drug Safety and Genomics" Inserm U1018 research unit (Paris, France).

Contact addresses of board members

Katja Taxis (chair)
Groningen Research Institute of Pharmacy (GRIP)
Unit PharmacoTherapy, -Epidemiology & -Economics
University of Groningen
Ant. Deusinglaan 1
9713 AV Groningen
THE NETHERLANDS
Tel: +31- (0)50 - 363 8205
Email: k.taxis@rug.nl

Anna Birna Almarsdóttir (chair elect)
Department of Pharmacy (Social and Clinical Pharmacy)
University of Copenhagen,
Universitetsparken 2,
2100 Copenhagen
DENMARK
TEL +45 35333715
Email: aba@sund.ku.dk
https://whocc-meduse.ku.dk/

Marion Bennie (past chair)
Strathclyde Institute of Pharmacy and Biomedical Sciences
University of Strathclyde
Room 501a Robertson Wing
Taylor Street
Glasgow, G4 0NR
SCOTLAND
Tel: +44 (0) 141 548 2113
Fax: +44 (0)141 552 2562
Email: marion.bennie@strath.ac.uk

Björn Wettermark (past chair)
Department of Pharmacy
Disciplinary Domain of *Medicine* and *Pharmacy*
Uppsala university
Visiting adress: Biomedicinskt Centrum BMC, Husargatan 3, 752 37 Uppsala
Postal adress: Box 580, 751 23 Uppsala
SWEDEN
Phone: +46 70 558 56 41
E-mail: bjorn.wettermark@farmaci.uu.se

Monique Elseviers (past chair)
University of Antwerp
Campus drie Eiken
Universiteitsplein 1
B-2610 Wilrijk
BELGIUM
Tel: +32 473 98 56 14
Email: monique.elseviers@ua.ac.be

Elisabetta Poluzzi (webmaster)
Pharmacology Unit, Department of Medical and Surgical Sciences, University of Bologna
Via Irnerio, 48; 40126 Bologna
ITALY
Tel: +39 0512091809
Fax: +39 051248862
Email:
elisabetta.poluzzi@unibo.it

Ana Tomas Petrović (Linkedln manager)
Department of Pharmacology, toxicology and clinical pharmacology
University of Novi Sad
Hajduk Veljkova 3, 21000 Novi Sad,
SERBIA
Tel: +381606798476
E-mail: aanaa_tomas@yahoo.com

Irina Iaru (Cazacu) (Linkedln manager)
Department of Pharmacology, Physiology and Pathophysiology, Faculty of Pharmacy
University of Medicine and Pharmacy "Iuliu Hatieganu",
6A Louis Pasteur Street, 1st floor, 400012 Cluj-Napoca
ROMANIA
Tel: +40746229455
Email: Cazacu.Irina@umfcluj.ro

Gabriel Sanfélix-Gimeno
Health Services Research Unit
Foundation for the Promotion of Health and Biomedical Research of Valencia Region (FISABIO)
Av. Catalunya 21, 46020 Valencia
SPAIN
Tel:+34 961925916
Email: sanfelix_gab@gva.es

Indrė Trečiokienė
Pharmacy center, Institute of Biomedical Science
Faculty of Medicine, Vilnius University,
M. K. Ciurlionio str. 21/27, LT-03101 Vilnius,
LITHUANIA
Tel: +37052398771,
E-mail: indre.treciokiene@mf.vu.lt

Gisbert W. Selke
AOK Research Institute (WIdO)]
Rosenthaler Str. 31, 10178 Berlin
GERMANY
Tel:+49-3034646-2393
Email: gisbert.selke@wido.bv.aok.de

Hege Salvesen Blix
WHO Collaborating Centre for Drug Statistics Methodology
Norwegian Institute of Public Health &
The research group for personalized pharmacotherapy
and clinical pharmacy
Department of Pharmacy
University of Oslo
P.O.Box 222 Skøyen, 0213 Oslo,
NORWAY
Tel: +47 21078163
Email: hege.salvesen.blix@fhi.no

Katarina Gvozdanović
School of Medicine, University of Zagreb
Zagreb, 10 000
Agency for medicinal products and medical devices
Ksaverska cesta 4
Zagreb 10 000
CROATIA
Tel:+385 (0) 99 6651 941
Email: katarina.gvozdanovic@gmail.com

Lucas Morin
Clinical Investigation Unit, University Hospital of Besançon
2 place St Jacques, 25000 Besançon
FRANCE
Tel: + 33 (0)3 81 21 86 35
Email: lucas.morin@inserm.fr

Luisa Ibáñez
Fundació Institut Català de Farmacologia
Hospital Universitari Vall d'Hebron
Servei de Farmacologia Clínica
Pg Vall d'Hebron 119-129
Barcelona 08029
SPAIN
phone +34 93 489 41 05
fax +34 93 4894109
E-mail: li@icf.uab.cat

Paraskevi (Voula) Papaioannidou
Aristotle University of Thessaloniki; Faculty of Medicine Department of Pharmacology
University Campus
54124 Thessaloniki
GREECE
Tel:+302310 999314
Email: ppap@auth.gr

Sean MacBride Stewart
NHS Greater Glasgow and Clyde Pharmacy Services
Clarkston Court, 56 Busby Rd, Glasgow G3 8SJ
SCOTLAND
Tel: +44 141 201 6064
Mobile: +44 0790 368 0954
Email: sean.macbride-stewart@ggc.scot.nhs.uk

Sabine Vogler
WHO CC for Pharmaceutical Pricing and Reimbursement
Policies Pharmacoeconomics
Department Gesundheit Österreich GmbH,
Stubenring 6, 1010 Vienna
AUSTRIA
Tel: +43 1 515 61-147
Fax: +43 1 513 84 72
Email: sabine.vogler@goeg.at

Verica Ivanovska
Faculty of Medical Sciences
University "Goce Delcev"
Krste Misirkov 10-A, Stip 2000
NORTH MACEDONIA
Tel: +38970980671
AMR Division
World Health Organization
Avenue Appia 20
CH-1211 Geneve 27
SWITZERLAND
Tel: +41227914618
Email: vericaivanovska@hotmail.com

Ria Benkő (secretary)
Dept. of Clinical Pharmacy
University of Szeged,
Szikra utca 8, Szeged H-6725
HUNGARY
Tel/Fax: +36 62 342572
E-mail: benkoria@gmail.com

For updates please visit our website:
www.pharmacoepi.org/eurodurg

Please distribute this Bulletin to your colleagues!