# ICPE 2022

Advancing Pharmacoepidemiology and Real-World Evidence for the Global Community

August 24-28 // Copenhagen, Denmark

icpe2022.org



## Contents

BOARD OF DIRECTORS 2022-2023	3
CHAIRS & LIAISONS	5
STUDENT CHAPTERS	7
ORGANIZATIONAL & INSTITUTIONAL MEMBERS	8
2022 ICPE SCIENTIFIC PROGRAM COMMITTEE	9
ISPE DEVELOPMENT COMMITTEE	9
ABSTRACT REVIEWERS	10
NEW ISPE FELLOWS 2022	1 4
ICPE SPONSORS & EXHIBITORS	1 5
2022 ISPE AWARDS	16
SCHEDULE AT-A-GLANCE	19
PROGRAM SCHEDULE	
TUESDAY, AUGUST 23	2 4
WEDNESDAY, AUGUST 24	2 5
THURSDAY, AUGUST 25	27
FRIDAY, AUGUST 26	29
SATURDAY, AUGUST 27	39
SUNDAY, AUGUST 28	5 1
POSTERS	6 1
SESSIONS A	6 2
SESSIONS B	8 9
SESSIONS C	117
FLOOR DIAN	1 4 0



# Board of Directors 2022-2023

#### EXECUTIVE COMMITTEE



Vincent Lo Re, **FISPE** President



**Tobias** Gerhard, **FISPE** President-Elect



Wei Zhou, **FISPE** Vice President/ Finance



Caitlin Knox Vice President/ Finance-Elect



Olaf Klungel, **FISPE** *Immediate* Past President



James Vrac Executive Secretary

#### DIRECTORS



Ursula Kirchmayer, FISPE Government/Regulator (Europe/Africa)





Tomoko Kobayashi Industry/Service Provider (Asia Pacific)



Jennifer Lund, FISPE Academic (Americas)



Stine Hasling Mogensen Government/Regulator (Europe/Africa)



Mette Nørgaard Academic (Europe/Africa)



Fredrik Nyberg, FISPE Industry/Service Provider (Europe/Africa)



Lisa Pont, FISPE Academic (Asia/Pacific)



**Daniel Prieto-**Alhambra, FISPE Academic Europe/Africa)



**Jeremy** Rassen, FISPE Industry/Service Prov (Americas)



# Board of Directors 2022-2023

#### DIRECTORS Cont'd



Jennita Reefhuis Government/Regulator (Americas)



Mary Beth Ritchey, FISPE Industry/Service Provider (Americas)



Montserrat Soriano Gabarro, FISPE Industry/Service Provider (Europe/Africa)



Yoshiaki Uyama Government/Regulator (Asia/Pacific)



Shirley Wang, FISPE Academic (Americas)



Hongbo Yuan Government/Regulator (Americas)



Stanley Edlavitch, FISPE Executive Director, emeritus

#### ELECTED REPRESENTATIVES 2022-2023



Lisa Pont, FISPE President-Elect



Efe Eworuke Government/Regulator (Americas)



Ursula Kirchmayer, FISPE Government/Regulator (Europe/Africa)



Jessica Franklin Industry/Service Provider (Americas)



Gillian Caughey Academic (Asia/Pacific)

#### STAFF

James Vrac Executive Secretary

Katie Geraghty Deputy Executive Secretary

Melissa Castan Director of Meetings

Jennifer Tarr Head of Membership, Registration, and Data Management

**Christine Morgan** Society Manager

Holly Riester Society Manager

**Amy Winter** Society Manager



## Chairs & Liaisons

#### COMMITTEES

**ACPE International Steering** 

Soko Setoguchi, FISPE

**Archives & History** 

Eileen Ming, FISPE

Hugh Tilson, FISPE

Bylaws, Policies & Procedures

Stella Blackburn, FISPE

Frank May, FISPE

Development

Taichi Ochi

Leah Sansbury, FISPE

Education

Debbie Layton, FISPE

Judith Maro

Fellowship & Awards

Olaf Klungel, FISPE

Finance

Wei Zhou, FISPE

Global Development

K. Arnold Chan, FISPE

Maribel Salas, FISPE



#### Management Oversight

Olaf Klungel, FISPE

#### Membership

Emily Brouwer, FISPE

Rohini Mathur

#### **Nominating**

Olaf Klungel, FISPE

#### **Public Policy**

Susan dosReis, FISPE

Meredith Smith, FISPE

#### **Publications & Communications**

Juan Hincapie-Castillo

Joan Largent

#### Scholarship

Lisa Pont, FISPE

#### Strategic Planning

Tobias Gerhard, FISPE

#### COUNCILS

#### Academic

Soha Elmorsy

Amie Goodin

#### Government/Regulatory

Thamir Alshammari

Ann McMahon, FISPE

#### Industry/Service Provider

Jaclyn Bosco, FISPE

Solomon Iyasu, FISPE

#### Student

Miyuki Hsing-Chun Hsieh

Sebastian Jugl

#### SPECIAL INTEREST GROUPS (SIGs)

#### Adherence

Julie Lauffenburger

Sarah-Jo Sinnott

#### Asian Pharmacoepidemiology Network (AsPEN)

Nam-Kyong Choi

#### Benefit, Risk Assessment, Communication & Evaluation (BRACE)

Priya Bahri

**Brett Hauber** 

Elaine Morrato

#### **Biologics**

Seoyoung Kim

Nicole Pratt. FISPE

#### Cancer

Armen Ghazarian

Maribel Salas, FISPE

#### Comparative Effectiveness Research

Grammati Sarri

Richard Wyss

#### **Databases**

Rosa Gini

Vinay Mehta

#### Digital Epidemiology

Dana Teltsch

Lisa Weiss

#### Drug Utilization/Health Services Research

Mina Tadrous

#### **Drug-Drug Interaction**

Katsiaryna Bykov

Thanh Phuong Pham Nguyen



#### Environmental Pharmacoepidemiology

Charlie Leonard, FISPE Soko Setoguchi, FISPE

#### **Genomics & Precision Medicine**

Gillian Bartlett-Esquilant, FISPE Leah Sansbury, FISPE

#### Geriatric Pharmacoepidemiology

Danijela Gnjidic Daniela Moga

#### **Health Equity**

Eileen Ming, FISPE Leo Russo

#### **Medical Devices**

Mary Beth Ritchey, FISPE

#### Medicines in Pregnancy & Lactation (MiPal)

Susan Sinclair, FISPE Marleen Van Gelder

#### **Pediatrics**

Greta Bushnell Francesca Kolitsopoulos

#### Rare Disease

**Emily Bratton** Janet Sultana

#### **Vaccines**

Jennifer Gerber Bradley Layton, FISPE

#### REGIONAL INTEREST GROUPS (RIGs)

#### Africa

Kwame Appenteng Irene Murimi-Worstell

#### Brazil

Claudia Garcia Serpa Osorio de Castro

Lisiane Leal

Luciane Lopes

#### **Gulf Region**

Yasser Albogami Turki Althunian

#### Latin America

Yesenia Rodriguez Yared Santa-Ana-Téllez

#### TASK FORCES

#### Real-World Evidence (RWE)

Helga Gardarsdottir, Co-Chair Donna Rivera, FISPE; Co-Chair

#### LIAISONS

Council for International Organizations of Medical Sciences (CIOMS)

Stella Blackburn, FISPE

**European Network of Centres** for Pharmacoepidemiology and Pharmacovigilance (ENCePP)

K. Arnold Chan, FISPE

International Network for Epidemiology in Policy (INEP)

Meredith Smith, FISPE Susan dosReis, FISPE

## Student Chapters

Basel Pharmacoepidemiology Unit

University of Basel, Switzerland & the Boston Collaborative Drug Surveillance Program, Boston University, USA

Brown University School of **Public Health** 

USA

Center for Drug Safety & Effectiveness Department of Epidemiology, Johns Hopkins School of Public Health, USA

Center for Drug Safety & Pharmaceutical Health Services Research Graduate Program

University of Maryland School of Pharmacy, USA

Center for Pharmacoepidemiology and Treatment Science (PETS)

Rutgers University, USA

Clinical and Population Health Research Program

Department of Quantitative Health Sciences, University of Massachusetts Medical School. USA

College of Pharmacy & Pharmaceutical Sciences

Washington State University, USA

College of Pharmacy

Rady Faculty of Health Sciences, University of Manitoba, Canada

College of Pharmacy University of Cincinnati, USA

Department of Epidemiology, Biostatistics, and Occupational Health & Department of Family Medicine

McGill University, Canada

Department of Pharmaceutical **Outcomes and Policy** 

College of Pharmacy, University of Florida, USA

**Department of Pharmacy Practice** KMCH College of Pharmacy, Coimbatore, India

Department of Pharmacy Systems, **Outcomes and Policy** 

University of Illinois at Chicago, USA

**Dutch ISPE Student Chapter** Faculty of Pharmacy

JSS University, Mysore, India

Graduate Course in Pharmaceutical Sciences

University of Sorocaba, São Paulo

**Graduate Department of** Pharmaceutical Sciences

Leslie Dan Faculty of Pharmacy, University of Toronto, Canada

Harvard University School of Public Health

USA

Health Outcomes and Pharmacy Practice

The University of Texas at Austin, USA

International Society of Pharmacoepidemiology

China Pharmaceutical University Student Chapter (ISPE CPU Student Chapter), China

ISPE Brazilian Student Chapter

Grupo Brasileiro de Estudantes da Sociedade Internacional de Farmacoepidemiologia - GBE-ISPE, **PENN-CPeRT** 

Center for Pharmacoepidemiology Research and Training),

University of Pennsylvania, USA

Pharmacoepidemiology and **Pharmacoeconomics** 

University of Rhode Island, USA

Pharmacoepidemiology Program

Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill,

Program for Clinical Pharmacy and Pharmaceutical Sciences

National Chen-Kung University, Taiwan

Skaggs School of Pharmacy and Pharmaceutical Sciences

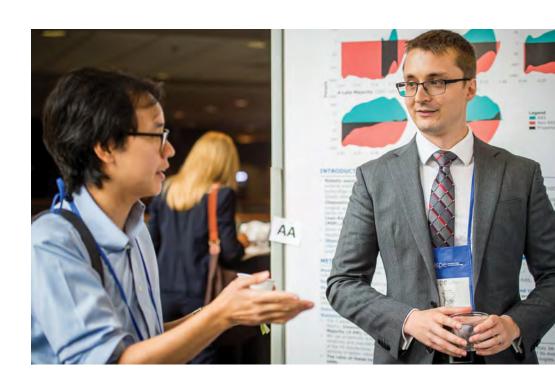
University of Colorado Anschutz Medical Campus, USA

Talla Padmavathi College of Pharmacy

Warangal, Telangana, India

Touro College of Pharmacy New York City, USA

University of Bordeaux France



# Organizational & Institutional Members

#### **PHARMACEUTICALS**

Gilead Sciences

GlaxoSmithKline

Merck

Regeneron

Sanofi

UCB BioSciences

#### SERVICE PROVIDERS

OM1

**RTI Health Solutions** 

#### GOVERNMENT/ REGULATORY AGENCY

Department of Epidemiology Lazio Regional Health Service, Italy

#### ACADEMIC PROGRAMS

Center for Drug Safety & Effectiveness Department of Epidemiology Johns Hopkins School of Public Health

Center for Pharmacoepidemiology Research and Training (CPeRT) Pereleman School of Medicine at the University of Pennsylvania

College of Pharmacy University of South Carolina

Harvard School of Public Health

McGill Pharmacoepidemiology Research Unit McGill University

Pharmacoepidemiology Program Department of Epidemiology Gillings School of Global Public Health, University of North Carolina at Chapel Hill

**Rutgers Center for** Pharmacoepidemiology and Treatment Science

University of Massachusetts Medical School - Clinical and Population Health Research

University of Utrecht



# 2022 ICPE Scientific Program Committee

Anton Pottegård, Chair

Jesper Hallas, FISPE; Co-Chair

Frank Andersohn

Kwame Appentena

Wendy Camelo-Castillo

Ian Douglas

Sascha Dublin

Tobias Gerhard, FISPE

Rosa Gini

Christian Hampp, FISPE

Juan Hincapie-Castillo

Daniel Horton

Krista Huybrechts, FISPE

Sebastian Jugl

Caitlin Knox

J Bradley Layton, FISPE

Charles Leonard, FISPE

Vincent Lo Re, FISPE

Jennifer Lund, FISPE

Kenneth Mann

Judy Maro

Elaine Morrato

Susana Perez-Gutthann,

**FISPE** 

Syd Phillips

Robert Platt

Mary Beth Ritchey, FISPE

Yesina Rodriguez

Tania Schink

Soko Setoguchi, FISPE

Rachel Sobel, FISPE

Alexandra Sosinsky

Mina Tadrous

Shirley Wang, FISPE

Lisa Weiss

Jessica Young

# **ISPE** Development Committee

Leah Sansbury, Chair

Taichi Ochi. Vice Chair

Amanda Anderson

Eirini Apostolidou

Dimitri Bennett

Elliott Bosco

Tirza Boyle

Andrzej Czarnecki

Daina Esposito

Nicholas Everage

Joshua Gagne, FISPE

Nydjie Grimes

Sai Krishna Gudi

Veena Hoffman

Linda Kalilani

Danica Marinac-Dabic

Payam Peymani

Surasak Saokaew

Xuerong Wen

Hongbo Yuan

Yanmin Zhu



## **Abstract Reviewers**

Mia Aakjaer

Victoria Abbing-Karahagopian

Abdullah Abdelaziz

Devin Abrahami

Shahab Abtahi

John Acquavella,

**FISPE** 

Waheed Adedeji

Michael Adena

Motohiko Adomi

Fariba Ahmadizar

Elizabeth Ailes

Adebola Ajao

Oras Alabas

Abdullah Alalwan

Omar Albalawi

Yasser Albogami

Khalidah Alenzi

Aljoharah Algabbani

Eman Alghamdi

Waad Alghamdi

Saja Al-Habardi

Ayad Ali

Ohoud Almadani

Mona Almaghrabi

Sara Almishari

Meshael Alrasheed

Fares Alrubaish

Adel Alrwisan

Thamir Alshammari

Amal Alshatri Almotiry

Dana Alsugeir

Mohammed Alsultan

Turki Althunian

Carlos Alves

Hassan Alwafi

Abdulaziz Alzarea

Frank Andersohn

Amanda Anderson

Daniel Ankrah

Mary Anthony

Ippazio Cosimo Antonazzo

Jummai Apata

Eirini Apostolidou

Kwame Appenteng

Priya Aradhya

Alejandro Arana, FISPE

Alexi Archambault

Janet Arrowsmith

Keiko Asao

Mustafa Ascha

Gulce Askin

Quazi Ataher

Shilpa Avarebeel

Lade Ayodele

Md Azharuddin

Nicole Baker

Mohammad Bakhriansyah

Sulayman Balogun

Gretchen Bandoli

Sonja Banga

Dipika Bansal

Clare Barnett

Claudia Bartolini

Beniamin Bates

Vincent Bauchau

Sungho Bea

Daniel Beachler

Claudia Becker

Ajda Bedene

Sigrid Behr

Elizabeth Bell

Ariel Berger

Ramesh Bhandari

Anto Amith Biju

Mette Bliddal

Lourens Bloem

Michael Blum William Blumentals

Marco Boeri

Justin Bohn

John Booth

Jaclyn Bosco, FISPE

Alexa Bowie

Marie Bradley

Joanne Brady

**Emily Bratton** 

Benjamin Bray

Alexander Breskin

Kimberly Brodovicz

**Emily Brouwer** 

Jeffrey Brown

Vanessa Brunetti

Claudia Bruno

Camelia Bucsa

Katharina Buesch

Mehmet Burcu

Johanita Burger

**Dustin Burns** 

Greta Bushnell

Anne Butler

Katsiaryna Bykov

Claudia Cabrera Moksnes

Guy Cafri

Bin Cai

Gregory Calip

Wendy Camelo Castillo

Ulka Campbell

Raissa Candido

Bruce Carleton, FISPE

David Carrell

Deborah Casso

Caroline Castro

Gillian Caughey

Carolyn Cesta

Christina Chambers

Vivien Chan

Yen Lin Chang

**Zheng Chang** 

Chao Chen Li-Ju Chen

Lu Chen

Nai-Yu Chen

Wei-Han Chen

Danni Cheng

Hong Cheng

Charmi Chhatrala

Pudi Chiranjeevi

Kate Chitty

Yohann Chiu

Ahhyung Choi

Eun-Young Choi

Andrea Chomistek

Te-Yuan Chyou

Javier Cid Ruzafa Jacqueline Cohen

Karen Cohen

Catherine Cohet

Irma Convertino

Paul Coplan, FISPE

Nicole Cossrow Deborah Covington,

**FISPE** 

Marianne Cunnington

Jeffrey Curtis

Benjamin Daniels

Mukhtar Dar

Monica D'arcy

Nabarun Dasgupta

Chintan Dave

Kourtney Davis, FISPE

**Ghadeer Dawwas** 

Airam de Burgos Gonzalez

Cvnthia De Luise

Sieta De Vries

Erin Delker

Huiwen Deng

Petra Denig, FISPE

Anouk Deruaz Luyet

Neil Dhopeshwarkar Julia Dibello

Harriet Dickinson

Paul Dillon

**Bethany Diprete** 

Rachael

Disantostefano

Djeneba Audrey Djibo

Caitlin Dodd

Macarius Donneyong

David Dore

Colin Dormuth

Susan Dosreis, FISPE

Ian Douglas

**Antonios Douros** 

Brian Dreyfus

Cecile Droz-Perroteau

Wei Du

Sascha Dublin

Emilie Duchesneau

Elena Dudukina

Mai Duong

Katherine Duszynski

Stanley Edlavitch,

**FISPE** Dr. Egwuenu

Giraud Ekanmian

**Emad Elkholy** 

Alan Ellis

Soha Elmorsy Sherif Eltonsv

Efe Eworuke

Michael Falster

Ahmed Fathelrahman

Guillaume Favre Muhammed Shaffi

Fazaludeen Koya

Tim Feeney

Nermina Ferizovic Milene Fernandes

Daniel Fernandez

Llaneza Sara Ferraro

Kristian Filion

Joan Forns

Michael Forstner Nadia Foskett

Matthew Francis

Candace Fuller

#### ISPE is very grateful to the 760 volunteers who gave generously of their time to review abstracts submitted for ICPE 2022.

Phillip Hunt

Kari Furu Joshua Gagne, FISPE Sampada Gandhi Le Gao Xabier Garcia de Albeniz Claudia Garcia Serpa Osorio de Castro Helga Gardarsdottir, **FISPE** Arushi Garlapati Elizabeth Garry Wenzhen Ge Jamie Geier Tobias Gerhard, FISPE Thijs Giezen Alicia Gilsenan, FISPE Maria Giner-Soriano Rosa Gini Cynthia Girman, FISPE Natasa Gisev Muqdha Gokhale Negar Golchin Inbal Goldshtein Asieh Golozar Ainhoa Gomez-Lumbreras Amie Goodin David Graham Sophie Graham Sonia Grandi Christina Greene Laura Gressler Xinchun Gu Xiaodong Guan Sandra Guedes Jason Guertin Estelle Guiard Sinem Ezgi Gulmez Jingchuan 'Serena' Guo Yuchen Guo

Balaji Gupta

Lia Gutierrez

Raquel Gutierrez Katrina Hagberg Kristen Hahn Lara Haidar Tariq Halasa Gillian Hall, FISPE Jesper Hallas, FISPE Christian Hampp, **FISPE** Kalindi Hapani Anne Hattersley Ulrike Haug Kaley Hayes Kevin Haynes Na He Sonia Hernandez-Diaz, **FISPE** Mackenzie Herzog Blánaid Hicks Juan Hincapie-Castillo Maureen Hitschfeld Mikkel Hoeilund Sarah Hoffman Veena Hoffman Chantal Holy Ria Hopkins Daniel Horton Erzsebet Horvath-Puho Miyuki Hsing-Chun Hsieh Yu-Chia Hsu Phyo Htoo Jason Hu Lin Hu Qingqing Hu Hsiao-Ching Huang Kui Huang Li Ying Huang Shih-Tsung Huang

John E Hughes

Nicholas Hunt

Katherine Hughes

Mohammad Salman Hussain Krista Huybrechts Giulia Hyeraci Heba Ibrahim Fidelia Ida Adeniyi Idigo Onyekachukwu IIIoh Jenni Ilomaki Shinobu Imai Sherin Ismail Atta Aleena Issac Takahiro Itaya Masao Iwagami Hector Izurieta Jessica Jalbert Aziza Jamal-Allial Meghna Jani Donica Janzen Annie Jeffery Camilla Jensen Han Eol Jeong Annika Joedicke Catherine Johannes Stephen Johnston Cynthia Jones Michele Jonsson Funk, FISPE Hugo Jourdain Chengsheng Ju Sebastian Jugl Yuseon Jung Jacob Kahrs Emma Kalk Geetika Kalloo Vikas Kammar Yea-Huei Kao Yang, **FISPE** Anokhi Kapasi Sigal Kaplan Ruby Kasana Aaron Katz

Gursimran Kaur Alison Kawai David Kern Sara Khalid Anam Khan Wael Khawagi Alena Khromava Christopher Kim Chungsoo Kim Eunyoung Kim Ju Hwan Kim Sangmi Kim Seoyoung Kim Sujin Kim Alan Kinlaw Ursula Kirchmaver. **FISPE** Victor Kiri Alyssa Klein Olaf Klungel, FISPE Caitlin Knox Caitlin Knox Tomoko Kobayashi Forrest Koch Jose Kochuparambil Natalia Konstantelos Linda Koria Tzuyung Douglas Kou Erna Kristin Whitney Krueger Jürgen Kübler Kiyoshi Kubota, FISPE Subeesh Kulangara Viswam Hiraku Kumamaru Vijayanarayana Kunhikatta Jennifer Kuntz Seth Kuranz Xavier Kurz Edward Lai Francois-Xavier Lamy Suzanne Landi

Pamela Landsman-Blumberg Joan Largent Tamar Lasky, FISPE Tomas Lasys Chase Latour Wallis Lau Julie Lauffenburger Jill Lavigne Alekhya Lavu Gifty Lawrance J. Bradley Layton Deborah Layton, FISPE Hristina Lebanova Coralie Lecomte Chaw-Ning Lee Hyesung Lee Wanju Lee Charles Leonard Melissa Leung Michael Lewis, FISPE Hailona Li Hu Li Lin Li Pei Li Xiaojuan Li Xiao-Xiao Li Xintong Li Caihua Liang Alexander Liede Chih-Wan Lin Nancy Lin Zhen-Fang Lin Marie Linder Vincent Lo Re, FISPE John Logie Feng-Hua Loh Luciane Lopes Anita Loughlin Lipin Lukose Jennifer Lund, FISPE Carlotta Lunghi

## **Abstract Reviewers**

Angela Lupattelli

Jennifer Lyons

Theodore Lystig

Christina Mack, FISPE

Eswaran Maheswari

Marina Malikova

Jowanna Malone

Kenneth Man

Kenneth Mann

Omar Mansour

Zachary Marcum

Andrea Marcus

Andrea Margulis, FISPE

Morgan Marks

Judy Maro

Ashley Martinez

Maria

Martinezgonzalez

Nancy Maserejian

Amar Maske

Prithpal Matreja

Shinichi Matsuda

Geric Maura

Sophie Mayer

Giampiero Mazzaglia

Leah Mcgrath

Wilhelmine Meeraus

Hemalkumar Mehta

Rosanne Meijboom

Cristiane Menezes

Mikhail Menis

Davide Messina

Nkuchia M'ikanatha

**Daniel Mines** 

Barbara Mintzes

Dustin Miracle

Sonal Sekhar Mirai

Fariba Mirzaei

Garima Mishra

Garima Mittal

Jingping Mo

Daniela Moga

Soroush Mohammadi Jouabadi

Marta Monreal

Francois Montastruc

**Daniel Morales** 

Elaine Morrato

Earl Morris

Andrew Mosholder

Cristiano Moura

Mohammad Movahedi

Tanja Mueller

Zaietuni Mulaa

Dana Murdock

Nivantha Naidoo

Gouri Nair

Sreedharan Nair

Ava Nakitanda

Young Hee Nam

Abdallah Naser

Mitra Nekouei Shahraki

G. Nethravathi

Huah Shin Ng

Chi Nguyen

Carrie Nielson

Prasad Nishtala

Yunha Noh

Hedvig Nordeng, FISPE

Niklas Noren

Mette Norgaard

Pandji Winata

Nurikhwan

Fredrik Nyberg, FISPE

Adam Nygren

Emily Obrien

Ingvild Odsbu

Gyeon Oh

Bruno Ohana

Hemlata Ojha

Charles Okafor

Monika Oktora Denise Oleske

Timothy Oluwasola

Oluwadamilola

Onasanya

Sylvia Opanga

Ibrahim Oreagba

Merete Osler

Anna Ostropolets

Marianne Otoo

Jetty Overbeek

Julie Paik

Shilpa Palaksha

Karine Palin

Kristin Palmsten

Menglan Pang

Sewon Park

So-Hee Park

Lauren Parlett

Naldy Parodi Lopez

Ami Patel

Kaushal Patel

Jessica Paulus

Alma Pedersen

Imelda Pena

Susana Perez-Gutthann

Silvia Perez-Vilar

Rebecca Persson

Dyah Perwitasari

Paul Petraro

Payam Peymani

Thanh Phuong Pham

Nguyen

Syd Phillips

Syd Phillips

Bora Plaku

Robert Platt

Katharina Platzbecker

Lisa Pont, FISPE

Anton Pottegard

Lisa Prach

Anjali Pradhan

Daniel Prieto-Alhambra.

FISPE

Rajeshwari Punekar

Dima Qato

Jingjing Qian

Adrian Paul Rabe

Ashish Rai

Asha Rajan

Adepu Ramesh

Muhammed Rashid

Nuvan Rathnayaka

Ravina Ravi

Jennita Reefhuis

Adriano Reis

Christopher Rentsch

Simon Reuter

Carlen Reves

Jinnie Rhee

Munaza Riaz

Tatiane Ribeiro

Kathrvn Richardson

Mary Beth Ritchey

Mary Ritchey, FISPE

Donna Rivera

Elena Rivero-Ferrer.

FISPE

Giuseppe Roberto

Yesenia Rodriguez

Catherine Rogers

Murray

Vered Rosenberg

Dominique Rosillon

Rachael Ross

Kathryn Rough

Elizabeth Roughead, FISPE

Debabrata Roy

George Sabblah

Patricia Saddier

Sujit Sah

Nuria Saigi-Morgui

Laura Saint-Lary

Maribel Salas, FISPE Hager Saleh

Catherine Saltus

Savitha Sanathan

Gabriel Sanfelix-Gimeno

Leah Sansbury

Djanilson Santos

Amir Sarayani

Jyotirmoy Sarker

Grammati Sarri

Wiebke Schaefer

Andrea Schaffer

Darren Scheer

Tania Schink

Maria Schneeweiss

Oliver Scholle

Suzie Seabroke

Ryan Seals

Juny Sebastian John Seeger, FISPE

Jodi Segal, FISPE

Harry Seifert, FISPE

Maurizio Sessa

Soko Setoguchi, FISPE

Sha Sha Syed Mohsin

Mahmood Shah

Shahriyar Shahbazi

Khamas Aina Shaju

Jessica Shami

Meijia Shao

Shih-Chieh Shao

Atiqulla Shariff

Manvi Sharma Syed Ilyas Shehnaz

Chin-Yao Shen

Eric Cheng-Chan Shih Hojin Shin

Adithya Shivakumar

Shahar Shmuel

Irene Shui

Srikanth Siddalingegowda

Ana Silva

Ruth Sim

Jason Simeone

Susan Sinclair

Ambrish Singh

Sachinkumar Singh Sonal Singh Nils Skajaa Jonathan Slaughter Chloe Smit Meredith Smith, FISPE Rachel Sobel Arjun Sondhi Anne Mette Sorensen Montse Soriano Gabarro, FISPE Alexandra Sosinsky Patrick Souverein O'mareen Spence Shannon Sperati Julia Spoendlin Michele Springer Chalasani Sri Harsha Chaitra Srinivas Michael Steinbuch. Douglas Steinke, FISPE Henrik Stovring Loreen Straub Victoria Strauss Adam Streeter Elizabeth Suarez Mina Suh Karine Suissa Siti Zaleha Suki Ihtisham Sultan Feng Sun Jenny Sun

Reese Sy Jehath Syed Mina Tadrous Masato Takeuchi Yoshinori Takeuchi Ardesheer Talati Ashna Talwar Silas Tamufor Eng Hooi (Cheryl) Tan Huilin Tang Fatima Taugeer Katja Taxis, FISPE Lockwood Taylor Antonio Teixeira Rodrigues Dana Teltsch Thuy Thai Arulmani Thiyagarajan Jarir At Thobari Reimar Thomsen Girish Thunga Nicolas Thurin Jennifer Tjia Ana Tomas Carla Torre Phuong Tran Phuong Tran Tanja Tran Thao Tran Tien Tran

Nhung Trinh Bang Truong llse Truter, FISPE Hsiang-Te Tsai Stanislas Tshilumba Md Jamal Uddin Anan Udombhornprabha Ugochinyere Vivian Ukah Christine Ulbricht Krishna Undela Ikenna Unigwe Rakshith Ur Hisashi Urushihara Sascha van Boemmel-Wegmann Angela van der Salm Marleen van Gelder Catherine Vasilakis-Scaramozza S Phani Veeranki Luis Velez Lorenzo Villa Zapata Arti Virkud David Vizcaya Stiin Vos Carla Vossen Scott Vouri Mai Vu Marit Waaseth Ching-Yu Wang Grace (Hsin Min) Wang

Junfeng Wang Lu Wang Xiaoxia Wang Xin Wang Yehua Wang Yingying Wang Youjin Wang Shirley Wang, FISPE Michael Webster-Clark Yue Wei Yu-Jung Jenny Wei Lisa Weiss Shi Wu Wen Xuerong Wen Nadine Wentzell Biorn Wettermark, **FISPE** Andrew Wiese Elissa Wilker Corinne Willame Veronika Wirtz, FISPE Robert Wise, FISPE Angel Wong Jenna Wong Mollie Wood Lu Hsuan Wu Richard Wyss Sherry Xiao Junging Xie Yiqiong Xie Xiaomo Xiong Hairong Xu Michiyo Yamazaki

Yu Yang Haya Yasin Alfi Yasmina Wai Ping Yau Belay Yimer Zenas Yiu Jennifer Yland Dongwon Yoon Kazuki Yoshida Jessica Young Chengxuan Yu Qiuyan Yu Yuelin Yu Hongbo Yuan Emma Xiaomeng Yue Huifeng Yun Eden Dagnachew Zeleke Ousseny Zerbo Salwa Zghebi Le Zhana Ling Zhang Shumin Zhang Xinyan Zhang Zhenzhen Zhang Meijia Zhou Wei Zhou, FISPE Yanmin Zhu Lin Zhuo Andrew Zullo

Seonkyeong Yang

#### **NEWCOMER TRACK REVIEWERS**

**Boubacar Traore** 

**Thierry Trenque** 

Shanna Trenaman

Emily Brouwer, FISPE Ian Douglas, FISPE Sascha Dublin

Kristian Svendsen

Kristian Filion Alicia Gilsenan, FISPE Xavier Kurz

Jocelyn R. Wang

Edward Lai John Logie Daniel Mines Lisa Pont, FISPE Suzie Seabroke Katja Taxis, FISPE

# Congratulations to Our New Fellows



**Edward Bortnichak** 



**Emily Brouwer** 



J. Bradley Layton



Nicole Pratt



Donna Rivera



Leah Sansbury



Susan Sinclair



Jonathan Slaughter

# HealthCore Safety & Epidemiology Research

Uncover vital real-world evidence on the utilization, safety, and effectiveness of biopharmaceuticals and devices in large patient populations with accuracy and efficiency.

#### **Safety & Epidemiology Services**

- Post-Marketing Requirements & Post-Authorization Safety Studies
- Scientific Coordinating Center & Data Analytics for Multi-Database Studies
- Pregnancy Outcomes Studies
- Algorithm Development & Validation Studies
- Risk Evaluation & Mitigation Studies
- Medical Record Abstraction & Adjudication
- Patient-Centered Research
- External Control Arms for Clinical Trials
- Machine Learning & Diagnostic Models

#### **HealthCore**

Visit us at ICPE **Booth #401.**For a full list of HealthCore ICPE presentations, go to **HealthCore.com/conferences/icpe-2022.** 

## ICPE 2022 Sponsors & Exhibitors

ISPE gratefully acknowledges the generous support of the following organizations, institutions, and programs. Their contributions helped the Society advance the scientific program content and increase attendance at ISPE's 38<sup>th</sup> annual meeting (ICPE).

#### PLATINUM

#### AstraZeneca

GOLD

Aetion Eli Lilly IBM Watson Health P-95

Amgen Inc Epi Excellence IQVIA Panalgo

Boehringer Evidera | PPD Johnson & Johnson RTI Health

Ingelheim Exponent OM1

Clark Davis
Associates
Healthcore
Optum

\_\_\_\_\_\_ SILVE

Analysis Group CorEvitas Genesis Research Regeneron

---- BRONZE

Bristol Myers Squibb Target RWE WorldWide Patient Safety Epidemiology/BMS

EXHIBITORS

Aarhus University

Certara

**DeSC** Healthcare

Drug Safety Research Unit

Eu2P + Am P2 Programme

**IHME Client Services** 

JMDC Inc

Oxon Epidemiology

Solutions

PHARMO Institute

VAC4EU

#### INDUCTION OF ISPE FELLOWS

Edward Bortnichak, FISPE Emily Brouwer, FISPE

J. Bradley Layton, FISPE Nicole Pratt, FISPE

Donna Rivera, FISPE Leah Sansbury, FISPE Susan Sinclair, FISPE Jonathan Slaughter, FISPE

#### **EMERGING LEADER AWARD**

Kaley Hayes

#### SPECIAL AWARD FOR PUBLIC **HEALTH PROMOTION THROUGH PHARMACOEPIDEMIOLOGY**

Dame June Raine

#### SUSTAINED SERVICE AWARD

Alison Bourke, FISPE

Byung Joo Park, FISPE

#### JUDITH K. JONES AWARD FOR IMPACT ON PUBLIC **HEALTH THROUGH PHARMACOEPIDEMIOLOGY**

Luciane Lopes

Ilse Truter, FISPE

#### RONALD D. MANN BEST PAPER AWARDS FOR MANUSCRIPTS PUBLISHED IN PHARMACOEPIDEMIOLOGY AND DRUG SAFETY (PDS), 2021

PRESENTERS:

Brian Strom, FISPE; Editor-in-Chief Vin Lo Re, FISPE; Regional Editor for the Americas Hubert Leufkens, FISPE; Regional Editor for Europe

Byung Joo Park, FISPE; Regional Editor for Asia-Pacific & ROW Amanda McLean-Inglis, Associate Editorial Director, Health Sciences, Wiley

#### WINNER

Association Between Inhaled Corticosteroid Use and COVID-19 Outcomes Anders Husby | Anton Pottegård | Anders Hviid

#### HONORABLE MENTION

Statins and Risk of Diverticular Disease: Nested Case-Control Study

Nils Skajaa | Frederikke Schønfeldt Troelsen | Lars Pedersen Ola Ekholm | Lisa Strate | Rune Erichsen | Henrik Toft Sørensen

#### SPECIAL ISPE AWARD FOR CONTRIBUTIONS TO PUBLIC HEALTH ASSOCIATED WITH THE COVID-19 PANDEMIC

A special award for 2022 to recognize how ISPE members have made and, in some cases, continue to make a demonstrable impact on public health related to the COVID-19 pandemic. From a strong field of candidates nominated by ISPE members, the following were selected by the Fellowship & Awards Committee and endorsed by the ISPE Board of Directors:

Robert Chen, FISPE

**Daniel Horton** 

**Daniel Prieto-**Alhambra, FISPE Reimar Thomsen

Nicolle Gatto, FISPE

Michele Jonsson Funk, FISPE

Christopher Rentsch

Almut Winterstein, FISPE

Carlos Grijalva

Vincent Lo Re, FISPE

#### ANDREW McAFEE AWARD FOR BEST ABSTRACT FROM A DEVELOPING COUNTRY

Gouri Nair

Target Fishing and Drug Repurposing for Pancreatic Ductal Adenocarcinoma: An Integrated Bioinformatic and Computational Approach

#### JOHN SNOW AWARD FOR BEST ABSTRACT BY A RESEARCHER/STUDENT LIVING IN A DEVELOPING COUNTRY

Pudi Chiranjeevi

Association of Sacubitril/Valsartan with Hypoacusis Unveiled Through Disproportionality Analysis in US FDA Adverse Event Reporting System (FAERS)

#### STANLEY A. EDLAVITCH AWARD FOR MOST HIGHLY RATED STUDENT ABSTRACTS

#### FIRST PLACE

Junging Xie Genetic Risk and Incident Venous Thromboembolism in Middle-Aged and Older Adults Following **COVID-19 Vaccination** 

#### SECOND PLACE

Syed Mohsin Mahmood Shah Association Between Very High PD-L1 Expression Versus High PD-L1 Expression in Patients Receiving Pembrolizumab as Firstline Treatment for Advanced Nonsmall Cell Lung Cancer

#### THIRD PLACE

Seonkyeong Yang Trajectories of Concurrent Opioid and Benzodiazepine Use and **Associated Opioid Overdose** Risk Among Arizona Medicaid Beneficiaries

#### MOST HIGHLY RATED METHODS ABSTRACT SUBMITTED BY A STUDENT

Lars Christian Lund Adjusting for Calendar Time in Analyses of COVID-19 Vaccine Safety and Effectiveness: A Simulation Study

#### MOST HIGHLY RATED ABSTRACT SUBMITTED BY A STUDENT IN THE DRUG UTILIZATION RESEARCH CATEGORY

Widya Norma Insani

Statin-Related Adverse Drug Reactions in UK Primary Care Consultations: A Retrospective Cohort Study to Evaluate the Risk of Cardiovascular **Events and All-Cause Mortality** 



"Contingent Staffing with Retained Results"

We specialize in staffing within the Epidemiology world with a passion for scaling organizations. We use a unique feet to pavement approach to provide global coverage to market opportunities for appropriate candidates. This approach has proven highly effective, with 92% of candidates submitted going to interview and 95% of offers made accepted. We pride ourselves on our ability to understand the specific needs of a group and deliver candidates that will not just fill a void, but more importantly contribute to the shape and sustained success of that group. We strive to be a trusted partner for our clients and deliver high quality solutions in timely fashion.

### Make the Most of Your Conference Experience with the

## **ICPE 2022 Mobile App!**

Take Notes | Create Personal Schedules | Personal Summary | Social Features

### 1. Download the CASE Conference App



**Scan** the QR Code or go to the Apple App Store or Google Play and search for **ISPE Meetings**.



App Icon

**Install** and **open** the event app.

**Find** your event in the Upcoming Events (bottom row).

**Tap** the event icon to launch your event's app.



Event Icon

### 2. Login to the App

Tap Login and enter your ISPE email address and password.



### 3. App Tips

**Download** the app before you go! Wi-Fi connection on-site can affect the functionality of the app.

**Browse** the event information and create a personal schedule by tapping on the star next to presentations titles.

7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM
							2 PM - 6 PM	Speaker Ro	eady Room – I			

### WEDNESDAY, AUGUST 24

THESDAY AUGUST

P. 25

_	_			, -	- 0	•		-						•
7.	AM	8 AM	9 AM	10 AM	11 AM	12 P	PM 1 P	M	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM
	7:30	AM-6PM R	egistration – actation Roo 8:30 AM - 1 PRE-CONF Pharmacoe Professiona Principles o Pharmacoe Risk Minimi Science-ba Studies for Effective Interest	PERENCE COL pidemiologist al Empowerme	JRSES 's Toolbox for nt – Room C1M0 mmunication: es and Case I Evaluating r the Safe Use		12:30 PM - 2 Lunch on Your Own	PM	Adherence Foundation Practical Sk Statistical A Pharmacoe Pragmatic 1 Implementa Using Field Pharmacoe Using Pharm Database R Safety Rese	to Medication as in Causal Infails in Protoco Analytic Prograpidemiology-Trials: Design, ation – <i>Room C</i> Studies to Valepidemiology-macoepidemiesources to Arearch – <i>Congre</i> nto Machine Ispidemiologist	ference – Room C1MO ference – Room I Writing and amming Releve - Congress Hali Methods, and 11M2 ue-add in - Meeting Room blogy ddress Drug ss Hall D5 Learning for	ant to D2		
								Board	I I of Directors om 18 & 19	' Meeting				

Registration -Hall F6-F7 Lobby

#### THURSDAY, AUGUST P. 27 **7 AM** 12 PM **4 PM 5 PM 6 PM 7 PM 8 AM 9 AM** 10 AM 11 AM **1 PM** 2 PM **3 PM** 7:30 AM - 6 PM Speaker Ready Room - Meeting Room 21 7:30 AM - 6 PM Registration - Hall F6 - F7 Lobby 7:30 AM - 6 PM Lactation Room - Meeting Room 28 8:30 AM - 12:30 PM 12:30 PM - 2 PM 2:00 PM - 6 PM 6:00 PM - 7:30 PM **PRE-CONFERENCE COURSES PRE-CONFERENCE COURSES** Lunch on Welcome Your Own Reception Intermediate/Advanced Topics in Vaccine Advanced Drug Utilization Research - Room C1M2 Hall E-South Epidemiology – Room C1M2 Advanced Pharmacoepidemiology Methods: 12:45 PM - 2 PM Mitigating Missing Data Concerns with External or Internal Subset Validation Populations Intermediate Pharmacoepidemiology: New Member & Approaches to Unmeasured Confounders Early Stage Room C1M5 Room C1M1 Investigator Introduction to Drug Utilization Research and the Lunch -Applied Sensitivity Analyses in Pharmacoepidemiology Database Conduct of Real-World Drug Utilization Studies: Room C1M5 Describe and Compare - Meeting Room 20 Studies - Congress Hall D5 By invitation only: registration Modern Pregnancy Pharmacoepidemiology: Medical Device Epidemiology - Meeting Room 20 required. Emulating Target Trials - Congress Hall D2 Real-World Evidence (RWE) Generation for Rare Pharmacovigilance and Signal Detection Disease Drug Development and Orphan Drug Room C1M0 Approvals – Room C1M4 Weighing the Benefits & Risks: Propensity Scores in The Science and Methods of Benefit-Risk Pharmacoepidemiology - Congress Hall D5 Assessment in Drug Development - Room C1MO New Frontiers for Pharmacoepidemiology: Using New and Mixed Methods for Data Collection Room C1M4

#### FRIDAY, AUGUST 26

P. 29

7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM
7 AM - 6 PM 7 AM - 6 PM	Speaker Re Registration Lactation R	ady Room – N n – Hall F6 - F7 oom – Meeting I Exhibits/Po and Session	Jeeting Room 2 Lobby  GRoom 28 Dister Session  10:30 12 PN SYMF WOR Represand Le Hetero Betweet in Multi Pharm demiol C1MO Metho Challe Assess Impact	A - Hall C  O AM -  O OSIA &  KSHOPS  Benting  Veraging  Geneity  en Data Sources  ti-database  accepi- logic Studies  dological  nges in  ing the  t of Digital	12-1:30 PM Lunch/ Poster Session A/ Exhibits Hall C  12-1:30 PM COMMITTE MEETINGS Education Meeting Roon Public Polic Meeting Roon	1:30- ORAI PRES Challe Health Medic Pregna and In E C1M2 A Tivol Distille Metho Antidia Sy Antidia	- 3 PM	3:30 - SYMF WORI  Advance for Cove Balance Beyone Score N and We Using C Technic  Methor Consid Hypoth Detecti Accom	POSIA & KSHOPS God Methods ariate ing: Going 1 Propensity Matching eighting Dytimization ques – CTMO ds and erations for nesis-free Signal ion Studies modating	5:15 - 6:4 ORAL PRESENT Pediatric M Use: Safe K Uncertain L C1MO Smörgåsbo C1M1 Lightning S C1M2 Methods - Comparato and Unmea Confoundin	IS PM  TATIONS  edicine ids in an .andscape ord  Gession 1  rs, Controls, sured	7 PM SIG MEETINGS MiPal Congress Hall D2 Vaccine Congress Hall D5 Rare Disease Conference Room C1M0 Drug-Drug Interaction Conference Room C1M1 Pediatric Conference Room C1M4 Geriatric Epi Meeting Room 19 Adherence Meeting Room 19 Adherence Meeting Room 20 Biologics Conference Room B5M1 Medical Device Conference Room B5M2 Brace Conference Room B5M3 Digital Epi Conference Room B5M4 CER Conference Room B5M4 CER Conference Room B4M4 Druq Druq
			Using I World I Pharm demiol Metho the Sci Depres Resear Data H Standa Quality in Distribute No. Congre Post-aa Regula to Eval Safety How to Design Databa	Patient Adherence	Global Development Meeting Room 1 Open to all participants, lunch available  12:15 - 1:15 PM Spotlight Poster Session A Hall E South	Movin Real-W Back a Congree	Moving from Trials to Real-World Evidence, Back and Forth Congress Hall D4 From Motherhood to Childhood, Moody to Healthy Congress Hall D5	Popula Region It Takes Strateg Collabi Advanc ISPE - C Consid Misclas and Co CO COVID- Effectiv A Vacci Endors Congre- Meetin for Res on Druip During An Ove Approa	ications, tions, and ss – C1M1 ss a Village: jic Global orations to be RWE Within C1M5 erations of sestification infounding on –19 Vaccines veness Studies – ine SIG ed Symposium ss Hall D2 g the Need earch g Safety Lactation: riview of		Methods CoV-2 all D4 ation ular d Diabetes	
									8:30 Stud Care Meet	- 11 PM ents/Early er Profession : & Greet ommar - Biergal op bar		Research Conference Room C1M5

#### SATURDAY, AUGUST P.39 12 PM **2 PM 3 PM 4 PM 7 AM 8 AM 9 AM** 10 AM 11 AM **1 PM 5 PM** 6 PM **7 PM** 7 AM - 6 PM Speaker Ready Room - Room 21 7 AM - 6 PM Registration - Hall F6 - F7 Lobby 8 AM - 6 PM Lactation Room - Meeting Room 28 8 AM - 6 PM Exhibits/Posters Session B - Hall C 7-8 AM 2:40 -6-7PM 8-9:30 AM 10 - 11:30 AM 11:30 AM - 1 PM 1-2:30 PM 4:15 - 5:45 PM 3:50 PM Coffee with ORAL Lunch/ **PLENARY ORAL SYMPOSIA &** COUNCIL **Exhibitors** Poster Session B/ Annual **PRESENTATIONS SESSION PRESENTATIONS WORKSHOPS MEETINGS** Hall C Exhibits - Hall C Meeting Congress Hall D4 Across the Psychotropic Use Drug Safety on the **Academic** of ISPE Cutting Edge: What are the Implications of Around the World Globe: Injury Conference 7-8AM Members 11:30 AM - 1 PM and Neurologic Room Africa Pharmacoepi & Awards EMA's To-Be-Released **COMMITTEE Mending Hearts** C<sub>1</sub>M<sub>0</sub> demiology - C1MO Risk Minimisation Regional Ceremony **MEETINGS** and Brains Guidance on Interest Congress Safety First! - C1M1 Student Conference Pharmacoepi Group Hall D4 Finance Room C1M1 demiological Methods Conference Meeting Room 18 Meeting Epidemiology Potpourri – *C1M2* and Practice in Room Lightning Session 2 Room 20 C1M2 Developed and C<sub>1</sub>M<sub>1</sub> Membership **Developing Countries?** Open to all Methods for Meeting Room 19 Methods: Machines Open to all C1M0 participants. Generating RWE Through Emulation **Making Predictions** participants. Open to all Real-World Evidence Congress Hall D4 participants 7-8 AM Studies in the of Target Trials lunch available Study Design post-COVID-19 Era: Latin Approaches Methodological America to Assessing **Drug Utilization** 11:45 AM -Considerations for Thrombosis Risk Regional Potpourri Pandemic Related 12:45 PM Congress Hall D2 Congress Hall D2 Disruptions - C1M1 Interest **Spotlight** Group What's the Opioids and Late Breakers (Oral Poster Addiction -Risk? Cancer Meeting presentations) - C1M2 Session B The Other Pandemic? Risk & Common Room 18 **HARmonized** Congress Hall D5 Hall Medications Open to all Congress Hall D5 Protocol to Enhance E-South Reproducibility (HARPER): An ISPE-7-8 AM ISPOR Joint Task Force of the RWE Initiative Poster Session B Set-Up Cloning, Censoring,

**7 PM 8 PM** 9 PM 10 PM 11 PM

Social Evening at the Langelinie Pavilion

and Weighting— Oh My! Applications of Target Trial Emulation

for Evaluating Cancer Interventions When Study Eligibility, Intervention Initiation, and Start of Follow-up are Not Aligned Congress Hall D2 COVID-19 Vaccine Safety Monitoring: Opportunities, Challenges and Lessons Learned for Pharmacoepidemiology Congress Hall D5

Hall C

#### SUNDAY, AUGUST 28

P. 49

7 AM	8 A N	9 AM	10 AM	11 AM	12 PM	1 F	РМ	2 PM	3 PM	4 PM	1 5 F	PM	6 PM	7 PM
7 AM - 4:30	PM Reg	aker Ready Room istration – <i>Hall Fé</i> ation Room – <i>Me</i>	- F7 Lobby											
	8 AM - 4:30 PM Exhibits – Hall C  8 AM - 1:30 PM Posters Session C – Hall C													
7-8 AM Coffee with Exhibitors Hall C 7-8 AM Poster Session C Set-Up Hall C	SCORE V N PP C C A C C P PP (C C C C C C C C C C C C C C C	a:30 PM Posters a:30 - 10 AM DRAL PRESENTATIONS A COUNTY OF THE PROPERTY OF THE POSTER A COUNTY OF THE POSTER A CO	10:3 12 P SYM WOI Emula Differ Bias: of Lan Emula Rand Trials Pract (RCT- C1MC COVII Use D Pregr Accel Innov Gene to Me Futur C1M1 Shap of Ph demi What Data Pract Oper Guida Real- Inten Decis Congr Upda on CC Vacci Cons for Pf demi	O AM - M POSIA & RKSHOPS ation ences versus Implications ge-scale ation of omized Clinical Using Clinical ice Data DUPLICATE) D-19 Vaccine uring nancy: erating ative Evidence ration Platforms et Current and e Challenges	12-1:30 PN Lunch/ Poster Sess C/ Exhibits Hall C 12-1:30 PN ISPE Board Directors' Lunch - Meeting Roo 12:15- 1:15 PM Spotlight Poster Session C Hall E Sou	sion  A I of  m 19	ORAI PRES Safety Conce Antidia C1M0 Evalua Vaccin Nasty Safety C1M1 Lightn C1M2 Novel Pharm C1M5 Fractu Osteo Medic Congre Use it Trends Cance Utiliza	ENTATIONS  Issues rning DM and abetic Drugs  ting the less Against the Bugs: First Round II ling Session 3  Approaches to acovigilance less and corosis ation less Hall D2 loss to Los Circ Anti-r and Biologic	3:15-4 Hot Top Session Congres	oic	4:45 - 5:30 PM The Final Word Congress Hall D4	6 2 S P C N R	6:45 - 6:45 PM 6023 6cientific Program Committee Geeting Coom 20 Pipen to ISPE Thembers.	

## PRE-CONFERENCE Program Schedule

#### 2:00 - 6:00 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Only required if you need to upload your presentation, or update/replace an already-uploaded presentation. Please complete uploads 24-hours in advance of your session.

#### LANYARD SELECTION

Please choose the color lanyard that best illustrates your comfort level with interactions at the conference.

Green: Ok to Contact, e.g. hug or handshake

Yellow: Minimal Contact, e.g. fist bump

Red: No Close Contact, e.g. no touching, maintain social distancina

#### 4:00 - 6:00 PM

#### **REGISTRATION / HALL F6-F7 LOBBY**

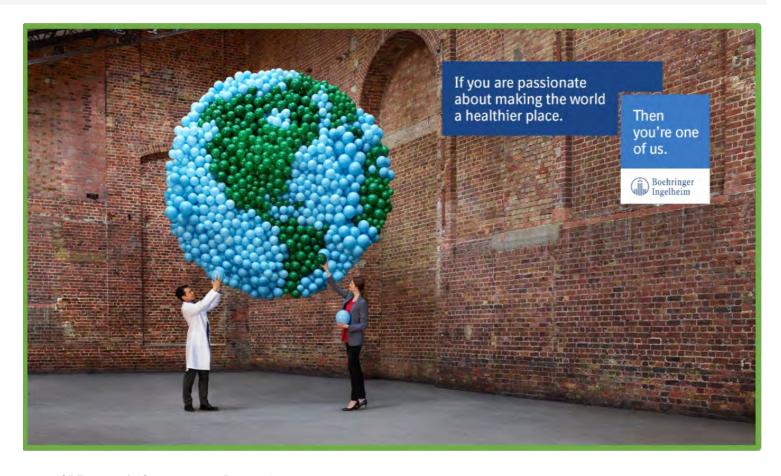
If you plan to attend a course on Wednesday morning, it is strongly recommended that you check-in Tuesday evening to avoid delays.

#### MASK WEARING MANDATE

Unless presenting, eating or drinking, mask wearing is required at all times during the conference and at all ISPEflagged events (this also means social events) using Type IIR or FFP2 (or equivalent or better) grade masks. You might forfeit your conference registration if you are not in compliance. For your convenience, ISPE will provide free masks at the registration desk.

#### **ISPE EXCHANGE**

With this exclusive membership benefit, 3,500+ members connect with peers, share ideas and get involved within ISPE communities. Members can also participate in our Mentor Match and search for colleagues within the membership directory.



# **▼**

## Pre-conference Program Schedule

#### WEDNESDAY, AUGUST 24

#### 7:30 AM - 6:00 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Only required if you need to upload your presentation, or update/replace an already-uploaded presentation. Please complete uploads 24 hours in advance of your session.

#### 7:30 AM - 6:00 PM

**REGISTRATION / HALL F6-F7 LOBBY** 

#### 7:30 AM - 6:00 PM

#### **LACTATION ROOM / MEETING ROOM 28**

Sponsored by EPI Excellence, LLC

#### 7:30 AM - 6:00 PM

### PRE-CONFERENCE COURSES - VIRTUAL COURSES

The following courses will be made available online shortly after the conclusion of ICPE.

## Cancer Pharmacoepidemiology and Genomics: What You Should Know in the Era of Precision Medicine

**FACULTY** 

Bruce Carleton, FISPE | Andrew Freedman, FISPE Gillian Bartlett-Esquilant, FISPE | Kelly Filipski Geoffrey Liu, FISPE | Donna Rivera, FISPE Leah Sansbury, FISPE | Wei Zhou, FISPE

### How to Design a Real-World Study of Biologics Including Biosimilars

**FACULTY** 

Jaclyn Bosco, FISPE | Rohini Hernandez Thijs Giezen | Gianluca Trifiro, FISPE

### Introduction to Pharmacogenomics & Precision Medicine for Pharmacoepidemiologists

**FACULTY** 

Amalia Issa, FISPE | Gillian Bartlett-Esquilant, FISPE Bruce Carleton, FISPE | Stephen Kimmel, FISPE Leah Sansbury, FISPE

Anke-Hilse Maitland-van der Zee, FISPE

#### Pediatric Pharmacoepidemiology

FACULTY

Tamar Lasky, FISPE | Jenny Sun | Ann McMahon, FISPE Rima Izem | Steven Bird | Mehmet Burcu | Daniel Horton

#### Regulatory Pharmacoepidemiology

**FACULTY** 

Danica Marinac-Dabic, FISPE | Gerald Dal Pan, FISPE Katherine Donegan

#### 8:30 AM - 12:30 PM

### PRE-CONFERENCE COURSES - HALF-DAY MORNING COURSES

Pre-purchase required.

### Pharmacoepidemiologist's Toolbox for Professional Empowerment – *Room C1M5*

**FACULTY** 

Caitlin Knox | Juan Hincapie-Castillo Mary Beth Ritchey, FISPE | Christopher Rentsch Yola Moride, FISPE

#### Principles of Pharmacoepidemiology – Room C1M0

**FACULTY** 

Tobias Gerhard, FISPE | Almut Winterstein, FISPE Anton Pottegård

#### Risk Minimization and Communication: Science-based Approaches and Case Studies for Designing and Evaluating Effective Interventions for the Safe Use of Medicinal Products – Room C1M2

FACULTY

Priya Bahri | Meredith Smith, FISPE | Peter Mol Elaine Morrato

#### 12:30 - 2:00 PM

#### **LUNCH ON YOUR OWN**

There are limited dining choices within walking distance of the Bella Center. Please plan to purchase food at one of the popup cafes provided for your convenience.

#### 1:00 - 5:00 PM

### ISPE BOARD OF DIRECTORS' MEETING – MEETING ROOM 18 & 19

Open to all ISPE members; please contact info@pharmacoepi.org if you are interested in attending this meeting.

## RE-CONFERENCE Program Schedule

#### 2:00 - 6:00 PM

#### PRE-CONFERENCE COURSES -

HALF-DAY AFTERNOON COURSES

Prepurchase required.

#### Adherence to Medication – Conference Room C1MO

Jacqueline Hugtenburg | Robert Gross, FISPE Julie Lauffenburger | Job Van Boven

#### Foundations in Causal Inference -Conference Room C1M4

**FACULTY** 

Joshua Gagne, FISPE | Geetha lyer

#### Introduction to Machine Learning for Pharmacoepidemiologists – Conference Room C1M5

**FACULTY** 

Lisa Weiss | Dana Teltsch | Harriet Dickinson Victoria Strauss | Orla Doyle | Kathryn Rough Joseph Zabinski

#### Practical Skills in Protocol Writing and Statistical Analytic Programming Relevant to Pharmacoepidemiology - Congress Hall D2

**FACULTY** 

Christian Hampp, FISPE | Jessica Jalbert Mingfeng Zhang | Nicole PrattSoko | Setoguchi, FISPE

#### Pragmatic Trials: Design, Methods, and Implementation - Room C1M2

**FACULTY** 

Jennifer Christian, FISPE | Priscilla Velentgas Cynthia Girman, FISPE | Anne Trontell Bodil Kjeldgaard Vistisen | Margaret Mazzeo

#### Using Field Studies to Value-add in Pharmacoepidemiology - Meeting Room 20

Katja Taxis, FISPE | Lisa Pont, FISPE | Veronika Wirtz Anna Birna Almarsdottirarm

#### Using Pharmacoepidemiology Database Resources to Address Drug Safety Research – Congress Hall D5

FACULTY

Kevin Haynes, FISPE | Daniel Beachler | Gillian Hall, FISPE Sudha Raman

## RE-CONFERENCE Program Schedule

#### 5

#### 7:30 AM - 6:00 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Please arrive 24 hours before your presentation start time to upload or check your presentation.

#### 7:30 AM - 6:00 PM

**REGISTRATION / HALL F6-F7 LOBBY** 

#### 7:30 AM - 6:00 PM

#### **LACTATION ROOM / MEETING ROOM 28**

Sponsored by EPI Excellence, LLC

#### PRE-CONFERENCE COURSES -

HALF-DAY MORNING COURSES

Prepurchase required.

#### Intermediate Pharmacoepidemiology: Approaches to Unmeasured Confounders – Conference Room C1M5

**FACULTY** 

Michele Jonsson Funk, FISPE | Sudha Raman Jennifer Lund, FISPE | Mugdha Gokhale | Jessica Young Til Stürmer, FISPE

#### Introduction to Drug Utilization Research and the Conduct of Real-World Drug Utilization Studies: Describe and Compare - Meeting Room 20

**FACULTY** 

Gillian Caughey | Mina Tadrous | Lisa Pont, FISPE Jodie Hillen | Bjorn Wettermarkarm, FISPE

#### Modern Pregnancy Pharmacoepidemiology: Emulating Target Trials - Congress Hall D2

Andrea Margulis, FISPE | Krista Huybrechts, FISPE Brian Bateman | Sonia Hernandez-Diaz, FISPE

#### New Frontiers for Pharmacoepidemiology: Using New and Mixed Methods for Data Collection - Congress Hall C1M4

**FACULTY** 

Nancy Dreyer, FISPE | Christina Mack, FISPE William Dixon | Nabarun Dasgupta | Rachel Williams

#### Pharmacovigilance and Signal Detection – Conference Room C1M0

**FACULTY** 

Judith Maro | Niklas Noren | Gregory Powell Monica Munoz

#### Propensity Scores in Pharmacoepidemiology – Congress Hall D5

FACULTY

John Seeger, FISPE | Jeremy Rassen, FISPE

#### Intermediate/Advanced Topics in Vaccine Epidemiology – Room C1M2

**FACULTY** 

Cathy Panozzo | Jennifer Gerber | Hui-Lee Wong Daina Esposito | Kaatje Bollaerts | Hector Izurieta Deshayne Fell | Rebecca Chandler

#### 12:30 - 2:00 PM

#### **LUNCH ON YOUR OWN**

There are limited dining choices within walking distance of the Bella Center. Please plan to purchase food at one of the popup cafes provided for your convenience.

#### 12:45 - 2:00 PM

#### **NEW MEMBER & EARLY-STAGE INVESTIGATOR LUNCH - ROOM C1M5**

By invitation only; registration required.

#### 2:00 - 6:00 PM

#### PRE-CONFERENCE COURSES: HALF-DAY AFTERNOON COURSES

Prepurchase required.

#### Advanced Drug Utilization Research -Conference Room C1M2

**FACULTY** 

Gillian Caughey | Mina Tadrous | Katja Taxis, FISPE Petra Denig, FISPE

#### Applied Sensitivity Analyses in Pharmacoepidemiology Database Studies -Congress Hall D5

**FACULTY** 

Sebastian Schneeweiss, FISPE | Jeremy Rassen, FISPE Nicolle Gatto | Elizabeth Garry

## Pre-conference Program Schedule

Medical Device Epidemiology – Meeting Room 20 FACULTY

Mary Beth Ritchey, FISPE | Christina Mack, FISPE Mackenzie Herzog | Paul Coplan, FISPE

Advanced Pharmacoepidemiology Methods: Mitigating Missing Data Concerns with External or Internal Subset Validation Populations – Conference Room C1M1

**FACULTY** 

Judith Maro | Lourens Bloem | Jenny Sun Corinne de Vries | Janick Weberpals

Real-World Evidence (RWE) Generation for Rare Disease Drug Development and Orphan Drug Approvals – Room C1M4 FACULTY

Emily Bratton | Rima Izem | Xabier Garcia de Albeniz | Jie Li

Weighing the Benefits & Risks: The Science and Methods of Benefit-Risk Assessment in Drug Development – Conference Room C1MO FACULTY

Alicia Gilsenan, FISPE | Juhaeri Juhaeri Christine Poulos | Bennett Levitan

#### 6:00 - 7:30 PM

#### WELCOME RECEPTION / HALLE-SOUTH

Sponsored by IBM Watson Health

Vin Lo Re, FISPE, ISPE President Anton Pottegård, Chair ICPE 2022 Scientific Program Committee Jesper Hallas, FISPE, Co-Chair ICPE 2022 Scientific Program Committee

### REGIONAL INTEREST GROUP & ACADEMIC SHOWCASE

Brigham and Women's Hospital Division of Pharmacoepidemiology & Pharmacoeconomics

London School of Health and Tropical Medicine

McGill University, Department of Epidemiology, Biostatistics, and Occupational Health

University of Florida, College of Pharmacy
Department of Pharmaceutical Outcomes and Policy

University of North Carolina at Chapel Hill

## Most diseases aren't siloed or stagnant. So why should your research be?





#### U G 2

#### 7:00 AM - 6:00 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Only required if you need to upload your presentation, or update/replace an already-uploaded presentation. Please complete uploads 24-hours in advance of your session.

#### 7:00 AM - 6:00 PM

**REGISTRATION / HALL F6-F7 LOBBY** 

#### 7:30 AM - 6:00 PM

**LACTATION ROOM / MEETING ROOM 28** Sponsored by EPI Excellence, LLC

#### 7:00 - 8:00 AM

**COFFEE WITH EXHIBITORS / HALL C** 

#### 7:00 - 8:00 AM

Poster Session A set-up - Hall C Spotlight Poster Session set-up - Hall E South

#### 8:00 AM - 6:00 PM

EXHIBITS/POSTER SESSION A - HALL C

#### 8:00 - 8:30 AM

#### **WELCOME / CONGRESS HALL D4**

Vin Lo Re, FISPE, ISPE President Anton Pottegård, Chair ICPE 2022 Scientific Program Committee Jesper Hallas, FISPE, Co-Chair ICPE 2022 Scientific Program Committee

#### 8:30 - 10:00 AM

#### **KEYNOTE PLENARY**

Strategies for Successful Mass Vaccination Rollout: Balancing Science, Politics, Communication and Trust - Congress Hall D4

KEYNOTE SPEAKER

Søren Brostrøm, MD, PhD, MPA

Director General, Danish Health Authority

Dr. Søren Brostrøm, Director General of the Danish Health Authority, will discuss strategies for successful mass vaccination rollout primarily from the Danish experience, but also drawing on international perspectives. The focus will be on the importance, from his experience during the pandemic, of 'evidence-based government' and 'radical transparency' and how not everything can be simplified to just 'communication' but is instead about having a good case to communicate, i.e., that science is more important than communication skills.

#### 10:00 - 10:30 AM

**BREAK WITH POSTERS & EXHIBITORS - HALL C** 

#### 10:30 AM - 12:00 PM

#### **CONCURRENT SESSIONS:**

SYMPOSIA & WORKSHOPS

Using Real-World Data and Pharmacoepidemiologic Methods to Advance the Science of Deprescribing Research [26] – C1M5 Shahar Shmuel | Daniela Moga | Joshua Niznik Julie Lauffenburger | Lucas Morin | Danijela Gnjidic Xiaojuan Li | Kaley Hayes (United States)

Post-authorization Regulatory Strategies to Evaluate Drug Safety in Pregnancy:
How to Optimize the Design of Registries & Database Studies [27] – Congress Hall D5
Sonia Hernandez-Diaz FISPE | Leyla Sahin
Christina Chambers | Andrea Margulis FISPE
Krista Huybrechts FISPE | Corinne de Vries (United States)

Representing and Leveraging Heterogeneity Between Data Sources in Multi-database Pharmacoepidemiologic Studies [28] – C1MO Rosa Gini | Romin Pajouheshnia | Gillian Hall FISPE Robert Platt | Soko Setoguchi FISPE Susana Perez-Gutthann FISPE | Corinne Willame (Italy)

#### Data Harmonization, Standardization, and Quality Assessment in Distributed Health Data Networks: Lessons from Around the World [29] –

Congress Hall D2

Jeffrey Brown | Lisa Lix | Judith Maro | Matvey Palchuk Robert Reynolds | Xavier Kurz (United States)

#### Methodological Challenges in Assessing the Impact of Digital Technologies on Patient Adherence [30] – C1M1

Bjorn Wettermark, FISPE | Cristina Ghiciuc | Job Van Boven Monique Elseviers | Gaye Hafez | Catherine Goetzinger Maria Herdeiro | Enrica Menditto Francisca Leiva-Fernandez | Maria Dimitrova Zorana Kovačević | Virginia Aguiar Leiva (Sweden)

#### 12:00 - 1:30 PM

### LUNCH/POSTER SESSION A/EXHIBITS - HALL C

Sponsored by AstraZeneca

#### 12:00 - 1:30 PM

#### ISPE COMMITTEE MEETINGS

Open to all attendees; lunch available.

Education - Meeting Room 20

Public Policy - Meeting Room 18

Global Development - Meeting Room 19

#### 12:15 - 1:15 PM

#### SPOTLIGHT POSTER SESSION A - HALL E SOUTH

Adherence

**ASPEN** 

**Biologics** 

**BRACE** 

Cancer

Comparative Effectiveness Research

#### 1:30 - 3:00 PM

#### **CONCURRENT SESSIONS:**

**ORAL PRESENTATIONS** 

### A Tivoli Gardens Distillery of Applied Methods – Room C1M5

#### 1:30 PM

Inverse Probability Weighting or Multiple Imputation for Nonmonotone Missing Data? [31]
Rachael Ross | Stephen Cole | Daniel Westreich
Julie Daniels | Jeffrey Stringer | Jessie Edwards
(United States)

#### 1:45 PM

Sampling Biases in Analyses of Prescription Durations [32] Henrik Stovring | Anton Pottegård Jesper Hallas FISPE (Denmark)

#### 2:00 PM

The Impact Of Parametric Assumptions on the Bias-variance Tradeoff for Causal Analysis of Time-to-event Outcomes [33]
Andrew Allmon | Samantha Eiffert
Alexander Breskin (United States)

#### 2:15 PM

Successful Implementation of Inverse-probability-ofscreening Weights to Address Differential Outcome Screening: Effects of Statin Persistence on Breast Cancer Risk in Denmark [34]

Sophie Mayer | Jesper Hallas FISPE | Jessie Edwards Louise Henderson | Til Stürmer FISPE (United States)

#### 2:30 PM

Analytic Methods for Elucidating Continuous Dose-response Associations in the Presence of Spike-effects: Avoiding the Illusion of a Safe Dose [35] Andrew Wiese | Carlos Grijalva | Margaret Adgent Sarah Osmundson | Amelie Pham | Sharon Phillips Ed Mitchel | Andrew Spieker (United States)

#### 2:45 PM

Antidepressant Drug-Drug-Drug Interactions and Unintentional Traumatic Injury: Pharmacoepidemiologic Screening to Detect Three-way Drug Interaction Signals [36] Charles Leonard, FISPE | Cheng Chen | Sean Hennessy Colleen Brensinger | Emily Acton | Warren Bilker Todd Miano | Thanh Phuong Pham Nguyen (United States)

#### Antidiabetics - Not Just About Diabetes -Congress Hall D2

#### 1:30 PM

Incretin-based Drugs and the Prevention of Chronic Obstructive Pulmonary Disease Exacerbations Among Patients with Type 2 Diabetes [37] Richeek Pradhan | Sally Lu | Hui Yin | Oriana Hoi Yun Yu Pierre Ernst | Samy Suissa | Laurent Azoulay (Canada)

#### 1:45 PM

Association Between Sodium Glucose Co-transporter 2 Inhibitors and Incident Glaucoma in Patients with Type 2 Diabetes: A Multi-institutional Cohort Study in Taiwan [38] Shih-Chieh Shao | Edward Lai | Jia-Horung Hung (Taiwan)

#### 2:00 PM

Heterogeneous Treatment Effect of Glucagon-like Peptide 1 Receptor Agonists on Asthma/COPD exacerbation: Machine-learning Analysis of Two Nationwide Cohorts [39]

Tiansheng Wang | John Buse | Corinne Keet Alexander Keil | Richard Wyss | Virginia Pate Michele Jonsson Funk, FISPE | Michael Kosorok (United States)

#### 2:15 PM

Risk of Hepatic Events Associated with Sodiumglucose cotransporter-2 Inhibitors in Patients with Type 2 Diabetes: A Nationwide Cohort Study [40] Sungho Bea | Han Eol Jeong | Sohee Park | Yoosoo Chang Dong Hyun Sinn | Oriana Hoi Yun Yu | Ju-Young Shin (Republic of Korea)

#### 2:30 PM

Incretin-based Drugs and the Incidence of Prostate Cancer Among Patients with Type 2 Diabetes [41] Sally Lu | Hui Yin | Oriana Hoi Yun Yu Laurent Azoulav (Canada)

#### 2:45 PM

Association of Glucagon-like peptide-1 Receptor Agonists with Serious Liver Events: Scandinavian Cohort Study [42] Arvid Engström | Victor Wintzell | Mads Melbye Henrik Svanström | Björn Eliasson | Soffia Gudbjörnsdottir Kristian Hveem | Christian Jonasson (Sweden)

#### From Motherhood to Childhood. Moody to Healthy - Congress Hall D5

Use of Selective Serotonin Reuptake Inhibitors During Pregnancy and the Risk of Preterm Birth [43] Guy Amit | Alice Tang | Chen Yanover | Maytal Bivas-Benita Pinchas Akiva | Irena Girshovitz | Brian Le Tomiko Oskotsky (Israel)

#### 1:45 PM

Lisdexamfetamine in Early Pregnancy and Risk of Major Congenital Malformations [44] Jacqueline Cohen | Carolyn Cesta | Øystein Karlstad Johan Reutfors | Kari Furu (Norway)

Psychostimulant Use During Pregnancy and the Risk of Neurodevelopmental Disorders in Children [45] Elizabeth Suarez | Brian Bateman Sonia Hernandez-Diaz FISPE | Loreen Straub | Yanmin Zhu Helen Mogun | Krista Huybrechts FISPE (United States)

Antidepressant Treatment in Pregnancy and Maternal Mental Health in the Postpartum Year: A Danish Registry Linkage Study in Pregnant Women with Obsessive-compulsive Disorder [46] Nhung Trinh | Birgitte Dige Semark | Trine Munk-Olsen Xiaoqin Liu | Liselotte Voqdrup Petersen Angela Lupattelli (Norway)

#### 2:30 PM

Topiramate During Pregnancy and the Risk of Neurodevelopmental Disorders in Children [47] Sonia Hernandez-Diaz FISPE | Loreen Straub Brian Bateman | Elizabeth Suarez | Yanmin Zhu Helen Mogun | Page Pennell | Krista Huybrechts, FISPE (United States)

#### 2:45 PM

Association of Prenatal Antidepressant Exposure with Trajectories and Acceleration of Body Mass Index in Children from 6 Week to 8 Years of Age [48] Angela Lupattelli | Michele Pedroncelli | Sina Rostami Nhung Trinh (Norway)

#### Challenges in Healthy Aging - C1MO

#### 1:30 PM

Serious Hypoglycemia and the Risk of Dementia: A Population-based Cohort Study Using Exposure Density Sampling [49]

Wajd Alkabbani | Colleen Maxwell | Ruth Ann Marrie Suzanne Tyas | Iliana Lega | John-Michael Gamble (Canada)

#### 1:45 PM

Evaluation of Fall-related Injuries Following a Potential Calcium Channel Blocker — Loop Diuretic Prescribing Cascade [50]

Scott Vouri | Grace (Hsin Min) Wang | Earl Morris Laurence Solberg | Michael Daniels | Carl Pepine Todd Manini | Daniel Malone (United States)

#### 2:00 PM

Translation of a Medicare Claims-based Frailty Index from International Classification of Diseases 9th Revision to 10<sup>th</sup> Revision [51]

Emilie Duchesneau | Shahar Shmuel | Keturah Faurot Jihye Park | Musty Allison | Virginia Pate | Alan Kinlaw Til Stürmer FISPE (United States)

#### 2:15 PM

Tobacco Smoking, Intensity, and Duration are Associated with Frailty Among People with HIV [52] Stephanie Ruderman | Heidi Crane | Allison Webel Annette Fitzpatrick | Michelle Odden | Paul Crane Amanda Willig | Robin Nance (United States)

#### 2:30 PM

Impact of Different Poststroke Antihypertensive Regimens on Cardiovascular Outcomes and Mortality in People with Dementia: Four Continents for Dementia (4C4D) Study [53] Jenni Ilomaki | Xiwen Simon Qin | Celine SL Chui Gang Fang | Wallis Lau | Stephen J. Wood | Stella Kim Miriam TY Leung (Australia)

#### 2:45 PM

Frailty-gradient Risk of Mortality Comparing Primary Endocrine Therapy and Surgery in Treating Women with Early Breast Cancer [54] Yubo Wang | Douglas Steinke, FISPE | Sean Gavan Li-Chia Chen (United Kingdom)

#### Moving from Trials to Real-World Evidence, Back and Forth - Congress Hall D4

#### 1:30 PM

Using Bias Correction Methods with Hybrid Randomized Controlled Trial (RCT) Plus Real World (RW) Controls to Replicate Results of a Phase lib RCT of Baricitinib for Rheumatoid Arthritis (RA) [55] Anita Loughlin | Kristin Sheffield | Oksana Pugach Mingyang Shan | Douglas Faries | Paul Lakin Samantha Kerti | Zhanglin Cui (United States)

#### 1:45 PM

Better Analysis of RCTs [56] Tim Feeney | Stephen Cole (United States)

#### 2:00 PM

Risk Ratios versus Hazard Ratios in Comparative Effectiveness Research: An Illustration Using Clinical Trial Data [57] Chase Latour | I-Hsuan Su | Megan Delgado | Virginia Pate Charles Poole | Jessie Edwards | Til Stürmer, FISPE Jennifer Lund, FISPE (United States)

#### 2:15 PM

Differential Misclassification of Overdose Safety in a Prominent Comparative Effectiveness RCT Comparing Buprenorphine and Naltrexone for Opioid Dependence [58]

Nabarun Dasgupta | Elizabeth Ajazi | Todd Schwartz Stephen Marshall (United States)

#### 2:30 PM

Predicting Treatment Effects of a New Drug in a Target Population Based on Randomized Controlled Trial Results [59] HoJin Shin | Shirley Wang, FISPE | Dae Kim Mufaddal Mahesri | Lily Bessette | Joshua Gagne, FISPE Sebastian Schneeweiss, FISPE | Mehdi Najafzadeh (United States)

#### 2:45 PM

How Choosing the Risk Ratio or the Risk Difference Changes Sufficient Adjustment Sets for External Validity [60] Michael Webster-Clark | Alexander Keil (Canada)

#### Medicating for Two: Pregnancy, Maternal, and Infant Outcomes – C1M2

Does Treating Genital Herpes Infection During Pregnancy Reduce the Risk of Preterm Delivery? A Prospective Cohort Study of 89,000 Pregnant Women [61] DeKun Li | Jeannette Ferber | Roxana Odouli Piero Garzaro | Lyndsay Avalos | Charles Quesenberry (United States)

#### 1:45 PM

Prenatal Antibiotic Exposure and Subsequent Infections in Infancy: A Register-based Cohort Study in Sweden with Sibling Analysis [62] Aya Nakitanda | Helle Kieler | Ingvild Odsbu | Samuel Rhedin Catarina Almqvist | Björn Pasternak | Laura Pazzagli (Sweden)

#### 2:00 PM

Evaluating the Safety of Antiemetic Combination Use on Pregnancy Loss [63] Thuy Thai | Joshua Brown | Stephan Schmidt Judith Maro | Sonja Rasmussen | Almut Winterstein, FISPE (United States)

#### 2:15 PM

COVID-19 Vaccines During Pregnancy and Birth Defects: Preliminary Data from V-Safe COVID-19 Vaccine Pregnancy Registry, United States 2021 [64] Jennita Reefhuis | Lauren Zauche | Sabrina Madni Janet Cragan | Cynthia Moore | Regina Simeone John Nahabedian | Emily Petersen (United States)

#### 2:30 PM

Initiation of Atenolol versus Methyldopa During Pregnancy and the Risk of Intrauterine Growth Restriction/small for Gestational Age [65] Brian Bateman | Yanmin Zhu | Krista Huybrechts, FISPE Sonia Hernandez-Diaz, FISPE | Lockwood Taylor Rita Ouellet-Hellstrom | Yong Ma Yandong Qiang (United States)

#### 2:45 PM

Characteristics and Medication Use Patterns of Pregnancies with COVID-19 in the Sentinel System [66] Mayura Shinde | Jennifer Lyons | Susan Andrade Austin Cosgrove | Jolene Damon Elizabeth Messenger-Jones | Danijela Stojanovic Ben Wong (United States)

#### 3:00 - 3:30 PM

BREAK/POSTERS/EXHIBITS - HALL C

#### 3:30 - 5:00 PM

### **CONCURRENT SESSIONS:**

SYMPOSIA & WORKSHOPS

Considerations of Misclassification and Confounding on COVID-19 Vaccines Effectiveness Studies – A Vaccine SIG Endorsed Symposium [67] – Congress Hall D2 John Seeger, FISPE | Michele Jonsson Funk, FISPE J. Bradley Layton, FISPE | Tainya Clarke (United States)

Advanced Methods for Covariate Balancing: Going Beyond Propensity Score Matching and Weighting Using Optimization Techniques [68] -Room C1M0

Stephen Johnston | Pranjal Tewari | Paul Coplan, FISPE (United States)

Methods and Considerations for Hypothesisfree Signal Detection Studies Accommodating Various Types of Medications, Populations, and Regions [69] - Room C1M1

Miyuki Hsing-Chun Hsieh | Edward Lai | Andrew Bate Nicole Pratt | Nam-Kyong Choi | Judith Maro Lars Christian Lund | Sengwee Toh (Taiwan)

Meeting the Need for Research on Drug Safety During Lactation: An Overview of Approaches [70] - Congress Hall D5 Kristin Palmsten | Bandoli Gretchen | Christina Chambers Hedvig Nordeng, FISPE | Shinya Ito | Marie Teil Lynne Yao (United States)

It Takes a Village: Strategic Global Collaborations to Advance RWE within ISPE 1711 - C1M5 Helga Gardarsdottir, FISPE | Shirley Wang, FISPE Susana Perez-Gutthann, FISPE | Carla Rodriguez-Watson

Olaf Klungel, FISPE | Donna Rivera, FISPE (Netherlands)

#### 5:00 - 5:15 PM

BREAK

#### 5:15 - 6:45 PM

#### **CONCURRENT SESSIONS:**

**ORAL PRESENTATIONS** 

#### Methods – Comparators, Controls, and Unmeasured Confounding - Room C1M5

#### 5:15 PM

Using Active Comparators in Self-controlled Case Series: An Application to Two Studies in the Clinical Practice Research Datalink 1721 Anna Schultze | Jeremy Brown | John Logie Marianne Cunnington | Stephen Evans | Ian Douglas Nicholas Galwey (United Kingdom)

#### 5:30 PM

Negative Control Outcomes to Assess the Comparability of Biologics versus Small-molecule Therapeutics for Osteoporosis: Considerations for Differential Non-adherence [73] Lydia Feinstein | Alexander Breskin | Peter S. Samai M. Alan Brookhart (United States)

#### 5:45 PM

**Evaluation of Methods for Unmeasured Confounding** Control in Pharmacoepidemiology Using Healthcare Databases: An Empirical Study Concerning Drugs Inducing Prematurity [74]

Chi Hong Duong | Romain Demailly | Sylvie Escolano Anne Thiébaut | Pascale Tubert-Bitter | Ismaïl Ahmed (France)

#### 6:00 PM

Alternative Analytic and Matching Approaches for the Prevalent New-user Design: A Simulation Study [75] Michael Webster-Clark | Panagiotis Mavros | Elizabeth Garry Til Stürmer | Shahar Shmuel | Jessica Young Cynthia Girman, FISPE (Canada)

#### 6:15 PM

Proton Pump Inhibitors and Myocardial Infarction: An Application of Active Comparators in a Self-controlled Case Series [76] Angel Wong | Celine SL Chui | Ka Shing Cheung Jeremy Brown | Ian Douglas | Ian Wong | Esther W. Chan (United Kingdom)

#### 6:30 PM

Advantages of Splitting Switchers and New Users in the Prevalent New User Design [77] Jessica Young | Michael Webster-Clark | Panagiotis Mavros Til Stürmer, FISPE | Elizabeth Garry | Shahar Shmuel Cynthia Girman, FISPE (United States)

#### Pharmacoepidemiologic Methods and SARS-CoV-2 - Congress Hall D4

#### 5:15 PM

Influence of Incomplete Death Information on Cumulative Risk Estimates in United States Claims Data 1781

Julie Barberio | Timothy Lash | Ashley Niami Rachel Patzer | Christopher Kim | M. Alan Brookhart David Gilbertson | Brian Bradbury (United States)

#### 5:30 PM

Estimating Real-World Outcomes Under a Rapidly Evolving Treatment Paradigm: Dexamethasone and Inpatient Mortality Among US Hospitalized COVID-19 Patients [79] Elizabeth Garry | Imaani Easthausen | Sarah Vititoe Andrew Weckstein | Aloka Chakravarty | Tamar Lasky Marie Bradley | Silvia Perez-Vilar (United States)

#### 5:45 PM

Adjusting for Calendar Time in Analyses of COVID-19 Vaccine Safety and Effectiveness: A Simulation Study [80] Lars Christian Lund | Jesper Hallas, FISPE | Henrik Stovring (Denmark)

#### 6:00 PM

Evaluating the Comparative Effectiveness and Safety of Repurposed Drugs for COVID-19 [81] Eng Hooi (Cheryl) Tan | Dalia Dawoud | Faaizah Arshad Jennifer Lane | James Weaver | Talita Duarte-Salles Scott DuVall | Thomas Falconer (United Kingdom)

#### 6:15 PM

Adjusting for Data Observation Delay in near Real-time Safety Surveillance of COVID-19 Vaccines Using Administrative Claims Databases [82] Yoganand Chillarige | Mao Hu | Yuhui Feng | Xiangyu Shi Cindy Zhou | Hui-Lee Wong | Yixin Jiao | Patricia Lloyd (United States)

#### 6:30 PM

Near Real Time Safety Surveillance of COVID-19 Vaccines in the UK [83] Katherine Donegan | Jemma Walker | Nick Andrews (United Kingdom)

#### Drug Utilization Studies in Cardiovascular Disease and Diabetes - Congress Hall D5

#### 5:15 PM

UK Trends in Prescribing Preferences for Antidiabetic Medications Among Type 2 Diabetes Patients with and without Chronic Kidney Disease, 2006-2020 [84] Julia Liaw | Meera Harhay | Soko Setoguchi, FISPE Tobias Gerhard, FISPE | Chintan Dave (United States)

#### 5:30 PM

Contemporary Trends in the Utilization of Second-line Pharmacological Therapies for Type 2 Diabetes in the United States [85]

Devin Abrahami | Elvira D'Andrea | Seoyoung Kim Julie Paik | Deborah Wexler | Elisabetta Patorno (United States)

#### 5:45 PM

Sex Disparities in Treatment Patterns After Metformin Initiation Among Patients with Type 2 Diabetes Mellitus [86] Monika Oktora | Stijn De Vos | Sieta de Vries | Eelko Hak Petra Denig, FISPE (Netherlands)

#### 6:00 PM

Continued Potassium Supplementation Use Following Loop Diuretic Discontinuation in Older Adults: An Evaluation of a "Prescribing Cascade Relic" [87] Grace (Hsin Min) Wang | Steven Smith | Earl Morris Scott Vouri (United States)

#### 6:15 PM

Trends and Prescription Patterns of Medications for Secondary Stroke Prevention in Denmark, 2013-2018 [88]

Nils Skajaa | Devin Abrahami | Kasper Adelborg Henrik Toft Sørensen | Julie Lauffenburger | Elvira D'Andrea Lee Schwamm | Elisabetta Patorno (Denmark)

#### 6:30 PM

The Potential Impact of the Supplemental Nutrition Assistance Program (SNAP) on Adherence to Antihypertensive Medications [89] Macarius Donneyong (United States)

#### Pediatric Medicine Use: Safe Kids in an Uncertain Landscape – Room C1MO

#### 5:15 PM

Trends in High-risk Prescribing to US Pediatric Dental Patients, 2012-2019 [90] Katherine Kim | Tumader Khouja | Charlesnika Evans Gregory Calip | Jacqueline Burgette | Walid Gellad Katie Suda (United States)

#### 5:30 PM

Identifying Acute Neuropsychiatric Events in Children and Adolescents [91] James Antoon | James Feinstein | Carlos Grijalva Yuwei Zhu | Emily Dickenson | Justine Stassun Jakobi Johnson | Mert Sekmen (United States)

#### 5:45 PM

Comprehensive Assessment of Paediatric SARS-CoV-2 Infection: A Danish Population-based Cohort Study [92] Helene Kildegaard | Lars Christian Lund | Mikkel Hoeilund Lone Graff Stensballe | Anton Pottegård (Denmark)

#### 6:00 PM

Inappropriate Antibiotic Prescriptions and the Risk of Adverse Drug Events Among Children Treated for Common Infections [93]
Anne Butler | Derek Brown | Michael Durkin John Sahrmann | Katelin Nickel | Caroline O'Neil Margaret Olsen | David Hyun (United States)

#### 6:15 PM

KiDSafe – Improving Medication Safety for Children and Adolescents: Implementation and Evaluation of a New Form of Care [94]

Irmgard Toni | Jochem König | Dorothée Malonga Makosi Michael S. Urschitz | Wolfgang Rascher | Antje Neubert (Germany)

#### 6:30 PM

Comparative Safety of Tozinameran in Children versus Adolescents: An Analysis of First Pharmacovigilance Data [95] Francois Montastruc | Clément Karsenty Durrieu Geneviève | Clara Flumian | Laurent Chouchana Camille Brehin (France)

#### Smörgåsbord – Room C1M1

#### 5:15 PM

Association Between Children Prescription Drug Costs for New Medications and Their Parent's Adherence to Chronic Medication [96] Julie Lauffenburger | Renee Barlev | Niteesh Choudhry (United States)

#### 5:30 PM

The Impact of Using Pictorial Aids in Caregivers' Understanding of Patient Information Leaflets of Pediatric Pain Medications:

A Quasi-experimental Study [97]

Aljoharah Algabbani | Khalid Alzahrani | Sarah Sayed Meshael Alrasheed | Deema Sorani | Omar Almohammed Amani Algahtani (Saudi Arabia)

#### 5:45 PM

Does Left Atrial Dilation Predict Atrial Fibrillation Severity and Post-ablation Outcomes Among Individuals with Atrial Fibrillation? [98] Paul Coplan, FISPE | Amit Doshi | Liat Tsoref Yariv Avraham Amos | Mati Amit | Charlene Wong Guy Cafri | Rahul Khanna (United States)

#### 6:00 PM

Patient Groups in Rheumatoid Arthritis Identified by Deep Learning Respond Differently to Biologic or Targeted Synthetic Disease Modifying Antirheumatic Drugs [99] Theresa Burkard | Maria Kalweit | Andrea Burden Thomas Hügle (Switzerland)

#### 6:15 PM

Anticoagulant Therapy and Risk of Kidney Disease – A Nationwide Cohort Study [100]

Ane Emilie Friis Vestergaard | Christian Christiansen
Simon Jensen | Kasper Adelborg | Henrik Birn
Uffe Heide-Jørgensen (Denmark)

#### 6:30 PM

Costs Associated with Healthcare Resources
Utilization Among Empagliflozin vs GLP-1RA Initiators
in Routine Clinical Care in Denmark [101]
Reimar Thomsen | Lotte Brix Christensen | Johnny Kahlert
Jakob Knudsen | Anastasia Ustyugova
Susanne Sandgaard | Pia Holmgaard | Lars Ehlers (Denmark)

#### 5:15 - 6:45 PM

### LIGHTNING FORUM SESSION 1 - ROOM C1M2

#### Cancer

#### 5:15 PM

Risk of Myasthenia Gravis with Tyrosine Kinase Inhibitors: A Disproportionality Analysis from Vigibase and AERS Databases [102]
Luis Velez-Nandayapa | Amit Saxena | Miguel Izquierdo Maria Nicolaides | Pierre de Zeeuw | Alicia Rossiter Johannes Eisinger | Christiane Michel (Switzerland)

#### 5:20 PM

Breast Cancer and Subsequent Risk of Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis [105] Nanna Jordt | Kasper Kjærgaard | Reimar Thomsen Signe Borgquist | Deirdre Cronin-Fenton (Denmark)

#### 5:25 PM

Risk of Pancreatitis and Pancreatic Carcinoma for Anti-diabetic Medications: Evidence Synthesis from Disproportionality Analysis [103] Asif Muhammed | Christy Thomas | Krishna Undela (India)

#### 5:30 PM

Cardiovascular Risk Among Adolescents and Young Adults Initiating Cardiotoxic Cancer Chemotherapy and Concurrent QTc Interval-prolonging Antidepressants [107] Oluwadamilola Onasanya | Susan DosReis, FISPE Eberechukwu Onukwugha | Wendy Camelo Castillo (United States)

#### 5:35 PM

Cancer Panel Discussion

#### Drug Utilization Research

#### 5:45 PM

Longer-term Effectiveness of Home Blood Pressure Self-monitoring Plus Self-titration of Antihypertensive Medication for Poorly Controlled Hypertension in Primary Care: An Extension of the ADAMPA Trial [108] Gabriel Sanfelix-Gimeno | Patricia Martínez-Ibáñez Irene Marco-Moreno | Celia Robles-Cabaniñas Eugenia Avelino-Hidalgo | Laura Bellot-Pujalte Ignacio Barreira-Franch | Lucía Martínez-Ibáñez (Spain)

#### 5:50 PM

The Impact of COVID-19 Pandemic on Drug Utilization Patterns: A Population-based Cohort Study in Manitoba, Canada [111] Laila Aboulatta | Payam Peymani | Christine Vaccaro Christine Leong | Kaarina Kowalec | Joseph Delaney Jamie Falk | Silvia Alessi-Severini (Canada)

#### 5:55 PM

Morbidity Consequences of Misuse of Psychoactive Prescription Drugs in Portugal: The MisuMedPT Project [106] Ana Araujo | Rita Casal | João Goulão | Ana Martins (Portugal)

#### 6:00 PM

Global Trends in Antidepressant, Atypical Antipsychotic, and Benzodiazepine Use: A Cross-sectional Analysis of 64 Countries [113] Orges Alabaku | Katie Suda | Simone Vigod | Mina Tadrous (United States)

#### 6:05 PM

Drug Utilization Research Panel Discussion

#### Diabetes

#### 6:15 PM

Effectiveness and Safety of Empagliflozin in Routine Care: Results from the Empagliflozin Comparative Effectiveness and Safety (EMPRISE) Study [110] Phyo Htoo | Helen Tesfaye | Julie Paik | Deborah Wexler Mehdi Najafzadeh | Robert Glynn | Anouk Deruaz-Luyet Soulmaz Farsani (United States)

#### 6:20 PM

Association Between Glycemic Control and Risk of Venous Thromboembolism in Diabetic Patients: A Nested Case-control Study [112] Sarah Charlier | Christian Meier | Susan Jick Christoph Meier | Claudia Becker (Switzerland)

Diabetes Severity and the Risks of COVID-19 Infection and Severe COVID-19 Outcomes [109] Sascha Dublin | James Floyd | Rod Walker | Jennifer Kuntz Susan Shortreed | Stephen Fortmann | Elizabeth Bayliss Laura Harrington (United States)

#### 6:30 PM

Liraglutide and Unexpected Psychiatric Adverse Events in Patients with Obesity: A Pharmacovigilance Study with Machine Learning Approach [104] Ji-Hwan Bae | Hyesung Lee | Sungho Bea | Ju-Young Shin (Republic of Korea)

#### 6:35 PM

Diabetes Panel Discussion

#### 7:00 - 8:00 PM

### ISPE SPECIAL INTEREST GROUP MEETINGS

Open to all attendees.

MiPal - Congress Hall D2

Vaccine - Congress Hall D5

Rare Disease - Conference Room C1M0

Drug-Drug Interaction – Conference Room C1M1

Pediatric - Conference Room C1M4

Geriatric Pharmacoepidemiology – Meeting Room 18

Cancer – Meeting Room 19

Adherence - Meeting Room 20

Biologics - Conference Room B5M1

Medical Device - Conference Room B5M2

Brace - Conference Room B5M3

Digital Epi - Conference Room B5M4

CER - Conference Room B4M2

Genomics and Precision Medicine – Conference Room B4M4

Conference Room B4IVI4

Drug Utilization Research – Conference Room C1M5

#### 8:30 - 11 PM

### STUDENTS/EARLY CAREER PROFESSIONALS MEET & GREET -

Hosted by the ISPE Student Council

Midsommar Biergarten og Rooftop Bar, Nørrebrogade 18 B, 2200 Copenhagen www.midsommar.dk

Midsommar Biergarten og Rooftop Bar is a 15-minute taxi ride from the Bella Sky Hotel. No ISPE transportation is available for this event; attendees must make their own way to the venue.



FIND US AT: booth #101

LEARN MORE: rtihs.org/ICPE22

#### The power of knowledge. The value of understanding.

Our expert team of epidemiologists are no strangers to real-world evidence. We have long-standing research collaborations with over 20 research partners across Europe and North America. You can trust our background and expertise to guide you to the right evidence to help you answer your pharmacoepidemiology, risk management, benefit-risk, and real-world evidence questions.

#### 7:00 AM - 6:00 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Only required if you need to upload your presentation, or update/replace an already-uploaded presentation. Please complete uploads 24-hours in advance of your session.

#### 7:00 AM - 6:00 PM

**REGISTRATION / HALL F6-F7 LOBBY** 

#### 7:00 AM - 6:00 PM

**LACTATION ROOM / MEETING ROOM 28** 

Sponsored by EPI Excellence, LLC

#### 7:00 - 8:00 AM

COFFEE WITH EXHIBITORS / HALL C

#### 7:00 - 8:00 AM

#### REGIONAL INTEREST GROUPS

Open to all attendees.

Africa – Meeting Room 20

Latin America – Meeting Room 18

#### 7:00 - 8:00 AM

Poster Session B set-up - Hall C Spotlight Poster Session set-up - Hall E South

#### 8:00 AM - 6:00 PM

EXHIBITS/POSTER SESSION B - HALL C

#### 8:00 - 9:30 AM

#### **CONCURRENT SESSIONS:**

**ORAL PRESENTATIONS** 

#### Methods for Generating RWE Through Emulation of Target Trials – Room C1M5

#### 8:00 AM

One Design to Rule Them All: The Clone-Censor-Weight Design as a General Framework for Epidemiologic Studies [114] Alexander Breskin (United States)

#### 8:15 AM

Effect of Different Durations of Treatment with Antihypertensive Drugs with Anticholinergic Effects on the Risk of Dementia: A Target Trial Emulation Study [115] Jaume Aguado | Lia Gutierrez | Kenneth Rothman Xabier Garcia de Albeniz (United States)

#### 8:30 AM

Evaluation Metrics for Data-driven Propensity Score Estimation: A Simulation Study [116] Yuchen Guo | Daniel Prieto-Alhambra | Victoria Y. Strauss Sara Khalid (United Kingdom)

#### 8:45 AM

Emulating a Sequence of Target Trials to Avoid Immortal Time Bias in Pregnancy Studies an Application to Antibiotic Initiation and Preterm Delivery [117]

Ellen Caniglia | Rebecca Zash | Christina Fennell Modiegi Diseko | Gloria Mayondi | Jonathan Heintz Mompati Mmalane | Joseph Makhema (United States)

#### 9:00 AM

Comparing the Effects of Neoadjuvant Versus Adjuvant Chemotherapy in Stage II-III, Triple-negative Breast Cancer: Illustration of Trial Emulation Using the Clone-Censor-Weight Method [118] I-Hsuan Su | Charles Gaber | Stephanie Downs-Canner Emilie Duchesneau | Jennifer Lund, FISPE (United States)

#### 9:15 AM

**Emulating Stratified Randomized Trials by** Propensity Score Methods [119] Phyo Htoo | Robert Glynn | Shirley Wang, FISPE Julie Paik | Sebastian Schneeweiss, FISPE Elisabetta Patorno (United States)

#### Drug Utilization Potpourri – Congress Hall D2

#### 8:00 AM

Method of Hormonal Contraception and Protective Effects Against Ectopic Pregnancy: A Population-based Register Study [120] Marie Linder | Carolyn Cesta | Helena Kopp Kallner Silvia Segovia Chacón | Sofie Graner (Sweden)

#### 8:15 AM

The Characteristics of Gabapentinoid Users with Chronic Non-cancer Pain in the Primary Care of United Kingdom [121]

Xinchun GU | Teng-Chou Chen | Douglas Steinke, FISPE Li-Chia Chen (United Kingdom)

#### 8:30 AM

Sedative Load Before and After Entry to Residential Aged Care [122] Gillian Caughey | Catherine Lang | Janet Sluggett Steve Wesselingh | Maria Inacio (Australia)

#### 8:45 AM

Prescription Patterns in Patients with Incident Trigeminal Neuralgia [123] Pilar Hernandez-Con | Haesuk Park | Michael Maguire Shailina Keshwani | Juan Hincapie-Castillo (United States)

#### 9:00 AM

Non-adherence to Chronic Medications Used in COPD and Its Association with Adverse Events: A Longitudinal, Population-based Study [124] Daniala Weir | Kay James | Kednapa Thavorn Sara Guilcher | Salmaan Kanji | Sunita Mulpuru | Chris Bai Walter Wodchis (Netherlands)

#### 9:15 AM

South Peace Polypharmacy Reduction Project: Impact Evaluations of Medication Reviews and Online Workshops in Rural British Columbia [125] Colin Dormuth | Greg Carney | Lina Al-Sakran | Anat Fisher Malcolm Maclure (Canada)

#### Opioids and Addiction – The Other Pandemic? – Congress Hall D5

#### 8:00 AM

Trajectories of Use in Elderly Incident Benzodiazepine Users of Norway [126] Kristian Svendsen (Norway)

Patterns of Buprenorphine Initiation Treatment for Opioid Use Disorder and Association with Opioid-related Overdose Deaths [127] Svetla Slavova | Feitong Lei | Daniela Moga | Emily Slade Lindsey Hammerslag | Nabarun Dasgupta | Michelle Lofwall Patricia Freeman (United States)

#### 8:30 AM

Secular Trends of Dispensed Opioid Prescriptions in Catalonia, Spain, 2007-19: A Population-based Cohort Study of over 5 Million Individuals [128] Junging Xie | Victoria Y. Strauss | Gary S. Collins Sara Khalid | Antonella Delmestri | Aleksandra Turkiewicz Martin Englund | Mina Tadrous (United Kingdom)

#### 8:45 AM

Association of Opioid Dose Reduction with Opioid Overdose and Opioid Use Disorder Among Patients on High-dose Long-term Opioid Therapy in North Carolina [129]

Bethany DiPrete | Shabbar Ranapurwala Courtney Maierhofer | Naoko Fulcher | Paul Chelminski Christopher Ringwalt | Timothy Ives | Nabarun Dasgupta (United States)

#### 9:00 AM

Geographic Variation of High-risk Prescription Opioid Use Measures Among Disabled Medicare Beneficiaries, 2011-2018 [130] Motomori Lewis | Lili Zhou | Walid Gellad Juan Hincapie-Castillo | Diana Wilkie | Richard Segal Debbie Wilson | Weihsuan Jenny Lo-Ciganic (United States)

#### 9:15 AM

The Association Between Trajectories of Prescription Opioid Use and Opioid Overdose Risk Among Nonmetastatic Breast Cancer Survivors [131] Weihsuan Jenny Lo-Ciganic | Juan Hincapie-Castillo Ching-Yuan Chang | Bobby Jones | Haesuk Park Coy Heldermon | Vakaramoko Diaby | Debbie Wilson (United States)

#### Across the Globe: Injury and Neurologic Pharmacoepidemiology - Room C1M0

#### 8:00 AM

β2-adrenoceptor Agonists and Risk of Parkinson's Disease: Nested Case-control Study of People with Asthma or Chronic Obstructive Pulmonary Disease [132]

Anne Paakinaho | Miia Tiihonen | Heikki Koskela Marjaana Koponen | Jari Tiihonen | Sirpa Hartikainen Anna-Maija Tolppanen (Finland)

#### 8:15 AM

Trends in the Use of Non-prescription Medications for Intentional Self-poisoning: A Review of Data from the United States Poison Control Centers [133] Silvia Perez-Vilar | Jummai Apata | Dinci Pennap Andrew Mosholder (United States)

Dosing Profiles of Opioid and Benzodiazepine Use Associated with Risk of Injurious Falls Among US Medicare Beneficiaries: Group-based Multi-trajectory Models [134] Juan Hincapie-Castillo | Walid Gellad | Bobby Jones Jeannie Lee | James Huang | Ching-Yuan Chang Debbie Wilson | Gary Reisfield (United States)

Bacillus Calmette-Guérin Therapy for Bladder Cancer and Risk of Alzheimer's Disease in Denmark [135] Signe Sørup | Trine Frøslev | Mette Nørgaard Jørgen Bjerggaard Jensen (Denmark)

#### 9:00 AM

Effect of Reductions in Opioid Prescribing on Opioid Use Disorder and Fatal Overdose in the United States: A Dynamic Markov Model [136] G. Caleb Alexander | Jeromie Ballreich | Omar Mansour

David Dowdy (United States)

#### 9:15 AM

Fatal Overdoses in a Cohort of Chronic Pain Patients [137] Aleksi Hamina | Ingvild Odsbu | Vidar Hjellvik | Linn Gjersing | Torgeir Lid | Thomas Clausen Svetlana Skurtveit (Norway)

#### Safety First! - Room C1M1

#### 8:00 AM

Use of Antipsychotics and the Risk of Acute Respiratory Failure [138] Onyekachukwu IIIoh | Susan DosReis, FISPE (United States)

#### 8:15 AM

Evaluating the Long-term Effect of Allopurinol Use in Gout Using Marginal Structural Models: A Primary Care Electronic Health Records Study [139] Trishna Rathod-Mistry | Edward Roddy | Kelvin Jordan Christian Mallen | Milisa Blagojevic-Bucknall (United Kingdom)

#### 8:30AM

Association Between Fluoroguinolones and Uveitis, Retinal Detachment and Aortic Aneurysm or Dissection: An Application of Self-controlled Study Designs with Active Comparators [140] Jeremy Brown | Kevin Wing | Stephen Evans Clémence Leyrat | Kathryn Mansfield | Liam Smeeth Angel Wong | David Yorston (United Kingdom)

#### 8:45 AM

Death, Cardiac Event and Acute Liver Injury Associated with Bedaquiline or Delamanid in Patients with Multidrug Resistant Tuberculosis: A Nationwide Cohort Study [141] Han Eol Jeong | Ju Hwan Kim | Hyesung Lee | In-Sun Oh Sungho Bea | Ju-Young Shin (South Korea)

#### 9:00 AM

Risk of Depressive Disorders Associated with Medical Cannabis Authorization: A Propensity Score Matched Cohort Study [142] Jerry Liwono Yana | Jason Dyck | Dean Eurich Arsène Zongo (Canada)

#### 9:15 AM

Risk of Mortality Associated with Pimavanserin Compared with Atypical Antipsychotics in Patients with Parkinson's Disease-related Psychosis [143] J. Bradley Layton, FISPE | Lisa McQuay | Joan Forns Heather Danysh | Colleen Dempsey | Mary Anthony Mary Ellen Turner (United States)

#### Disease Epidemiology Potpourri – Room C1M2

#### 8:00 AM

Inhaled Corticosteroids and COVID-19 Risk and Outcomes—Findings from a Population-based Cohort within the SCIFI-PEARL Project [144] Brian Kirui | Marina Labor | Fredrik Nyberg, FISPE Lowie Vanfleteren (Sweden)

#### 8:15 AM

Risk Factors for Mortality and Intensive Care Requirements Among Pediatric Patients Hospitalized with COVID-19 in the United States [145] Nuvan Rathnayaka | Alexander Breskin | Angela Cook Catherine Wiener | M. Alan Brookhart (United States)

#### 8:30 AM

Temporal Trends, In-hospital Outcomes and Comorbidity Profile in US Asthma Hospitalizations Between 2004 and 2017 [146] Salwa Zghebi | Mohamed Mohamed | Mamas Mamas Evangelos Kontopantelis (United Kingdom)

Healthcare Costs and Disease Duration Associated with Mild, Moderate and Severe COVID-19: A Payer Perspective [147] Chantal Holy | Brandon Patterson | Fayolah Richards

Antoine El khoury | Jill Ruppenkamp | Ronita Debnath Jessica deMartino | Brahim Bookhart (United States)

#### 9:00 AM

Clustering of HbA1c Longitudinal Trajectories in Type 2 Diabetes Mellitus (T2DM) [148] Adrian Martinez de la Torre Maria Luisa Marques de Sá Faquetti | Fernando Perez-Cruz Stefan Weiler | Andrea Burden (Switzerland)

#### 9:15 AM

Women's Mortality Following Childbirths Affected by Vaginal Bleeding Due to Threatened Miscarriage: A Danish Cohort Study with up to 40 Years of Follow-up [149]

Elena Dudukina | Erzsebet Horvath-Puho Henrik Toft Sørensen | Vera Ehrenstein (Denmark)

#### 9:30 - 10:00 AM

#### BREAK/POSTERS/EXHIBITS - HALL C

#### 10:00 - 11:30 AM

#### PLENARY SESSION

Updates from the COVID-19 Pharmacoepidemiological Battlefield: Recent Victories and Battles Ahead -Congress Hall D4

In this session, our four esteemed speakers will both look back over the many contributions from the pharmacoepidemiological society to the handling of the COVID-19 pandemic, as well as outline both learnings and likely challenges that lies ahead. Specifically, we will discuss the value of coordinated global collaborations in addressing urgent safety issues, what methodological insights we should take from these recent years, what regulators have learned and will expect from the pharmacoepidemiological society in the future, and what areas of the pandemic that will likely provide the study questions of the future.

#### Anton Pottegård

Professor, University of Southern Denmark Odense C, Denmark

#### Daniel Prieto-Alhambra, FISPE

Professor of Pharmaco- and Device Epidemiology, University of Oxford

#### J. Bradley Layton, FISPE

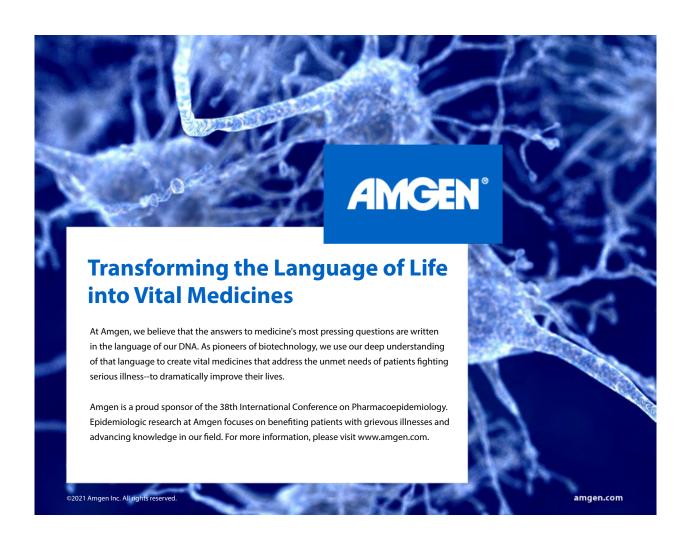
Director, Epidemiology, RTI Health Solutions

#### Miriam Sturkenboom, FISPE

Prof. Dr., University Medical Center Utrecht

#### Catherine Cohet, PhD

Pharmacoepidemiology/RWE Senior Specialist, European Medicines Agency



#### 11:30 AM - 1:00 PM

LUNCH/POSTER SESSION B/EXHIBITS - HALL C

#### 11:30 AM - 1:00 PM

#### ISPE COMMITTEE MEETINGS

Open to all attendees; lunch available.

Finance - Meeting Room 18

Membership - Meeting Room 19

#### 11:45 AM - 12:45 PM

#### SPOTLIGHT POSTER SESSION B -

HALL E SOUTH

**Databases** 

Digital Epidemiology

**Drug Utilization Research** 

**Drug-Drug Interaction** 

Genomics

Geriatrics

#### 1:00 - 2:30 PM

#### **CONCURRENT SESSIONS:**

ORAL PRESENTATIONS

#### Methods: Machines Making Predictions -Congress Hall D4

#### 1:00 PM

Comparative Evaluation of Automated Approaches for Confounder Selection in Ultra High-dimensional Data with Rare Outcomes [151]

Richard Wyss | Mark van der Laan | Susan Gruber | Xu Shi Hana Lee | Sarah Dutcher | Sengwee Toh Jennifer Nelson (United States)

#### 1:15 PM

Fracture Risk Estimation in Post-menopausal Women: A Comparison of Machine Learning Methods and Software Systems [152]

David Pritchard | Matthew Phelan | M. Alan Brookhart (United States)

#### 1:30 PM

A New Artificial Intelligence Guided Method for Identifying Add-on and Switch in Secondary Data Sources: A Case Study on Antiseizure Medications in Danish Registries [153] Maurizio Sessa (Denmark)

#### 1:45 PM

Claims-based Model to Predict Obesity in Older Patients [154] Karine Suissa | Zhigang Lu | Lily Bessette Cassandra York | Richard Wyss | Joshua Lin (United States)

#### 2:00 PM

Development of a Multivariate Prediction Model to Identify Possible Signal Triggering Reports from Spontaneous Individual Case Safety Reports [155] Florence van Hunsel | Helen Gosselt | Liza Bazelmans Thomas Lieber | Linda Harmark (Netherlands)

Predicting Wilson Disease Progression Using Machine Learning with Real-World Electronic Health Records [156]

Caihua Liang | Scott Kelly | Rongjun Shen | Ling Li Kasia Lobello | Steven Arkin | Kui Huang | Xiaofeng Zhou (United States)

#### Study Design Approaches to Assessing Thrombosis Risk - Congress Hall D2

#### 1:00 PM

Risk of Venous Thromboembolism in Patients Receiving Targeted Anti-cancer Therapy – A Nationwide Cohort Study [157] Erzsebet Horvath-Puho | Florian Moik | Cihan Ay John-Bjarne Hansen | Frits Mulder | Nick van Es Henrik Toft Sørensen (Denmark)

#### 1:15 PM

Arterial and Venous Thrombotic Events in Patients with COVID-19 Compared to Influenza [158] Noelle Cocoros | Sarah Dutcher | John Connolly Silvia Perez-Vilar | Dena Carbonari | Terese Defor Djeneba Audrey Djibo | Laura Harrington (United States)

#### 1:30 PM

Synergistic Effects of PM2.5 and Use of Corticosteroids on Cardiovascular and Thromboembolic Events Among Older Adults: Evidence of Environment-Drug Interaction [159] Kevin Josey | Rachel Nethery | Benjamin Bates, Aayush Visaria | Poonam Gandhi | Jung Hyun Kim Soko Setoguchi, FISPE (United States)

#### 1:45 PM

Association Between Phentermine and Risk of Major Adverse Cardiovascular Events: A Suite of Self-Controlled and Comparative Cohort Studies to Conquer Confounding [160] Amir Sarayani | Christian Hampp, FISPE | William T. Donahoo Joshua Brown | Almut Winterstein, FISPE (United States)

Use of Chlorprothixene and the Risk of Diabetes and Major Adverse Cardiovascular Events: A Nation-wide Cohort Study [161] Rikke Wesselhoeft | Mikkel Hoejlund | Christina Wagner Kjeld Andersen | Anders Fink-Jensen Jesper Hallas, FISPE (Denmark)

#### 2:15 PM

Use of Combined Oral Contraceptives and Risk of Venous Thromboembolism: A Nested Case-control Analysis in German Claims Data [162] Tania Schink | Christina Princk | Malte Braitmaier Ulrike Haug (Germany)

#### What's the Risk? Cancer Risk & Common Medications - Congress Hall D5

#### 1:00 PM

5-alpha Reductase Inhibitor Use and Risk of Colorectal Cancer in Men with Benign Prostatic Hyperplasia: A Population-based Cohort Study [163] Niamh Doherty | Christopher Cardwell | Peter Murchie Christopher Hill | Laurent Azoulay | Blánaid Hicks (United Kingdom)

#### 1:15PM

Parity, Use of Statins and Low-dose Aspirin, and Breast Cancer Risk—Data from Two Large Cohort Studies [164]

Julie Schmidt | Agnès Fournier | Manon Cairat Aurélie Mailhac | Henrik Toft Sørensen | Marc Gunter Deirdre Cronin-Fenton (Denmark)

#### 1:30 PM

Statins and Breast Cancer Recurrence: A Danish Nationwide Cohort Study with Up to 23 Years of Follow-up [165] Elisabeth Solmunde | Rikke N. Pedersen | Lene Mellemkjær Søren Friis | Bent Ejlertsen | Thomas P. Ahern Mette Nørgaard | Deirdre Cronin-Fenton (Denmark)

#### 1:45 PM

The Association Between Menopausal Hormone Therapy and Gastric and Colorectal Cancer Risk in Korean Women: A Nationwide Population-based Cohort Study [166] Ji-Eun Kim | Chaewon Baek | Aesun Shin Seokyung Hahn | Hee-Kyung Park | Ji-Yeob Choi (South Korea)

#### 2:00 PM

Sodium-glucose Co-transporter 2 Inhibitors and the Risk of Early Bladder Cancer Events [167] Devin Abrahami | Helen Tesfaye | Hui Yin | Seanna Vine Blánaid Hicks | Oriana Yu | Robert Platt Sebastian Schneeweiss, FISPE (United States)

#### 2:15 PM

Thiazide Diuretics and Risk of Colorectal Cancer [168] Julie Rouette | Emily McDonald | Tibor Schuster Ilan Matok | James Brophy | Laurent Azoulay (Canada)

#### Psychotropic Use Around the World – Room C1MO

#### 1:00 PM

Antidepressant Use Among Children and Adolescents Across the Scandinavian Countries [169] Lotte Rasmussen | Peter Jensen | Johan Reutfors Lena Brandt | Kari Furu | Svetlana Skurtveit | Randi Selmer Per Damkier (Denmark)

#### 1:15 PM

Attention Deficit Hyperactivity Disorder Medication Consumption in 64 Countries from 2015 to 2019: A Longitudinal Study [170]

Adrienne Chan | Tian-Tian Ma | Wallis Lau | Patrick Ip David Coghill | Le GAO | Yogini Jani | Yingfen Hsia (Hong Kong)

#### 1:30 PM

Patterns of ADHD Medicine Use: A Population-based Study Among Australian Children and Adults (2013-2020) [171] Claudia Bruno | Alys Havard | Malcolm Gillies David Coghill | Jonathan Brett | Adam Guastella Sallie-Anne Pearson | Helga Zoega (Australia)

#### 1:45 PM

An Overview of Psychotropic Pharmacotherapy at Time of Death by Suicide: An Australian-wide Case Series Study Using Administrative and Coronial Data [172]

Kate Chitty | Nicholas Buckley | Jessy Lim | Zein Ali Jennifer Schumann | Rose Cairns | Benjamin Daniels David Preen (Australia)

#### 2:00 PM

Prescription of Psychotropic Medications in Patients with Cancer: A Population-based Study in Hong Kong [173]

Chun Sing Lam | Chui Ping Lee | Joey Wing Yan Chan Yin Ting Cheung (Hong Kong)

#### 2:15 PM

Antidepressant Adherence Patterns over Time Among Adults with Depression—an Application of Groupbased Trajectory Modeling Using Commercial Claims Data from 2007-2015 [174]

Jannat Saini | Danya Qato | Susan DosReis, FISPE (United States)

A Partnership for the Real World.

As the industry's best-in-class complete real world evidence solution, Target RWE cultivates a distinctly collaborative enterprise to unify unique real world data and advanced RWE analytics in a cohesive ecosystem. Now fully integrated with NoviSci, Target RWE is shifting the paradigm in healthcare for how decisions are made to improve lives.

Together, we're redefining real world evidence. Meet with the Target RWE team and visit our many posters and presentations at ICPE 2022!

#### Find out how Target RWE delivers:

- Unique Data: Unique, granular, and connected data sets across multiple therapeutic areas from diverse patients in academic and community settings
- Advanced Analytics: Rigorous, interactive, and advanced RWE analytics to extract deeper insights from real world data
- Unmatched Collaboration: A distinctly collaborative community of KOLs, patients, and healthcare stakeholders brought together in a powerful, dynamic model



#### Visit Target RWE at ICPE 2022

#### Posters

Discharged where? The importance of understanding discharge dispositions when estimating in-hospital mortality

M. Alan Brookhart, PhD

The effect of remdesivir for the treatment of COVID-19 on mortality among hospitalized patients Alexander Breskin, PhD, MPH

In-hospital treatment patterns among patients hospitalized with COVID-19 in the United States Nuvan Rathnayaka, PhD

#### **Podium Presentations**

Friday, August 26

1:30 - 3:00 p.m. CEST The impact of parametric assumptions on the bias-variance tradeoff for causal analysis of time-to-event outcomes Presented by Andrew Allmon, DrPH

5:15 - 6:45 p.m. CEST Negative control outcomes to assess the comparability of biologics versus small-molecule therapeutics for osteoporosis: considerations for differential non-adherence Presented by Lydia Feinstein, PhD

#### Saturday, August 27

8:30 - 10:00 a.m. CEST One design to rule them all: The clone-censor-weight design as a general framework for epidemiologic studies

Presented by Alexander Breskin, PhD, MPH

8:30 – 10:00 a.m. CEST Risk factors for mortality and intensive care requirements among pediatric patients hospitalized with COVID-19 in the United States Presented by Nuvan Rathnayaka, PhD

1:00 - 2:30 p.m. CEST Fracture risk estimation in post-menopausal women: a comparison of machine learning methods and software systems Presented by David Pritchard, PhD, MS



#### Mending Hearts and Brains – Room C1M1

#### 1:00 PM

Comparative Effectiveness of Direct Oral Anticoagulants versus Warfarin Among Nursing Home Residents with Atrial Fibrillation [175] Hemalkumar Mehta | Huijun An | Jodi Segal, FISPE James Goodwin | G. Caleb Alexander (United States)

#### 1:15 PM

The Effectiveness and Safety of Extended Anticoagulant Treatment in Patients with Venous Thromboembolism [176] Nazleen Khan | Geetha lyer | Helen Tesfaye | Gregory Brill Katsiaryna Bykov (United States)

#### 1:30 PM

Using Real-World Data to Assess Comparative Effectiveness and Safety of Apixaban and Rivaroxaban in Patients with Nonvalvular Atrial Fibrillation in the UK [177]

Liza Gibbs | Priya Govil | Seamus Kent | Stephen Duffield Shaun Rowark | Manuj Sharma | Ayad Ali | Amanda Patrick (United States)

#### 1:45 PM

Prophylactic Anticoagulation with Low Molecular Weight Heparin in COVID-19: Cohort Studies in Denmark and Sweden [178] Lars Christian Lund | Pontus Hedberg Anne Helms Andreasen | Janne Petersen | Tonny Petersen Anton Pottegård | Jacob Bodilsen | Pontus Naucler (Denmark)

#### 2:00 PM

Risk of Ischemic Stroke Associated with DOAC Discontinuation on Patients with Non-valvular Atrial Fibrillation [179]

Tobias Alvaro Thomsen | Jorge Mesa Guadalupe Lucía Cea Soriano | Consuelo Huerta | Airam De Burgos (Spain)

#### 2:15 PM

High-intensity versus Low- or Moderate-intensity Statin Treatment for Patients with Ischemic Stroke: Nationwide Cohort Study [180] Frederikke Bach | Nils Skajaa | Buket Öztürk Esen Cecilia Fuglsang | Erzsebet Horvath-Puho Henrik Toft Sørensen | Kasper Adelborg (Denmark)

#### 1:00 - 2:30 PM

### LIGHTNING FORUM SESSION 2 - ROOM C1M2

#### **Vaccines**

#### 1:00 PM

Risk of Appendicitis After mRNA COVID-19 Vaccination: A Population-based Cohort Study [191] Helene Kildegaard | Louise Ladebo | Jacob Harbo Andersen Peter Jensen | Lotte Rasmussen | Per Damkier Anton Pottegård (Denmark)

#### 1:05 PM

Impact of Individual Case Reports for COVID-19
Vaccines on the Ability to Detect Future Safety Signals
with Other Medicinal Products [192]
Sara Hedfors Vidlin | Oskar Gauffin | Daniele Sartori
Niklas Noren (Sweden)

#### 1:10 PM

The Impact of Data Truncation on Rates of Vaccine-associated Adverse Events Utilizing Open and Closed Claims: Lessons from Post-Marketing Safety Surveillance of the SARS-CoV-2 mRNA-1273 Vaccine [186]

Christopher Bush | Daina Esposito | Deesha Patel Alice Gelman | Sahar Syed | Priyadarshani Dharia Katie Mues | David Martin (United States)

#### 1:15 PM

The Comparative Risk of Thrombosis with Thrombocytopenia Associated with Different COVID-19 Vaccines: International Network Cohort Study Including 5 European Countries and the US [182] Xintong Li | Edward Burn | Talita Duarte-Salles | Can Yin Christian Reich | Antonella Delmestri | Katia Verhamme Peter Rijnbeek (United Kingdom)

#### 1:20 PM

Vaccines Panel Discussion

#### Biologics/Biosimilars

#### 1:30 PM

Predictors of Effectiveness of First-line Biologic Disease Modifying Antirheumatic Drug(s) (bDMARD) or Targeted Synthetic DMARD (tsDMARD) Treatment with a Tumor Necrosis Factor Inhibitor in Patients with Rheumatoid Arthritis [189]

Alexander Liede | Whitney Krueger | Linyan Li Yuhang Liu | Yi Pan | Michelle Brauer | Seoyoung Kim Earl Steinberg (Ireland)

#### 1:35 PM

Effect Modification of Biologic Survival by Patient Characteristics: A Step Towards Precision Medicine in the Treatment of Psoriasis [184]

Zenas Yiu | Gabrielle Becher | Brian Kirby | Philip Laws Nick Reynolds | Catherine Smith | Richard Warren Christopher Griffiths (United Kingdom)

#### 1:40 PM

Application of a Systems Biology Approach to Address Confounding by Indication for Immunemediated Disorders in Spontaneous Reports Data: A Case Study of Vedolizumab-associated Pancreatitis in Inflammatory Bowel Disease [187] Jodie Hillen | Katherine Duszynski | Ty Stanford Michael Ward | Elizabeth Roughead | Lisa Kalisch Nicole Pratt (Australia)

#### 1:45 PM

Discontinuation of Infliximab Treatment in IBD Patients: A Comparison Between Patients Who Retransitioned to Originator and Those Who Remained on Biosimilar [185] Rosanne Meijboom | Helga Gardarsdottir, FISPE Matthijs Becker | Kris Movig | Johan Kuijvenhoven Toine Egberts | Thijs Giezen (Netherlands)

Biologics/Biosimilars Panel Discussion

#### Benefit-Risk Assessment, Communication, and Evaluation (BRACE)

#### 2:00 PM

Mortality Among Parkinson's Disease Patients Treated with Pimavanserin or Atypical Antipsychotics: An Observational Study in Medicare [188] Sandia Akhtar | Andrew Mosholder | Yong Ma Gerald Podskalny | Yuhui Feng | Hai Lyu | Jiemin Liao Yugin Wei (United States)

#### 2:05 PM

Post-market Safety Communication for New Drugs Approved in Australia 2010-2016 [190] Barbara Mintzes | Alice Bhasale | Lucy Perry | Eliza McEwin Annim Mohammad | Ashleigh Hooimeyer | Atse Huisman (Australia)

#### 2:10 PM

Hydroxyzine Initiation Following Drug Safety Advisories on Cardiac Arrhythmias in the UK and Canada: A Longitudinal Cohort Study [181] Richard Morrow | Barbara Mintzes | Patrick Souverein Christine Hallgreen | Bilal Ahmed | Elizabeth Roughead Marie Louise De Bruin | Sarah Kristiansen (Canada)

#### 2:15 PM

Duration of the Evaluation of Additional Risk Minimization Measures: The Need for Speed [183] Sharon Essink | Inge Zomerdijk | Sabine Straus Marie Louise De Bruin (Netherlands)

#### 2:20 PM

Benefit-Risk Assessment, Communication, and Evaluation (BRACE) Panel Discussion

#### 2:40 - 3:50 PM

#### ANNUAL MEETING OF ISPE MEMBERS & AWARDS CEREMONY -

**CONGRESS HALL D4** 

#### Call to Order & President's Address

Vin Lo Re, FISPE, ISPE President

#### Financial Report

Wei Zhou, FISPE, Vice President/Finance

#### Strategic Plan 2020-2024 Update

Tobias Gerhard, FISPE,

Chair, Strategic Planning Committee

#### **New Business**

#### **Awards Ceremony**

#### **ISPE** Board Transition

RETIRING BOARD MEMBERS & OFFICERS Olaf Klungel, FISPE | Fredrik Nyberg, FISPE Lisa Pont, FISPE | Jennita Reefhuis Mary Beth Ritchey, FISPE | Wei Zhou, FISPE

#### INDUCTION OF NEW DIRECTORS

Ursula Kirchmayer, FISPE

Government/Regulator (Europe/Africa)

#### Andrea Margulis, FISPE

Industry/Service Provider (Europe/Africa)

#### Gillian Caughey

Academic (Asia/Pacific)

#### Efe Eworuke

Government/Regulator (Americas)

#### Jessica Franklin

Industry/Service Provider (Americas)

#### INSTALLATION OF 2022-2023 OFFICERS

Tobias Gerhard, FISPE, President

Caitlin Knox, Vice President/Finance

Vin Lo Re, FISPE, Immediate Past President

Lisa Pont, FISPE, President-Elect

#### 3:50 - 4:15 PM

BREAK/POSTERS/EXHIBITS - HALL C

#### 4:15 - 5:45 PM

#### **CONCURRENT SESSIONS:**

SYMPOSIA & WORKSHOPS

HARmonized Protocol to Enhance Reproducibility (HARPER): An ISPE-ISPOR Joint Task Force of the RWE Initiative [200] - Room C1M5 Shirley Wang, FISPE | Donna Rivera, FISPE | William Crown Peter Arlett | Wim Goettsch (United States)

Cloning, Censoring, and Weighting—Oh My! Applications of Target Trial Emulation for **Evaluating Cancer Interventions When Study** Eligibility, Intervention Initiation, and Start of Follow-up are Not Aligned [201] - Congress Hall D2 Jennifer Lund, FISPE | Xabier Garcia de Albeniz Camille Maringe | Charles Gaber | Richard Wyss, Maribel Salas, FISPE | Armen Ghazarian (United States)

COVID-19 Vaccine Safety Monitoring: Opportunities, Challenges and Lessons Learned for Pharmacoepidemiology [202] - Congress Hall D5 Alicia Gilsenan, FISPE | Miriam Sturkenboom, FISPE Cynthia De Luise | Catherine Cohet | Jeffrey Brown Susana Perez-Gutthann, FISPE | Patricia Lloyd | Joseph Kim (United States)

Drug Safety on the Cutting Edge: What are the Implications of EMA's To-bereleased Risk Minimisation Guidance on Pharmacoepidemiological Methods and Practice in Developed and Developing Countries? [203] - Conference Room C1M0 Meredith Smith, FISPE | Priya Bahri | Elaine Morrato Parthasarathi Gurumurthy (United States)

Real-World Evidence Studies in the Post-COVID-19 Era: Methodological Considerations for Pandemic Related Disruptions [204] - C1M1 Anne Butler | Mehmet Burcu | Helga Gardarsdottir, FISPE

G. Caleb Alexander (United States)

#### 4:15 - 5:45 PM

#### LATE BREAKERS -CONFERENCE ROOM C1M2

#### 4:15 PM

Alternative Approaches to Defining COVID-related Inpatient Encounters in IBM® Marketscan® Data [194] Kathleen Andersen | Andy Surinach | Qiao Mu Tamuno Alfred | Deepa Malhotra | Leah McGrath Jennifer Nguyen | Jennifer Judy (United States)

#### 4:30 PM

Use of the New ICD-10-CM Diagnosis Code for Post-COVID-19 Condition in Routine Clinical Practice in the United States [195] Leah McGrath | Amie Scott | Andy Surinach Richard Chambers | Michael Benigno | Deepa Malhotra (United States)

#### 4:45 PM

Rapid Surveillance on the Use of Neutralising Monoclonal Antibodies and Antivirals in Patients with COVID-19 in Scotland Using Administrative and Purposely Collected Data [196] Tanja Mueller | Euan Proud | Holly Tibble | Elliott Hall Amanj Kurdi | Marion Bennie (United Kingdom)

#### 5:00 PM

Increasing Use of Antidepressants, Hypnotics and Psychostimulants During the COVID-19 Pandemic Among Danish Children, Adolescents, and Young Adults [197] Mette Bliddal | Lotte Rasmussen | Jacob Harbo Andersen Anton Pottegård | Trine Munk-Olsen | Helene Kildegaard Rikke Wesselhoeft (Denmark)

#### 5:15 PM

Female Preconception Vaccination Against COVID-19 and Spontaneous Abortion in a Prospective Preconception Cohort Study [198] Jennifer Yland | Amelia Wesselink | Krista Huybrechts, FISPE Sonia Hernandez-Diaz, FISPE | Lauren Wise (United States)

#### 5:30 PM

Comparative Effectiveness of Sotrovimab and Molnupiravir for Prevention of Severe COVID-19 Outcomes in Non-hospitalised Patients: An Observational Cohort Study Using the OpenSAFELY Platform [199] Bang Zheng | Amelia Green | John Tazare | Stephen Evans lan Douglas | Brian MacKenna | Ben Goldacre Laurie Tomlinson (United Kingdom)

#### 6:00 - 7:00 PM

**COUNCIL MEETINGS** 

Academic - Conference Room C1M0 Student - C1M1

#### 7:00 - 11:00 PM

Social Evening at the Langelinie Pavillonen

Badge or guest ticket required for entry.

Located at Langelinie 10, DK-2100 Copenhagen Shuttle from Bella Center Entrance 6 starting at 6:00 pm

#### SUNDAY, AUGUST 28

#### 7:00 AM - 3:30 PM

#### SPEAKER READY ROOM / MEETING ROOM 21

Only required if you need to upload your presentation, or update/replace an already-uploaded presentation. Please complete uploads 24-hours in advance of your session.

#### 7:00 AM - 4:30 PM

**REGISTRATION / HALL F6-F7 LOBBY** 

#### 7:30 AM - 4:30 PM

#### **LACTATION ROOM / MEETING ROOM 28**

Sponsored by EPI Excellence, LLC

#### 7:00 - 8:00 AM

**COFFEE WITH EXHIBITORS / HALL C** 

#### 7:00 - 8:00 AM

Poster Session C set-up - Hall C Spotlight Poster Session set-up - Hall E South

#### 8:00 AM - 3:15 PM

POSTERS - HALL C

#### 8:00 AM - 4:30 PM

**EXHIBITS** - HALL C

#### 8:30 - 10:00 AM

#### **CONCURRENT SESSIONS:**

**ORAL PRESENTATIONS** 

#### Methods: Validation – Congress Hall D5

#### 8:30 AM

Validation of an International Classification of Disease (ICD) 10 Algorithm for Hypoglycemia in Administrative Claims Data [205]

Qoua Her | Sara Dejene | Jea Young Min | Virginia Pate Michele Jonsson Funk, FISPE | James Flory (United States)

#### 8:45 AM

Evaluation of Mortality Data Sources Compared to the National Death Index in the Healthcore Integrated Research Database [206]

Aziza Jamal-allial | Todd Sponholtz | Shiva K Vojjala Anahit Papazian | Biruk Eshete Seyed Hamidreza Mahmoudpour | Patrice Verpillat Daniel Beachler (United States)

#### 9:00 AM

Adaptability of High Dimensional Propensity Score Procedure in the Transition from ICD-9 to ICD-10 in the US Healthcare System [207]

Amir Sarayani | Joshua Brown | Christian Hampp, FISPE William T. Donahoo | Almut Winterstein, FISPE (United States)

#### 9:15 AM

Reproducibly Estimating Drug Exposure from Free-text Prescriptions [208]

William Dixon | Belay Yimer | David Selby | Meghna Jani Mark Lunt | Goran Nenadic (United Kingdom)

#### 9:30 AM

A Bootstrap Approach for Validating Groups Identified by Latent Class Growth Models [209] Marc Simard | Miceline Mésidor | Caroline Sirois

Marc Simard | Miceline Mésidor | Caroline Sirois Denis Talbot (Canada)

#### 9:45 AM

Can Administrative Claims Data Be Used to Determine Pre-treatment HbA1c Among Adults with Type 2 Diabetes? [210]

Jenna Wong | Xiaojuan Li | David Arterburn Dongdong Li Elizabeth | Messenger-Jones | Rui Wang Sengwee Toh (United States)

### Examining Equity: Who? Where and What? – Congress Hall D2

#### 8:30 AM

Inequalities in the Incidence and Management of Non-valvular Atrial Fibrillation in England, 2009 to 2019: Cohort Study Using Electronic Health Records from General Practices [212]

Alyaa Ajabnoor | Salwa Zghebi | Rosa Parisi Darren Ashcroft | Martin Rutter | Tim Doran Matthew Carr | Mamas Mamas (United Kingdom)

#### 8:45 AM

Racial Disparities in Clinical Trial Participation: Evidence from Real-World Oncology Data [213] Harlan Pittell | Gregory Calip | Amy Pierre Jenny Guadamuz (United States)

#### 9:00 AM

Socioeconomic Inequalities in COVID-19
Vaccination and Infection Among Adults Living
in Urban Areas of Catalonia, Spain:
A Population-based Cohort Study [214]
Elena Roel | Berta Raventós | Edward Burn
Andrea Pistillo | Daniel Prieto-Alhambra
Talita Duarte-Salles (Spain)

#### 9:15 AM

Geographic Variation and Racial Disparities in Novel Glucose-lowering Drugs Adoption Among US Medicare Beneficiaries with Type 2 Diabetes [215] Wei-Han Chen | Yujia Li | John M. Allen | Hui Shao William Donahoo | Steven Smith | Serena Jingchuan Guo (United States)

#### 9:30 AM

The Association of Ethnicity and Social
Deprivation and Choice of Second-line Antidiabetic
Treatment in People with Type 2 Diabetes:
A Cross-sectional Study [216]
Patrick Bidulka | Rohini Mathur | David Lugo-Palacios

Patrick Bidulka | Rohini Mathur | David Lugo-Palacios Stephen O'Neill | Anirban Basu | Richard Silverwood Paul Charlton | Andrew Briggs (United Kingdom)

#### 9:45 AM

Differences in Opioid Use After Hip Fracture by Race and Post-acute Care Use Among US Older Adults [217]

Kaley Hayes | Meghan Cupp | Abednego Commey Francesca Beaudoin | Richa Joshi | Andrew Zullo (United States)

### Pandemic Prescription Patterns (Plus Pneumonia!) – Congress Hall D4

#### 8:30 AM

Does COVID-19 Pandemic Impacted on Quality of Antibiotic Use in the Community? An Interrupted Time-series Analysis [218] Carla Torre | Antonio Teixeira Rodrigues Mariana Dominques | José Guerreiro | João Rocha Bruno Sepodes (Portugal)

#### 8:45 AM

Systemic Corticosteroids for COVID-19 in US Outpatient Settings [219]

Marie Bradley | David Graham | Efe Eworuke | Hana Lee Sandia Akhtar | Hai Lyu | Kushal Naik | Yoganand Chillarige (United States)

#### 9:00 AM

Utilization of Broad- Versus Narrow-spectrum Antibiotics for the Treatment of Outpatient Community-acquired Pneumonia [220] Katelin Nickel | Anne Butler | Michael Durkin Margaret Olsen | John Sahrmann | Caroline O'Neil (United States)

#### 9:15 AM

Impact of COVID-19 Pandemic on the Prescription Trends of Antiseizure Medications [221] Alekhya Lavu | Donica Janzen | Laila Aboulatta Payam Peymani | Brianne Desrochers | Silvia Alessi-Severini Sherif Eltonsy (Canada)

#### 9:30 AM

The Effect of the COVID-19 Pandemic on Medicines Utilisation in England [222]
Danielle Robinson | Jonathan Pearson-Stuttard
Benjamin Bray (United Kingdom)

#### 9:45 AM

Impact of COVID-19 on Psychotropic Medication Use Among Children and Adolescents Receiving Mental Health Services [223] Alejandro Amill-Rosario | Haeyoung Lee Chengchen Zhang | Susan DosReis, FISPE (United States)

### Around the World with Real-World Evidence – Room C1MO

#### 8:30 AM

HIV Pre-exposure Prophylaxis (PrEP) Effectiveness in the Real World: A Nested Case-control Study Among 46,706 Men at High Risk of HIV Infection in France [224] Hugo Jourdain | Sophie Billioti de Gage | David Desplas Rosemary Dray-Spira (France)

#### 8:45 AM

Use of Central Nervous System Drugs in Combination with Selective Serotonin Reuptake Treatment:
A Bayesian Screening Study for Risk of Suicidal Behavior [225]

Zheng Chang | Tyra Lagerberg | Arvid Sjölander Robert Gibbons | Patrick Quinn | Brian D'Onofrio Clara Hellner | Paul Lichtenstein (Sweden)

#### 9:00 AM

Long-acting Injectable Antipsychotics and Risk of Treatment Failure in a Population-based Cohort [226]
Donica Janzen | James Bolton | Christine Leong
I fan Kuo | Silvia Alessi-Severini (Canada)

#### 9:15 AM

The Effect of Remdesivir for the Treatment of COVID-19 on Mortality Among Hospitalized Patients [227]

Alexander Breskin | Catherine Wiener | M. Alan Brookhart (United States)

#### 9:30 AM

Association Between Very High PD-L1 Expression versus High PD-L1 Expression in Patients Receiving Pembrolizumab as First-line Treatment for Advanced Non-small Cell Lung Cancer [228]
Syed Mohsin Mahmood Shah | Melina Marmarelis
Ronac Mamtani | Rebecca Hubbard | Sean Hennessy
(United States)

#### 9:45 AM

Does Hydroxychloroquine Prevent Cardiovascular Events in Systemic Lupus Erythematosus Patients? [229] Lamiae Grimaldi | Tom Duchemin | Philippe Attias Yann Hamon | Jacques Benichou | Yola Moride Lucien Abenhaim (France)

### SGLT2s and Cardiovascular Endpoints – Room C1M1

#### 8:30 AM

Sodium-glucose Co-transporter 2 Inhibitor Treatment and Risk of Atrial Fibrillation: Scandinavian Cohort Study [230] Arvid Engström | Victor Wintzell | Mads Melbye Anders Hviid | Björn Eliasson | Soffia Gudbjörnsdottir Kristian Hveem | Christian Jonasson (Sweden)

#### 8:45 AM

Cardiovascular Outcomes in Patients with Type 2
Diabetes Who Added Either GLP1 Receptor Agonists
or DPP4 Inhibitors to SGLT2 Inhibitor Therapy [231]
Katsiaryna Bykov | Seoyoung Kim | Chintan Dave
Raisa Levin | Deborah Wexler | Elisabetta Patorno
(United States)

#### 9:00 AM

Cardiovascular Effectiveness of Sodium—Glucose Cotransporter 2 Inhibitors (SGLT-2i) and Glucagon-like Peptide 1 Receptor Agonists (GLP-1 RA) in Routine Care of Frail People with Type 2 Diabetes [232] Alexander Kutz | Chandrasekar Gopalakrishnan Dae Hyun Kim | Elisabetta Patorno (United States)

#### 9:15 AM

Cardiovascular Effectiveness of SGLT2 Inhibitors: Head-to-head Comparisons [233] Devin Abrahami | Elvira D'Andrea | Julie Paik Deborah Wexler | Brendan Everett | Seoyoung Kim Elisabetta Patorno (United States)

#### 9:30 AM

Cardiovascular Effectiveness of Empagliflozin vs Glucagon-like peptide-1 Receptor Agonists or Liraglutide in the EMPRISE Study [234] Phyo Htoo | Helen Tesfaye | Julie Paik | Deborah Wexler Mehdi Najafzadeh | Robert Glynn | Anouk Deruaz-Luyet Soulmaz Farsani (United States)

#### 9:45 AM

Using Iterative Causal Forest to Identify Heterogeneous Treatment Effects: Sodium-glucose Cotransporter-2 inhibitors versus Glucagon-like Peptide-1 Receptor Agonists on Hospitalization for Heart Failure [235]

Tiansheng Wang | Alexander Keil | Siyeon Kim Richard Wyss | Phyo Htoo | Michele Jonsson Funk, FISPE John Buse | Michael Kosorok (United States)

#### Welcoming Novel Methods in Pregnancy Research - Room C1M2

#### 8:30 AM

Associations of Prenatal Exposure to Antibiotics and Paracetamol with Trajectories of Wheezing up to 2 Years of Age [236]

Marleen Van Gelder | Michelle G.A. Clevis | Sharon Essink Jolt Roukema | Nel Roeleveld | Chris Verhaak Peter Merkus (Netherlands)

#### 8:45 AM

Development and Validation of Claims-based Algorithms for Estimating Gestational Age of Spontaneous Abortion and Termination [237] Krista Huybrechts, FISPE | Yanmin Zhu Sonia Hernandez-Diaz, FISPE | Brian Bateman Kathryn Gray | Loreen Straub | Lockwood Taylor Rita Ouellet-Hellstrom (United States)

#### 9:00 AM

Estimating the Association Between Initial Postpartum Discharge Adgent Prescription Dose and Subsequent Opioid Use: The Role of Different Modeling Strategies [238] Andrew Wiese | Carlos Grijalva | Margaret adgent Sarah Osmundson | Amelie Pham | Sharon Phillips Ed Mitchel | Andrew Spieker (United States)

#### 9:15 AM

Hierarchical Clustering Analysis to Inform Classification of Congenital Malformations for Surveillance of Medication Safety in Pregnancy [239] Loreen Straub | Sonia Hernandez-Diaz, FISPE Shirley Wang, FISPE | Kathryn Gray | Lewis Holmes Brian Bateman | Helen Mogun | Krista Huybrechts, FISPE (United States)

#### 9:30 AM

A Novel Framework to Assess Reproductive Toxicity: Pregnancy Outcomes Intensive Monitoring (PRIM) [240] Lisa Prach | Bita Rezaallah | Valentine Jehl (Switzerland)

#### 9:45 AM

Quantification of Medication-mediated Effects on Pregnancy Outcome in Women with Rheumatic Conditions [241] Gretchen Bandoli | Kristin Palmsten | Chelsey Smith Christina Chambers (United States)

#### 10:00 - 10:30 AM

BREAK/POSTERS/EXHIBITS - HALL C

#### 10:30 AM - 12:00 PM

#### **CONCURRENT SESSIONS:** SYMPOSIA & WORKSHOPS

#### Shaping the Future of Pharmacoepidemiology [242] - Meeting Room C1M5

Vicki Osborne | Deborah Layton, FISPE | Amie Goodin Almut Winterstein, FISPE | Andrew Bate | Catherine Cohet Xavier Kurz | Lisa Pont, FISPE | David Moeny Olaf Klungel, FISPE | Simone Pinheiro | John Seeger, FISPE K. Arnold Chan, FISPE | Stanley Edlavitch, FISPE Hugh Tilson, FISPE | Joshua Brown (United Kingdom)

What Do Real World Data Validation Best Practices Look Like? Operationalizing Guidance for Real-World Studies Intended for Decision-making [243] - Congress Hall D2 Ulka Campbell | Sangmi Kim | Sengwee Toh Seamus Kent | Jeffrey Brown | Carla Rodriguez-Watson (United States)

Updating the Public on COVID-19 Vaccine Safety – Considerations for Pharmacoepidemiologists [244] - Congress Hall D5 Mathias Møllebæk | Priya Bahri | Nabarun Dasgupta Barbara Mintzes | Anton Pottegård | Peter Mol (Denmark)

**Emulation Differences versus Bias:** Implications of Large-scale Emulation of Randomized Clinical Trials Using Clinical Practice Data (RCT-DUPLICATE) 12451 - Conference Room C1M0

Shirley Wang, FISPE | Sebastian Schneeweiss, FISPE Peter Arlett | Hans-Georg Eichler | Melvin Olson (United States)

COVID-19 Vaccine Use During Pregnancy: Accelerating Innovative Evidence Generation Platforms to Meet Current and Future Challenges [246] - Meeting Room C1M1 Kourtney Davis, FISPE | Diego Wyszynski Wilhelmine Meeraus | Lydie Marcelon | Nicole Baker

Emily Yost (United States)

#### 12:00 - 1:30 PM

LUNCH/POSTER SESSION C/EXHIBITS - HALL C

#### 12:00 - 1:30 PM

ISPE BOARD OF DIRECTORS' LUNCH -**MEETING ROOM 19** 

Open to all ISPE members; please contact info@pharmacoepi.org if you are interested in attending this meeting.

#### 12:15 - 1:15 PM

SPOTLIGHT POSTER SESSION C - HALL E SOUTH

**Health Equity** 

**Medical Devices** 

Medications in Pregnancy and Lactation

**Pediatrics** 

Rare Diseases

Vaccines



Solve complex challenges with real-world data and industry-leading expertise

Visit ICPE booth #301 and talk with our researchers and data scientists

IBM Watson Health



#### 1:30 - 3:00 PM

#### CONCURRENT SESSIONS:

**ORAL PRESENTATIONS** 

### Novel Approaches to Pharmacovigilance – *Room C1M5*

#### 1:30 PM

Surveillance of Antidepressant Safety (SADS): Comparison of Signal Detection of Serious Medical Events Using Tree-based Scan Statistics and Repeated Cohort Studies [247] Mia Aakjær | Murat Kulahci | Marie Louise De Bruin Abdul Rauf Khan | Morten Andersen (Denmark)

#### 1:45 PM

Myocarditis and Pericarditis Associated with SARS-CoV-2 Vaccines in Four European Countries Using Large Electronic Health Care Data Sources: A Population-based Descriptive Cohort and a Nested Self-controlled Risk Interval Study [248] Judit Riera Arnau | Sophie Bots | Anna Schultze Davide Messina | Svetlana Belitser | Carlos Duran Ema Alsina | Ian Douglas (Spain)

#### 2:00 PM

Screening for Statin-related Prescribing
Cascades Using High-throughput Sequence
Symmetry Analysis [249]
Scott Vouri | Earl Morris | Marta Walsh
Leonie Hochleitner | Matthew Muschett | Jessica Agalliu
Alyssa Dempsey | Stephan Schmidt (United States)

#### 2:15 PM

Detecting Adverse Drug Events in Dermatology Through Natural Language Processing of Physician Notes [250] Lawrence Rasouliyan | Vikas Kumar | Veysel Kocaman David Talby (United States)

#### 2:30 PM

Preliminary Results from HERO-together:
A Post-emergency Use Authorization Observational
Cohort Study to Evaluate the Safety of the PfizerBioNTech COVID-19 Vaccine in US Healthcare
Workers and Community Members [251]
Emily OBrien | Cherise Wong | Jack Shostak | Laura Webb
Lauren Cohen | Heather Rubino | Patrick Caubel
Amy Abernethy (United States)

#### 2:45 PM

Use of Anxiolytic, Hypnotic and Antidepressant Drugs After Dispensation of a Levonorgestrel 52 mg Intra-uterine System Compared to a 19.5 mg Intra-uterine System:

A Nationwide Matched-cohort Study [252]

Noemie Roland | Bérangère Baricault | Jeremie Botton Lise Duranteau | Rosemary Dray-Spira | Alain Weill Mahmoud Zureik (France)

### Fractures and Osteoporosis Medication – Congress Hall D2

#### 1:30 PM

Concurrent Use of Prescription Opioids with Other Medications and Risk of Fall and Fracture in Rheumatoid Arthritis Patients [253] Nazleen Khan | Katsiaryna Bykov | Jeffrey Katz Robert Glynn | Seanna Vine | Seoyoung Kim (United States)

#### 1:45 PM

Effectiveness of Osteoporosis Medications on the Risk of Fracture: A French Population-based Cohort Study [254]

Pauline Bosco-Levy | James O'Kelly | Karine Briot Nadia Mehsen-Cetre | Alban Fabre | Régis Lassalle Abdelilah Abouelfath | Angela Grelaud *(France)* 

#### 2:00 PM

A Translational Approach to Study Drug-Drug Interaction with Hormonal Contraceptives: From Pharmacoepidemiology to Mechanistic Modelling [255] Amir Sarayani | Brian Cicali | Stephan Schmidt Joshua Brown | Almut Winterstein, FISPE (United States)

#### 2:15 PM

Comparison of Denosumab versus Bisphosphonates on Progression-free and Overall Survival in Newly Diagnosed Multiple Myeloma: A New User, Active Comparator Analysis of Real-World Data [256] Jenny Guadamuz | Mustafa Ascha Ghulam Rehman Mohyuddin | Brian C.-H. Chiu Pritesh R. Patel | Karen Sweiss, | Rebecca Rohrer Amy Pierre (United States)

#### 2:30 PM

The Difference Between Pregabalin and Gabapentin in the Risk of Fragility Fractures – A Nationwide High-dimensional Propensity Score Matched Cohort Study [257]

Daniel Henriksen | Emilie Jørgensen | Per Damkier Jesper Hallas, FISPE (Denmark)

#### 2:45 PM

Treatment Heterogeneity in Comparative Effectiveness of Teriparatide vs Bisphosphonates: Multi-database Cohort Study [258] Alexandros Rekkas | Annika Joedicke | David van Klaveren Daniel Prieto-Alhambra | Peter Rijnbeek (Netherlands)

#### Use it or Lose Out: Trends in Anti-cancer and Biologic Utilization - Congress Hall D5

#### 1:30 PM

Utilization Patterns of Systemic Immunomodulating Drugs in Patients with Atopic Dermatitis in Clinical Practice [259] Maria Schneeweiss | Priyanka Anand Sebastian Schneeweiss, FISPE (United States)

#### 1:45 PM

Trends in Access to Essential Cancer Medicines in Low and Middle Income Countries, 2015-2020 [260] Dima Qato | Andrew Shooshtari | Jonathan Cohen Prashant Yaday (United States)

#### 2:00 PM

End-of-life Endocrine Treatment of Older Hormone Receptor-positive Metastatic Breast Cancer Patients: A Nationwide Swedish Retrospective Cohort Study [261] Máté Szilcz | Jonas Wastesson | Henrik Lindman Kristina Johnell (Sweden)

#### 2:15 PM

Real-World Treatment Patterns Before and After Receiving PD-L1 Test Results in Patients with Advanced Non-small Cell Lung Cancer (aNSCLC) [262] Wenzhen Ge | Scott Antonia | Ning Wu Jean-François Pouliot | Hilary Dietz | Jessica Jalbert Ruben GW Quek | James Harnett (United States)

Triptan Consumption Before and After the Initiation of an Anti-CGRP mAb: A Descriptive Drug Utilization Study in Tuscany Region, Italy [263] Giulia Hyeraci | Olga Paoletti | Luigi Francesco lannone Rosa Gini | Francesco De Cesaris | Silvia Benemei Pierangelo Geppetti | Giuseppe Roberto (Italy)

#### 2:45 PM

The Association Between Trajectories of Adherence to Endocrine Therapy and the Risk of Breast Cancer Recurrence Among Nonmetastatic Breast Cancer Survivors [264] Juan Hincapie-Castillo | Weihsuan Jenny Lo-Ciganic Ching-Yuan Chang | Bobby Jones | Haesuk Park Coy Heldermon | Vakaramoko Diaby | Debbie Wilson (United States)

#### Safety Issues Concerning DM and Antidiabetic Drugs - Room C1M0

#### 1:30 PM

Long-acting Insulin Analogues versus Neutral Protamine Hagedorn Insulin and the Risk of Severe Hypoglycemia Among Patients in Type 2 Diabetes in the United Kingdom [267]

Vanessa Brunetti | Kristian Filion | Oriana Hoi Yun Yu, Robert Platt (Canada)

#### 1:45 PM

Dipeptidyl peptidase-4 Inhibitors and the Risk of Acute Liver Injury Among Patients with Type 2 Diabetes [268] Richeek Pradhan | Hui Yin | Oriana Hoi Yun Yu Laurent Azoulay (Canada)

#### 2:00 PM

The Comparative Safety of Individual SGLT2 Inhibitors and the Risk of Diabetic Ketoacidosis [269] Devin Abrahami | Elvira D'Andrea | Seoyoung Kim Deborah Wexler | Julie Paik | Elisabetta Patorno (United States)

#### 2:15 PM

Risk of New-onset Type 2 Diabetes in Antidepressant Users: A Population-based Cohort Study in Denmark [270] Reeha Sharon | Morten Andersen | Theis Lange (Denmark)

Risk of Hypoglycemia with Sodium Glucose cotransporter-2 Inhibitors vs Alternative Glucose Lowering Medications in Patients with and without Baseline Use of Insulin or Sulfonylurea [265] Phyo Htoo | Deborah Wexler | Seoyoung Kim | Julie Paik Ethan Alt | Dae Kim | Elisabetta Patorno (United States)

#### 2:45 PM

Concomitant Use of Sulfonylureas and Warfarin and the Risk of Severe Hypoglycemia: A Population-based Cohort Study [266] Jenny Dimakos | Ying Cui | Robert Platt | Christel Renoux Kristian Filion | Antonios Douros (Canada)

### Evaluating the Vaccines Against the Nasty Bugs: Safety First Round II – *Room C1M1*

#### 1:30 PM

COVID-19 Vaccination During Pregnancy and Risk of Preterm Birth, Small-for-gestational-age Birth, and Stillbirth [271]

Deshayne Fell | Sheryll Dimanlig-Cruz | Annette Regan Siri Haberg | Christopher Gravel | Laura Oakley Gilian Alton | Tavleen Dhinsa (Canada)

#### 1:45 PM

Risk of Myocarditis and Pericarditis Following BNT162b2 and mRNA-1273 COVID-19 Vaccination [272]

Nicola Klein | Kristin Goddard | Edwin Lewis Bruce Fireman | Ousseny Zerbo | Thomas Boyce Kayla Hansen | James Donahue (United States)

#### 2:00 PM

COVID-19 Vaccination and Acute Neurological Events in England: A Self-controlled Case Series Using the OpenSAFELY Platform [273] Anna Schultze | Jemma Walker | John Tazare Arina Tamborska | Bhagteshwar Singh | Katherine Donegan Julia Stowe | Caroline Morton (United Kingdom)

#### 2:15 PM

Assessment of the Risk of Myocardial Infarction, Stroke, and Pulmonary Embolism Following Different COVID-19 Vaccines in Adults Under 75 Years of Age in France [274] Stephane Le Vu | Jeremie Botton | Marie-Joëlle Jabagi Marion Bertrand | Bérangère Baricault | Jérôme Drouin Alain Weill | Paddy Farrington (France)

#### 2:30 PM

Genetic Risk and Incident Venous Thromboembolism in Middle-aged and Older Adults Following COVID-19 Vaccination [275]
Junqing Xie | Victoria Y. Strauss | Albert Prats-Uribe

Dipender Gill | Roger Paredes | Daniel Prieto-Alhambra (United Kingdom)

#### 2:45 PM

mRNA COVID-19 Vaccination Early in Pregnancy and Risk of Spontaneous Abortion in an International Pregnancy Registry [276]

Omar Mansour | Diego Wyszynski Sonia Hernandez-Diaz, FISPE (United States)

#### 1:30 - 3:00 PM

#### LIGHTNING SESSION 3 - ROOM C1M2

#### Informatics

#### 1:30 PM

The Impact of Electronic Health Record Discontinuity on Prediction Modeling [282]

Lily Bessette | Joshua Lin | Shreyas Kar | Richard Wyss Aaron Kesselheim (United States)

#### 1:35 PM

Target Fishing and Drug Repurposing for Pancreatic Ductal Adenocarcinoma: An Integrated Bioinformatic and Computational Approach [277]

Gouri Nair | Aina Shaju | Subeesh Kulangara Viswam (India)

#### 1:40 PM

Using Network Analysis Modularity to Represent Health Code Systems in Machine Learning Models [281] Mohsen Askar | Kristian Svendsen | Lars Småbrekke Lars Ailo Bongo (Norway)

#### 1:45 PM

Web and Social Media Listening Using AI/NLP for COVID-19 Vaccine Safety Monitoring [287]
Alena Khromava | Chathuri Daluwatte | Yuning Chen Laurence Serradell | Anne-Laure Chabanon
Anthony Chan-Ou-Teung | Kiran Mahadeshwar
Cliona Molony (Canada)

#### 1:50 PM

Informatics Panel Discussion

#### Disease Epidemiology

#### 2:00 PM

Temporal Changes in Incidence of Acute Pyelonephritis: A 19-year Population-based Danish Cohort Study [278] Lise Svingel | Christian Christiansen | Kirstine Søgaard Henrik Birn | Mette Nørgaard (Denmark)

#### 2:05 PM

Predicting Risks of Intracranial Bleeding in Older Adults with Atrial Fibrillation to Aid Prescribing Decisions [283] Lily Bessette | Joshua Lin | Daniel Singer | Dae Kim (United States)

Real world evidence. Real confidence. Real results.

Let's talk at ICPE 2022



IQVIA Real World Solutions • iqvia.com • RWEinfo@iqvia.com



#### 2:10 PM

Estimating the Incidence of Co-occurring Thrombosis and Thrombocytopenia in a Healthcare Database [279] Yanfang Liu | Choo Hua Goh | Dereck Shen Kuan-Chih Huang | Hong Qiu | Man Luo | Zhangjing Chen Chao-Hsiun Tang (United States)

#### 2:15 PM

Individualized Treatment Rule Identification in Heart Failure Patients Using Precision-medicine Methods [286]

Arti Virkud | Jessie Edwards | Michele Jonsson Funk, FISPE Emily Gower | Michael Kosorok | Patricia Chang Abhi Kshirsagar (United States)

#### 2:20 PM

Disease Epidemiology Panel Discussion

#### Pregnancy and Lactation

#### 2:30 PM

Exposure to Known or Suspected Teratogenic Drugs Prior to Conception in a Commercially Insured Population of Pregnant Women [284] Ryan Seals | Alicynne Glazier-Essalmi | Florence Wang (United States)

#### 2:35 PM

Antibiotic Use in Early Pregnancy and Risk of Gestational Diabetes Mellitus: A Nationwide Cohort Study of 3 Million Pregnancies [285] Yunha Noh | Eun-young Choi | Ahhyung Choi Seung-Ah Choe | Ju-Young Shin (South Korea)

#### 2:40 PM

Associations of Prenatal Depression and Selective Serotonin Reuptake Inhibitor (SSRI) Treatment with Early Child Development [280]

Lyndsay Avalos | Nerissa Nance | Ayesha Sujan Kathryn Ridout | DeKun Li | Charles Quesenberry Meghan Davignon | Lisa Croen (United States)

#### 2:45 PM

Associations of Prenatal Exposure to Non-steroidal Anti-inflammatory Drugs with Preterm Birth and Small-for-gestational Age Among Women with Autoimmune Disorders [463]

Erin Delker | Christina Chambers | Diana Johnson Gretchen Bandoli (United States)

#### 2:50 PM

Pregnancy and Lactation Panel Discussion

#### 3:00 - 3:15 PM

BREAK/EXHIBITS/POSTERS - Hall C

#### 3:15 - 4:45 PM

#### **HOT TOPIC SESSION**

#### How Can We Mitigate Publication of Poorly Conducted RWE Studies? Keynote Session -Congress Hall D4

The growing acceptance of RWE in clinical and regulatory decision-making as well as the increasing availability of healthcare data coupled with automated analytic approaches have contributed to a marked expansion of RWE studies. Commensurate with this, there has been increasing concern about inappropriate applications of RWE, violating causal inference principles with inappropriate use of data and methods. At the height of the 2020s COVID-19 pandemic, urgency for data elucidating the effects of various COVID-19 treatments may have created additional pressure to relax standards regarding the level and rigor of scientific review, resulting in "pandemic-related research waste", including two papers published in, and then retracted from, NEJM and The Lancet. This symposium will discuss ways that we as pharmacoepidemiologists can contribute to better governance of RWE studies, including appropriate study conduct, transparency, publication and peer review.

#### **SPEAKERS**

Almut Winterstein, FISPE

Distinguished Professor, University of Florida

Vera Ehrenstein, MPH, DSc, Aarhus University

Jeffrey Brown, PhD, Chief Scientific Officer, TriNetX

Til Stürmer, FISPE

Nancy A. Dreyer Distinguished Professor and Chair, University of North Carolina at Chapel Hill

Meredith Smith, FISPE, AstraZeneca

#### 4:45 - 5:30 PM

#### THE FINAL WORD - CONGRESS HALL D4

#### 38th ICPE Awards

Anton Pottegård

Chair, ICPE 2022 Scientific Program Committee

Jesper Hallas, FISPE

Co-Chair, ICPE 2022 Scientific Program Committee

Review of Abstract Admission Categories

Newcomer Track

Moderator Subcommittee

Spotlight Poster Sessions

#### Spotlight Poster Awards

Wendy Camelo Castillo

Chair, Spotlight Poster Sessions

#### ADJOURNMENT OF THE ICPE 2022

Anton Pottegård

Chair, ICPE 2022 Scientific Program Committee

Jesper Hallas, FISPE

Co-Chair, ICPE 2022 Scientific Program Committee

#### 5:45 - 6:45 PM

#### 2023 SCIENTIFIC PROGRAM **COMMITTEE - MEETING ROOM 20**

Open to all attendees.

#### **FUTURE MEETINGS**

14th Asian Conference on Pharmacoepidemiology (ACPE)

Tainan, Taiwan | October 21-23, 2022

Soto Setoquchi

Program Chair

Mid-Year Meeting, Reykjavík Iceland | April 23-25, 2023

Helga Gardarsdottir, FISPE

Program Chair

39th ICPE: Halifax

Nova Scotia, Canada | August 23-27, 2023

Robert Platt

Chair, ICPE 2023 Scientific Program Committee

### Posters

#### GUIDELINES

#### **OVERVIEW**

Poster sessions are intended to give presenters an opportunity to discuss informally their research with colleagues interested in their research. The purpose of the posters is to visually stimulate interest in the research, to present sufficient information for viewers to understand the methods, results, and significance of the research, and to promote conversations and networking among conference participants.

Neither ISPE nor the Bella Convention Center will be responsible for any material left on display overnight or is lost or damaged.

#### POSTER SESSIONS EXPLAINED

There are two separate and distinct Spotlight and General poster sessions each day at the Bella Convention Center. The Spotlight Poster Session is scheduled for Hall E South. The General Poster Session is scheduled for Hall C. Each day is allocated a Session and scheduled at the following times:

Session A: Friday, August 26 | 8 AM - 6 PM

Session B: Saturday, August 27 | 8 AM - 6 PM

Session C: Sunday, August 28 | 8 AM - 1:30 PM

#### SETUP/TAKE DOWN

7:00am-8:00am; all posters must be in place by 8:00am. The poster area must be cleared of tubes, obstacles, trip hazards, and other materials.

All posters for a specific day's session must be removed at the end the session, by 7:00pm on Friday and Saturday, and by 3:00pm on Sunday. Posters not removed by these times will be assumed to be abandoned and will be discarded.

#### **DISCUSSION TIME**

#### **General Session**

Presenting Authors must be at their posters at the following times for discussion:

Friday (Session A): 12:00 - 1:30 PM

Saturday (Session B): 11:30 AM - 1:00 PM

Sunday (Session C): 12:00 - 1:30 PM

#### **Spotlight Poster**

Presenting Authors must be at their posters at the following times for discussion:

Friday (Session A): 12:15 - 1:15 PM

Saturday (Session B): 11:45 AM - 12:45 PM

Sunday (Session C): 12:15 - 1:15 PM

#### Spotlight Sessions

Organized by ISPE Special Interest Groups (SIGs). Spotlight sessions showcase select posters and give presenters the opportunity to share and discuss their work with an audience. When the spotlight session chair and audience stop at your poster, please give a brief, 3-minute, presentation and be prepared to answer questions about your research.

Spotlight posters are organized in the following topic areas:

#### Friday (Session A)

Adherence | ASPEN | Biologics | BRACE Cancer | Comparative Effectiveness Research

#### Saturday (Session B)

Databases | Digital Epidemiology | Drug Utilization Research Drug-Drug Interaction | Genomics | Geriatrics

#### Sunday (Session C)

Health Equity | Medical Devices | Medications in Pregnancy and Lactation | Pediatrics | Rare Diseases | Vaccines

#### Spotlight Session Prizes

A group of judges will select the best posters of each Spotlight Session. The best presenters will receive an invitation to display their posters for the duration of the conference. The winners will be announced at The Final Word session on Sunday, August 28.

#### Numbering System

Each poster board will be numbered. Presenters should attach their posters to the board number corresponding to the number assigned to their poster listed in this program. The poster board number is the first number listed. The publication number, for use in locating abstracts in the program book, is listed after the abstract title.

#### Example

97 – Characteristics of Patients with Depression Who Initiate Antidepressant and Benzodiazepine Therapy Simultaneously, Compared with Antidepressant Monotherapy [176]

Greta A. Bushnell | Alice White | Til Stürmer | Bradley Gaynes Virginia Pate | Deborah Azrael | Matthew Miller (United States)

Key: 97 – Poster Board Number [176] – Publication Number

#### SPOTLIGHT POSTERS

ADHERENCE	63
ASPEN	63
BIOLOGICS	64
BENEFIT-RISK ASSESSMENT, COMMUNICATION, AND EVALUATION (BRACE)	64
CANCER	65
COMPARATIVE EFFECTIVENESS RESEARCH (CER)	65
BENEFIT-RISK ASSESSMENT, COMMUNICATION, AND EVALUATION (BRACE)	66
DISEASE EPIDEMIOLOGY/CLINICAL COURSE	67
DRUG UTILIZATION RESEARCH	70
HEALTH EQUITY	74
METHODS IN PHARMACOEPIDEMIOLOGY	76
MOLECULAR EPIDEMIOLOGY/ BIOMARKERS/ PHARMACOGENETICS	79
PHARMACOVIGILANCE	79
PREGNANCY AND LACTATION	81
RARE DISEASE	85
SAFETY END DOINTS	96

#### FRIDAY, AUGUST 26 | 8 AM - 6 PM

#### SPOTLIGHT POSTERS

#### ADHERENCE -

A – Primary Hydroxychloroquine Adherence in Lupus Pregnancy [291]

Julia F Simard | Emily F. Liu | Eliza Chakravarty
Amadeia Rector | Miranda Cantu | Daniel Kuo | Gary Shaw
Maurice Druzin | Michael Weisman | Monique Hedderson
(United States)

B – Impact of the COVID-19 Pandemic on Timeliness of Denosumab Dispensations: An Interrupted Time Series Analysis [292] Anna M. Rzepka | Tara Gomes | Angela M. Cheung Sandra Kim | Maha Chaudhry Suzanne M. M. Cadarette (Canada)

C – Trends in Opioid New Users and Subsequent Long-Term Use Among Patients with Rheumatic and Musculoskeletal Diseases Between 2006-2020 [293]

Meghna Jani | Joyce (Yun-Ting) Huang | David A. Jenkins Belay Yimer | Jose Benitez-Aurioles | Niels Peek Mark Lunt | William Dixon (United Kingdom) D – Changes in Medication Use Before and After Bariatric Surgery in Older Adults [294]
Scott M. Vouri | Ching-Yu Wang | Leonie Hochleitner (United States)

E – Antidepressant Continuation and Adherence in Pregnancy and Risk of Antenatal Hospital Admission for Depression and/or Anxiety [295] Angela Lupattelli | Anna Cantarutti | Giovanni Corrao, Chiara Gatti (Norway)

F – ADHD Medication Use Trajectories Among Pregnant Women with ADHD in Norway and Sweden [296]

Chaitra Srinivas | Øystein Karlstad | Hein Stigum Karl Furu | Carolyn Cesta | Johan Reutfors Jacqueline Cohen (Norway)

#### ASPEN

G – Thiazide Diuretics and the Risk of Skin Cancer: A Meta-Analysis of Observational Studies [297] Tien Hoang Tran | Seung-Kwon Myung Thao Thi Kim Trinh (Vietnam)

H – Incidence and Prevalence of Prescription Opioid Use During Australian COVID-19 Restrictions [298]

Monica Jung | Dickson Lukose | Suzanne Nielsen J. Simon Bell | Geoffrey Webb | Jenni Ilomaki (Australia)

I – Impact of Clinical Pharmacist Interventions on Patients' Quality of Life (QoL) and Influencing Risk Factors Associated with Poor QoL in Systemic Lupus Erythematosus Disorder Patients [299] Sujit Kumar Sah | Ramesh Madhan Subramanian Ramaswamy (India) J – Economic Evaluation of Sacubitril/ Valsartan for the Treatment of Chronic Heart Failure with Reduced Ejection Fraction (HFrEF) in Indonesia [300]

Erna Kristin | Dwi - Endarti | Ratih Puspita Febrinasari Dwi Aris Agung Nugrahaningsih | Woro Rukmi Pratiwi Sudi Indrajaya (Indonesia)

K – Risk of Mortality with Early-Stage Nonadherence to the Regimen in Patients with Drug-Susceptible Tuberculosis: A Nationwide Linkage Database [301] Hyesung Lee | Sungho Bea | Ju Hwan Kim | Bin Hong Ju-Young Shin (Republic of Korea)

L – Comparative Cardiovascular Events
Associated with Denosumab vs Zoledronate in
The Elderly: A 5-Year Follow-Up Propensity Score
Matching Cohort [302]

Kaicheng Chang | Fang-Yi Li | Shih-Chieh Shao Hui-Yu Chen (*Taiwan*)

M – Association of Sacubitril/Valsartan with Hypoacusis Unveiled Through Disproportionality Analysis in US FDA Adverse Event Reporting System (FAERS) [303]

Pudi Chiranjeevi | Saraswathy G. R. Subeesh Kulangara Viswam | Ann Mary Swaroop (India)

N – Triazole Anti-fungals Associated with Acute Pancreatitis: A Disproportionality Analysis in a Spontaneous Reporting Database [304]
Lipin Lukose | Aina Shaju | Mohammed Asif Subeesh Kulangara Viswam (India)

#### BIOLOGICS -

O – Depression, Anxiety and Adjustment Disorder Among Patients with Psoriasis Receiving Systemic Agents: A Retrospective Cohort Study in Quebec, Canada [305]

Raymond Milan | Jacques Lelorier | Marie-Josée Brouillette Anne Holbrook | Ivan V. Litvinov | Elham Rahme (Canada)

P – Inpatient Constipation Among Migraine Patients Treated with Preventive Medications in a United States Electronic Health Record Database [306]

Andrea K. Chomistek | Veena Hoffman | Karminder Gill Robert Urman | Stephen M. Ezzy | Li Zhou | Andrew Park Brett Loop | Sandra Lopez-Leon | Peter Mcallister Florence Wang (United States)

Q – Effect Modification by Indications to the Risks of Major Thromboembolic Adverse Events in Patients Receiving Intravitreal Anti-Vascular Endothelial Growth Factor Treatment – A Population-based Retrospective Cohort Study [307]

Wanju Annabelle Lee | Shih-Chieh Shao | Tzu-Chi Liao Swu-Jane Lin | Chi-Chun Lai | Edward Lai (*Taiwan*)

R – Mandatory Non-Medical Switching Policy from Originator to Biosimilar Infliximab in Patients with Inflammatory Bowel Disease in British Columbia: A Cohort Study [308]

Anat Fisher | Jason D. Kim | Colin Dormuth (Canada)

S – TNF-Alpha Inhibitors Biosimilar Use in France: A 207,118 Patients Longitudinal Study [309] Hugo Jourdain | Mahmoud Zureik | Léa Hoisnard Emilie Sbidian (France)

T – Predictors of Treatment Changes in Patients with Rheumatoid Arthritis Using Machine Learning [310]

Alexander Liede | Whitney Krueger | Linyan Li Yuhang Liu | Yi Pan | Michelle Brauer | Seoyoung Kim Earl Steinberg (*Ireland*)

U – Drug Utilization of Biologic Therapy in Crohn's Disease and Ulcerative Colitis: A Population-based Danish Cohort Study 2015-2020 [311]

Kristoffer Jarlov Jensen | Camilla B. Jensen
Christina Wennerström | Kari Stougaard Jacobsen
Johan Burisch | Janne Petersen (Denmark)

#### BENEFIT-RISK ASSESSMENT, COMMUNICATION, AND EVALUATION (BRACE) -

V – Regulatory Benefit-Risk Assessment of Oncology Drugs: A Systematic Review of FDA and EMA Approvals [312]

Tommi Tervonen | Cathy Anne Pinto | Maria E. Dudek Shahrul Mt-Isa | Xinyue Liu | Oswaldo Bracco Zaneta Balantac | Harrison Clarke (United Kingdom)

W – Benefit Risk Contextualisation of COVID-19 Vaccines in the EU [313]

Xavier Kurz | Catherine Cohet | Chantal Quinten Geert Molenberghs | Niel Hens | Steven Abrams Lander Willem | Jonas Crevecoeur | Neilshan Loedy Johan Verbeeck (Netherlands) X – Structured Benefit-Risk for Enoxaparin Based on Real-World Evidence Data in the Context of Its Label Extension for Treatment of Deep Vein Thrombosis and Pulmonary Embolism and Prevention of Its Recurrence in Active Cancer Patients *[314]* 

Marie-Laure Kürzinger | Chantal El-Haddad Tatiana Gouin-Soboleva | Zita Fazekas | Denis Granados Elizabeth Benito Garcia | Yasmina Djoudi (*France*)

Y – An Approach to Personalized Assessment of Drug Efficacy Using Likelihood Ratios [315] Colin Dormuth (Canada)

#### CANCER -

Z – Incidence of Opportunistic Infections
Among Patients with Multiple Myeloma:
Real-World Evidence from a Large US
National Claims Database [316]
Alexi Archambault | Martha Makaratzi
Karen Rodriguez Lorenc | Glenn Kroog | Christian Hampp
(United States)

AA – Proton Pump Inhibitors and Colorectal
Cancer Mortality: A Population-based
Nationwide Cohort Study [317]
Jannik Wheler | Deirdre Cronin-Fenton | Anders Kjærsgaard
Timothy Lash | Rune Erichsen | Veronika Fedirko (Denmark)

AB – Risk of Venous Thromboembolism Events in Prostate Cancer Patients [318]
Lu Wang | Mitchell M. Conover | James Weaver
J. Kellogg Parsons | Sabine D. Brookman-May | Dina Gifkins (United States)

AC – 5-Alpha Reductase Inhibitor Use and Risk of Kidney and Bladder Cancer in Men with Benign Prostatic Hyperplasia: A Population-based Cohort Study [319]
Niamh Doherty | Christopher Cardwell | Peter Murchie Christopher Hill | Laurent Azoulay | Blánaid Hicks (United Kingdom)

AD – Effects of Endocrine Therapy on Cardiovascular Diseases and Type 2 Diabetes Among Breast Cancer Patients: The National Health Insurance Service Database of Korea [320] Ji-Eun Kim | Jaseung Choi | Jooyong Park | Wonshik Han Daehee Kang | Ji-Yeob Choi (South Korea)

AE – Use of Selective Serotonin Reuptake Inhibitors (SSRI) and Risk of Breast Cancer [321] Tomas Log | Marit Waaseth (Norway)

AF – Hypothesis-Free Screening for Carcinogenic Effects of Drugs [322]
Anton Pottegård | Kasper Bruun Kristensen | Søren Friis
Lars Christian Lund | Jesper Hallas | Christopher Cardwell
Bettina K. Andreassen | Laurel A. Habel (Denmark)

AG – Mineralocorticoid Receptor Antagonists and Prostate Cancer Risk in Patients with Heart Failure [323]

Chengsheng Ju | Wallis Lau | Li Wei (United Kingdom)

### COMPARATIVE EFFECTIVENESS RESEARCH (CER)

AH – Antipsychotic Polytherapy Versus Monotherapy in Specific Dose Categories in the Maintenance Treatment of Schizophrenia [324] Heidi Taipale | Antti Taskanen | Jari Tiihonen (Finland)

Al – Comparative Risk of Opioid Overdose with Concomitant Use of Prescription Opioids and Skeletal Muscle Relaxants [325] Nazleen Khan | Katsiaryna Bykov | Michael Barnett Robert Glynn | Seanna Vine | Joshua J. Gagne (United States)

AJ – Association of Mortality by Statin
Intensity in Chronic Liver Disease Patients with
Atherosclerotic Cardiovascular Disease:
A Nationwide Cohort Study [326]
Sungho Bea | In-Sun Oh | Ju Hwan Kim | Dong Hyun Sinn
Yoosoo Chang | Seungho Ryu | Ju-Young Shin
(Republic of Korea)

AK – Macrolide Treatment Failure Due to Drug-Drug Interactions: Real-World Evidence to Evaluate a Pharmacological Hypothesis [327] Brian Cicali | Stephan Schmidt | Markus Zeitlinger Joshua Brown (United States)

AL – Real World Effects of Oral Anticoagulants in AF: A Cohort Study with Validation Against Results from a Randomised Controlled Trial [328] Emma M L Powell | Ian Douglas | Kevin Wing Usha Gungabissoon | Liam Smeeth (United Kingdom)

AM - Comparative Effectiveness of Ticagrelor, Prasugrel, and Clopidogrel for Secondary Prophylaxis in Acute Coronary Syndrome [329] Joel F. Farley | Arun Kumar | Pamela Lutsey Wendy St. Peter, | Jon Schommer | Jeremy Van'T Hof Abhijeet Rajpurohit (United States)

AN – Real-World Evidence for the Effectiveness of Vitamin D Supplementation in the Reduction of Total and Cause-specific Mortality.

Results from Half a Million Participants of the UK Biobank Cohort Study [330]

Sha Sha | Hermann Brenner | Ben Schoettker

Thi Mai Ngoc Nguyen | Sabine Kuznia | Tobias Niedermaier Anna Zhu (Germany)

AO – A Real-World Assessment of Sex Differences in the Comparative Safety and Effectiveness of Direct-Acting Oral Anticoagulants Versus Warfarin [331] Meijia Shao | Ai Ni | Macarius Donneyong (United States)

#### BENEFIT-RISK ASSESSMENT, COMMUNICATION, AND EVALUATION (BRACE) -

- 1 Pharmacoepidemiology and Benefit/Risk Management Strategies in Clinical Trials with Cell-based Combination Products 13321 Marina A. Malikova (United States)
- 2 Application of The BRACE Framework for Benefit-Risk Assessment, Communication, and Evaluation of Pexidartinib 13331 Eric Wang | Charles Dharmani | Maribel Salas

(United States)

3 – Estimates of Dietary Exposure to Antibiotics Among a Community Population in East China 13341

Yingying Wang | Yurong Li | Jinxin Zang | Xiaolian Dong Bingbing Zhu | Na Wang | Lufang Jiang, | Feng Jiang Xinping Zhao | Qingwu Jiang | Chaowei Fu (China)

4 – Evaluation of Consumers' Knowledge, Beliefs and Risk Assessment Regarding Protein 13351

Paraskevi Basdeki | Eirini-Georgia Deligiannidou Diamanto Lazari | Christos Kontogiorgis (Greece)

5 – Guidance for Pediatric Use in Prescription Information for Novel Medicinal Products in the EU and the US [336]

Helle Christiansen | Christine Hallgreen | Sven Frokjaer Marie Louise De Bruin (Denmark)

6 – Fetal Exposure to Isotretinoin in Saudi Arabia: Real-World Data Analysis from 2015-2020 [337]

Yasser Albogami | Ohoud A. Almadani | Sultan Alshehri Abdullah Alkhebri | Mona Anzan | Sumaya Almohareb Abdulaziz Alhossan | Adel A. Alrwisan (Saudi Arabia)

7 – Research Impact Assessment: An Example from the Canadian Network for Observational Drug Effect Studies [338]

Ingrid Sketris | Amy Freier | Alexandra M. Yip Natasha Rodney-Cail | Nancy Carter (Canada)

8 – Prenatal Exposure to Teratogenic Drugs: Contrasts Between Publicly and Privately Insured Persons 13391

Nicole Smolinski | Yanning Wang | Thuy Thai Amir Sarayani | Celeste Ewig | Sonja Rasmussen Almut Winterstein (United States)

- 9 Readability of Information Imprinted in Patient Information Leaflets (PILs) in Saudi Arabia: The Case of Antihypertensive Medications [340] Aljoharah M. Algabbani | Shahad Alzahrani | Slawa Moaman Radwan Hafiz (Saudi Arabia)
- 10 Letermovir for Cytomegalovirus Prophylaxis in Allogeneic Hematopoietic Stem Cell Transplantation [341]

Md Azharuddin | Manju Sharma (India)

- 11 A Review of Patient-Reported Outcomes for European Medicines Agency Regulatory Approval of Oncologic Drugs Between 2017 and 2020 [342] Carla Torre | Maria Manuel Teixeira | Fabio Cardoso Borges Paula Barão | João Rocha | Bruno Sepodes (Portugal)
- 12 Targets for Quality Improvement? Top 10 Teratogenic Drugs Used During Pregnancy in the US [343]

Yanning Wang | Nicole Smolinski | Thuy Thai Amir Sarayani | Celeste Ewig | Sonja Rasmussen Almut Winterstein (United States)

13 – Effectiveness of Risk Minimization Plan for Concentrated Insulin Lispro in France, Germany and Sweden [344]

Ayad K. Ali | Melissa L. Ewing (United States)

14 – A Comprehensive Review on the Teratogenic Risks for Twelve Drugs with Risk **Evaluation and Mitigation Strategy (REMS)** to Prevent Prenatal Exposure [345]

Tansu Miriam Isilay Aydogan | Nicole Smolinski | Thuy Thai Sebastian Jugl | Amir Sarayani | Celeste Ewig Almut Winterstein (Germany)

15 - Contribution of Real-World Evidence to Support Efficacy Claims in Centralised Marketing Authorisation Applications Submitted to EMA in 2018-2019 [346]

Elisabeth Bakker | Kelly Plueschke | Carla Jonker Viktoriia Starokozhko | Peter Mol | Xavier Kurz (Netherlands)

#### DISEASE EPIDEMIOLOGY/CLINICAL COURSE -

16 – Prevalence of Hypothyroidism in the United States: An NHANES 2009–2010 and 2011–2012 Analysis [347]

Chris Schneiderman | Dianlin Guo | Bruce Barger (United States)

17 – A Cross-Sectional Analysis of Systemic Lupus Erythematosus: Younger Patients Have Higher Inpatient Readmission Rates and Older Patients Have Higher Inpatient Resource Use and Mortality [348]

Laura A. Clark | Evelyn Rizzo | Rosa C. Banuelos Koen Degeling | Kathy Belk (United States)

18 – Trends in The Incidence of Chronic Inflammatory Demyelinating Polyneuropathy Over a 10-Year Period in a US Commercially Insured Population [349]

Nicole Tsao | Venkatesh Harikrishnan William A. Blumentals (United States)

19 – Estimating Incidence and Case Fatality of Thyroid Storm in Germany Between 2007 and 2017: A Claims Data Analysis [350]

Katharina Platzbecker | Arulmani Thiyagarajan Till Ittermann | Henry Völzke | Ulrike Haug (Germany)

20 – Using Healthcare Claims to Evaluate Long Haul COVID-19 Disease [351]

Rachel Ogilvie | Jessica Franklin | Michael C. Doherty Heather Norman | John Seeger (United States)

21 – Suicide Poisoning Mortality:

A Comparison of the National Poison Control Center and CDC National Datasets [352]

Silvia Perez-Vilar | Jummai Apata | Dinci Pennap Andrew Mosholder (*United States*)

22 – Type 2 Diabetic Patients with a Single Cardiovascular or Renal Comorbidity: 5-Year Risk of a New Cardiovascular Renal Complication Using the French Nationwide Claims Database [353]

Patrick Blin | Michael Joubert | Philippe Zaoui Estelle Guiard | Dunia Sakr | Caroline Dureau-Pournin Marie-Agnès Bernard | Régis Lassalle Florence Thomas-Delecourt | Sébastien Bineau Nicholas Moore | Cécile Droz-Perroteau Patrick Jourdain (France) 23 – Prevalence and Clinical Burden of Genetic Dilated Cardiomyopathy in the United States: Results from The Optum® Electronic Health Records Database [354]

Scott Kelly | Yaa Ababio | Robert Moccia | Franca S. Angeli Joanne Berghout | Kui Huang | Kathy Liu | Sara Burns Cynthia Senerchia | Gabriel C. Brooks (United States)

24 – The Burden of Sudden Cardiac Death Among Older Adults Diagnosed with Cancer [355]

Jennifer Lund | Courtney Schlusser Sharon Peacock Hinton | Emilie Duchesneau Disha Subramaniam | Magdalene M. Assimon (United States)

25 – Diabetes and Cardiovascular Diseases in Women with Pregnancies Complicated by Vaginal Bleeding: Danish Population-based Cohort Study [356]

Elena Dudukina | Erzsebet Horvath-Puho Henrik Toft Sørensen | Vera Ehrenstein (Denmark)

26 – Type 2 Diabetes, the Epidemic: Trends in Prevalence, Treatment and Risk-Factor Control, 2004-2020 [357] Jetty Overbeek | Karin Swart | Marieke Blom | Petra Elders Giel Nijpels | Ron Herings (Netherlands)

27 – Characteristics and Trends in Cough Medication Use Among Patients with Chronic Cough in Florida: 2013-2019 [358]

Weihsuan Jenny Lo-Ciganic | Seonkyeong Yang Shu Huang | Juan Hincapie-Castillo | Xuehua Ke Jonathan Schelfhout | Helen Ding | Mandel Sher Debbie Wilson (United States)

28 – Treatment Rates for Glaucoma and Intraocular Hypertension in the United Kingdom, 2000-2019 [359]

Luis Velez-Nandayapa | Laura Eggenschwiler | Susan Jick Christoph Meier | Claudia Becker (Switzerland)

29 – The Burden of Osteoarthritis Across the States of India, 1990–2019: Findings from the Global Burden of Disease Study 2019 [360]

Ambrish Singh | Siddharth Kumar Das | Arvind Chopra Debashish Danda | Binoy J. Paul | Lyn March Ashish Jacob Mathew | Padmanabha Shenoy Carolyn Gotay | Andrew J. Palmer | Benny Antony (Australia)

30 – Socioeconomic Position, Psychiatric Medical Treatment and Risk of Breast Cancer Recurrence and Mortality: A Danish Population-based Cohort Study [361] Fanny B. Asmussen | Cathrine Hjorth | Oleguer Plana-Ripoll Aurélie Mailhac | Deirdre Cronin-Fenton (Denmark)

31 - Risk of COVID-19 Among Patients with Atopic Dermatitis: A Targeted Literature Review [362] Ihtisham Sultan | Ashley Howell | Andrea Marcus (United States)

32 - Age- and Gender-specific Epidemiology of Urinary Tract Infection, Pneumonia, Sepsis, Cholecystytis and Cellulitis Among the Elderly: A 20-Year Nationwide Study [363] Hung-Yu Lin | Shih-Tsung Huang | Liang-Kung Chen Fei-Yuan Hsiao (Taiwan)

33 – Incidence of Diabetes Mellitus Among **Chronic Inflammatory Demyelinating** Polyneuropathy Patients Compared to the General Population: A Real-World Study of US Commercially Insured Individuals 13641 Nicole Tsao | Venkatesh Harikrishnan William A. Blumentals (United States)

34 – Evaluating the Effectiveness of Implementing Diagnostic Stewardship in the Management of Acute Pharyngitis: Insights from India [365] Aleena Issac | Jose J. Kochuparambil Jais Vayalikunnel (India)

35 - Uropathogens and Their Antimicrobial Sensitivity Patterns to **Choose Empirical Antibiotic:** Study from a Public Hospital in India [366] Aleena Issac | Jose J. Kochuparambil Jais Vayalikunnel (India)

36 – Treatment Patterns for Inflammatory Bowel Disease in Japan and the US (2010-2019) [367] Michiyo Yamazaki | Hsingwen Chung | Hong Qiu Md, PhD (United States)

37 – Assessment of Neurological Complications in Hemodialysis Patients [368] Sunil G M | Savitha Sanathan | Manjunath Shetty Ronald Castelino | Santhrupth H V (India)

38 – The Willingness and Attitude of Healthcare Providers on Medication Self-Management by Hospitalized Patients with Schizophrenia or Bipolar Disease [369] Elke Loots (Belgium)

39 – Associations Between Oral Diseases and Chronic Diseases Modified by Trajectories of Lifestyle Behaviors: A Nationwide Populationbased Study in Korea [370] Ji-Yeob Choi | Jaseung Choi | Seokyung Hahn Hee-Kyung Park | Seo-Young Park (South Korea)

40 – The Impact of Improved Treatments on Survival of US Leukemia Patients: 1990-2018 [371] Nadia Howlader | Kathleen A. Cronin | Angela Mariotto Manami Bhattacharya | Elad Sharon (United States)

#### 41 – A-1 Adrenergic Receptor Antagonists and Risk of Severe COVID-19 [372]

Elizabeth Smith | David Graham | Hector Izurieta Di Zhang | Armen Avagyan | Hai Lyu | A. Wiederhorn Yun Lu | Andrew Mosholder | Yueqin Zhao Shanlai Shangguan | Huei-Ting Tsai | Dinci Pennap Alexander Sandhu | Michael Wernecke | Thomas E. Macurdy Jeffrey Kelman | Richard A. Forshee (United States)

#### 42 – Migraine and Risk of Gastrointestinal Cancer: A Danish Population-based Cohort Study [373]

Cecilia Fuglsang | Holly Elser | Nils Skajaa | Vera Ehrenstein Dóra Körmendiné Farkas | Henrik Toft Sørensen (Denmark)

#### 43 - Baseline Study for Improving Diagnostic Stewardship at Secondary Health Care Facilities in Nigeria [374]

Abiodun Egwuenu | Adaora Ejikeme | Sara Tomczyk Olaniyi Ayobami, | Oluwaseun Odebajo | Samuel Akhibi Constance Agulanna | Osayande Osagie | Stella Inweregbu Ridwan Yahaya | Tochi Okwor | Hannah Dada-Adegbola Ikeoluwapo Ajayi | Abdulhakeem Olorukooba Tim Eckmanns | Chinwe Lucia Ochu Chikwe Ihekweazu (Nigeria)

44 – Epidemiology of Pseudomonas and Multidrug-resistant Pseudomonas Species in Patients Hospitalized with Community-acquired Bacterial Pneumonia [375]

Adeniyi J. Idigo | J Michael Wells | Matthew L. Brown Howard Wiener | Russell Griffin | Gary Cutter Sadeep Shrestha | Rachael A. Lee (United States)

45 – Development and Validation of a Chronic Kidney Disease Phenotype Using Combined Electronic Health Record and Claims Data [376]

Lily Bessette | Julie Paik | Richard Wyss Julianna M. Mastrorili | Zhigang Lu | Theodore Tsacogianis Joshua Lin (United States)

46 - Characteristics of Asthma Patients with COVID-19 by Disease Severity and Across Age Groups – A Swedish Population-based Analysis within the SCIFI-PEARL Project [377]

Brian K. Kirui | Ailiana Santosa | Lowie Vanfleteren Caroline Stridsman | Fredrik Nyberg (Sweden)

47 – Assessment of Incidence, Pattern and Risk Factors Associated with Opportunistic Infections Among HIV Seropositive Patients [378] Balaji Sathyanarayana Gupta | Alan James Ramesh Madhan (India)

### epi-xcellence

Epi Excellence is pleased to announce the addition of Haley Kaplowitz and Doug Watson to the team!

Our 35+ epidemiologists and scientists are readily available to provide a range of epidemiology services:

- Literature review (simple to complex, narrative to systematic, for any purpose)
- Study development and support (strategic planning; protocol, SAP, report, or manuscript writing)
- Strategic consulting
- Other tasks, no matter how small

Epi Excellence is a small business, honored to be certified as a Women's Business Enterprise and a Minority Business Enterprise.



Proud sponsor of ICPE's Lactation Room - Bella Center Room 28

Call or Text: +1 215.920.7680 | Email: eming@epiexcellence.com Web: epiexcellence.com



Eileen E. Ming, MPH, ScD, FISPE



Haley J. Kaplowitz, PhD



Doug Watson, PhD, FISPE

#### DRUG UTILIZATION RESEARCH

48 – Effect of the COVID-19 Pandemic on Medicines Prescription for Children in Portugal [379]

Ana Silva | Claudia Furtado | Célia Silva (Portugal)

49 – Post-Myocardial Infarction Guidelinerecommended Therapy Utilization Sankey Diagrams [380]

Montika Bush | Sharon Peacock Hinton | Ross J. Simpson Gang Fang (United States)

50 – Characterization and Treatment Patterns of Systemic Lupus Erythematosus Patients -Data from a Large Israeli Health Maintenance Organization [381]

Vered Rosenberg | Tali Eviatar | Gabriel Chodick Daphna Paran (Israel)

51 – The Use of Metamizol and Other Non-opioid Analgesics in Switzerland Between 2014 and 2019: A Descriptive Study [382] Stephan Gut | Marlene Rauch | Carola A. Huber Manuel Haschke | Jan Gärtner | Christoph Meier Julia Spoendlin (Switzerland)

52 – Titanium Dioxide in Drugs Available on the French Market [383]

Manon Cairat | Inge Huybrechts | Agnès Fournier (France)

53 – A Factorial Randomized Trial of Personalized Prescribing Portraits and Evidence Letters to Reduce Long-term Proton Pump Inhibitor Prescribing in Primary Care [384] Greg Carney | Anat Fisher | Dana Stanley

Malcolm Maclure | Colin Dormuth (Canada)

54 – Protocol for Implementing and Evaluating Online Physician Prescribing Portraits: Scalable Low-Cost Audit and Feedback Delivery and Improvement 13851

Greg Carney | Sean Burnett | Malcolm Maclure Colin Dormuth (Canada)

55 – Initial Choice and Switching of P2Y12 Inhibitors Among Patients with Acute Coronary Syndrome (ACS) After Percutaneous Coronary Intervention (PCI) [386]

Yehua Wang | Joshua Brown | Larisa Cavallari Almut Winterstein (United States)

56 – Drug Treatment in Older Patients According to Indicators of Potentially Rational Prescribing 13871 Naldy Parodi Lopez | Staffan A. Svensson Susanna M. Wallerstedt (Sweden)

57 – Status of the Implementation of National Action Plans—All Countries, 2021 [388] Nkuchia M. M'ikanatha | Xin Yin | David Welliver Heather Tate (United States)

58 – Current Trends in Continuous Peripheral Nerve Block Use in Total Knee Arthroplasty [389] Sachinkumar Singh | Gaurav Bisht | Jennifer Wood (United States)

59 - Drug Utilization and Characteristics of COVID-19 Positive Pre- and Postmenopausal Women Diagnosed with Breast Cancer: A Cross-Sectional SCIFI-PEARL Study (390) Mohammadhossein Hajiebrahimi | Hussam Shihan Bjorn Wettermark | Fredrik Nyberg (Sweden)

60 – Trends of Thromboprophylaxis Among Newly Diagnosed Multiple Myeloma Patients Initiating Immunomodulatory Drug-based Regimens, 2010 to 2018 [391]

Abdullah Abdelaziz | Karen Sweiss | Pritesh R. Patel Brian C.-H. Chiu | Gregory Calip (United States)

61 – Assessment of Drug-Drug Interactions and Their Associated Risk Factors in Patients with Systemic Lupus Erythematosus: A Cross-Sectional Study [392] Sujit Kumar Sah | Subramanian Ramaswamy Ramesh Madhan (India)

62 – Use of Prescription Medicines Among Incarcerated Individuals in the United States [393] Jill Curran | Brendan Saloner | Matthew Tajanlangit G. Caleb Alexander (United States)

63 - The Availability of Essential Medicines for Cardiovascular Diseases in Low- and Middle-income Countries: A Case Study of Bangladesh [394] Md Jamal Uddin | Shariful Hakim Muhammad Abdul Baker Chowdhury (Bangladesh)

64 – Utilisation and Prescribing Patterns of Antipsychotic Medication in the Scottish Primary Care Setting (2010-2020) [395]

Fatema Mahmoud | Siobhan Mcbride | Amanj Kurdi (United Kingdom)

65 – Association of Medication Clusters and Labor Market Marginalization in Refugee Youths and Swedish-Born with Common Mental Disorder in Sweden [396]

Jiaying Chen | Ellenor Mittendorfer-Rutz | Heidi Taipale Syed Rahman | Thomas Niederkrotenthaler Peter Klimek (*Austria*)

66 – Trends in Antibiotic Utilization in Australian Residential Aged Care from 2016-2019: A Case Study of Trends of the Antibiotics Frequently Used to Manage Urinary Tract Infection [397]

Chloe C. H. Smit | Katja Taxis | Kris Rogers Hamish Robertson | Lisa Pont (Australia)

67 – Off-Label Low Dose Amitriptyline for Insomnia Disorder: Patient-Reported Outcomes [398]

Mette H. Bakker | Jacqueline Hugtenburg | Marcel Smits Henriette Van Der Horst | Pauline Slottje (Netherlands)

68 – Measuring Access to Medicines for Children: The Robustness of a Child-Specific Indicator [399] Rianne Van Den Ham | Iris Joosse | Aukje Mantel-Teeuwisse Veronika J. Wirtz | Fatima Suleman (Netherlands)

69 – Evaluating Brazil's National Administrative Claims Data for Real-World Pharmacoepidemiologic Studies: Trends in Rheumatoid Arthritis Using DATASUS (2010-2020) [400]

Alexander Liede | Marina G. Birck | Marco Curi Whitney Krueger | Guilherme Julian (Ireland)

70 – Temporal Trends and Correlates of Early Life Exposure to Acid-suppressant Therapy [401]

Gabriel Chodick | Inbal Goldshtein | Tomer Achler Ron Shaoul | Shlomi Cohen | Amir Ben Tov (Israel)

71 – Epidemiology Assessment of Poly-pharmacy Among Metabolic Syndrome Patients Based on Prescriptions of Iranians Health Insurance Service Data Sets, a Cross Sectional Study [402]

Mojdeh Daneshmand | Hamidreza Jamshidi Farshad Farzadfar | Mohammadhadi Farjoo Salehe Mortazavi | Mohsen Shati (*Iran*)

72 – Machine Learning-based Prediction Models for Outpatient Prescription of Japanese Kampo Formulations: Development and Validation Using a Health Insurance Claims Database [403] Hayato Yamana (Japan)

73 – Choice of Initial Treatment with Cholesterol Lowering Drugs in Patients with Familial Hypercholesterolemia, Atherosclerotic Cardiovascular Disease, or Increased Risk of Atherosclerotic Cardiovascular Disease [404] Jakob Kronkvist Hoe | Camilla B. Jensen | Susanne Hansen Rasmus Huan Olsen | Tina Johansen Espen Jimenez-Solem | Janne Petersen (Denmark)

74 – Community Pharmacists' Knowledge, Attitude, and Practices Towards Antibiotic Use in Bulgaria [405]

Hristina Lebanova | Stefan Balkanski | Nadia Veleva (Bulgaria)

75 – Drug Utilization of Anxiolytics and Sedatives Among New Users in Sweden [406] Elin Dahlen | Carola Bardage | Paulina Tuvendal Maria Grünewald | Rickard Ljung (Sweden)

77 – Incidence of Antipsychotic Use Among Community Dwellers with and without Parkinson's Disease [408]

Miia Tiihonen | Satu Lilja | Anna-Maija Tolppanen Sirpa Hartikainen (*Finland*)

78 – Time Trends in the Prescription of Overactive Bladder Agents in England [409]

Kathryn Richardson | Yoon K. Loke | Nicholas Steel Duncan Edwards | Jalesh N. Panicker | Stuart Irving Katharina Mattishent | Chris Fox | Louise Robinson Irene Petersen (United Kingdom)

79 – Improving Patient Safety: A Qualitative Study of the Implementation of the 'Know Check Ask' Medication Safety Campaign Among Healthcare Professionals, Patients and Carers [410] John E. Hughes | B. O'Donovan | C. Kirke | M. Pate S. Mchugh | Kathleen E. Bennett | Caitriona Cahir (Ireland)

80 - Self-Sufficiency and Pharmaceutical Local Production of Chronic Diseases Medicines in Saudi Arabia: The Case of Type Two Diabetes Medications [411] Amal Alshatri Almotiry | Abduallah Alshareef Abdulaali Almutairi | Abdulmohsen Bahlewa Abdullah Alshehri | Omar Almazroo Mohammed Ghazwani (Saudi Arabia)

81 – Less Timely Initiation of Glucose-lowering Medication Among Younger and Male Patients with Diabetes and Similar Initiation of Blood Pressure-lowering Medication Across Age and Sex: Trends Between 2015 and 2020 [412] Petra Denig | Martina Ambroz | Sieta De Vries Klaas Hoogenberg (Netherlands)

82 - Antibiotic Use for Diarrheal Illness in Patients with a Positive Molecular Gastrointestinal Pathogen Panel Result [413]

Samantha Eiffert | Emily Ciccone | Natalie Mackow Banks Kooken | Melissa B. Miller | Alan Kinlaw (United States)

83 – Storage and Disposal of Medicines by Households in Kathmandu Valley, Nepal [414] Nisha Jha | Sajala Kafle | Shital Bhandary Pathiyil Ravi Shankar (Nepal)

84 - Population, Outcome, and Treatment Changes in Secondary Data Early in the COVID-19 Pandemic [415] Michael Webster-Clark | Joyce Pak (Canada)

85 - Changes in Use of Glucose-Lowering Drugs and Physician Responsibility: A Danish Nationwide Study [416]

Anton Pottegård | Reimar Thomsen | Jacob Harbo Andersen Jens Søndergaard | Tina Vilsbøll (Denmark)

86 – Impact of Angiotensin-Receptor-Blocker (ARB) Recalls Due to Nitrosamine Contamination on ARB Utilization in the US, Canada, and Denmark [417]

Efe Eworuke | Mayura Shinde | Laura Hou Michael Paterson | Peter Jensen | Judith Maro | Ashish Rai Daniel Scarnecchia | Daniel Woronow | Anton Pottegård Robert Platt | Hana Lee | Dinci Pennap | Marie Bradley (United States)

87 – Impact of Implementing a Guide on Intravenous Fluids to Minimise the Risk of Hospitalacquired Hyponatraemia in Denmark [418] Per Sindahl | Christian Overgaard-Steensen Helle Wallach-Kildemoes | Marie Louise De Bruin Kaare Kemp | Helga Gardarsdottir (Denmark)

89 - Utilization Patterns and Predictors of Persistence for Anti-osteoporosis Treatment Initiators in Denmark: A Population-based Cohort Study [420] Vera Ehrenstein | Alma Becic Pedersen | Nickolaj Risbo George Kafatos | David E. Neasham | James O'kelly (Denmark)

90 - The Utilisation of Low-Dose Rivaroxaban in Patients with Atherosclerotic Cardiovascular Disease in the United Kingdom and The Netherlands [421] Nicholas B. Hunt | Allan Salih | Marloes Bazelier Bjorn Wettermark | Sander Van Doorn | Helga Gardarsdottir Olaf H. Klungel | Romin Pajouheshnia (Netherlands)

91 – Time Trends in Antidepressant Use Among Women Aged 45-75 in Germany [422] Wiebke Schaefer | Miriam Heinig | Ulrike Haug (Germany)

92 – Initiation of Antihypertensive Drugs to Patients with Confirmed COVID-19 -A Population-based Cohort Study in Sweden [423] Bjorn Wettermark | Salar Issa Moussa | Fredrik Nyberg Mohammadhossein Hajiebrahimi | Rebecka Bertilsson Jonatan Nåtman | Ailiana Santosa (Sweden)

93 – Trends of Antiseizure Medications Utilization in Pregnant People: Population-Level Data from Two Canadian Provinces Over Two Decades [424] Sherif Eltonsy | Payam Peymani | Brandace Winquist Joseph Delaney | Walid Shouman | Alekhya Lavu Kaarina Kowalec | Marcus Ng (Canada)

94 – Opioid Prescriber Responsibility: A Danish Drug Utilization Study 14251 Lotte Rasmussen | Anne Mette Skov Soerensen Morten Olesen | Anton Pottegård (Denmark)

95 – Opioid Overdose Risk Prediction in a State Medicaid Program: How Does Predicted Risk Change Over Time? [426]

Serena Jingchuan Guo | Walid Gellad | Qingnan Yang Jeremy C. Weiss | Julie M. Donohue | Gerald Cochran Adam J. Gordon | Daniel Malone | Kent Kwoh Courtney C. Kuza | Debbie Wilson Weihsuan Jenny Lo-Ciganic (United States)

96 – Epilepsy: Trends in Real-World Treatment Patterns in the United States [427] Lawrence Rasouliyan | Amanda G. Althoff | Vikas Kumar Stacey Long | Mitesh B. Rao (United States)

97 – Impact of Risk Minimisation Measures on the Use of High-dose Cyproterone Acetate in France [428]

Anke Neumann | Pauline Dayani | Isabelle Yoldjian Mahmoud Zureik | Sébastien Froelich | Alain Weill (France)

98 – Agreement on Drug Interactions from Two Drug Information System: An Analysis from a Population-based Survey in the Brazilian Amazon, 2019 14291 Tais Freire Galvao | Tayanny Margarida M. Almeida Biase Giulia Brunieri | Marcus Silva (Brazil)

99 – Implementation of a Living Lab Intervention in Family Medicine Groups to Improve Medication Use for Seniors with Neurocognitive Disorders [430]

Dylan Bonnan | Edeltraut Kröger | Anne Maheu Lise Poisblaud | Laurianne Bélanger | Isabelle Vedel Machelle Wilchesky | Yves Couturier | Nadia Sourial Michèle Morin | Line Guénette (Canada)

100 – The Association of Patients' Demographics with Glucose-lowering Drugs Prescription Among Patients with Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis of Observational Studies 14311 Fatema Mahmoud | Haya Yasin | Nouf Abutheraa Amanj Kurdi (United Kingdom)

101 – Antibiotic Use During Pregnancy: A Swedish Drug Utilization Study from 2006 to 2019 [432] Aya Nakitanda | Ingvild Odsbu | Pär Karlsson

Laura Pazzagli (Sweden)

102 - Drug Utilization Pattern of Non-steroidal Anti-Inflammatory Drugs Among Pre-end-stage Renal Disease Patients in Taiwan 14331 Yuhuan Shih | Ju-Ling Chen | Yu-Ching Chang Chien-Huei Huang | Ching-Lan Cheng (Taiwan)

103 - Differences in the Use of Medications for Treated ADHD Patients Between Children and Adults from Real-World Data in Korea [434] Yoon Cho | Hankil Lee (South Korea)

104 – Impact of Angiotensin-Receptor-Blocker (ARB) Recalls Due to Nitrosamine Contamination on ARB Utilization in Germany: A Multinational Study with a Common Protocol Led by FDA [435] Chantal Quinten | Chantal Quinten | Xavier Kurz Marie Bradley | Hana Lee | Efe Eworuke (Netherlands)

105 – Rising Trends of Opioid Prescription in Brazil, 2014-2019 14361 Raissa Carolina Fonseca Candido Cristiane Aparecida A. Menezes De Pádua Ana Paula Melo (Brazil)

106 – Impact of Regulatory Interventions on Ulipristal Acetate (Esmya) Use in Spain: An Interrupted Time-series Analysis [437] Raquel Gutierrez Machin | Marta Monreal | Diana González Belén Castillo | Consuelo Huerta | Alfonso Rodríguez Dolores Montero (Spain)

#### **HEALTH EQUITY -**

#### 107 – Women's Autonomy in Choosing Methods for HIV Prevention [438]

Raissa Carolina Fonseca Candido | Ana Carolina Mayrink Cristiane Aparecida A. Menezes De Pádua (Brazil)

### 108 – Health Determinants and the Number of Deaths Caused by COVID-19 in Brazil Regions -An Ecological Analysis at the Initial Period of the Pandemic [439]

Raissa Carolina Fonseca Candido | Alícia Amanda M. Costa Higor José Souza | Paula Drummond | Jéssica Malta Cristiane Aparecida A. Menezes De Pádua (Brazil)

#### 109 – Disparity Among Racial Groups for Tibial Fracture Treatments in a Medicaid Database 14401

Chantal Holy | Mari Vanderkarr | Jill Ruppenkamp Mollie Vanderkarr | Anjani Parikh | Charisse Sparks Paul Coplan | Toni M. Mclaurin (United States)

#### 110 – Disparity Among Racial Groups for Humeral Fracture Treatments in a Medicaid Database 14411

Chantal Holy | Mari Vanderkarr | Jill Ruppenkamp Mollie Vanderkarr | Anjani Parikh | Charisse Sparks Paul Coplan | Toni M. Mclaurin (United States)

#### 111 – Disparity Among Racial Groups for Femoral Fracture Treatments in a Medicaid Database [442]

Chantal Holy | Mari Vanderkarr | Jill Ruppenkamp Mollie Vanderkarr | Anjani Parikh | Charisse Sparks Paul Coplan | Toni M. Mclaurin (United States)

### 112 – Differences in Heart Failure Hospitalization Risk Following Initiating SGLT2 Inhibitors vs DPP4 Inhibitors Across Race/Ethnicity and Rural/Urban Areas [443]

Serena Jingchuan Guo | Yujia Li | Jiang Bian Daniel T. Lackland | Stephen Kimmel | Desmond A. Schatz Almut Winterstein (United States)

### 113 – Racial Disparities in COVID-19 Outcomes Among Patients with Rheumatic Arthritis (RA) -A Population-based Study Using US EHR Data [444]

Xiaofeng Zhou | Ling Li | Rongjun Shen | Leo Russo Oladayo Jagun (United States)

### 114 – Are Women with Rheumatoid Arthritis Really Less Likely to Achieve Remission with Biologics? A Cohort Study in the Swiss Clinical Quality Management Cohort [445]

Enriqueta Vallejo-Yague | Julia N. Pfund | Theresa Burkard Carole Clair | Raphael Micheroli | Burkhard Möller Axel Finckh | Andrea Burden (Switzerland)

### 115 – Repurposing Metformin Among Older Adults with Alzheimer's Disease and Other Dementias: Health Disparities and Equity Implications [446]

Kevin Lu | Xiaomo Xiong | Minghui Li (United States)

### 116 – A Survey Among Urban Community Pharmacists and Their Knowledge, Attitude and Practice Towards Travel-related Infectious Diseases [447]

Janga Monisha Reddy | Mahalekshmi M S | Mahima Murali Lalmalsawmi Renthlei | Savitha Sanathan (India)

#### 117 – Beta-Blockers in Atrial Fibrillation Patients with Heart Failure 14481 Zhen-Fang Lin (Taiwan)

### 118 – Disparities in the Association Between Proximity to Community Healthcare Facilities and COVID-19 Related Mortality Across US Counties in the COVID-19-vaccine Era [449]

Wenxi Huang | Inmaculada Hernandez | Shangbin Tang Nico Gabriel | Nasser Sharareh | Nimish Patel Lucas A. Berenbrok | Sean Dickson Serena Jingchuan Guo (United States)

### 119 – Applying Parkinson's Disease (PD) Clinical Trial Eligibility Criteria to US Claims Data by Demographic Distribution [450]

Jeremy D. Furtado | Feiby L. Nassan | Henry Krzywy Susan Eaton | Nicholas J. Everage | Nancy Maserejian (United States)

122 - Impact of Alzheimer's Disease and Related Dementias on Colorectal Cancer Screening Utilization, Knowledge, and Associated Health Disparities [453]

Xiaoxia Wang | Gang Lv | Xiangxiang Jiang | Minghui Li Kevin Lu (United States)

123 - Measuring Social Determinants of Health in Real-World Data: A Review of Pharmacoepidemiology Studies [454] Leah Mcgrath | Amanda Miles | Andy Surinach Deepa Malhotra (United States)

124 - COVID-19 and Breast Cancer Care in Ireland: A Survey Study to Investigate the Impact of the Pandemic on Breast Cancer Services [455]

Charlotte Myers | Kathleen E. Bennett Caitriona Cahir (Ireland)

125 – Time-Dependent Risk of Major Dental Treatment Over 10 Years in Cancer Patients Compared to the General Population Using a National Claims Database [456]

Areum Han | Eun-Gee Park | Jeong-Hwa Yoon | Ji-Yeob Choi | Hee-Kyung Park | Seokyung Hahn (South Korea)



Office of the Chief Medical Officer



Global Epidemiology Organization

#### METHODS IN PHARMACOEPIDEMIOLOGY

126 – Use of a Potential Outcomes Framework to Simulate Bias Due to Unidirectional Treatment Switching in Real-World Studies [457]

Imaani Easthausen | Elisha Beebe | Elizabeth M. Garry
David Lenis | Ulka Campbell | Nicolle Gatto (United States)

127 – Trends in the Incidence of Immunologic and Oncologic Diseases Before and During COVID-19 Pandemic in the US [458]

Nicole Tsao | Anil Mor | Venkatesh Harikrishnan Sarah-Jo Sinnott (United States)

128 – The State of Use and Utility of Negative Controls in Pharmacoepidemiologic Studies [459] Jeong-Eun Park | Zafar Zafari | Chintal H. Shah Susan Dosreis | Emily F. Gorman | Wei Hua | Yong Ma Fang Tian (United States)

129 – Validity of Adverse Clinical Outcomes in Routine Health Data for COVID-19 Vaccines and Therapies [460]

Belene Podmore | Nawab Qizilbash | Kirsty Andresen Marina Hinojosa-Campos | Marianne Cunnington (Spain)

130 – Evaluation of a Cross-School, Student-led Reading Club on Facilitating Learning in Pharmacoepidemiology – Experience of the Tea & Crêpe Reading Club from Taiwan [461] Hsiang-Te Tsai | Hsuan-Yu Su | Nai-Yu Chen | Chin-Yao Shen Miyuki Hsing-Chun Hsieh | Yea-Huei Kao Yang Edward Lai (Taiwan)

131 – Changes in Incidence and Characteristics of Juvenile Idiopathic Arthritis Diagnoses from ICD-9-CM to ICD-10-CM [462]

Lauren E. Parlett | Amanda Neikirk | Cecilia Huang Stephen Crystal | Amy Davidow | Kevin Haynes Tobias Gerhard | Carlos D. Rose | Brian L. Strom Daniel B. Horton (United States)

132 – Accounting for Time Trends in Classification Parameters Using the Adaptive Validation Approach [463]

Katherine Lawson-Michod | Julie Barberio Richard Maclehose | Thomas P. Ahern | Timothy Lash Lindsay J. Collin (United States)

133 – Can Machine Learning Models Help Predict Potentially Inappropriate Medication Use in Older Adults? A Population-based Cohort Study [464] Yohann M. Chiu | Barbara Roux | Marie-Eve Gagnon

Marc Simard | Denis Talbot | Caroline Sirois (Canada)

134 – Methods for Drug Safety Signal
Detection Using Routinely Collected Electronic
Healthcare Data: A Systematic Review [465]
Astrid Coste | Angel Wong | Marleen Bokern | Andrew Bate
lan Douglas (United Kingdom)

135 – Validation of an Algorithm to Identify Venous Thromboembolism (VTE) in Health Insurance Claims Data Among Patients with Rheumatoid Arthritis [466]

Sangmi Kim | Carolyn Martin | John C. White Maureen H. Carlyle | Shiyao Gao | Claudia A. Salinas Bonnie Bui *(United States)* 

136 – Validation of an Algorithm for Unusual Site Thrombosis with Thrombocytopenia Syndrome (TTS) within Electronic Health Records (EHRs) *[467]* 

Shayan Hobbi | Patrick Saunders-Hastings | Cindy Zhou Patricia Lloyd | Nader Alawar | Tainya Clarke | Lisa Kowarski Jeffrey Beers | Ananth Srikrishnan | Timothy Burrell Hui-Lee Wong | Steven Anderson (United States)

137 – Assessing the Robustness of COVID-19 Vaccine Effectiveness Studies to Bias [468] Sophie Graham | Elise Tessier | Julia Stowe Jamie Lopezbernal | Nick Andrews | Jemma Walker Helen Mcdonald (United Kingdom)

138 – Comparing Study Designs in Casecrossover Studies of Chronic Medications Versus Acute Medications in a Systematic Review [469] Hsiao-Ching Huang | Wen-Chin Li, | Todd A. Lee

139 – The Use of Electronic Health Records During The COVID-19 (C19) Pandemic: What Impact for Observational Studies Not Assessing COVID-19? [470] Helene Denis | Eleonore Herquelot | Nada Assi Fanny Raguideau (France)

140 – Accuracy and Validity of Reported Opioid Prescription Days' Supply [471]

Dustin K. Miracle | Svetla Slavova | John Brown Nabarun Dasgupta | Sarah Harris | Patricia Freeman (United States)

141 – A Novel Method for Estimating Survival Parameters Under Conditionally Independent Left Truncation [472]

Arjun Sondhi (United States)

142 – Diabetes and IBD: Utilization of High Dimensional Propensity Score Methods for Screening and Balancing Risk Factors Between Type 2 Diabetes and Non-diabetes Population in Risk of IBD Assessment [473] Ling Zhang (United States)

143 – Extending Treatment Effects from a
Randomized Trial Using Observational Data [474]
Anthony Matthews | Issa J. Dahabreh | Ole Fröbert
Bertil Lindahl | Stefan James | Maria Feychting
Tomas Jernberg | Anita Berglund | Miguel A. Hernán (Sweden)

144 – Validation of Diagnostic Codes to Identify Carbon Monoxide Poisoning in Taiwan's Claim Data [475]
Shu-Chen Liao | Shih-Chieh Shao (Taiwan)

145 – Co-Producing a Pharmacoepidemiology Online Knowledge Hub [476]

Annie Jeffery | Sophie Eastwood | Matthew Adesuyan (United Kingdom)

146 – Validation of New Medication User
Definitions in Single-specialty EHR Data [477]
Jeffrey Curtis | Yujie Su | Michael George | Cassie Clinton
Patrick Stewart | Fenglong Xie (United States)

147 – A Review of Algorithms Used to Identify People Who Use Nonmedical or Psychotropic Drugs in Electronic Healthcare Records and Claims Data [478]

Mary C. Figgatt | Asher J. Schranz | Juan Hincapie-Castillo Yvonne M. Golightly | Stephen Marshall | Nabarun Dasgupta (United States)

148 – The Effect of Continuous Use of Antidepressants, with or without Anticholinergic Properties, for At Least 4 Months Versus No Treatment on the Incidence of Dementia: A Target Trial Emulation [479]

Joan Forns | Jaume Aguado | Elena Rivero-Ferrer Estel Plana | Barbra A. Dickerman Xabier Garcia De Albeniz (Spain)

149 – Inverse Probability Treatment Weighting Versus Propensity Score Matching in the Sentinel System: A Test Case [480]

Marie Bradley | Talia Menzin | Joy Kolonoski | Mayura Shinde Rongmei Zhang | Efe Eworuke | David Graham | Laura Hou Adebola Ajao | Po-Yin Chang | John Connolly (United States) 150 – Association of Benzodiazepines, Z-Drugs, Pregabalin and Melatonin with Traffic Accidents [481]

Merete Osler | Martin Balslev Jørgensen (Denmark)

151 – Validation of Medical Code Lists for Defining Mental Health Conditions with Primary Care Data: A Mixed Qualitative and Quantitative Study [482]

Juan Carlos Jc Bazo Alvarez | Christina Avgerinou
Danielle Nimmons | Joseph F. F. Hayes | Claudia Cooper
David Osborn | Irene Petersen | Kate Walters (United Kingdom)

152 – Representativeness of the PHARMO Electronic Health Records (EHRs) from Primary Care [483]

Jetty Overbeek | Eline Houben | Karin Swart Fernie J. Penning-Van Beest | Ron Herings (Netherlands)

153 – Data Source Heterogeneity in Multi-data Base Pharmacoepidemiologic Studies: An ISPE-sponsored Scoping Review [484]

Rosa Gini | Romin Pajouheshnia | Gillian Hall | Robert Platt Soko Setoguchi | Marloes Bazelier | Sigal Kaplan Xiaofeng Zhou | Stephan Lanes | Kenneth Man | Lin Li Mehmet Burcu | Giuseppe Roberto | Caitlin Dodd Carlos Duran | Angelika Wientzek-Fleischmann Kanaka Soman | Edward Lai | Karine Marinier Dimitri BennettHelga Gardarsdottir (Italy)

154 – Identifying Hospitalizations in Patients with Medicare Supplemental Insurance [485]

Virginia Pate | Jessica Young | Jennifer Lund | Til Stürmer Michele Jonsson Funk (United States)

155 – Discharged Where? The Importance of Understanding Discharge Dispositions When Estimating In-hospital Mortality [486]

M. Alan Brookhart | Catherine Wiener | Alexander Breskin (United States)

157 – Addressing Residual Confounding Using Propensity Score Matching Versus Cardinality Matching [488]

Stephen Fortin | Martijn Schuemie (United States)

158 – The Autopsy of a Failed Instrumental Variable: Plasmode Simulation as a Tool to Assess Unconfoundedness of an IV [489]
Albert Prats-Uribe | Daniel Prieto-Alhambra

Albert Prats-Uribe | Daniel Prieto-Alhambra Victoria Y. Strauss (United Kingdom)

159 – Development and Application of a Claimsbased Frailty Index (CFI): A Systemic Review [490] Shu Ping Huang (Taiwan)

160 – Optimizing Clinicaltrials.gov as a Tool to Evaluate the Potential of Real World (RW) Data Sources for Use as External Comparator Arms 14911

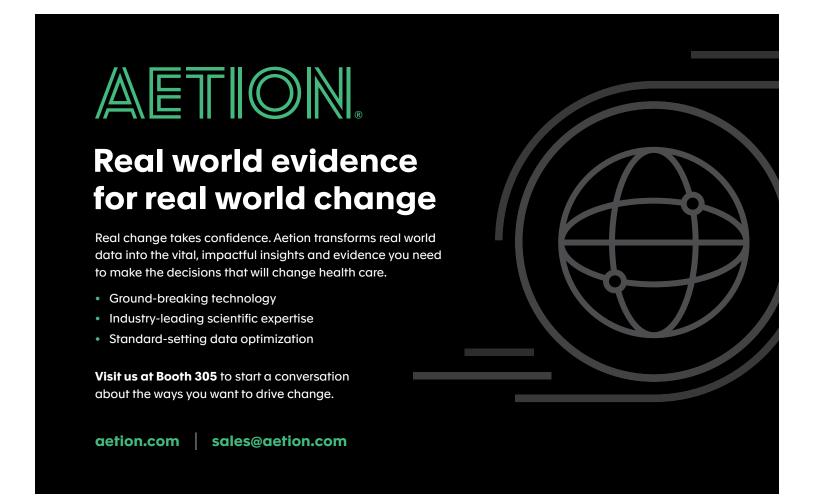
Danielle Chun | John Garrity | David Tabacco Emily Brouwer (United States)

161 – Opportunities and Challenges for Decentralized Clinical Trials: The European Regulators' Perspective [492]

Amos De Jong | Tessa Van Rijssel | Yared Santa-Ana-Tellez Mira Zuidgeest | Scott Askin | Ghislaine Van Thiel Jaime Fons-Martínez | Tim De Smedt | Anthonius De Boer Helga Gardarsdottir (Netherlands)

162 - Evaluation of the Case-Time-Control Design to Examine the Association between Anticancer Drug Use and Acute Kidney Injury [493]

Philip Munch | Simon Jensen | Uffe Heide-Jørgensen Mette Nørgaard | Henrik Birn Christian Christiansen (Denmark)



#### MOLECULAR EPIDEMIOLOGY/ BIOMARKERS/ PHARMACOGENETICS:

163 - Colorectal Cancer Cohort Comparison Among Four Real-World Databases [494] Wei Zhou | Ching-Yu Wang | Changxia Shao Alicia Mcdonald | Edward A. Bortnichak | Xinyue Liu (United States)

164 – Genetic Polymorphisms of CYP2C19 Gene, Clopidogrel Use, and Risk of Mortality: The Rotterdam Study [495]

Negin Soroush | Mkamran Ikram | Bruno H. Stricker Fariba Ahmadizar (Netherlands)

165 – In-Silico Determination of Therapeutic Possibilities for Contact Eczema: A Gene Database Linked Analysis 14961 Neha Maria Thomas (India)

166 – Drug Interactions with Tamoxifen in a Danish Premenopausal Breast Cancer Cohort [497]

Kirsten M. Woolpert | Lindsay J. Collin | Thomas P. Ahern Per Damkier | Anders Kjærsgaard | Henrik Toft Sørensen Stephen Hamilton-Dutoit | Bent Ejlertsen Peer Christiansen | Rebecca Silliman | Timothy Lash Deirdre Cronin-Fenton (Denmark)

#### **PHARMACOVIGILANCE**

167 - Community Pharmacists-Reported Barriers and Facilitators for Adverse Drug Reaction Reporting: Findings of a Focus Group Study [498] Atiqulla Shariff | Srikanth Malavalli Siddalingegowda Aishwarya Mahesh Kumar Padmini | Hariss Mohanram Sidharth Soman (India)

169 – Post-Marketing Safety Profile of Cannabis Products: Signals from the FDA Adverse Event Reporting System [500] Valentina Giunchi | Michele Fusaroli | Carlotta Lunghi Arsène Zongo | Emanuel Raschi | Elisabetta Poluzzi (Italy)

170 – Pulmonary Related Adverse Events Associated with Bruton's Tyrosine Kinase Inhibitor: A Disproportionality Analysis in a Spontaneous Reporting Database [501] Subeesh Kulangara Viswam | Amrutha Shettigar Zeba Zeba | Ashwin Dhas | Aarushi Kheterpal Gursimran Kaur | Lipin Lukose (India)

171 – Unintended Impact of Medicines Regulatory Interventions: A Systematic Review Focusing on Data and Methods 15021

Tomas Lasys | Yared Santa-Ana-Tellez | Satu Siiskonen Rolf Hh Groenwold | Helga Gardarsdottir (Netherlands)

172 - Pembrolizumab and the Potential Risk of Cholestasis: A Review of Pharmacovigilance Data [503]

Abdulaziz Nasser Alakeel | Roaa M. Alamri Abdulrahman Almutairi | Mohammed Fouda (Saudi Arabia)

173 - Teriparatide and Potential Risk of Multiple Myeloma [504]

Waad Altayyar | Hadir Aljohani | Nouf Alfadel Fawaz F. Alharbi (Saudi Arabia)

174 - Establishment and Validation of Automatic Monitoring Module for Drug-induced Arrhythmia Based on Hospital Information System Data [505] Haili Guo | Daihong Guo | Ao Gao | Bo Zhang Boyan Li | Jiaxi Wang (China)

175 - Distinguishing Patterns Associated with Statin-Related Myopathy Using Korea Adverse **Event Reporting System Database:** Unsupervised Machine Learning Methods [506] Jeong-Yeon Kim | Sewon Park | Min Taek Lee Sun-Young Jung (South Korea)

176 – A National Viewpoint of Community Pharmacists of Pharmacovigilance and Adverse Drug Reaction Reporting in Saudi Arabia [507] Moudi M. Alasmari | Mona Y. Alsheikh (Saudi Arabia)

177 – Post-Marketing Safety Profile of Pethidine in Indonesia [508]

Jonathan Hasian Haposan | Jarir At Thobari Muhammad Nurwahidin | Lukman Ade Chandra Nastia Hidayati | Rianiasa Karunia Dewi Dyah Juliana Pudiiati (Indonesia)

### 178 – Drugs-Associated with Red Man Syndrome: An Integrative Approach Using Disproportionality Analysis and PHARMIP [509]

Aina Shaju | Nishi Panicker | Venkumahanti Chandni V. Lakshmi Prasanna Marise | Gouri Nair Subeesh Kulangara Viswam (*India*)

### 179 – Descriptive Analysis of Disproportionate Medication Errors and Associated Patient-Characteristics in the Food and Drug Administration's Adverse Event Reporting System [510]

Victor Pera | Frauke Van Vaerenbergh | Peter Rijnbeek Johan Van Der Lei | Jan A. Kors | Rowan Parry Erik Van Mulligen | Marcel De Wilde | Lies Lahousse Katia M. Verhamme (Netherlands)

### 180 – Sex Differences in the Number and Type of Adverse Drug Reactions Reported for Common Cardiovascular Medications in a Cardiac Outpatient Population [511]

Sophie Bots | Milena Jancev | N. Charlotte Onland-Moret Igor I. Tulevski | G. Aernout Somsen Hester M. Den Ruijter (Netherlands)

### 181 – Safety Surveillance for COVID-19 Vaccines at the National Pharmacovigilance Centre Lareb *15121*

Florence Van Hunsel | Ingrid Oosterhuis | Joep Scholl Eugene Van Puijenbroek (Netherlands)

### 182 – Impact of the COVID-19 Pandemic on Drug Safety Surveillance: An Analysis of the Canadian Spontaneous Reporting Database [513]

Yola Moride | Laurence Paquet | Tiffany Cristarella Anne-Marie Castilloux (Canada)

### 183 – An Examination of How Serious Infection are Reported in Spontaneous Reports [514]

Gregory Powell | Vijay Kara | Daniel Naranjo Taysir Chamem | Ashley Gleaton | Leah White Andrew Bate (United States)

### 184 – Lopinavir Induced Hypospadias: New Signal Detection for Lopinavir by Disproportionality Analysis Using USFDA Database [515]

Eswaran Maheswari | K. Evangelene | G. Chaitanya Sai Khushboo Kumari | Poornima Gunari | Shivani Srinivasan H. Ms Poornima (India)

### 185 – Risk of Ischemic Stroke Among a Nationwide Cohort of Patients Receiving Antipsychotics: Role of A1-Adrenergic and 5-HT1A Antagonism [516]

Francois Montastruc | Philippe D. Garcia | Christel Renoux Etienne Very | Julien Bezin | Agnès Sommet Antoine Yrondi | Maryse Lapeyre-Mestre (France)

### 186 – Medication Errors Among Patients Admitted with Cardiovascular Disorders at the Critical Care Unit of a National Referral Hospital in Kenya [517]

Sylvia Atisa Opanga | Doryne Mbula | Faith A Okalebo (Kenya)

### 187 – Comparative Study of Osteonecrosis of the Jaw with Bisphosphonates and Denosumab in Two Pharmacovigilance Database [518]

Thierry Trenque | Laura Canneau | Salomé Martin Federica Tralongo | Aurore Morel | Brahim Azzouz (France)

### 188 – How Has Machine Learning Been Used in Patient Safety? [519]

Priyanka Yalamanchili | Maribel Salas | Jan Petracek Omar Aimer | Dinesh Kasthuril | Sameer Dhingra Toluwalope Junaid | Tina Bostic (United States)

### 189 – Appendicitis Associated with Pembrolizumab Use: Adverse Events – Signal Review [520] Abdulrahman Almutairi | Roaa M. Alamri

Abdulaziz Nasser Alakeel (Saudi Arabia)

190 – Pancreatic Carcinoma Associated with Liraglutide Use:

Adverse Events – Signal Review [521] Abdulrahman Almutairi | Roaa M. Alamri Abdulaziz Nasser Alakeel (Saudi Arabia)

### 191 – Soft Tissue Sarcomata in Humans at Potential Injection Sites, United States, 1975 – 2018 [522] Robert Philip Wise | Sean Altekruse (United States)

192 – Conducting Observational Multi-Country Studies for Regulatory Decision Making During COVID-19 Pandemic: The Strategic Role of the Scientific Project Manager [523] Natasha Yefimenko | Fabio Riefolo | Katica Boric Gianmarco Di Mauro | Eva Molero (Spain)

193 – Screening and Monitoring Testing of HIV Pre-Exposure Prophylaxis Use Among Commercially Insured Patients, 2016-2019 [524] Ikenna Unigwe | Hyun Jin Song | Robert Cook Haesuk Park (United States)

194 – Optic Neuritis Associated with PD-1 /PD-L1 Checkpoint Inhibitors: Case Series Utilizing the WHO Global Database of Individual Case Safety Reports (ICSRs) [525]

Maha Alghamdi | Nouf Alfadel Fawaz F. Alharbi (Saudi Arabia) 195 – Exposure to Integrase-inhibitor
Antiretroviral Drugs During Pregnancy
and Congenital Abnormalities:
A Case/Non-case Study from the International
Pharmacovigilance Database Vigibase® [526]
Anna-Belle Beau | Agnès Sommet | Laura Saint-Lary
Isabelle Lacroix | Valériane Leroy (France)

#### PREGNANCY AND LACTATION

196 – Social Vulnerability and Initiation of Pharmacotherapy for Gestational Diabetes in a Medicaid Population [527]

Sarah Osmundson | Amelie Pham | Andrew Wiese Andrew Spieker | Kayla Johnson | Sharon Phillips Margaret Adgent | Carlos Grijalva (United States)

197 – Association Between Morning Sickness and Having a Girl – Myth or Fact? [528]

Lars J. Kjerpeseth | Kari Furu | Jacqueline Cohen (Norway)

198 – Extracting Pregnancies from
Heterogeneous Data Sources in Europe:
A Novel Algorithm in the Conception Project [529]
Giorgio Limoncella | Claudia C. Bartolini | Carlos Duran
Anna Girardi | Giulia Hyeraci | Judit Riera Arnau
Ana Llorente | Lucía Cea Soriano | Mar Martin-Perez
Patricia García-Poza | Francisco Sanchez-Saez
Gabriel Sanfelix-Gimeno | Hedvig Nordeng | Eimir Hurley
Luigi A. Maglanoc | Emily Holthuis | Karin Swart
Valentina lentile | Matilde Tanaglia | Jeremy BrownKevin Wing
Tania Schink | Romin Pajouheshnia | Marianne Cunnington
Miriam Sturkenboom | Rosa Gini (Italy)

199 – Association Between Antidepressant Use Patterns on the Long-term Trajectories of Depressive and Anxiety Symptoms and Health-related Quality of Life [530] Nhung Trinh | Flavie Perrier | Hedvig Nordeng Angela Lupattelli (Norway)

200 – Postpartum Episode of Eating, Mood, or Anxiety Disorder in Women with Eating Disorders Who Continue or Discontinue Antidepressant Treatment in Pregnancy [531]

Nhung Trinh | Birgitte Dige Semark | Trine Munk-Olsen Xiaoqin Liu | Øyvind Rø | Cynthia Bulik | Leila Torgersen Angela Lupattelli | Liselotte Vogdrup Petersen (Norway) 201 – Frequent Drug Exposures During Pregnancy: A Population-based Cohort Study with SIDIAP Database [532]

Maria Giner-Soriano | Marta Lestón Vázquez Ainhoa G. Gomez-Lumbreras | Oriol Prat-Vallverdu Carles Vilaplana-Carnerero | Rosa Morros Cristina Vedia (Spain)

202 – Spontaneous Abortion and Drug Exposure. Case-control Study with SIDIAP Database [533]

Maria Giner-Soriano | Oriol Prat-Vallverdu Marta Lestón Vázquez | Carles Vilaplana-Carnerero Cristina Vedia | Ainhoa G. Gomez-Lumbreras Rosa Morros (Spain)

203 – Recording of Chronic Diseases and Adverse Obstetric Outcomes During Hospitalizations for a Delivery in the National Swiss Hospital Medical Statistics Dataset Between 2012 and 2018:

An Observational Cross-Sectional Study [534]
Carole Anna Marxer | Marlene Rauch | Clementina Lang Alice Panchaud | Christoph Meier
Julia Spoendlin (Switzerland)

204 – Risk of Gestational Hypertension in Women Treated with Serotonin and Norepinephrine Reuptake Inhibitors: A Comparative Study in the EFEMERIS Database [535]

Isabelle Lacroix | Mélanie Araujo | Julie Waser Caroline Hurault-Delarue | Christine Damase-Michel (France)

205 – Proton Pump Inhibitors Use During Pregnancy and Risk of Congenital Malformations: A Nationwide Cohort Study of 2.7 million Pregnancies [536]

Ahhyung Choi | Yunha Noh | Han Eol Jeong Eun-Young Choi | Dong Keon Yon | Ju-Young Shin (South Korea)

### 206 – Use of Antiepileptic Drugs During Pregnancy and Neonatal Birth Weight Outcomes: A Systematic Review and Meta-Analysis [537]

Alekhya Lavu | Christine Vaccaro | Enav Zusman Laila Nabil Mahmoud Helmy Aboulatta | Basma Aloud Rasheda Rabbani | Payam Peymani | Walid Shouman Silvia Alessi-Severini | Sherif Eltonsy (Canada)

207 – Prescription of Asthma-Control Medications Dispensed During Pregnancy in Belgium: The Trends Between 2003 and 2018 Using a Medico-administrative Database [538] Lionel Larcin | Güngör Karakaya | Philippe Van Wilder Christine Damase-Michel | Fati Kirakoya (Belgium)

### 208 – Neonatal and Maternal Adverse Outcomes Following Use of Buprenorphine and Methadone for Treatment of Opioid Use Disorder in Pregnancy [539]

Elizabeth Suarez | Krista Huybrechts | Loreen Straub Sonia Hernandez-Diaz | Hendree Jones | Hilary Connery Jonathan Davis | Kathryn Gray | Barry Lester Mishka Terplan | Helen Mogun | Brian Bateman (United States)

209 – Evaluating Awareness of Pregnancy Exposure Registries Among Women [540] Kristin Veley | Courtney G. Norris | Jennifer Mccall, PhD (United States)

210 – Demographic Representativeness of Participants in Pregnancy Registries [541]
Kristin Veley | Katheryne Downes, PhD, MPH
Rebecca Morris Buus, PhD | Payal Pozin
Lindsey Wilson, MPH | Sandra Okala, PhD (United States)

## 211 – The Risk of SARS-CoV-2 Infection in Pregnant Women. An Observational Cohort Study Using BIFAP Database [542]

Airam De Burgos Gonzalez | Mercedes Mota Pérez Ana Llorente | Consuelo Huerta | Lucía Cea Soriano (Spain)

212 – Associations Between Late-onset
Preeclampsia and The Use of Calcium-based
Antacids and Proton Pump Inhibitors During
Pregnancy: A Prospective Cohort Study [543]
Marleen Van Gelder | Pim Beekers | Eugene Van Puijenbroek
Joris Van Drongelen | Nel Roeleveld | Luc Jm Smits
(Netherlands)

### 213 – Use of Isotretinoin Among Girls and Women of Childbearing Age and Exposure During Pregnancy [544]

Jonas Reinold | Bianca Kollhorst | Ulrike Haug (Germany)

214 – Decisional Conflicts About Antidepressant Treatment in Pregnant Women in Norway [545] Angela Lupattelli | Lana Jalal Shabat Fatima Taugeer (Norway)

### 215 – Prenatal Exposure to Antidepressants and Risk of Overweight and Obesity in Offspring at Age 8 Years [546]

Angela Lupattelli | Michele Pedroncelli | Sina Rostami Nhung Trinh (Norway)

216 – Evaluating Awareness, Knowledge and Practice of Healthcare Professionals Following Implementation of a Revised Pregnancy Prevention Programme for Isotretinoin in Ireland: A Multi-stakeholder Cross-sectional Study [547] John E. Hughes | Niamh Buckley | Yvonne Looney Gráinne Kirwan | Maeve Mullooly Kathleen E. Bennett (Ireland)

### 217 – Most Common Diagnoses During Pregnancy in a Commercially Insured Population of Women [548]

Rachel Ogilvie | Katherine C. Hughes | Stephen M. Ezzy Michael C. Doherty | Monica Bertoia | John Seeger (United States)

218 – Drug Utilization Among Hospitalized Pregnant Women with Severe COVID-19 Disease and Assessment of the Safety Profile [549] Yesenia Rodriguez | Anaís Lazarte | Raquel Delgado (Peru)

219 – Exposure to Non-Insulin 2<sup>nd</sup>-line
Antidiabetic Medications in Early Pregnancy and
Risk of Major Congenital Malformations [550]
Carolyn Cesta | Ran Rotem | Krista Huybrechts
Brian Bateman | Gabriel Chodick | Ellen W. Seely
Elisabetta Patorno | Sonia Hernandez-Diaz (Sweden)

### 220 – Identification of Pregnancies and Their Outcomes in Healthcare Claims Data, 2008-2019: An Algorithm [551]

Jennita Reefhuis | Elizabeth Ailes | Weiming Zhu Elizabeth Clark | Ya-Lin Huang | Margaret Lampe Athena Kourtis | Karen Hoover (United States)

### 221 – Linking Male Parents to Pregnancies and Infants in a Health Insurance Claims Database *[552]*

Monica Bertoia | Claire Pernar | Michael C. Doherty John Seeger (United States)

82 | ICPE 2022 | Copenhagen, Denmark

222 – Identification of Preterm Birth in an Administrative Claims Database Using Maternal Claims, Infant Claims, and Gestational Age [553] Andrea K. Chomistek | Michael C. Doherty | Robert Gately Monica Bertoia | Katherine C. Hughes | Florence Wang John Seeger (United States)

223 – Prenatal Opioid Exposure and Well-child Care in the First 2 Years of Life – A Population-based Cohort Study [554]

Andi Camden | Teresa To | Joel G. Ray | Tara Gomes Li Bai | Astrid Guttmann (Canada)

224 – Validity of Healthcare Administrative Data to Identify Infants with Low Birth Weight [555]

Loreen Straub | Brian Bateman | Yanmin Zhu Sonia Hernandez-Diaz | Seanna Vine | Krista Huybrechts (United States) 225 – Medication Use Among Lactating Persons: An Electronic Health Record (EHR)-based Approach [556]

Kristin Palmsten | Gabriela Vazquez-Benitez Meghan M. Jaka | Bandoli Gretchen | Katherine A. Ahrens Elyse Kharbanda (*United States*)

226 – Use of Rivaroxaban During Pregnancy and Description of Pregnancy Outcomes [557]
Tania Schink | Nadine Wentzell | Annemarie Voss
Bianca Kollhorst | Ulrike Haug (Germany)

227 – Treatment with Tumor Necrosis Factor Alpha Inhibitors During Pregnancy and Occurrence of Severe Infections Among Infants: A Descriptive Analysis Based on German Claims Data [558]

Ulrike Haug | Christina Princk | Bianca Kollhorst Kathrin Thöne | Julia Borst-Ohlraun | Christof Schaefer, Marlies Onken | Katarina Dathe (Germany)

### **Optum**

Let's work together to catalyze innovation, insight and impact that truly transform care.

Our trusted, robust real-world data and experienced consultants connect the dots in ways that:



Answer tough questions



Illuminate new possibilities



Improve patients' lives



Visit booth #106 to meet our world-renowned experts, including Dr. John Seeger

#### 228 – Characteristics of Linked and Unlinked Mother-infant in the Healthcore Integrated Research Database *[559]*

Aziza Jamal-Allial | Maria Guzman | Christopher L. Crowe Kerrin Gallagher | Brett Doherty | Sarah Hoffman Ramya Avula | Geetika Kalloo | Biruk Eshete (United States)

### 229 – Impact of COVID-19 on Obstetric and Gynecologic Healthcare Utilization in a Large US-claims Database *I5601*

Sarah Hoffman | Christopher L. Crowe | Maria Guzman Brett Doherty | Kerrin Gallagher | Aziza Jamal-Allial Geetika Kalloo (United States)

## 230 – Design Considerations for Using the Tree-based Scan Statistic in Surveillance of Maternal Outcomes Following Medication Use During Pregnancy [561]

Thuy Thai | Almut Winterstein | Elizabeth Suarez
Danijela Stojanovic | Jane Liedtka | Abby F. Anderson
Di Zhang | Yueqin Zhao | Monica Munoz | Wei Liu
Inna Dashevsky | Talia Menzin | Elizabeth Messenger-Jones
Elizabeth Siranosian | Judith Maro (United States)

### 231 – Distribution of Gestational Age by Maternal and Infant Characteristics in US Birth Certificate Data: Toward Informing Gestational Age Assumptions When Clinical Estimates are Not Available *15621*

Andrea Margulis | Brian Calingaert | Alison Tse Kawa Elena Rivero-Ferrer | Mary Anthony (Spain)

### 232 – Trends in Antiemetic Medication Use in Pregnancy in An Integrated Health System in the US, 2010–2021 [563]

Sascha Dublin | Paige D. Wartko | Umesh Singh Anna Howe | Susan Shortreed | Stephanie D'souza Sharon Fuller | Rita M. Mangione-Smith (United States)

## 233 – COVID-19 Disease and Medications in Pregnancy: Pooled Analysis of International Network of Obstetric Survey Systems (INOSS) Population-based Studies [564]

Odette De Bruin | Hilde Engjom | Nicola Vousden Marian Knight | Serena Donati | Miriam Sturkenboom Kitty Wm Bloemenkamp (Netherlands)

### 234 – Characteristics of Women with COVID-19 During Pregnancy in a US Health Insurance Claims Database [565]

Laura A. Yochum | Katherine C. Hughes | Michael Miller Michael C. Doherty | Ritika Pandey | Robert Gately Monica Bertoia (United States)

### 235 – Dilemma of Belimumab Therapy (Dis) Continuation During Pregnancy: Results of a Retrospective Study in EudraVigilance [566]

Nafise Ghalandari | Hubertina Johanna Maria Josephina Crijns Radboud Dolhain | Mieke Hazes | Eugene Van Puijenbroek (Netherlands)

### 236 – Reported Congenital Malformations After Exposure to Non-TNF-A Inhibitors: A Retrospective Comparative Study in EudraVigilance Database [567]

Nafise Ghalandari | Hubertina Johanna Maria Josephina Crijns Jorieke Bergman | Radboud Dolhain Eugene Van Puijenbroek | Mieke Hazes (Netherlands)

### 237 – A Landscape Analysis of Post-marketing Studies Registered in EU PAS Register and Clinicaltrials.gov Focusing on Pregnancy Outcomes or Breastfeeding Effects: A Contribution from the ConcePTION Project [568]

Leonardo Lrp Roque Pereira | Carlos Duran Deborah Layton | Georgios Poulentzas Panagiotis Nikolaos Lalagkas | Christos Kontogiorgis Miriam Sturkenboom (United Kingdom)

238 – Uses of Antiepileptic Drugs Among Pregnant Women with Epilepsy and Risk of Adverse Obstetric Outcomes; A Group-based Trajectory Analysis [569] Yi-Chin Lin | Chih-Wan Lin | Shih-Tsung Huang Fei-Yuan Hsiao (Taiwan)

### 239 – Maternal and Infant Morbidity in Relation to Caesarean Section in a Large Commercially Insured Population in the US in 2019 and 2020 [570]

Brett Doherty | Stephanie A. Lynch | Aneesh Naavaal Chrissie Li | Kimberly Cole | Leslie Macphee Leslie Banning | Anup Sharma | Michael Grabner Eric Stanek | Tiffany Inglis (United States)

### 240 – Congenital Malformations Among Offspring of Women with Type 1 Diabetes Using Insulin Pump: A Prospective Cohort Study [571] Ida H. Thorius, Lise Lotte N Husemoen | Rikke B. Nordsborg Amra C. Alibegovic | Mari-Anne Gall | Janne Petersen Elisabeth Mathiesen (Denmark)

#### 241 – Proton Pump Inhibitors Use and Risk of Preeclampsia: A Meta-Analysis of Pharmacoepidemiological Studies [572] Mohammad Salman Hussain | Ambrish Singh | Benny Antony Jitka Klugarova | M. Hassan Murad | Aarthi S. Jayraj

Alena Langaufová | Miloslav Klugar (Czech Republic)

242 – Levothyroxine Use and the Risk of Pregnancy Loss Among Pregnant Women with Subclinical Hypothyroidism: An Observational Study Emulating a Target Trial [573] Sonia M. Grandi | Ya-Hui Yu | Pauline Reynier | Robert Platt Oriana Hoi Yun Yu | Kristian Filion (Canada)

243 – Antidepressant Use Patterns During Pregnancy and Birth Outcomes Among Pre-conception Antidepressant Users [574] Lyndsay Avalos | Nerissa Nance | Sylvia E Badon Kathryn Ridout | Jennifer Ahern | Dekun Li Charles Quesenberry (United States)

244 – Neonatal and Maternal Outcomes Following Exposure to Non-Steroidal Anti-Inflammatory Drugs During Early Pregnancy:
A Nationwide Cohort Study [575]
Eun-Young Choi | Han Eol Jeong | Yunha Noh
Ahhyung Choi | Dong Keon Yon | Ju-Young Shin (South Korea)

245 – Characterization of Pregnancy Data Reported by Health Care Professionals Versus Patients in International Case Safety Reports – A ConcePTION Study [576]

Yrea Van Rijt-Weetink | David Lewis | Laura Yates Eugene Van Puijenbroek (Netherlands)

246 – Vaccination Use Among
Pregnant Women 2016-2021:
An Analysis Using Healthcare Claims [577]
Sara A. Ephross | Jessica D. Albano | Nicole Carneal-Frazer
Charles Coombs (United States)

247 – Adverse Fetal Outcomes Associated with Gabapentin Use in Pregnancy:
A Population-based Cohort Study and Meta-Analysis [578]
Brianne Desrochers | Alekhya Lavu | Eunice Valencia Christine Vaccar | Sherif Eltonsy (Canada)

248 – Adverse Birth Outcomes Associated with Drug Use in Pregnancy at a Referral Teaching Hospital in Kenya [579] Nelly Muthee | Margaret N. Oluka | Faith A. Okalebo (United States)

249 – Use of Selective Serotonin Reuptake Inhibitors During Pregnancy and the Risk of Child's Neurodevelopmental Disorders [580] Guy Amit | Chen Yanover | Maytal Bivas-Benita Irena Girshovitz | Pinchas Akiva | Tal Helbitz Vered Bar (Israel)

250 – Impact of COVID-19 on Pregnancy Complications and Outcomes in the Healthcore Integrated Research Database [581] Geetika Kalloo | Maria Guzman | Christopher L. Crowe Brett Doherty | Kerrin Gallagher | Aziza Jamal-Allial Sarah Hoffman (United States)

251 – Utilization of Biologics Before,
During and After Pregnancy Among Patients
with Autoimmune Conditions [582]
Celeste Ewig | Nicole Smolinski | Yanning Wang
Thuy Thai | Amir Sarayani | Sebastian Jugl
Sonja Rasmussen | Almut Winterstein (United States)

#### RARE DISEASE -

252 – Sarcoidosis in Patients After Solid Organ Transplantation Treated with mTOR Inhibitors Versus Calcineurin Inhibitors [583]

Emese K. Vágó | Matthew C. Baker | Suzanne Tamang Henrik Toft Sørensen | Erzsebet Horvath-Puho (Denmark)

253 – The Burden of AADC Deficiency on Patients, Caregivers, and Healthcare Systems: A Systematic Literature Review [584]

Flemming Axelsen | Katharina Buesch | Rongrong Zhang Kasia Szczepanska | Gregory Fuest | Alexis Russell (Denmark)

254 – Epidemiology of Palmoplantar Pustulosis in Urban China and a Systematic Review [585]
Jingnan Feng | Qian Zhang | Jinzhu Guo | Lin Zhuo
Shengfeng Wang | Wenhui Wang | Siyan Zhan (China)

255 – Survival Benefit of Eculizumab in Patients with Paroxysmal Nocturnal Hemoglobinuria [586] Ami Patel | Jesse Metzger | Louis Terriou

Christopher Patriquin | Morag Griffin | Jong Wook Lee
Phillippe Gustovic | Wei Jiang | Jeff Szer (United States)

256 – Treatment Patterns for Depression and Anxiety Among Patients with Progressive Supranuclear Palsy (PSP) [587]

Sara J. Snell Taylor | Jessica Shurer | Kristophe Diaz Nelson Pace (United States)

257 – Predictors of Loss of Ambulation in Duchenne Muscular Dystrophy: A Literature Review [588]

Anne Broe | Katharina Buesch | Nermina Ferizovic Erik Landfeldt (Denmark)

258 - Prevalence of Postural Orthostatic Tachycardia Syndrome (POTS) in the US [589] Jessica Jalbert | Dana Murdock | Ying Li | Ethan Marin Scott Mellis | Mohamed Hussein (United States)

259 - Marketing Authorisation Pathways and Clinical Evidence Supporting Approval of Orphan Medicinal Products in EU Between January 2015 and October 2021 [590] Christine Hallgreen | Mathias Møllebæk Ertugrul Corap (Denmark)

260 – The Development of a Conceptual Model to Describe the Health-related Quality of Life Impacts of Living with Friedreich Ataxia [591] Christina Qian | Katharina Buesch | Andrea Bever Jessica Dunne | Shelagh Szabo (Canada)

261 - Outcome Measures Relevant for Assessing Health Related Quality of Life and Utility in Friedreich Ataxia [592]

Christina Qian | Katharina Buesch | Tina Li | Andrea Bever Jessica Dunne | Shelagh Szabo (Canada)

262 – Frequency of Sleep Disorders and Insomnia in Patients with Wilson Disease Identified in Electronic Health Records 15931 Mary Dozier | Elissa H. Wilker | Jawad Hasan | Shona Fang (United States)

263 - Clinical Evaluation of Code-based Algorithms to Identify Pulmonary Arterial Hypertension Patients in Coded Healthcare Databases [594]

Eva-Maria Didden | Di Lu | Andrew Hsi | Haley Hedlin Monika Brand | Roham T. Zamanian (Switzerland)

264 – A Non-interventional Study Using Multiple Data Sources to Evaluate Potential Sight Threatening Events and Severe Visual Loss Among Patients Exposed to Crizotinib [595] Kui Huang | Jingping Mo | Elizabeth Kim Jayeta Chakrabarti | Keith Wilner | Cynthia De Luise Patrick J. Arena (United States)

#### SAFETY END POINTS

265 – Long-term Clinical Outcomes Associated with Antimicrobial Allergies Using Mixed-effect Survival Models [596]

Matthew P. Gray | Sandra Kane-Gill (United States)

266 – The Effect of Antibiotics Prescription and Length of Hospitalization on Mortality in Patients with Sepsis [597]

Onyinye O. Akunne | Aduragbenro D. Adedapo (South Africa)

267 - Effect of Cardiovascular Disease and Diuretic Use on Amputation Risk with Sodium-Glucose Cotransporter 2 Inhibitors in Patients with Type 2 Diabetes [598]

Sohee Park | Han Eol Jeong | Sungho Bea Oriana Hoi Yun Yu | Ju-Young Shin (Republic of Korea)

268 - Is Statin Use Associated with an Increased Risk of Adrenal Insufficiency? A Nested Matched Case-control Study [599] Julien Bezin | Sandy Maumus-Robert | Ana Jarne-Munoz Antoine Pariente | Thomas Duroux | Lise Duranteau (France)

269 - Risk of Suicidal Behavior Associated with Benzodiazepines: A Nationwide Case-crossover Study [600] Julien Bezin | Marie Tournier | Anne Bénard-Laribière Fabrice Jollant | Emilie Hucteau | Papa-Yatma Diop Antoine Pariente | Emmanuel Oger (France)

270 - Real-World Safety of Factor Xa Inhibitors and Warfarin in Obese and Morbidly Obese Nonvalvular Atrial Fibrillation (NVAF) Patients Using a University Health Center Electronic Medical Record Database in the United States (US) [601]

Mohammed Alsultan | Ana L. Hincapie | Patricia Wigle Diego F. Cuadros | Alex C. Lin | Jeff J. Guo (United States)

271 – Comparative Safety of Beta-Blocker and Calcium Channel Blockers in Patients with Chronic Obstructive Pulmonary Disease and Atrial Fibrillation: A National Population Cohort Study in Taiwan [602] Shan-Ju Lin | Nai-Yu Chen | Yu-Ching Chang

Ching-Lan Cheng (Taiwan)

272 – Differential Risk of Osteoporotic Fractures Associated with Use of Antipsychotics: A Systematic Review and Meta-Analysis 16031 Dana Alsugeir | Matthew Adesuyan | Basma Alfageh Li Wei | Ruth Brauer (United Kingdom)

273 – Risk of Clostridium Difficile Infection Associated with Used of Proton Pump Inhibitors and Histamine-2 Receptor Antagonists in Taiwan Hospitalized Patients [604] Yi Hsuan Liu | Yea-Huei Kao Yang | Lu Hsuan Wu Chien-Chou Su (Taiwan)

274 – A Study of Statins and the Risk of Venous Thromboembolism [605] Lade Ayodele | Susan Jick | David Mcmanus Howard J. Cabral (United States)

275 – Evaluation of a Web-based Application Monitoring Thiopurine Therapy in the Veterans Health Administration (VHA) 16061 Anthony Au | Von Moore | Muriel Burk Francesca Cunningham (United States)

276 - Use of Sodium-Glucose Cotransporter-2 Inhibitors (SGLT2i) and Risk of Parkinson's Disease [607] Miyuki Hsing-Chun Hsieh | Edward Lai (Taiwan)

277 - "Take Up to Eight Tablets Per Day": The Impact of Incorporating the Uncertainty of Free-text Medication Instructions for Drug Exposure Data Preparation 16081 Meghna Jani | Belay Yimer | David Selby | Mark Lunt Goran Nenadic | William Dixon (United Kingdom)

278 - Diabetes Mellitus, Antidiabetic Use and the Risk of Treated Depression in the UK [609] Claudia Becker | Delia Bornand | Susan Jick Christoph Meier (Switzerland)

279 – Use of Oral Contraceptives or Hormone Therapy and Risk of COVID-19 Infection or Hospitalization: A Multisite Cohort Study [610] Sascha Dublin | Laura Harrington | John Powers Elizabeth Bayliss | Stephen Fortmann | Susan Shortreed Rod Walker | James Floyd | Jennifer Kuntz | Sharon Fuller Ladia Albertson-Junkans | Mi Lee Lisa Temposky (United States)

280 – Warfarin and Sulfonylureas in Individuals with Type 2 Diabetes and Risk of Bleeding: A UK Population-based Cohort Study [611] Hassan Hasan Alwafi | Abdallah Naser (Saudi Arabia)

281 – Leuprolide and Fracture Risk in Patients with Central Precocious Puberty [612] Yandong Qiang | Talia Menzin | Christian Hampp Hye Seung Lee | Shannon Sullivian | Yuegin Zhao Ting-Ying Huang (United States)

282 - Aromatase Inhibitors and the Incidence of Parkinson's Disease: Population-based Cohort Study [613] Francois Montastruc | Farzin Khosrow-Khavar Laurent Azoulay | Jean-Louis Montrastruc Christel Renoux (France)

283 – Association Between Concomitant Use of Direct Oral Anticoagulants and Statins and Major Bleeding in Patients with Non-valvular Atrial Fibrillation 16141 Airam De Burgos Gonzalez | Lucía Cea Soriano Consuelo Huerta (Spain)

284 - Evaluate the Risk of Cardiovascular **Event in Rheumatoid Arthritis Patient Receiving** Tofacitinib and TNF Inhibitors in Taiwan [615] Chin-Yao Shen | Edward Lai (Taiwan)

285 - Associations of Thiazide Use with Skin Cancers: A Systematic Review and Meta-Analysis [616] Yi-Hung Chen | Shih-Chieh Shao | Edward Lai Ching-Chi Chi (Taiwan)

286 – Risk of Adverse Events Associated with Novel Oral Anticoagulant (Apixaban): A Systematic Review and Meta-Analysis [617] Amar Ashok Maske | Christy Thomas Krishna Undela (India)

287 – A Replication of the Incidence Rate Estimates of Selected Adverse Events of Special Interest (AESIs) from the vACCine COVID-19 monitoring readinESS (ACCESS) in the EU with US Real World Data [618] Stephen Schachterle | Ling Li | Rongjun Shen Charles Wentworth | Jill Dreyfus | Scott Kelly Ann Madsen | Xiaofeng Zhou (United States)

288 – Cardiovascular Efficacy and Safety of Incretin Mimetics and Sodium-Glucose Co-Transporter 2 Inhibitors as Add-on to Metformin Monotherapy in Patients with Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis of RCTs [619]
Gifty Lawrance | Christy Thomas | Krishna Undela (India)

289 – To Use Antipsychotics or Not to Use Antipsychotics? A Population-based Nested Case-control Study in Patients with Hospital-acquired Delirium After Discharge [620]
Hsiang-Te Tsai | Wei-Hung Chang | Edward Lai (Taiwan)

290 – Risk of Intentional Self Harm and Suicide Among 5-Alpha Reductase Inhibitor Users and Alpha-Blocker Users [621]

Sandia Akhtar | Dinci Pennap | Adebola Ajao | Elena Boley Sai Dharmarajan | Kushal Naik | Natasha Flowers Michael Wernecke | Jeffrey Kelman | Andrew Mosholder David Graham | Thomas E. Macurdy (United States)

291 – Acute Myocardial Infarction, Stroke, and MACE in COPD Patients Treated with Aclidinium and Other Inhaled Bronchodilators [622]

Nuria Saigi-Morgui | Cristina Rebordosa | Estel Plana Annalisa Rubino | Jaume Aguado | David Martinez Alejhandra Lei | Sami Daoud | Peter Mcmahon Susana Perez-Gutthann | Elena Rivero-Ferrer (Spain)

292 – Atypical Antipsychotic Use and Mortality Risk in Parkinson's Disease [623]

Thanh Phuong Pham Nguyen | Dylan Thibault Daniel Weintraub | Allison Willis (United States)

293 – Opioid-Induced Nausea – A Populationbased Active-comparator Symmetry Analysis [624] Daniel Henriksen | Kamilla Caspersen | Lars Christian Lund Per Damkier | Jesper Hallas (Denmark)

294 – Association Between Initiation of Medical Therapy and Hypo- or Hyperthyroidism – A Population-based Symmetry Analysis Screening Study [625]

Daniel Henriksen | Lars Folkestad | Sara Ali | Per Damkier Jesper Hallas (Denmark)

295 – Exposure to Tricyclic and Selective Serotonin Reuptake Inhibitor Antidepressants and the Risk of Hip Fracture: An Updated US-based Case-control Study [626] Caitlin Dodd | Sara Burns | April Duddy Marten Van Den Berg | Tiffany Siu Woodworth (United States) 296 – Risk of Cardiovascular Events in Patients with Rheumatoid Arthritis Treated with Tofacitinib vs Select TNF Inhibitors:
Assessing the Concordance of Trial Findings Using Real-World Data [627]
Gulce Askin | Amanda Kong | Julia Pitino
Dionna Attinson | Tancy Zhang | Jennifer Polinski
Ryan Kilpatrick | Dongmu Zhang | Whitney Krueger (United States)

297 – Flecainide and Risk of Skin Cancer: A Large Population-based Case-control Study in Spain and Denmark [628]

Carlen Reyes | Luz Maria M. León-Muñoz Andrea Pistillo | Sigrún Alba Jóhannesdóttir Schmidt Kasper Bruun Kristensen | Anton Pottegård Consuelo Huerta | Talita Duarte-Salles Diana Puente (Spain)

298 – Predicting Individual Risk of Muscle Disorders in Patients Eligible for Statin Treatment: Derivation and External Validation of STRATIFY-StatinMD Prediction Model [629]

Ting Cai | Constantinos Koshiaris | Jennifer A. Hirst F. D. Richard Hobbs | James P. Sheppard (United Kingdom)

299 – Identifying Hospitalizations for Heart Failure in Healthcare Databases: Algorithm Development and Validation [630] Yu-Ru Liu | Chih-Fan Yeh | Tsung-Yu Ko | Chi-Chuan Wang Fang-Ju Lin (Taiwan)

300 – Peptidomimetic Structure of Dipeptidyl Peptidase-4 Inhibitors and the Risk of Sulfonylurea-induced Severe Hypoglycemia: A Population-based Cohort Study [631]
Jenny Dimakos | Ying Cui | Robert Platt | Christel Renoux Kristian Filion | Antonios Douros (Canada)

301 – Buprenorphine and Tramadol Prescriptions in Major Depressive Disorder Settings [632]
Onyekachukwu Illoh | Eberechukwu Onukwugha
Julia F. Slejko (United States)

302 – Risk of Malignancy in Patients with Rheumatoid Arthritis Treated with Tofacitinib vs Select TNF Inhibitors:
Assessing the Concordance of Trial Findings Using Real-World Data [633]
Gulce Askin | Amanda Kong | Julia Pitino | Dionna Attinson Tancy Zhang | Jennifer Polinski | Ryan Kilpatrick Dongmu Zhang | Whitney Krueger (United States)

#### **SPOTLIGHT POSTERS**

DATABASES	90
DIGITAL EPIDEMIOLOGY	90
DRUG UTILIZATION RESEARCH	91
DRUG-DRUG INTERACTION	92
GENOMICS	92
GERIATRICS	93
DISEASE EPIDEMIOLOGY/CLINICAL COURSE	93
DRUG EFFECTIVENESS	95
DRUG UTILIZATION RESEARCH	100
GERIATRIC PHARMACOEPIDEMIOLOGY	103
HEALTH ECONOMICS/OUTCOMES RESEARCH	106
LATE BREAKERS	110
MEDICAL DEVICES	112
METHODS IN PHARMACOEPIDEMIOLOGY	113
PHARMACOVIGII ANCE	115

### SATURDAY, AUGUST 27 | 8 AM - 6 PM

#### SPOTLIGHT POSTERS

#### DATABASES

A – Identification and Classification of Asthma Patients Using a Computerized Database -Data from a Large Israeli Health Maintenance Organization [634]

Vered Rosenberg | Gabriel Chodick | Neville Berkman (Israel)

B – Quality of Life in Patients with Post-COVID-Syndrome: Combining Data from Electronic Health Records and Questionnaires [635]
Rinske Van Den Hoek | Karin Hek, Eelko Hak | Isabelle Bos Lisa Bosman | Robert Verheij | Tim Olde Hartman Lilian Peters | Jean Muris | Sjoukje Van Der Bij Liset Van Dijk (Netherlands)

C – The Impact of COVID-19 on Populationlevel Drug Utilisation of Alendronate in Five European Databases [637]

Eng Hooi (Cheryl) Tan | Danielle E Robinson
Annika Joedicke Maria Sanchez-Santos | Mees Mosseveld
Katrine Bødkergaard Nielsen | Carlen Reyes
Annemarie Voss | Ettore Marconi | Francesco Lapi
Jonas Reinold | Katia M Verhamme | Lars Pedersen
Marcel De Wilde | Marc Far Ruiz | María Aragón
Pauline Bosco-Levy | Régis Lassalle
Daniel Prieto-Alhambra (United Kingdom)

D – The Impact of Longitudinal Datacompleteness of Electronic Health Record (EHR) Data on Prediction Performance of Clinical Risk Scores *16621* 

Joshua Lin | Yinzhu Jin | Sebastian Schneeweiss Dave Merola (United States)

E – Changes in Sensitivity and Positive Predictive Value in Phenotype Algorithms for Myocardial Infarction and Ischemic Stroke Over Time in Multiple Observational Databases [663]

Joel N Swerdel | Patrick Ryan (United States)

F – Time Trends in Performance of Different Mortality Data Sources Compared to the National Death Index in the Healthcore Integrated Research Database [664]

Todd Sponholtz | Aziza Jamal-Allial | Shiva K Vojjala Anahit Papazian | Biruk Eshete | Seyed Hamidreza Mahmoudpour | Patrice Verpillat | Daniel Beachler (United States)

G – Selection of Censoring Schemes for Analyzing Overall Survival in Real-World Data with Linked Mortality Information [665]

Wei-Chun Hsu | Aaron Crowley | Susan Oliveria Craig Parzynski (United States)

H – Concordance of Efficacy Data Collected in a Clinical Trial Setting Versus a Registry Study Setting: Example of Use of Real-World Data to Support Drug Regulatory Approval of Abatacept for Acute Graft Versus Host Disease Prophylaxis [666]

Christopher Bond | Tzuyung Douglas Kou | Leslie Kean Linda J. Burns | Karissa Lozenski | Roxanne Kapikian Xiao-Ying Tang | Mei-Jie Zhang | Michael Hemmer Sean Connolly | Martin Polinsky | Brian Gavin Andres Gomez | Marcelo Pasquini (United States)

#### DIGITAL EPIDEMIOLOGY

I – New Tools for Pharmacoepidemiological Studies: Developing a Lightweight Modular Analytics Framework Based on a Nordic Common Data Model (NCDM) and a General Model of Person-Time-Event Data [659]

Morten Andersen | Reeha Sharon | Sarah Kristiansen Mia Aakjær (Denmark) J – Machine Learning to Automate Data Extraction for Systematic Literature Reviews [660] Antonia Panayi | Juan M Ortiz | Katherine Ward | Antonio Santiago Ibanez Lopez | Andrew Xia | Regina Barzilay (Switzerland)

K – Predicting Early Readmission and Death After Hospitalization for Chronic Obstructive Pulmonary Disease Exacerbation Using Machine Learning [661]

Chih-Ying Wu | Chien-Ning Hsu | Charlotte Wang Jung-Yien Chien | Chi-Chuan Wang | Fang-Ju Lin (Taiwan)

L – Identifying Protective Drugs for Parkinson's Disease: Large Screening of The French National Healthcare Database with Signal Detection Machine Learning Algorithms [670]

Émeline Courtois | Thi Thu Ha Nguyen | Agnès Fournier Sylvie Escolano | Laure Carcaillon-Bentata Pascale Tubert-Bitter | Alexis Elbaz | Anne Thiébaut Ismaïl Ahmed (France)

M – Development of a Tool for Visualizing Patient Journeys Using Disease Blogs on the Internet [671]

Shinichi Matsuda | Takumi Ohtomo | Masaru Okuyama Hiraku Miyake (Japan)

#### DRUG UTILIZATION RESEARCH

N – Respiratory Drugs and Antibiotics Use Before and During COVID-19 in Asthma and COPD Patients: A Quasi-Experimental Study [638] Laila Nabil Mahmoud Helmy Aboulatta | Emily M. Barr Christine Leong | Kaarina Kowalec | Joseph Delaney Jamie Falk | Silvia Alessi-Severini | Sherif Eltonsy (Canada)

O – Variation in The Impact of a Policy to Restrict Coverage of Lidocaine 5% Plasters in Ireland [639] Frank Moriarty | Molly Mattsson (Ireland)

P – In-Hospital Treatment Patterns Among Patients Hospitalized with COVID-19 in the United States [640]

Nuvan Rathnayaka | Catherine Wiener | Alexander Breskin Angela Cook | M. Alan Brookhart (United States)

Q – Utilization of Antipsychotics for Delirium After Hospitalization for COVID-19 and Other Infections [641]

Lily Bessette | Yichi Zhang | Cassandra York | Joshua Lin (United States)

R – Agreement and Correlation Between Different Topical Corticosteroid Potency Classification Systems [642]

Mina Tadrous | Alexa C Bowie | Alexander Egeberg Jane Harvey | Stephanie Lax | Jacob Thyssen Aaron M. Drucker (Canada)

S – Use of Methotrexate in Girls and Women of Childbearing Age and Occurrence of Methotrexate-Exposed Pregnancies in Germany [643]

Nadine Wentzell | Bianca Kollhorst | Ulrike Haug (Germany)

T – Intended and Unintended Consequences: Changes in Opioid Prescribing Practices Following Two Policies in North Carolina, 2012–2018 – A Controlled Interrupted Time Series Analysis [644]

Courtney Maierhofer | Shabbar Ranapurwala Bethany Diprete | Naoko Fulcher | Christopher Ringwalt Paul Chelminski | Timothy Ives | Nabarun Dasgupta Vivian Go | Brian Pence (United States)

U – Statin-Related Adverse Drug Reactions in UK Primary Care Consultations: A Retrospective Cohort Study to Evaluate the Risk of Cardiovascular Events and All-cause Mortality [645]

Widya Norma Insani | Cate Whittlesea | Chengsheng Ju Kenneth Man | Hassan Hasan Alwafi | Alaa Alsharif Sarah Chapman | Li Wei (United Kingdom)

#### DRUG-DRUG INTERACTION

V – Polypharmacy and Potential Drug Interactions in the Brazilian Amazon: A Cross-Sectional Population-based Study, 2019 [646]

Tais Freire Galvao | Gustavo Magno B Tiguman Tayanny Margarida M. Almeida Biase | Marcus Silva (Brazil)

X – Age and Sex Differences in Polypharmacy Patterns in New Users of Metformin: A UK-based Descriptive Study [647]

Maria Luisa Marques De Sa Faquetti | Theresa Burkard Adrian Martinez De La Torre | Andrea Burden (Switzerland)

Y – The Impact of Polypharmacy on Antidepressant Discontinuation in Comorbid Depression and Type 2 Diabetes: A UK Primary Care Record Cohort Study [648] Annie Jeffery | Kate Walters | David Osborn | Ian Wong Joseph F. F. Hayes (United Kingdom)

Z – Polypharmacy Trends Among US Middle-aged Adults from 2007 to 2020 [649]

April Duddy | Lu Zhang | Tiffany Siu Woodworth (United States)

AA – Adverse Events of Myopathy After Comedication of Statin-Contraindicated Drugs: Case/Noncase Study Using Korea Adverse Event Reporting System (KAERS) Database, 2016-2020 [672]

Sewon Park | Min-Ju Koo | Sun-Young Jung (South Korea)

AB - Concomitant Use of Sodium-Glucose Cotransporter 2 Inhibitors and Statins and the Risk of Myotoxicity - A Pharmacovigilance Study [673] Antonios Douros, | Christopher Gravel | Daniel Krewski Donald Mattison (Canada)

AC – A Population Based Assessment of Concomitant Use of Sulfonylureas and Beta-Blockers and the Risk of Severe Hypoglycemia [674]

Jenny Dimakos | Ying Cui | Robert Platt | Kristian Filion Christel Renoux | Antonios Douros (Canada)

#### **GENOMICS -**

AD – KRAS P.G12 Mutated Advanced Non-Small Cell Lung Cancer: Characteristics and Outcomes from a Danish Nationwide Retrospective Observational Study [636]

Matilde Frost | Ditte Resendal Gotfredsen Kristoffer Jarlov Jensen | Anne Mette Skov Soerensen Karly Louie Nicholas Sroczynski | Erik Jakobsen Jon AndersenEspen Jimenez-Solem Tonny Petersen (Denmark)

AE – Shifting Treatment Landscape and Overall Survival by PD-L1 Expression Level Among Patients with Advanced Non-Small Cell Lung Cancer (aNSCLC) 16501

Wenzhen Ge | Hilary Dietz | Ning Wu | Ruben Gw Quek Jean-Francois Pouliot | Scott Antonia | Jessica Jalbert James Harnett (United States)

AF – Evolution of The Treatment Landscape in Patients with Advanced or Metastatic Cancers Following the Approval of Immuno-Oncology Treatments: Analysis of The England National Cancer Registry [651]

Patrice Verpillat | Seyed Hamidreza Mahmoudpour Craig Knott | Amerah Amin | Emmanuelle Boutmy (Germany)

AG – Utilization of Drugs with Pharmacogenetic Dosing Recommendations in Switzerland: A Descriptive Study Using Swiss Claims Data [667] Nina L. Wittwer | Christoph Meier | Carola A Huber Henriette E. Meyer | Zu Schwabedissen | Samuel Allemann Cornelia Schneider (Switzerland)

AH – Determinants of Higher Metformin Daily Dosage Among Type 2 Diabetic Patients: A Genetic Risk Score Analysis in The Rotterdam Study 16681

Soroush Mohammadi Jouabadi | Payam Peymani Bruno H. Stricker | Fariba Ahmadizar (Netherlands)

Al – Comparison of FDA and EMA Regulatory Routes and Approval Timing for Personalized Medicines 16691

Carla Vossen | Tara Isherwood | Jessica D Albano (Netherlands)

#### **GERIATRICS**

AJ – Urinary Retention and the Risk of Delirium Among Elderly Patients with Benign Prostatic Hyperplasia [652]

Sheng-Yung Chang | Chin-Yao Shen | Edward Lai (Taiwan)

AK – Polypharmacy and Trajectories of Health-Related Quality of Life in Older Adults: A National Cohort Study [653]

Edwin CK Tan | Muhamad Aljeaidi Miriam Haaksma (Australia)

AL – Classifying Polypharmacy: A Latent Class Analysis in Older Adults in Quebec, Canada [654] Maude Gosselin | Denis Talbot | Marc Simard

Miceline Mesidor | Yohann M Chiu | Caroline Sirois (Canada)

AM – Comparison of Potentially Inappropriate Medications in Nursing Homes and the Community: A Nationwide Cross-Sectional Study in Older Persons [655]

Solene Drusch | Thien Le Tri | Joel Ankri Hugues Michelon | Mahmoud Zureik | Marie Herr (France)

AN – Time Series Analysis of Blood Pressure-lowering Drug Prescribing Trends Among Dementia Patients in Hong Kong [656] Edmund Cl Cheung | Celine Sl Chui | Miriam Leung Gary Kk Lau | Hao Luo | Eric Yf Wan lan Wong (Hong Kong)

AO – One-Year Opioid Use Following Discharge from Post-Acute Care After Hip Fracture [657]

Andrew Zullo | Meghan Cupp | Francesca Beaudoin Richa Joshi | Melissa Riester | Kaley Hayes (United States)

AP – Longitudinal Progression of Frailty in Older Population and Risk of Mortality: An Application of Joint Latent Class Models 16581

Leena Mohamed Elabbas Elhussein | Danielle E. Robinson Antonella Delmestri | Daniel Prieto-Alhambra | Alan Silman Victoria Y. Strauss (United Kingdom)

#### DISEASE EPIDEMIOLOGY/ CLINICAL COURSE

1 – The Risk of Acute Infection in Association with Newly Diagnosed Depression: A Cohort Study [675]

Noah Aebi | Christoph Meier | Susan Jick | Undine E. Lang Julia Spoendlin (Switzerland)

2 – The Impact of Sex on Migraineassociated Risks of Premature Stroke and Myocardial Infarction: A Danish Populationbased Cohort Study [676]

Cecilia Fuglsang | Morten Schmidt | Lars Pedersen Henrik Toft Sørensen (Denmark)

3 – The Impact of COVID Passport Mandates on The Number of Cases of and Hospitalizations With COVID-19 in the UK: A Difference-In-Differences Analysis [677] Kim López Güell | Albert Prats-Uribe | Martí Català Daniel Prieto-Alhambra | Clara Prats Jotun Hein (United Kingdom)

4 - Trends and Risk Factors of Adult Oral Disease: Results from a Nationwide Population-based Study in Korea [678] Jaseung Choi | Seo-Young Park | Seokyung Hahn Hee-Kyung Park | Ji-Yeob Choi (South Korea)

5 – Response to Electroconvulsive Therapy in Treatment Resistant Depression: A Nationwide Register-based Study [679] Adam Nygren | Johan Reutfors | Lena Brandt Robert Bodén | Axel Nordenskjöld | Mikael Tiger (Sweden)

6 – Patterns of Adverse Event Reporting for Long-acting Benzodiazepines [680] Ju Won Lee | Yuseon Jung | Seung-Hun You | Dal Ri Nam

Sun-Young Jung (Republic of Korea)

7 – Heart Failure Phenotype Transitions in Early Diagnosis [681]

Mai Duong | Phillip R Hunt | Alison Booth | Nahila Justo Javier Cid Ruzafa | Ignacio Hernández | Beatriz Palacios Juan J. Delgado | Aldo Maggioni (United Kingdom)

8 - COVID-19: Multifactorial Modelling to Predict Long-Term Trends [682]

Chris Schneiderman | Leon Raskin | Alexander Liede (United States)

(Denmark)

9 – Heart Failure Following ST-Segment Elevation (STEMI) and Non-ST-Segment Elevation Myocardial Infarction (NSTEMI): Incidence, Characteristics and Its Impacts on Mortality in Taiwan [683]

Huimin Chuang | Shih-Tsung Huang | Fei-Yuan Hsiao (Taiwan)

### 10 – The Medikeye Project: The First European Study on in Utero Medicine Exposure and Congenital Anomalies of Eyes [684]

Charlotte Dubucs | Anthony Caillet | Van Ngo
Amanda Neville | Helen Dolk | Maria Loane | Ester Garne
Babak Khoshnood | Nathalie Lelong | Anke Rissmann
Mary O'mahony | Anna Pierini | Miriam Gatt
Hermien De Walle | Maciej R Krawczynski
Anna Latos-Bielenska | Luis Echevarría González De Gariba
Clara Cavero Carbonell | Marie-Claude Addor | David Tucker
Sue Jordan | Vera Nelen | Ingeborg Barisic
Hanitra Randrianaivo | Monique Courtade-Saïdi
Isabelle Lacroix | Caroline Hurault-Delarue
Christine Damase-Michel (France)

### 11 – The Completeness of the Swedish National Patient Register in Terms of Cancer Diagnoses [685]

Sakura Sakakibara | Laura Pazzagli | Marie Linder (Sweden)

#### 12 – Factors Influencing Diabetes Risk Assessment; a Systematic Comparison of Two Diabetes Risk Assessment Tools [686] Atiqulla Shariff | Srikanth Malavalli Siddalingegowda Sathvik Belagodu Sridhar | Anjali Pradhan Muskan Singh (India)

13 – Prevalence of Osteoporosis, Fractures, and Preventive Therapy Among Patients with Moderate to Severe Chronic Kidney Disease Patients Using National Heath and Examination Survey (NHANES) [687]

Sherin Ismail Atta | Michele Jonsson Funk (United States)

### 14 – Evaluating The Mortality in Women with Newly Diagnosed Early-Stage Breast Cancer Comparing Surgery Against Primary Endocrine Therapy [688]

Yubo Wang | Douglas Steinke | Sean Gavan | Li-Chia Chen (United Kingdom)

### 15 – National Trends of Dementia and Its Clinical Outcomes in Taiwan from 2004 to 2017: A Claim-based Nationwide Study [689]

Shih-Tsung Huang | Liang-Kung Chen Fei-Yuan Hsiao (*Taiwan*)

### 16 – Type 2 Diabetes Phenotypes and Polyneuropathy: A Prevalence Study in the DD2 Cohort *16901*

Frederik Pagh Kristensen | Diana Christensen
Brian Callaghan | Helene Svane | Jacob Stidsen
Jens Nielsen | Kurt Højlund | Henning Beck-Nielsen
Troels Jensen | Henning Andersen | Peter Vestergaard
Niels Jessen | Michael Olsen | Torben Hansen
Charlotte Brøns | Allan Vaag | Henrik Toft Sørensen
Reimar Thomsen (Denmark)

17 – Characteristics and Treatment Patterns in Patients with Locally Advanced and Metastatic Bladder Cancer in Denmark 2015-2020 [691] Mette Nørgaard | Aurélie Mailhac | Karin Fagerlund Torsten Strunz-Mckendry | Jørgen Bjerggaard Jensen

### 18 – Lower Extremity Strains in the US National Football League, 2015-2019 [692]

Mackenzie Herzog | Leigh Weiss | Rebecca Lee Christina Mack (United States)

19 – Prevalence and Clinical Outcomes of Lipodystrophy: A US National Cohort [693] Seonkyeong Yang | Caitlin Knox (United States)

20 – Representativeness in Clinical Trial Planning: An Epidemiologic Examination of Race and Ethnicity Leveraging Multiple Real-World Data (RWD) Sources in the United States [694] Emily W Bratton | Michel Denarie | Robert Stolper Monica Goins | Eric Gemmen (United States)

21 – Applying Sequence Clustering Methods to Characterize Healthcare Pathways of Patients at Different Prostate Cancer Stages in the French Nationwide Healthcare Database (SNDS) [695] Nicolas H. Thurin | Régis Lassalle | Roméo Baulain Jérémy Jové | Dunia Sakr | Marine Gross-Goupil Magali Rouyer | Patrick Blin | Cécile Droz-Perroteau (France)

22 – Cutaneous Lupus Erythematosus in a Large, Longitudinal Electronic Health Record Database in the United States: Demographics, and Comorbidities – A Focus on African Americans [696] Fariba Mirzaei | Li Li (United States)

### 23 – Validation of a Cohort of Rheumatoid Arthritis (RA) Patients in CPRD Aurum [697]

David E. Neasham | Catherine Vasilakis-Scaramozza Katrina Wilcox Hagberg | Rebecca Persson George Kafatos | Joe Maskell | Susan Jick (United Kingdom)

24 – Evaluating The Burden of Peripheral Neuropathy in Multiple Myeloma Using Two Real-World Data Sources from the United States [698]

Alexi Archambault | Martha Makaratzi Karen Rodriguez Lorenc | Glenn Kroog Christian Hampp (United States)

25 – Epidemiology of Select Clinical Events of Interest Following a Myocardial Infarction [699] Darcy E. Ellis | James Brash | Xiaoyu Lin | Sarah Seager Christian Reich | Max Waschbusch | Nicole L Baker (United States)

26 – Osteoarthritis Imaging Patterns in US Clinical Practice [700]

Angelika Manthripragada | Ravi lyer | Dana Murdock James Jackson | Mia Unsworth | Chloe A Walker Wenhui Wei (United States)

27 – Characterization and Treatment Pathways of Heavy Menstrual Bleeding (Champion-HMB): A Network Cohort Study [701]

Federica Edith Pisa | Kristina Gemzell-Danielsson Oskari Heikinheimo | Ronald Herrera | Bruno Imthurn Carsten Moeller | M Inês Neves | Christian Reich Juliane Schoendorf | Gabriele Schuhmann-Giampieri Marco Serrani | James Yang (Germany) 28 – Trends in The Incidence of Dementia in People with Hypertension in the UK Between 2000-2021 [702]

Matthew Adesuyan | Ruth Brauer | Yogini Jani (United Kingdom)

29 – Characteristics of Patients with Incident Delirium During Inpatient Rehabilitation: A Descriptive Study [703]

Marco G. Ceppi | Marlene Rauch | Christoph Meier Peter Sandor (Switzerland)

30 – Does Prescription of SGLT2i Decrease the Risk of COVID-19 in Adults with T2DM in the UK, Compared to Prescription of DPP4i: A CPRD Population-based Observational Cohort Study [704] Owen A. Taylor | Rohini Mathur (United Kingdom)

#### DRUG EFFECTIVENESS

31 – Effect of Obeticholic Acid in Non-Alcoholic Fatty Liver Disease (NAFLD) and Non-Alcoholic Steatohepatitis (NASH) Patients: A Systematic Review and Meta-Analysis [705] Nadella Mounika (India)

32 – Characterizing Extension Studies in Interventional Research: Twenty Year Trends [706] Andrew M Bevan | Brian M. Frankel | Debra A. Schaumberg (United Kingdom)

33 – Comparative Effectiveness of Sodium-Glucose Co-Transporter-2 Inhibitors Versus Dipeptidyl Peptidase-4 Inhibitors in Reducing Incidence of Stroke and Myocardial Infarction in Patients with Type 2 Diabetes [707]

Ghadeer Dawwas | James D. Lewis | Sean Hennessy (United States)

34 – Jak Inhibitors for Atopic Dermatitis: A Network Meta-Analysis of Adverse Events [708] Ana Penedones | Carlos Alves | Diogo Mendes Francisco Batel Marques (Portugal) 35 – Numbers Needed to Treat to Benefit (NNTB) and to Harm (NNTH) for COVID-19 Medicines [709] Ana Penedones | Diogo Mendes | Carlos Alves Francisco Batel Marques (Portugal)

36 – Efficacy of Bictegravir /Emtricitabine/Tenofovir Alafenamide (B/F/TAF) Versus Dolutegravir Combinations in HIV-1 Adult Population: A Systematic Review and Meta-Analysis [710] Anto Amith Biju J | Aina Shaju Manoj Kumar Mudigubba (India)

37 – Efficacy and Safety of Corticosteroids in COVID-19: An Overview of Meta-Analyses [711] Sreedharan Nair | Muhammed Rashid | Asha K. Rajan Ambalappotta Hafis | Viji Chandran | Girish Thunga Vishal Shanbhag | Souvik Chaudhuri (India)

38 – The Association Between Antihypertensive Agents and Incident Alzheimer's Disease: A Systematic Review and Meta-Analysis of Observational Studies [712]

Matthew Adesuyan | Ruth Brauer | Yogini Jani (United Kingdom)

39 - Comparative Effectiveness of Different Corticosteroid Regimens in Patients with Acute Respiratory Distress Syndrome [713]

Muhammed Rashid | Sreedharan Nair | Girish Thunga Vijayanarayana Kunhikatta | Vishal Shanbhag | Viji Chandran Asha K. Rajan | Raviaraja Acharya (India)

40 – Sociodemographic Factors and Medications for Opioid Use Disorder (MOUD) Initiation and Retention: A Review [714]

Catherine Psaras | Sophia L. Balkovski | Marissa Seamans (United States)

41 – Effectiveness and Safety of Warfarin Use After Bariatric Surgery in Patients with Atrial Fibrillation and Venous Thromboembolism: A Real-World Analysis [715]

Abdullah Abdulaziz Alalwan | Jeffrey Friedman Haesuk Park | Richard Segal (Saudi Arabia)

42 – Identifying Factors with and Effects of Metformin on The Risk of Alzheimer's Disease and Other Dementias: A Machine Learning Approach [716]

Xiaomo Xiong | Minghui Li | Kevin Lu (United States)

43 – Comparative Effectiveness of Adjuvant Chemotherapy Versus Chemotherapy Plus Targeted Therapy After Resection of Both Primary Tumor and Metastases in Patient with Colorectal Cancer [717]

Yi-Chia Su | Chih-Chien Wu | Yu-Ching Chang | Yea-Huei Kao Yang (Taiwan)

44 - Association Between Sodium-Glucose Co-Transporter 2 Inhibitors and Heart Failure Readmission Among Patients with Type 2 Diabetes [718]

Sohee Park | Han Eol Jeong | Hyesung Lee Ju-Young Shin (Republic of Korea)

45 – Safety and Efficacy of Perampanel in Epilepsy: A Systematic Review and Meta-Analysis of Randomised Controlled Trials 17191

Alekhya Lavu | Laila Nabil Mahmoud Helmy Aboulatta Ahamed M. Abou-Setta | Basma Aloud | Nicole Askin Rasheda Rabbani | Walid Shouman | Ryan Zarychanski Sherif Eltonsy (Canada)

46 – Impact of Romosozumab on Bone Mineral Density in Postmenopausal Osteoporosis [720]

Md Azharuddin | Manju Sharma (India)

47 – Hospital Readmission and Mortality in Patients with Heart Failure Treated with Sacubitril/ Valsartan versus Enalapril in Hong Kong [721] Xuxiao Ye (Hong Kong)

48 – Efficacy and Safety of a Personalized Vitamin D3 Loading Dose Followed by 2,000 IU Per Day to Raise Serum 25-Hydroxyvitamin D Levels in Colorectal Cancer Patients with Vitamin D Insufficiency. Interim Analysis of a RCT [722] Ben Schoettker | Hermann Brenner | Sabine Kuznia (Germany)

49 – Comparative Effectiveness and Safety of Sodium-Glucose Cotransporter 2 Inhibitors (SGLT2i) Versus Dipeptidyl Peptidase 4 Inhibitors (DPP-4i) in T2D Patients Across Different HbA1c Levels 17231

Elvira D'andrea | Deborah Wexler | Julie Paik | Ethan Alt Seoyoung Kim | Elisabetta Patorno (United States)

50 – Effect of Low-Dose Aspirin on The Primary Prevention of Colorectal Cancer in Patients with Type 2 Diabetes Taking Metformin [724] Jessica Shami | Vincent Kc Yan | Yue Wei | Ian Wong Esther W. Chan (Hong Kong)

52 – Statins and LDL-Cholesterol Control in The Long-Term: A Retrospective Cohort Study Using Electronic Health Records [726]

Juan Carlos Jc Bazo Alvarez | Kingshuk Pal | Tim P Morris James R Carpenter | Rafel Ramos | Goya Wannamethee Irene Petersen (United Kingdom)

53 – Cardiovascular Outcomes of GLP-1 Receptor Agonists Versus Metformin as First-Line Treatment for Type 2 Diabetes [727]

Hojin Shin | Sebastian Schneeweiss | Robert Glynn Elisabetta Patorno (United States)

54 – Sodium Glucose Cotransporter 2 Inhibitors and The Risk of Respiratory Outcomes Among Patients with Type 2 Diabetes: A Nationwide Cohort Study [728]

Han Eol Jeong | Sohee Park | Yunha Noh | Kristian Filion Oriana Hoi Yun Yu | Seung Hun Jang | Ju-Young Shin (South Korea)

55 – Daily Tenofovir Disoproxil Fumarate/ Emtricitabine and Hydroxychloroquine for Pre-exposure Prophylaxis of COVID-19: A Double-Blind Placebo Controlled Randomized Trial in Healthcare Workers. A Randomized Clinical Trial [729]

Xabier Garcia De Albeniz | Rosa Polo | Carolina Teran Miguel Morales | David Rial-Crestelo | Ma Garciñuno Miguel Garcia Del Toro | César Hita | Jl Gómez-Sirvent Luis Buzón | Alberto Díaz De Santiago | Jl Perez, Jesús Sanz P. Bachiller | Elisa Martínez | Vicens Díaz-Brito | Mar Masia Alicia Hernandez-Torres | José Guerra Piedad ArazoJose Arribas | Pablo Martínez De Salazar Santiago Moreno | Miguel A. Hernán | Julia Del Amo (Spain)

56 – Drug Repurposing in a Pandemic: Systematic Review and Meta-Analysis of Randomized Trials of Hydroxychloroquine for the Prevention of COVID-19. What Have We Learned? [730] Xabier Garcia De Albeniz | Julia Del Amo | Rosa Polo Jose Miguel Morales-Asencio | Miguel A Hernán (Spain)

57 – Survival Analysis of Riluzole for Patients with Motor Neuron Disease in Hong Kong: A Population-based Cohort Study [731]

Min Fan | Gary Kk Lau | Xue Li | Edmund Cl Cheung Le Gao | Ian Wong | Celine Sl Chui (Hong Kong)

58 – Use of Riluzole and Risk of Hospitalization for Patients with Motor Neuron Disease in Hong Kong: A Self-Controlled Case Series Study [732] Min Fan | Gary Kk Lau | Xue Li | Le Gao Edmund Cl Cheung | Ian Wong | Celine Sl Chui (Hong Kong)

59 – Risk of Falls and Fractures with Concomitant Use of Prescription Opioids and Other Medications in Osteoarthritis Patients [733] Nazleen Khan | Katsiaryna Bykov | Jeffrey Katz Robert Glynn | Seanna Vine | Seoyoung Kim (United States)

60 – Inhaled Corticosteroid Combinations in COPD-Safety and Efficacy: A Systematic Review of Real-World Data [734] Ramesh Madhan | Christy Thomas | Chalasani Sri Harsha Krishna Murti (India)



Connect with our experts to discuss your **real-world evidence needs** or any of our poster presentations on:

- Pregnancy registries
- Risk minimization measures
- Benefit-risk assessments
- Extension studies
- Data models and RWE
- Phenotype transitions

#### 61 – The Impact of Expanded Access to Direct Acting Antivirals for Hepatitis C on Patient Outcomes in Canada [735]

Cherry Chu | William Wong | Kevin Schwartz Jason Guertin | Tara Gomes | Tony Antoniou | Jordan Feld Naveed Janjua | Jeff Kwong | Mina Tadrous (Canada)

62 – Prevalence of Use of GABA Receptor Positive Allosteric Modulator Use and Associations with Treatment Discontinuation Among Patients Receiving Cancer Immunotherapy [736] Jyotirmoy Sarker | Gregory Calip (United States)

### 63 – Potential Unknown Benefits of Rabeprazole: Real-World Evidence Generated Using the REWARD Framework [737]

Justin Bohn | James Gilbert | Geoffrey Rezvani Saberi Rana Ali | Zhong Yuan | Linda Hannemann David M. Kern (United Kingdom)

#### 64 – Hydrochlorothiazide and Non-Melanoma Skin Cancer in Residents of the Province of Ontario, Canada *17381*

Marina G. Birck | Cristiano Moura | Coraline Danieli Michal Abrahamowicz | Louise Pilote Sasha Bernatsky (*Canada*)

65 – Biological Disease-Modifying Antirheumatic Drugs and Osteoporotic Fracture Risk in Patients with Rheumatoid Arthritis: A Danish Cohort Study with Prevalent New-User Design [739] Shahab Abtahi | René Cordtz | Lene Dreyer | Johanna H. M. Hm Driessen | Annelies Boonen | Andrea Burden

66 – Restricted Mean Survival Time for Analysis of Real-World Cardiovascular Effect Associated with SGLT2 Inhibitor Use: A Population-based Study [740] Zi-Yang Peng | Chun-Ting Yang | Chih-Hsing Wu Huang-Tz Ou (Taiwan)

(Netherlands)

67 – Effect of Statins on Coronary Artery Calcification: A Systematic Review and Meta-Analysis of Randomized Controlled Trials [741] Mitra Nekouei Shahraki | Soroush Mohammadi Jouabadi Daniel Bos | Bruno H Stricker | Fariba Ahmadizar (Netherlands)

68 – Real-World Effectiveness of Methadone Maintenance Treatment on the Reduction of Suicidal Attempts in Patients with Opioid Use Disorder 17421

Eric Cheng-Chan Shih | I-Lin Hsu, Edward Lai (*Taiwan*) 98 | ICPE 2022 | *Copenhagen, Denmark* \_\_\_\_\_ 69 – Evaluating Crisaborole 2% Ointment's Role in Improving Quality of Life in Patients Three Months and Older with Mild to Moderate Atopic Dermatitis: A Systematic Review [743] Feng-Hua Loh | Ahmad Naeem (United States)

70 – Long-Term Relative Effectiveness of Anti-Hypertensive and Anti-Hyperlipidemic Drug Monotherapy in Primary Prevention of Cardiovascular Events [744]

Xuechun Li | Maarten J Bijlsma | Jens H. J. Bos Catharina C. M. Schuiling-Veninga | Eelko Hak (Netherlands)

71 – Real-World Effectiveness and Safety of Ramucirumab in Hepatocellular Carcinoma Patients: A Retrospective Study in Taiwan [745] Min Hua Hung | Kaicheng Chang | Hui-Yu Chen (Taiwan)

### 72 – Real World Effectiveness of Lipid-lowering Medication in Denmark [746]

Camilla B Jensen | Jakob Kronkvist Hoe | Susanne Hansen Rasmus Huan Olsen | Tina Johansen Espen Jimenez-Solem | Janne Petersen (Denmark)

73 – Efficacy and Safety of Baloxavir in the Treatment of Influenza:
A Systematic Review and Meta-Analysis [747]
Lara Haidar | Laila Nabil Mahmoud Helmy Aboulatta
Alekhya Lavu | Sherif Eltonsy | Rania Azar (Canada)

74 – A Real-World Effectiveness of Second-line Osimertinib in NSCLC Patients: A Multi-Institutions Study in Taiwan [748] Hui-Yu Chen | Kaicheng Chang | Shih-Chieh Shao Yueh-Fu Fang (*Taiwan*)

75 – Comparative Effectiveness of Regorafenib and Nivolumab as Sequential Therapies in Patients After Sorafenib Failure for Hepatocellular Carcinoma Patients: A Cohort Study in Taiwan [749] Tzuyu Yeh | Kaicheng Chang | Hui-Yu Chen (Taiwan)

76 – Disease Relapse, Healthcare Utilization and Adverse Events Associated with the Use of Long-acting Injectable Antipsychotics Versus Oral Antipsychotics in People with Schizophrenia: A Self-controlled Case Series Study [750] Yue Wei | Vincent Kc Yan | Wei Kang | Ian Wong David J. Castle | Le Gao | Celine SI Chui | Kenneth Man Joseph F. F. Hayes | Wing Chung Chang | Esther W. Chan (Hong Kong)

77 – Real-World Impact of Non-Clinical Inhaler Switching on Asthma or COPD Patients: A Systematic Review 17511

John Bell | Omar Usmani | Sinthia Bosnic-Anticevich Richard Dekhuijzen | Federico Lavorini | Neda Stjepanovic Stephanie L. Swift | Nicolas Roche (United Kingdom)

78 – Medication Self-Management in Hospitalised Patients with Schizophrenia or Bipolar Disorder: The Perceptions of Patients and Healthcare Providers [752]

Elke Loots (Belgium)

79 – Efficacy and Safety of Amphotericin B and Oral Miltefosine Combination in Patients with Visceral Leishmaniasis: A Systematic Review and Meta-Analysis 17531

Christy Thomas | Mandava Satish | Krishna Undela (India)

80 – Comparative Effectiveness and Safety of First-Line Treatments of Metastatic Colorectal Cancer in Real-World Settings: A Systematic Review and Meta-Analysis [754]

Haya Yasin | Amanj Kurdi, Fatema Mahmoud | Tanja Mueller Natalie Weir | Marion Bennie (United Kingdom)

81 - Efficacy and Safety of Inhaled Corticosteroid Containing Combinations in Patients with Chronic Obstructive Pulmonary Disease (COPD): A Systematic Review and Meta-Analysis [755] Christy Thomas | C. Sri Harsha | Krishna Murti Krishna Undela | Ramesh Madhan (India)

82 – High-Intensity Thromboprohylaxis Is Not Associated with Reductions in COVID-19 Worsening, Severe Disease, or Death [756] Corey Joseph | Kayte M Andersen | Hemalkumar Mehta Michael B Streiff | Joshua Betz | Robert C. Bollinger Arielle Fisher | Amita Gupta | Charles F. Lemaistre Matthew Robinson | Yanxun Xu | Derek K. Ng G. Caleb Alexander | Brian Garibaldi (United States)

83 - Comparative Effectiveness of First-Line SGLT2 Inhibitor Use on Heart Failure Hospitalization Among Patients with Type 2 Diabetes Mellitus: A Target Trial Emulation [757] Hiraku Kumamaru | Yoshinori Takeuchi | Shun Kohsaka Hiroki Matsui | Hideo Yasunaga | Hiroaki Miyata (Japan)

84 – Hydroxychloroquine for Pre-Exposure Prophylaxis of COVID-19 in Health Care Workers: A Randomized, Multicenter, Placebo-controlled Trial (HERO-HCQ) [758]

Emily Obrien | Susanna Naggie | Kevin Anstrom Lauren Cohen | Jack Shostak | Rachel Olson Anne Friedland | Chris Woods Adrian Hernandez (United States)

85 – Converging Evidence from Human Pharmacoepidemiology and Rodent Psychopharmacology Studies on the Role of Spironolactone as a Potential Pharmacotherapy for Alcohol Use Disorder [759]

Mehdi Farokhnia | Christopher Rentsch | Vicky Chuong Adrienne Mcginn | Sophie Elvig | Eliza Douglass Jenna Sanfilippo | Renata Marchette | Brendan Tunstall David Fiellin | George Koob | Amy C. Justice Lorenzo Leggio | Leandro Vendruscolo (United States)

86 – Sodium-Glucose Cotransporter-2 Inhibitors and The Risk of Lung Cancer Among Patients with Type 2 Diabetes [760]

Samantha B. Shapiro | Hui Yin | Oriana Hoi Yun Yu Laurent Azoulay (Canada)

87 – Use of Immunosuppressive Drugs (ISD) and The Effectiveness of Immune Checkpoint Inhibitor (ICI) Therapy Among Patients with Advanced/Metastatic Non-Small Cell Lung Cancer (NSCLC) in the United States (US) [761] Brian Dreyfus | Ellen (Yan) Zhang | Charlotte Doran Kim Le | C. Kola | Brooke E Sylvester | Rajeshwari Punekar Lincy Lal | John Penrod | Stephanie L. Meadows-Shropshire (United States)

88 - Hemostatic Effectiveness of Four-factor Prothrombin Complex Concentrate for Treatment of Factor Xa Inhibitor-associated Acute Major Bleeds: A Meta-analysis [762]

Nicole L. Baker | Fidelia Ida | Rongrong Wang Brahm Goldstein (United States)

#### DRUG UTILIZATION RESEARCH

89 – COVID-19 Related Drug Utilization Study in Pregnancy – The COVI-Preg Cohort [763]
Guillaume Favre | Eva Gerbier | Emeline Maisonneuve
Ursula Winterfeld | Leo Pomar | Miriam Sturkenboom
Eimir Hurley | Hedvig Nordeng | Kitty Wm Bloemenkamp
Hilde Engjom | Odette De Bruin | Satu Siiskonen
David Baud | Alice Panchaud (Switzerland)

90 – Disparities in Access to Contraceptives and Abortion Medications Between High Income and Low- and Middle-Income Countries (LMICs) Before and During the COVID-19 Pandemic, 2015-2020 [764]

Dima Qato | Andrew Shooshtari | Jenny Guadamuz Laura Ferguson | Denise Harrison (United States)

### 91 – Use of Antibiotics for Urinary Tract Infections Up to and After Nursing Home Admission in Denmark [765]

Emma Bjørk | Rune Aabenhus | Søren Larsen Jesper Ryg | Daniel Henriksen | Carina Lundby Anton Pottegård (Denmark)

### 92 – Using Real-World Data to Examine Treatment Patterns of Patients with Advanced Non-Small Cell Lung Cancer Treated with Systemic Therapies [766]

Jason Simeone | Nicole Croteau | Sabrina Mueller (United States)

### 93 – Estimation of COVID-19 Vaccination Uptake by Brand to Inform Global Impact Measurement [767]

Robert C. Reiner | Catherine Gillespie | John Giles Christopher E. Troeger | Serena Santoni (United States)

### 94 – Estimating Patients' Knowledge and Behavioral Traits Towards Generic Drugs in Greece [768]

Konstantinos Kassandros | Christos Kontogiorgis Theodoros Constantinides (*Greece*)

### 95 – Adherence to Medications and Government Recommendations Among Breast Cancer Women During The COVID-19 Pandemic [769]

Charlotte Myers | Sophie Lauzier | Fanie Bourgault Michel Dorval | Hermann Nabi | Josée Savard Kathleen E. Bennett | Caitriona Cahir (*Ireland*) 96 – Variations in The Definitions for Prevalence of Chronic Post-Surgical Pain and Persistent Opioid Use After Surgery [770] Neetu Bansal | Li-Chia Chen | Sheanne Ang (United Kingdom)

97 – Real-World Prescription Pattern Among Patients with Inflammatory Bowel Disease in Taiwan: A Multi-Institutional Electronic Medical Records Database Analysis [771]

Chon Hou Kou | Kaicheng Chang | Hui-Yu Chen (Taiwan)

98 – Psychotropic Drug Utilization in An Ambulatory Psychiatric Clinic of a Tertiary Care Hospital [772] Srikanth Malavalli Siddalingegowda | Shivani B. | Kishore M. Atiqulla Shariff | Samaksha P. B. (India)

### 99 – The Initiation of Treatment and One-Year Treatment Non-Persistence Rates in Hypertensive Patients in Lithuania [773]

Indre Treciokiene | Nomeda Bratcikoviene | Jolanta Gulbinovic Bjorn Wettermark | Katja Taxis (*Lithuania*)

100 – Morbi-Mortality Consequences of Misuse of Psychoactive Prescription Drugs in Portugal: A Retrospective Observational Study – The MisuMedPT Project [774]

Ana Araujo | Ana Godinho | João Goulão Ana Martins (*Portugal*)

### 101 – Changes in Anticoagulant and Antiplatelet Drug Supply at US Hospitals During the COVID-19 Pandemic [775]

Dima Qato | Paul Wong | Scott A Mosley | Tien M. Ng Andrew Shooshtari | G. Caleb Alexander (United States)

### 102 – The Management of Adult Asthma: An Observational Study into Real-World Prescription Patterns of Inhalation Medication [776] Irene Mommers | Catharina C. M. Schuiling-Veninga

Irene Mommers | Catharina C. M. Schuiling-Veninga Jens H. J. Bos | Job Van Boven | Maarten J. Bijlsma Eelko Hak (Netherlands)

### 103 – Switching Patterns of Mixed Amphetamine Salt Products in the FDA's Sentinel Distributed Database [777]

Jennifer Lyons | Maria Kempner | Sarah Dutcher Amanda Carruth | Kira Leishear | Jennifer Thompson Corinne Woods | Aaron Hansbury | James Osterhout Elizabeth Siranosian | Talia Menzin | Sruthi Adimadhyam Sukhminder Sandhu | Silvia Perez-Vilar (United States)

104 – Uptake of Antiviral Treatment of Chronic Hepatitis B: A Panel Data Analysis of 31 Provinces in China (2013-2020) [778]

Hanchao Cheng | Shiyang Liu | Simon Luo | Linh-Vi Le Zhongdan Chen | Polin Chan | Jing Sun (China)

105 – Patient and Health System Factors Associated with Potentially Inappropriate Opioid Use in Non-Cancer Community-Dwelling Older Adults [779]

Carina D'aiuto | Carlotta Lunghi | Line Guénette Djamal Berbiche | Karine Bertrand Helen-Maria Vasiliadis (Canada)

106 – Performance of Three Sets of Criteria for Potentially Inappropriate Prescribing as Diagnostic Tools to Identify Inadequate Drug Treatment [780]

Susanna M. Wallerstedt | Johan Lönnbro Staffan A. Svensson | Fredrik Hieronymus | Johan Fastbom Mikael Hoffmann | Naldy Parodi Lopez (Sweden)

107 – Medication Use in the Year Before and After a Diagnosis of Cluster B Personality Disorder: Trends and Patterns Between 2002 and 2018 in Quebec, Canada [781]

Carlotta Lunghi | Lionel Cailhol | Victoria Massamba Elhadji Anassou Laouan Sidi | Caroline Sirois Elham Rahme | Louis Rochette | Suzane Renaud Evens Villeneuve | Marion Koch | Robert Biskin Pierre David | Cathy Martineau | Alain Lesage (Italy)

108 – Use of Pharmacological and Non-Pharmacological Treatments for Chronic Non-Cancer Pain Among People Using Opioids: A Longitudinal Cohort Study [782]

Ria E Hopkins | Gabrielle Campbell | Louisa Degenhardt Suzanne Nielsen | Fiona Blyth, Milton Cohen | Natasa Gisev (Australia)

109 – Use of Analgesics in Denmark: A National Survey [783]

Alaa Burghle | Anton Pottegård | Malthe Rasmussen Belinda Bruun | Jens Roost Hosbjerg | Carina Lundby (Denmark)

110 – Analysis of Discordantly Identified Criteria in STOPP/START – Problems Underlying Poor Reliability in Practice [784]

Naldy Parodi Lopez | Staffan A. Svensson Susanna M. Wallerstedt (Sweden) 112 – Medication-Related Problems and Medication Incidents in a Neonatal Intensive Care Unit of a Tertiary Care Hospital [786] Anjali Pradhan | Juny Sebastian (India)

113 – Real World Prevalence and Use of Immune Checkpoint Inhibitors Among Non-Small Cell Lung Cancer Patients in a Comprehensive Cancer Center [787]

Garima Mittal | Benjamin Bates | Maribel Salas Meera G. Sundararajan | Mackenzie Henderson Jyoti Malhotra | Haoqian Chen | Soko Setoguchi (United States)

114 – Secular Trends in Utilization of Pharmacologic and Non-Pharmacologic Pain Management Strategies Among Patients with Hip or Knee Osteoarthritis [788] Nazleen Khan | Jeffrey Katz | Seanna Vine | Seoyoung Kim (United States)

115 – Evaluation of Drug-Utilization and Healthcare Facilities Use in Patients with Ulcerative Colitis and Treated with Biologic Therapy Using Data of An Italian Healthcare Administrative Database: Results from MICHELANGELO Study [789]

Sara Ferraro | Olga Paoletti | Sabrina Giometto Silvia Tillati | Irma Convertino | Giulia Valdiserra Emiliano Cappello | Marco Bonaso | Claudia C. Bartolini Valentina Lorenzoni | Giuseppe Turchetti | Rosa Gini Matteo Fornai | Ersilia Lucenteforte | Marco Tuccori (Italy)

116 – Real-World Patterns and Trends of Idarucizumab Use in An Italian Region: A Probabilistic Record-Linkage Approach in the Period 2015-2020 [790]

Niccolo' Lombardi | Valentina Brilli | Giada Crescioli Ippazio Cosimo Antonazzo | Giampiero Mazzaglia Stefano Fumagalli | Guido Mannaioni | Alfredo Vannacci Rosa Gini (Italy)

117 – Development and Validation of a Virtual Reporting Tool for Diabetic Patients' Conventional and Herbal Medicine Use and Treatment Outcomes at a National Referral Hospital in Kenya [791]

Sylvia Atisa Opanga | Esther N. Mburu David N. Kimonge (Kenya)

118 – Factors Associated with Non-Persistence with Statin Treatment in Patients with Peripheral Arterial Disease [792]

Martin Wawruch | Jan Murin | Tomas Tesar (Slovakia)

119 – Detection of Temporal Trends in COVID-19 Treatments Using Routinely Collected Data: An Application of Change Detection Methods Towards Testing Effectiveness of Risk Minimisation Measures [793]

Daniel Prieto-Alhambra | Sara Khalid | Antony G. Sena Peter Rijnbeek (United Kingdom)

120 – Distribution of Samples of a New Preventive Migraine Drug and Potential Implications for Validity of Pharmacoepidemiology Studies Using Administrative Data [794]

Sarah Hoffman | Stephan Lanes | Christopher L. Crowe Kimberly M. Daniels | Francis Mawanda Krista Marie M. Schroeder (United States)

121 - Patterns of Psychotropic Medicine Use and Initiation in the Year Prior to Death by Suicide: A Population-based Study [795]

Andrea Schaffer | Nicholas A Buckley | Jennifer Schumann Jessy Lim | Rose Cairns | Kate Chitty (Australia)

122 - Trends and Characteristics Associated with Nonadherence to Antidepressants Among Breast Cancer Survivors with Depression [796]

Weihsuan Jenny Lo-Ciganic | Ching-Yuan Chang Juan Hincapie-Castillo | Haesuk Park | Coy Heldermon Vakaramoko Diaby | Seonkyeong Yang | Debbie Wilson (United States)

123 – Opioid Prescription Dispensing Patterns Among Patients with Schizophrenia or Bipolar Disorder [797]

Brittany Roy | Jianheng Li | Cathy Lally | Sarah C. Akerman Maria A. Sullivan | James Fratantonio | W. Dana Flanders, Made Wenten (United States)

124 – Anticoagulation Use for Hospitalized COVID-19 Patients in the United States: Evolving Patterns from March 2020 to January 2022 [798] Eileen Lee | Benjamin Bates | Nathaniel Kuhrt | Chang Xu Aayush Visaria | Soko Setoguchi (United States)

125 - Utilization of Factor Xa Inhibitors and Warfarin in Obese Nonvalvular Atrial Fibrillation (NVAF) Patients: Analysis of University Health Center Electronic Medical Records in the United States (US) [799]

Mohammed Alsultan | Ana L Hincapie | Patricia Wigle Diego F. Cuadros | Alex C. Lin | Jeff J. Guo (United States)

126 – Prescribing Patterns for Glucagon-like Peptide-1 Receptor Agonists Following the Introduction of Semaglutide in Denmark and Norway [800]

Lotte Rasmussen | Jacob Harbo Andersen | Kari Furu Øystein Karlstad | Philip Brenner | Anton Pottegård (Denmark)

#### 127 – Use of Riluzole Beyond Approved Therapeutic Indications in Three Italian Regions [801]

Ursula Kirchmayer | Marco Finocchietti | Niccolo' Lombardi Giada Crescioli | Emiliano Cappello | Giulia Valdiserra Marco Tuccori | Alfredo Vannacci | Olga Paoletti David Franchini | Marcello De Giorgi | Silvia Cascini Anna Maria Bargagli | Teresa Anna Cantisani Maria Grazia Celani | Paola Brunori | Nicola Vanacore Francesco Sciancalepore | Antonio Ancidoni Roberto Bonaiuti | Giulia Hyeraci | Rosa Gini Giampaolo Bucaneve | Rosalba Elisabetta Rocchi Mariangela Rossi | Valeria Belleudi | Antonio Addis (Italy)

128 – Profile of Statin Usage in Post-Myocardial Infarction Patients in a General Hospital in Banjarmasin During 2016-2020 [802]

Alfi Yasmina | Dwi Laksono Adiputro | Rizka Aprillia Maghfirah | Djallalluddin Djallalluddin | Pandji Winata Nurikhwan (Indonesia)

129 - ANTIBACDUS-PAN: Antibacterial Utilization Among Adult Patients at Koç University Hospital Before and During COVID-19 Pandemic Within 12-Months Period: A Hospital Pharmacoepidemiology Study [803] Sinem Ezgi Gulmez | Mustafa Guldan | Ege Anıl Uçar Mehmet Batuhan Karakuş | Selin Merve Şahin Uluman Şişman | Arzu Baygül (Turkey)

130 - Buprenorphine Utilization Trends Resulting from Multiple State Insurance Reimbursement Policy Changes: An Exploratory Joinpoint Analysis 18041

Amie Goodin | Michael Maguire | Juan Hincapie-Castillo (United States)

131 - Children with COVID-19:

The Real-World Hospital Experience [805] Lawrence Rasouliyan | Vikas Kumar | Amanda G. Althoff Stacey Long | Mitesh B. Rao (United States)

132 – Long-Term Trajectories of Prescription Opioid Use in New South Wales, Australia [806]

Natasa Gisev | Luke Buizen | Andrea Schaffer Benjamin Daniels | Sallie-Anne Pearson | Timothy Dobbins Fiona Blyth | Sarah Larney | David C. Currow Andrew Wilson | Louisa Degenhardt (Australia)

133 – Drug Utilization of Paliperidone and Risperidone in Adolescent Schizophrenia Patients in China [807]

Sijia Dong | Meng Shu | Tao Wu | Yongjing Zhang Hong Qiu Md, PhD | Huaning Wang | Jun Chen (China)

134 – Antithrombotic Therapy in Atrial Fibrillation Patients with Intracranial Hemorrhage: Retrospective Cohort Study with Administrative Data in Japan [808]

Shinobu Imai | Masato Koizumi | Chi-Chuan Wang Euna Han | Manabu Akazawa (Japan)

135 - Characteristics and 1-Year Mortality Outcome of ACS Patients Receiving ACEIs/ARBs: A 10-Year Retrospective Analysis of the Malaysian National Cardiovascular Database Registry [809]

Siti Zaleha Suki | Nur Lisa Zaharan

Ahmad Syadi Mahmood Zuhdi | Abqariyah Yahya (Malaysia)

136 – Antipsychotic Utilisation Within Primary Care in England from 2010-2020 [810]

Fatema Mahmoud | Amy Pavis | Amanj Kurdi (United Kingdom)

137 – Utilisation and Prescribing Patterns of Antipsychotics in Primary Care in Wales (2010-2020) [811]

Haya Yasin | Rania Lazrek | Amanj Kurdi (United Kingdom)

138 – Medication Errors Reported to the Danish Patient Safety Database During a Five-Year Period (2014-2018) [812]

Olga Tchijevitch | Jesper Hallas | Søren Bie Bogh Søren Birkeland (Denmark)

139 – Investigation on Primary Management of Community-Acquired Pneumonia at the Emergency Department in Vietnam [813]

Tien Hoang Tran | Nhu Quynh Tran Trang Nguyen Doan Dang (Vietnam)

#### GERIATRIC PHARMACOEPIDEMIOLOGY

140 – Impact of Cardiovascular Comorbidities on Bevacizumab Effectiveness and Safety in Older Patients with Metastatic Colorectal Cancer [814] Pernelle Noize | Amandine Gouverneur | Clélia Favary Jérémy Jové | Magali Rouyer | Emmanuelle Bignon Francesco Salvo | Achille Tchalla | Elena Paillaud Thomas Aparicio (France)

141 – Definition and Validation of Case Detection Algorithms Using Quebec Medico-Administrative Databases (Med-Echo and RAMQ) for Depression Among Seniors [815]

Giraud Ekanmian | Carlotta Lunghi | Helen-Maria Vasiliadis Line Guénette (Canada)

142 - Clinically Significant Drug Interaction Alerts in Older Patients, and Related Medically Justified Action 18161

Staffan A. Svensson | Carina Tukukino | Naldy Parodi Lopez Susanna M. Wallerstedt (Sweden)

143 – Shifting Patterns of Hospice Medication Use and Medicare Payments in the United States Between 2014-2018 [817]

Jennifer Tjia | Joshua Rumbut | Jon Furuno (United States)

144 – Assessment of Concomitant Opioid and Benzodiazepine Use and Fall Events in Older Adults with Cancer in the United States (2006-2017) [818]

Christy A. Xavier | Neal Bhachawat | Walter Agbor Rafia Rasu (United States)

145 - The Link Between Prescription Opioid Intensity and Fall Events in Older Cancer Patients [819]

Christy A. Xavier | Walter Agbor | Neal Bhachawat Rafia Rasu (United States)

146 – Variation in The Potentially Inappropriate Use of Antipsychotic Medications in Australian Long Term Care Facilities [820]

Danijela Gnjidic | Mouna J Sawan | Alexander Clough Jodie Hillen | Andrew Zullo | Daniela Moga (Australia)

147 – Beta-Agonists and Risk of Parkinson's Disease: Meta-Analysis of Pharmacoepidemiological Studies [821] Ambrish Singh | Md Salman Hussain | Benny Antony (Australia)

148 – Potentially Harmful Medication Prescribing to Nursing Home Residents with Dementia: The Role of Prescriber Specialization in US Nursing Homes [822]

Andrew Zullo | Kira Ryskina | Derrick Lo | Tingting Zhang Lauren Gerlach | Julie Bynum | Theresa Shireman (United States)

149 – Trends in COVID-19-Related Medication Use in United States Nursing Homes [823]
Andrew Zullo | Yuan Zhang | Kaley Hayes | Yoojin Lee (United States)

150 – Identification of Frail Older Adults Using Routine Primary Care Data: Accuracy of Four Electronically Derived Algorithms [824]

Jetty Overbeek | Karin Swart | Marieke Blom | Amber Van Der Heijden | Giel Nijpels | Hein Van Hout | Petra Elders | Ron Herings (Netherlands)

151 – Evaluation of Downstream Use of Medication Treatment for Overactive Bladder Following Potential Calcium Channel Blocker – Loop Diuretic Prescribing Cascade [825] Scott M Vouri | Grace (Hsin Min) Wang | Earl Morris Laurence Solberg | Michael Daniels | Carl Pepine Todd Manini | Daniel Malone | Almut Winterstein (United States)

152 – Use of Large-Scale Electronic Health Record Data to Examine Precise Antihypertensive Medication Exposures Immediately Before a Fall Among US Nursing Home Residents [826] Kaley Hayes | Lori A Daiello | Andrew Zullo | Sarah Berry (United States)

153 – Administrations of Pro Re Nata (PRN) Analgesics Among Skilled Nursing Facility Residents Following a Hip Fracture [827] Kaley Hayes | Melissa Reister | Yuan Zhang Francesca Beaudoin | Andrew Zullo (United States) 154 – Comparison of Approaches to Handle Missing Data for Estimating Longitudinal Patterns of Anticholinergic and Sedative Drug Load Among Older Adults [828]

Shahar Shmuel | Virginia Pate | Emilie Duchesneau

Jessie Edwards | Alan Kinlaw | Jennifer Lund (United States)

155 – Statin Discontinuation in Persons with and Without Alzheimer's Disease [829]

Heidi Taipale | Mai Thi Phuong Vu | Raimo Kettunen Anna-Maija Tolppanen | Sirpa Hartikainen (Finland)

156 – Patterns of Statin Use in Oldest Old in Quebec, Canada, 2008-2018 [830]

Marc Simard | Caroline Sirois | Marie-Eve Gagnon

Véronique Boiteau | Annie Maltais (Canada)

(Taiwan)

157 – Changes in Multimorbidity Burden and Healthcare Utilization Before and After a Diagnosis of Dementia: A Claim-based Nationwide Cohort Study [831] Shih-Tsung Huang | Liang-Kung Chen | Fei-Yuan Hsiao

158 – Patterns of Care Among Older Adults Diagnosed with Locally Advanced Esophageal Cancer Eligible for Trimodal Therapy [832] Charles Gaber | Nicholas J. Shaheen | Robert Sandler Jessie Edwards | Hazel B. Nichols | Hanna K. Sanoff Jennifer Lund (United States)

159 – The Comparative Effectiveness of Trimodal Therapy Versus Definitive Chemoradiation in Older Adults with Locally Advanced Esophageal Cancer [833] Charles Gaber | Nicholas J. Shaheen | Jessie Edwards Robert Sandler | Hazel B. Nichols | Hanna K. Sanoff Jennifer Lund (United States)

160 – Influenza Vaccine Uptake Among United States Nursing Home Residents: Measuring Geographic Variation in Racial Health Disparities [834]

Joe Silva | Chanelle Howe | John Jackson Barbara Bardenheier | Melissa Reister | Robertus Van Aalst Matthew Loiacono | Andrew Zullo (United States)

161 – Trends in Statin Initiation for Secondary Prevention of Atherosclerotic Cardiovascular Disease Among Older Adults [835]

Earl Morris | Kelly Ma | Rachel Reise | Nawaf Tokatly Cherry Tortor | Scott M. Vouri (United States)

162 – Less Medicines in Older Patients in the Netherlands, The Lemon Study [836] Jamila Abou (Netherlands)

164 – Prevalence of Drug-Drug Interactions in Older Community-Dwellers: A Systematic Review and Meta-Analysis [838] John E. Hughes | Catherine Waldron | Kathleen E. Bennett Caitriona Cahir (Ireland)

165 – The Association of Gabapentin Use and Change of Motor Functions in Older Adults with Normal Cognition [839] Gyeon Oh | Daniela Moga | David Fardo | Erin L. Abner (United States)

166 – Impact of Health Literacy on Medication Adherence in the Elderly [840]

Jehath M. Syed | Prathibha Pereira | Chalasani Sri Harsha Ramesh Madhan | Tejaswini C. J. | Shilpa Avarebeel Kshama Ramesh (India)

167 – Risk of Intrinsic Capacity Decline Associated with Potentially Inappropriate Medications and Polypharmacy in Elderly Patients [841]

Shao-En Weng | Tai-Yin Wu (Taiwan)

168 – Polypharmacy and The Risk of Fracture in Older Adults: A Systematic Review [842] Marie-Eve Gagnon | Denis Talbot | Florence Tremblay Marc-Antoine Tourville | Caroline Sirois (Canada)

169 – Prevalence of Frailty Among Older Inpatients with Dementia and Its Association with Medication Use: A Retrospective Cohort Study [843] Linda G. Koria | Mouna J. Sawan | Mitchell Redston Danijela Gnjidic (Australia)

170 – Evaluating Provider and Pharmacy Discordance in Potential Calcium Channel Blocker - Loop Diuretic Prescribing Cascades [844] Asinamai Medugu Ndai | Earl Morris | Almut Winterstein Scott M. Vouri (United States)

171 – US Emergency Department Visits for Prescription Opioid Adverse Events in Older Adults, 2016 to 2018 18451

Christina Greene | Rose Radin | Saranrat Wittayanukorn Jennifer G. Naples | Candice L. Collins | Judy Staffa (United States)

172 – Use of Medicines by the Elderly in Portugal in 2019 [846]

Ana Araujo | Elisabete Fernandes | Inês Ruivo Claudia Furtado (Portugal)

173 – The Association Between Age and Low-Density Lipoprotein Cholesterol Response to Statins 18471

Giulia Corn | Mads Melbye | Mark A. Hlatky | Jan Wohlfahrt Marie Lund (Denmark)

174 – Symptomatic and Preventive Medication Use in Frail Nursing Home Residents in Australia and Japan 18481 Shin J Liau | Shota Hamada | Agathe D Jadczak Nobuo Sakata | Samanta Lalic | Renuka Visyanathan J. Simon Bell (Australia)

175 – Association of Anticholinergic Burden and Risk of Cardiovascular Events: A Case-Crossover Study [849] Wei-Ching Huang | Shuei-He Yaung | Hsiang-Te Tsai

Edward Lai (Taiwan)

176 – Falling in Love with Nursing Home Electronic Health Record (EHR) Data: Greater Understanding of the Nature of Falls from Harnessing Information in Nurses' Notes [850] Samuel C. Spevack | Anam Khan | Kate Lapane Jowanna Malone | Dustin Burns | Catherine Rogers Murray Ekaterina Cleary | David D. Dore (United States)

177 – Perioperative Gabapentin Use and Adverse Clinical Events in Older Adults After Major Surgery: A Retrospective Cohort Study [851] Chan Mi Park | Jessica Lie | Sharon K Inouye Edward Marcantonio | Eran D. Metzger | Brian Bateman Su Been Lee | Raisa Levin | Dae Hyun Kim (United States)

178 – Trajectories of Opioid Use Around Spousal Bereavement: A Nationwide Register-based Cohort Study of Older Adults [852] Pierre-Olivier Blotiere | Géric Maura | Jonas Wastesson Kristina Johnell (Sweden)

179 – The Incidence of Benzodiazepine and Benzodiazepine-Related Drug Use in People with or without Parkinson's Disease Before and After the Diagnosis [853]

Anna-Maija Tolppanen | Veera Lonka | Sirpa Hartikainen Miia Tiihonen | Marjaana Koponen (Finland)

#### HEALTH ECONOMICS/ OUTCOMES RESEARCH

180 – Impact of the COVID-19 Pandemic on Assessing Incidence and Healthcare Resource Use of Myasthenia Gravis, Parkinson's Disease, and Hidradenitis Suppurativa Patients in the United States [854]

Coralie Lecomte | Harriet Dickinson | Hanaya Raad Jan Rudnik | Olga Pilipczuk | Mireia Aguila | Sahar Sayed Dorothee B. Bartels | François-Xavier Lamy (France)

181 – Do More Rigorously Tested Drugs Garner Higher Prices Upon Market Launch? [855] Jill Curran | Anni Fan | Jeromie Ballreich | Thomas J. Moore G. Caleb Alexander (United States)

182 – Health-Related Quality of Life of Indonesian Cancer Patients: Comparison of EORTC QLQ C30 and EQ5D Questionnaires [856]

Dyah A. Perwitasari | Fredrick D. Purba

Susan F. Candradewi | Bayu Septiantoro (Indonesia)

183 – Safety and Efficacy of Indacaterol/ Glycopyrronium Versus Salmeterol/ Fluticasone in Moderate-To-Severe Chronic Obstructive Pulmonary Disease: A Systematic Review and Meta-Analysis [857] Maya T. | Alisha Mathew | Elstin Anbu Raj S. Rajesh Vilakkathala (India)

184 – The Quality of Reporting Methods and Results of Cost-Effectiveness Analyses in India: A Methodological Systematic Review [858] Karun Donthineni | Christy Thomas | Krishna Undela (India)

185 – Assessment of Financial Toxicity and Its Association with Quality of Life Among Radiation Oncology Patients:
A Cross-Sectional Study in India [859]
Mukhtar Ahmad Dar | Richa Chauhan
Sameer Dhingra (India)



### **IHD Analytics:**

- 85% faster than traditional programming
- Transparent analysis results easily explained and defended
- Reproducible results in validated system
- · Supports regulatory submissions
- · Ad hoc queries in real-time

To learn how IHD Analytics can support your safety analyses, contact us at demo@panalgo.com

186 – The Best of All Worlds: Development of a Consolidated Data Model to Expand the Ability to Generate Real-World Evidence [860]

Ariel Berger | Marielle Bassel | Teresa Wilcox Kathleen Hines (United States)

187 – Clinical and Economical Impact of Parenteral Nutrition Among the Neonates Admitted to Neonatal Intensive Care Unit (NICU): A Prospective Interventional Study [861] Sai Siddharth M. | Juny Sebastian (India)

188 - Patient-Reported Challenges for Self-management of Asthma; Findings of a Focused Group Study [862] Shilpa Palaksha | Mahesh P. A. | Diba Khonglein (India)

189 – Incidence of Adverse Events of Special Interest in The Pre-Covid and Active Covid ERA as Historical Comparators for Post-Marketing Safety Surveillance of SARS-CoV-2 Vaccines [863] Katie Mues | Christopher Bush | Daina Esposito Deesha Patel | Alice Gelman | Sahar Sved Priyadarshani Dharia | David Martin (United States)

190 – Health Related Quality of Life in HIV Patients: A Decennial Data Systematic Review and Meta-Analysis [864]

Balaji Sathyanarayana Gupta | Tenzin Thinley Rahul Krishna Puvvada | Ramesh Madhan (India)

191 – Statistical Evaluation of Surrogate Endpoints to Optimise Trial Design and Speed Up Decision Making Through the Use of Early Outcomes: A Case Study Using Observational Patient-Level Data 18651 Clementine Nordon Sanchez | Kirsty Rhodes Mario Ouwens (United Kingdom)

192 – Systematic Literature Review on the Cost-effectiveness of Current Treatments for Chronic Cough [866]

Jonathan Schelfhout | Vishal Bali | Ada Adriano Aidan Byrne | Katherine Akers | Andrew Frederickson (United States)

193 – Systematic Literature Review on the Economic Burden of Chronic Cough 18671

Jonathan Schelfhout | Vishal Bali | Ada Adriano Aidan Byrne | Katherine Akers | Andrew Frederickson (United States)

194 – Systematic Literature Review on Health-Related Quality of Life Associated with Chronic Cough [868]

Jonathan Schelfhout | Vishal Bali | Ada Adriano Aidan Byrne | Katherine Akers | Andrew Frederickson (United States)

195 - Association Between Health Status and Access to Treatment in a Sample of Women Recovering from Substance Use Disorders [869] Phuong Tm Tran | Haeyoung Lee | Kay Connors Brijan Fellows | Olawunmi Ibraheem | Susan Dosreis (United States)

196 – The Effect of Generic Market Entry on HIV Treatment Cost in Portugal 18701 Claudia Furtado | Inês Henriques | Teresa Aires (United States)

197 – Evaluation of a Community Pharmacybased Diabetes Care: Patients Self-Reported Outcomes Using Validated Questionnaires and Clinical Outcomes 18711

Fatima Salawu Abdulhakeem Ikolaba | Ellen I Schafheutle Douglas Steinke (United Kingdom)

198 - Diagnostic Suspicion Bias in Studies of Thiazide and Non-Melanoma Skin Cancer – A Cohort Study [872]

Anat Fisher | Jason D. Kim | Colin Dormuth (Canada)

199 - The Care Cascade of Hepatitis C Virus in The Direct-Acting Antiviral Era: A Systematic Review and Meta-Analysis [873] Pilar Hernandez-Con | Hyun Jin Song | Ikenna Unigwe Munaza Riaz | Natalie Ourhaan | Xinyi Jiang Debbie Wilson | Amanda Joseph Haesuk Park (United States)

200 – Cost of Illness and Economic Burden of COVID-19 in Private Tertiary Care Hospital 18741

Rajesh Vilakkathala | Chaitanyamayee Kalakota Elstin Anbu Raj S. | Chandrasekar Uk | Muralidhar Varma Vijayanarayana Kunhikatta | Mahadev Rao Surulivelrajan M. (India)

201 – Assessment of Barriers for Medication Non-Adherence in Ambulatory Psychiatric Patients at Tertiary Care Hospital [875] Srikanth Malavalli Siddalingegowda | Premitha M. R. Kishore M. | Atiqulla Shariff | Samaksha P. B. (India)

202 – Determinants of Treatment Outcomes in HIV Patients with Opportunistic Infections: A Prospective Study in Southern India [876] Balaji Sathyanarayana Gupta | Vaishnavi Suryadevara Ramesh Madhan (India)

203 – Healthcare Resource Utilisation
Associated with Intermittent Oral
Corticosteroid Use in Asthma [877]
William Henley | Heath Heatley | Trung N. Tran
Arnaud Bourdin | Andrew Menzies-Gow | David J. Jackson
Ekaterina Maslova | Jatin Chapaneri | Victoria Carter
Jeffrey Shi Kai Chan | Cono Ariti | John Haughney
David Price (United Kingdom)

204 – Treatment Outcomes for Advanced and Recurrent Endometrial Cancer Following Platinum-based Chemotherapy in Canada [878] Diana Martins | Dylan O'sullivan | Devon Boyne Winson Y. Cheung | Odette Allonby | Justin Riemer (Canada)

205 – Impact of the COVID-19 Pandemic on Patients with Rheumatoid Arthritis: Data from the Ontario Best Practices Research Initiative (OBRI) [879]
Matthew Wong-Pack | Elliot Hepworth
Mohammad Movahedi | Claire Bombardier | Arthur Lau Sibel Aydin (Canada)

206 – Comparative Effect of Oral Anticoagulants on Home Time Loss and Cost: The Role of Frailty [880]

Lily Bessette | Joshua Lin | Mehdi Najafzadeh Su Been Lee | Darae Ko | Dae Kim (United States)

207 – Medical Conditions Associated with Hospitalization Among Outpatients with COVID-19: Findings from Real-World Data [881] Michael J. Munsell | Mark Friedman | Joseph Menzin (United States)

208 – Impact of Immunosuppressant Therapies and Transplantation on Health- Related Quality of Life Among Renal Transplant Recipients at a National Referral Hospital in Kenya [882] Sylvia Atisa Opanga | Phaustine Adhiambo David Nyamu (Kenya)

209 – Consumers Perceptions, Expectations & Satisfaction About Patient Care Services Provided by The Community Pharmacist [883] Ur Rakshith | Atiqulla Shariff | Srikanth Malavalli Siddalingegowda (India)

210 – The Association of Opioid Use with Risk of ICU Admission and Mortality in the Adult Dutch Population [884]

Ajda Bedene | Willem M. Lijfering | M Sesmu Arbous Frits R. Rosendaal | Albert Dahan | Eveline La Van Dorp (Netherlands)

212 – Understanding the Impact of the COVID-19 Pandemic on Disease Burden Among Patients with Employer Sponsored Insurance in the United States: An Analysis of Alterations in Healthcare Resource Utilization [886] Brenna Brady | Liisa Palmer (United States)

213 – Understanding the Impact of the COVID-19 Pandemic on Disease Burden Among Medicaid Patients in the United States: An Analysis of Alterations in Healthcare Resource Utilization [887] Brenna Brady | Liisa Palmer (United States)

214 – Lower Healthcare Costs for Commercially Insured Patients with Rheumatoid Arthritis in Remission [888] Jeffrey Curtis | Kathleen Fox | Fenglong Xie | Yujie Su David Collier | Cassie Clinton | Hafiz Oko-Osi (United States)

215 – Determining Patient Preferences for the Medical Management of Osteoporosis Using Conjoint Analysis [889]

Jeffrey Curtis | Xiaoyu Liu | Katherine Makaroff Carine Khalil | So Yung Choi | Brennan Spiegel (United States)

216 – Healthcare Cost Consciousness Among Physicians and Their Attitudes Towards Controlling Costs in Jordan: A Cross Sectional Study [890] Abdallah Naser | Mohmmed Hasan Yasin (Jordan)

217 – Factors Affecting Physicians'
Prescribing Practices Through
Pharmaceutical Marketing Mix Strategies:
A Cross-Sectional Study in Jordan [891]
Abdallah Naser | Dana Al Thabbah | Mohammad Al Mahirah (Jordan)

218 – Association of Joint Replacement Registries with Burden of Revision Changes [892] Charles Ebuka Okafor | Son Nghiem | Joshua Byrnes (Australia)

(United States)

219 – Screening For, Diagnosing and Surgically Treating Breast Cancer in the Unites States: Impact of the COVID-19 Crisis [893] Brian Buysse | Charles Coombs | Jessica D. Albano (United Kingdom)

220 - Cost-Effectiveness of IV Antibiotics Therapy for Children with Acute Gastroenteritis in a Secondary Care Hospital in South India [894] Jose J. Kochuparambil | Aleena Issac | Jais Vayalikunnel (India)

221 – Adjuvant Radiation Therapy and Mortality in Older Women with Early-Stage Endometrial Cancer: An Analysis Using The SEER-Medicare Linkage [895] Jihye Park | Jennifer Lund | Erin E Kent | Chelsea Anderson Wendy Brewster | Andrew F. Olshan | Hazel B. Nichols (United States)

222 – Cardiovascular and Renal Complications Among Patients with Chronic Kidney Disease (CKD) in the Netherlands 18961

Jetty Overbeek | Hilda J. De Jong Martine Oudenhuijzen-Taanman | Jan Pander Fernie J. Penning-Van Beest | Martine Oudenhuijzen Marc Vervloet (Netherlands)

223 – Incidence of RSV Lower Respiratory Tract Infections Among Infants Considering Effects of Palivizumab Immunoprophylaxis [897] Almut Winterstein | Phuong Tran | Sabina O. Nduaguba Renata Shih (United States)

224 – Operating Characteristics of COVID-19 Diagnosis Code in Hospital Settings [898] Cristiano Moura | Coraline Danieli | Fangming Liao Surain Roberts | Fahad Razak | Amol A. Verma David L. Buckeridge | Sasha Bernatsky (Canada)

225 – Healthcare Cost of Retreatment Following Ureteroscopy or Percutaneous Nephrolithotomy for Urinary System Stone Disease [899] Stephen S Johnston | Brian Po-Han Chen | Pragya Rai Philippe Grange | Harikumaran Dwarakanathan | Tony Amos Barbara H. Johnson | Sudip Ghosh | Noor Buchholz (United States)

226 – Risk of Second Recurrent Venous Thromboembolism and Major Bleeding Events Among Patients with Extended Anticoagulant Treatment: A Retrospective Cohort Study [900] Haesuk Park | Hye-Rim Kang | Pei-Lin Huang

Eric A. Dietrich | Christina E. Deremer Weihsuan Jenny Lo-Ciganic (United States)

227 – Self-Reported and Objectively Measured Productivity and Absence Costs and Comorbidity Assessments for Employees with Back and Joint Disorders 19011

Richard A. Brook | Ian A. Beren | Alek A. Drnach Nathan L. Kleinman | Eric M Rosenberg Justin L Schaneman (United States)

228 – Comparisons of Twenty-Year Trends in Direct Costs, Absence Payments and Lost Time for Employees with Breast, Skin, GI, Female, Male, and "Other" Cancers 19021 Richard A. Brook | Nathan L. Kleinman | Ian A. Beren Alek A. Drnach | Justin L. Schaneman | Eric M. Rosenberg

229 – Comparing Self-Reported Presenteeism with Objectively Measured Direct and Indirect Costs, Lost Time and Comorbidity Assessments for Employees with Cancer [903] Richard A. Brook | Ian A. Beren | Nathan L. Kleinman Alek A. Drnach | Justin L. Schaneman | Eric M. Rosenberg (United States)

230 – Comparing Self-Reported Presenteeism with Objectively Measured Direct and Indirect Costs, Lost Time and Comorbidity Assessments for Employees with Headaches and Migraines [904] Richard A. Brook | Ian A. Beren | Nathan L. Kleinman Alek A. Drnach | Justin L. Schaneman | Eric M. Rosenberg (United States)

231 – Comparing Self-Reported Presenteeism with Objectively Measured Direct and Indirect Costs, Lost Time and Comorbidity Assessments for Employees with Agency for Healthcare Research and Quality Skin Conditions 19051 Richard A. Brook | Ian A. Beren | Nathan L. Kleinman Alek A. Drnach | Justin L. Schaneman | Eric M. Rosenberg (United States)

232 - Real-World Cost-Effectiveness of Adrenocorticotropic Hormone Versus Oral Prednisolone for Children with West Syndrome [906]

Nagita Devi | Priyanka Madaan | Dipika Bansal Jitendra Kumar Sahu (India)

233 – Ticagrelor for Acute Coronary
Disease to Prevent Cardiovascular Events:
Cost-Effectiveness Analysis in Indonesia [907]
Jarir At Thobari | Jonathan Hasian Haposan (Indonesia)

234 – Challenges of Using Real-World Evidence for Regulatory Decisions: 4 Key Issues [908] Thomas J. Moore | Sonal Singh (United States)

235 – Healthcare Costs of COVID-19 Versus Flu and Pneumonia – A Payer Perspective [909] Chantal Holy | Fayolah Richards | Brandon Patterson Jill Ruppenkamp | Ronita Debnath | Antoine El Khoury Jessica Demartino | Brahim Bookhart | Paul Coplan (United States)

236 – Cost of Long COVID-19 Following Severe Disease – A Healthcare Database Analysis [910] Chantal Holy | Brandon Patterson | Jill Ruppenkamp Fayolah Richards | Jessica Demartino | Ronita Debnath Brahim Bookhart | Antoine El Khoury | Paul Coplan (United States)

237 – Duration of COVID-19 and Long COVID – A US Healthcare Database Analysis [911] Chantal Holy | Brandon Patterson | Jill Ruppenkam Fayolah Richards | Ronita Debnath | Antoine El Khoury Jessica Demartino | Brahim Bookhart | Paul Coplan (United States)

238 – A Web-based Survey of Patients Dispensed Viagra Connect Behind the Counter in the UK: An Evaluation of The Effectiveness of Additional Risk Minimization Measures [912]

Shaantanu Donde | Muhammad Younus | Jim Li Joanna Lem | David Taylor | Janine Collins | Kelly H Zou (United Kingdom)

240 – Estimated Costs of Severe Adverse Drug Reactions Resulting in Hospitalization in the Veterans Health Administration [914]

Anthony Au | Sherrie L. Aspinall | Von Moore Francesca Cunningham | Peter Glassman (United States)

241 – The Health Economics of Metastatic Hormone Sensitive and Non-Metatastatic Castration-Resistant Prostate Cancer – A Systematic Literature Review [915] Ivan Yanev | Alice Dragomir | Jessy Gatete Jr. (Canada)

#### LATE BREAKERS

242 – Reducing Bias from Chronic Exposure in Case-Crossover and Case-Time-Control Studies: A Simulation Study [916]

Kiyoshi K. Kubota | Thu-Lan Kelly (Japan)

244 – Cannabidiol Exposures in Children, National Poison Data System, July 2014–June 2021 [918] Silvia Perez-Vilar | Sara Karami | Karen Long | Kira Leishear (United States)

245 – Spontaneous Abortions Case Definition and Gestational Age Estimation Methodological Differences [919]

Aziza Jamal-Allial | Maria Guzman | Kerrin Gallagher Ramya Avula | Kimberly M. Daniels | Aaron B. Mendelsohn (United States)

246 – Effectiveness of Monoclonal Antibodies and Antivirals Against Severe COVID-19 Outcomes in Community Settings in England: An Emulated Target Trial Using the OpenSAFELY Platform [920] John R Tazare | Linda Nab | Bang Zheng | Amelia Green Helen Curtis | William Hulme | Alex Walker | Anna Schultze Krishnan Bhaskaran | Stephen Evans | Ben Goldacre Brian Mackenna | Ian Douglas | Laurie Tomlinson (United Kingdom)

247 – Comparative Effectiveness of 5-Alpha-Reductase Inhibitors Vs. Alpha-Blockers on the Long-term Risk of Progression of Benign Prostatic Hyperplasia [921]

Maria B. Bengtsen | Uffe Heide-Jørgensen | Michael Borre Mette Nørgaard (Denmark)

248 – The Role of The Excess Weight Status in The Risk of Hospitalizations for Patients with Depression Prescribed Obesogenic Antidepressants [922]

Svetlana Puzhko | Tibor Schuster | Christel Renoux Tracie A. Barnett | Kimberly Munro | Gillian Bartlett-Esquilant (Canada)

249 – Real-Time Survey of Vaccine Safety of the mRNA-1273 SARS-CoV-2 Vaccine in Workplace Vaccination at Keio University [923]

Azusa Hara | Kaho Okumura | Isa Inada | Daisuke Sugiyama Takahiro Hoshino | Takahiro Yakoh | Hirokatsu Yokoyama Hisashi Urushihara (*Japan*)

250 - The Risk of Posterior Reversible Encephalopathy Syndrome (PRES) with Tyrosine Kinase Inhibitors: A Disproportionality Analysis from Vigibase and AERS Databases [924] Luis Velez-Nandayapa | Anusmita Das | Amit Saxena Vishaka Parulekar | Naveen Chhabra | Miguel Izquierdo Pierre De Zeeuw | Edwin Schaart | Johannes Eisinger (Switzerland)

253 – Best Practice Implementation Project on Reporting of COVID-19 Vaccine Adverse Events Following Immunization in Kenya [927] Henry Amdany | Barbara Koech (Kenya)

254 - Incidence of Rhabdomyolysis in the Elderly Patients in Combination Therapy of Cytochrome 3A4 Substrate and Inhibitor with the Korean Elderly Claims Data [928]

Sukhyang Lee | Junhyuk Chang | Rae Woong Park (South Korea)

255 - The Impact of Type 2 Diabetes on **Complications After Primary Breast** Cancer Surgery: A Danish Populationbased Cohort Study [929]

Kasper Kjærgaard | Jannik Wheler | Looket Dihge Peer Christiansen | Signe Borgquist | Deirdre Cronin-Fenton (Denmark)

256 – The Impact of the COVID-19 Pandemic on The Duration of Antibiotic Therapy Across Hospitals in Scotland: A Segmented Interrupted Time Series Analysis 19301

Tanja Mueller | Amanj Kurdi | Aidan Morrison | Euan Proud Niketa Platt | Karen Gronkowski | William Malcolm Marion Bennie (United Kingdom)

257 – Totality of Evidence Evaluating the Effectiveness of Repurposed Therapies for COVID19: What Can We Learn from Real-World Studies & Randomized Controlled Trials? [931] Nawab Qizilbash | Jaap Mandema | Hugh E. Montgomery Louis Dron | Shuai Fu | Estelle Russek-Cohen Christina Bromley | Samer Mouksassi | Amy Lalonde Phil Ambery | Doug Mcnair | Stuart Pocock Nevine Zariffa (Spain)

258 – Risk of Incident Venous Thromboembolism Associated with Atopic Dermatitis and Treatment with Janus Kinase Inhibitors: A Systematic Review and Meta-Analysis 19321 Ching-Chi Chi Tai-Li Chen (Taiwan)

259 - Trends in Cardiovascular Medication Prescription Before and During the COVID-19 Pandemic 19331 Ugochinyere Vivian Uka | Robert Platt Hedvig Nordeng (Canada)

260 – Establishment and Optimization of an Automatic Monitoring Module for Epileptic Seizures in Inpatients Based on HIS [934] Jingchuan Lu (China)

261 – Analysis of 863 Spontaneous Cases of Drug-Related Severe Nervous System Adverse Reactions 19351 Jingchuan Lu (China)

262 – Analysis and Signal Mining on 1177 Reports of Adverse Drug Reactions Related to Antibacterial-Induced Coagulopathy [936] An Fu (China)

263 – Overlap Weighting Vs Inverse Probability of Treatment Weighting: An Empirical Evaluation of Propensity Score Methods to Minimise Confounding in COVID-19 Vaccine Effectiveness Studies [937] Annika Joedicke | Martí Català | Edward Burn Trishna Rathod-Mistry | Antonella Delmestri

Daniel Prieto-Alhambra (United Kingdom)

264 – Time to Reach an Adequately Powered Sample Size to Detect Risk of Major Congenital Malformations Using a Prospective Observational Pregnancy Registry and An Administrative Claims Database 19381

Sydney K. Willis | Geetika Kalloo | Kristen Hahn Stephan Lanes | Matthew Reynolds | Emily W. Bratton Lockwood Taylor (United States)

265 – Clinical Outcomes of Ceftazidime/Avibactam Therapy in The Treatment Carbapenem-Resistant Enterobacteriaceae (CRE) During the COVID-19 Pandemic: A Single Center Study [939]

Asmaa A. Abbas | Mohammad F. Zaitoun | Nehad Ahmed Rozan Radwan | Manal Al Gethamy | Abdulmoeen Algarni Lujain Babkair | Abdul Haseeb Hanif (Saudi Arabia)

266 – Did Publication Urgency During the Pandemic Trade-Off for Epidemiological Rigorousness? Results from An Umbrella Review *[940]* 

Grammati Sarri | Luke Zabotka | Andreas Freitag Ravinder Claire | Grace Wangge (United Kingdom)

#### MEDICAL DEVICES

267 - Real-World Continuous Glucose Monitoring in Adults with Type 1 and Type 2 Diabetes [941] Devin Abrahami | Sonia Hernandez-Diaz | Elisabetta Patorno (United States)

268 – Propensity Score Estimation Strategies for Inclusion of Surgeon Confounders Under Different Surgeon Impact on Treatment Allocation for Medical Device Epidemiology: A Simulation Study [942]

Mike Du | Victoria Y Strauss | Sara Khalid Daniel Prieto-Alhambra (United Kingdom)

269 – Use of Intra-Uterine Devices in France in 2019 and Continuation Use 1 Year After: A Nationwide Observational Study [943]

Noemie Roland | Bérangère Baricault | Rosemary Dray-Spira Alain Weill | Lise Duranteau | Mahmoud Zureik (France)

270 – Does The Shape of the Copper Intrauterine Device Affect Device Expulsion? Results from the Ongoing European Active Surveillance Study on LCS12 [944]

Tanja Boehnke | Anja Bauerfeind | Lisa Eggebrecht Camille Cellier | Jens Lange | Klaas Heinemann (Germany)

271 – Operative Time Among Women Undergoing Hysterectomy in Two Hospital Systems: Predictors and The Relative Contributions of Patient/Procedure Factors vs Individual Surgeons

Stephen S. Johnston | Divya Chakke | Keerthana Valsan Barbara H. Johnson (United States)

272 - Real-World Performance of SARS-CoV-2 Serology Tests in the United States [946]

Carla V Rodriguez-Watson | Anthony Louder | Carly Kabelac Christopher Frederick | Natalie E. Sheils Elizabeth H. Eldridge | Nancy D. Lin | Jennifer Gatz Shaun J. Grannis | Rohit Vashisht | Benjamin Pollock Kanwal Ghauri | Camille Knepper | Sandy Leonard Peter J. Embi | Garrett Jenkinson | Reyna J. Klesh Ayan Patel | Lisa Dahm | Carrie L Byington | Bridgit Crews Atul J. Butte | Jeff Allen (United States)

273 – Real-World Utilization of SARS-CoV-2 Serological Testing in RNA Positive Patients Across the United States 19471

Carla V. Rodriguez-Watson | Natalie E. Sheils Anthony Louder | Elizabeth H. Eldridge, | Nancy D. Lin Benjamin Pollock | Jennifer Gatz | Rohit Vashisht Kanwal Ghauri | Gina A. Valo | Aloka Chakravarty Tamar Lasky | Mary Jung | Carly Kabelac Camille Knepper | Sandy Leonard | Peter J. Embi Garrett Jenkinson | Ayan Patel | Lisa Dahm Carrie L. Byington | Bridgit Crews | Atul J. Butte | Jeff Allen (United States)

274 - Methods of Evaluating the Safety and Effectiveness of Cardiac Ablation Catheters Using Real-World Data: A Test-Case of the National Evaluation System for Health Technology Coordinating Center (NESTcc) [948]

Shumin Zhang | Sanket Dhruva | Jiajing Chen | Yue Yu Guy Cafri | Peter A. Noseworthy | Amit Doshi Guogian Jiang | Kolade M. Agboola | Jeph Herrin Kimberly Collison Farr | Meijia Zhou | Eric Brandt Thomas Forsyth | Keondae Ervin | Joseph Ross Joseph Drozda, Jr. | Paul Coplan (United States)

275 – Influence of Age and Other Risk Factors on Intrauterine Device Expulsion in a Real-World Safety Study - Results from EURAS-LCS12 [949] Lisa Eggebrecht | Anja Bauerfeind | Tanja Boehnke Camille Cellier | Jens Lange | Klaas Heinemann (Germany)

#### METHODS IN PHARMACOEPIDEMIOLOGY

276 - Dynamic Relationship Among Immediate Release Fentanyl Use and Cancer Incidence: A Multivariate Time-Series Analysis Using Vector Autoregressive (VAR) Models [950]

Raquel Gutierrez Machin | Marta Monreal | Diana González Alfonso Rodríguez | Pilar Rayón | Dolores Montero Consuelo Huerta (Spain)

277 – A Methodology Study to Evaluate External Comparator Arm Study Results Versus Randomised Controlled Trial Results: Multiple Myeloma Case Study 19511

Lisette Hoogendoorn | Héctor Sanz | Chantal Quinten Francesco Pignatti | Joan Largent | Gerd Rippin (Netherlands)

278 – Linking Progression to Lines of Therapy in Triple Class Refractory Multiple Myeloma Patients: Experience from an Oncology Electronic Health Record Database [952]

Aster Meche | Sarasa Johnson | Patrick Hlavacek Kevin Apodaca | Marco Dibonaventura | Francis Vekeman Jinma Ren (United States)

279 - Definition of Outcomes and Success Criteria for Healthcare Professional or Patient Surveys Designed to Assess the Effectiveness of Risk Minimization Measures (eRMM) [953]

Alice Rouleau | Neil Brett | Mengyin Hong | Zaeem Khan Véronique Pagé | Delphine Saragoussi (France)

280 – Remote Trial Elements Reported in Publicly Available Clinical Trial Protocols 19541

Amos De Jong | Renske Grupstra | Yared Santa-Ana-Tellez Mira Zuidgeest | Anthonius De Boer | Helga Gardarsdottir (Netherlands)

281 – Patient Characteristics, Outcomes and Potential for Bias in Oncological Real-World Data Studies with Imaging-Derived Response Endpoints [955]

Janick Weberpals | Charlotta Fruechtenicht | Ryan Davis Melanie Huntley | Yasuhiro Oki | Shelby Wyatt Felipe A. Castro | Huong Trinh (Switzerland)

282 – Validation to Estimate Sensitivity Along with Positive Predictive Value: A Case Study [956] Giorgio Limoncella | Anna Girardi | Giulia Hyeraci

Claudia C. Bartolini | Giuseppe Roberto | Edith Heintjes Hilda J. De Jong | Josephina Kuiper Anna Beckmeyer-Borowko | Sigrid Behr Miriam Sturkenboom, Rosa Gini (Italy)

283 – Data Lag in a Large Open and Closed Claims Dataset: Navigating the Completeness-Timeliness Tradeoff [957]

Andrew Weckstein | Ulka Campbell | Monica Gierada Emily Rubinstein | Reyna J. Klesh | Elizabeth M Garry Nicolle Gatto (United States)

284 – Development of Real-World Cohorts Using Electronic Health Records (EHR) Supplemented with Administrative Claims Data for Pharmacoepidemiology Studies of Patients with IBD Initiating Biologic Therapy 19581 Lani Wegrzyn | Carrie Huisingh | Katherine Gilpin Dionna Attinson | Phillip Levine (United States)

285 – Risk Factor Identification Using Machine Learning and High-dimensional Hospital Data to Inform Propensity and Disease Risk Score Models: An Applied Example in Hemostasisrelated Surgical Complications 19591 Stephen S. Johnston | Aakash Jha | Sanjoy Roy Esther Pollack (United States)

286 – Adapting Sufficient Component Cause Models to Pharmacoepidemiology: Mapping to Structural Equation Model Equivalents (960) Michael Webster-Clark | Imaani Easthausen | Ulka Campbell Elizabeth M. Garry | Nicolle Gatto (Canada)

287 – Distinguishing Death from Disenrollment: Applying a Predictive Algorithm to Reduce Bias in Estimating the Risk of Rehospitalization [961] Jessica Young | Nabarun Dasgupta | Kenneth Pack Sarah Bloemers | Toska Cooper | Bethany Diprete Til Stürmer | Virginia Pate | Jennifer Lund | Debra E. Irwin Teresa B. Gibson | Michele Jonsson Funk (United States)

288 – Evaluating The Impact of Electronic Health Record (EHR) Loss to Follow-Up Data in Patients with Atherosclerotic Cardiovascular Disease (ASCVD) [962]

Miyuki Hsing-Chun Hsieh | Tzu-Chi Liao | Edward Lai (*Taiwan*)

289 – Validity of An Electronic Health Record (EHR) and Claims-Derived Proxy Measure of Multiple Sclerosis (MS) Disability [963]

Paul Dillon | Spyros Roumpanis | Erwan Muros Le Rouzic (Switzerland)

290 – Outcome Misclassification: Differences in Hip Fracture Identification Using Administrative Claims Data [964]

Natalia Konstantelos | Andrea Burden | Angela M. Cheung Sandra Kim | Paul Grootendorst | Maha Chaudhry Suzanne M. M. Cadarette (Canada)

291 – Propensity Score-based Weighting Methods in The Context of Multiple Treatment Options [965]

Nazleen Khan | Robert Glynn | Kazuki Yoshida Katsiaryna Bykov (*United States*)

292 – Claims-based Algorithm to Define Breast Cancer Recurrence in SEER-Medicare Data [966] Benjamin Bates | Soko Setoguchi (United States)

293 – Use of a Rate-based Sequence Symmetry Analysis to Assess Recurring Adverse Drug Events [967]

Earl Morris | Ching-Yu Wang | Joseph Antonelli Almut Winterstein | Jesper Hallas | Scott M. Vouri (United States)

294 – Development and Validation of Elixhauser Summary Comorbidity Score for Use with ICD-10-CM Coded Data Among Older Adults [968]

Hemalkumar Mehta | Shuang Li | Huijun An James Goodwin | G. Caleb Alexander | Jodi Segal (United States)

296 – Bias Amplification of Unobserved Confounding in Pharmacoepidemiological Studies: There Is No Free Lunch in Restricting the Sample to Those with a Particular Drug Indication 19701

Viktor H. Ahlqvist | Paul Madley-Dowd | Amanda Ly Jessica Rast | Michael Lundberg | Egill Jónsson-Bachmann Daniel Berglind | Dheeraj Rai | Cecilia Magnusson Brian K. Lee (Sweden) 297 – Approaches to the Identification of Ulcerative Colitis Events in a Claims Database [971]

Xianying Pan | P. Shreyas | Jiayin Zhang | Yifan Zhang Hugh Kawabata (*United States*)

298 – Discrepancies in ICD Codes Used to Identify Three Common Diseases in Cancer Patients in Real-World Settings and Their Implications for Disease Classification in Patients Without Cancer: A Literature Review and Descriptive Study [972]

Nora Tu | Mackenzie Henderson | Meera G. Sundararajan Maribel Salas

299 – Utilization of Pharmacokinetic/
Pharmacodynamics Modeling in
Pharmacoepidemiologic Studies:
A Systematic Review on Anti-Arrhythmic and
Glucose-Lowering Medicines [973]
Soroush Mohammadi Jouabadi | Mitra Nekouei Shahraki
Fariba Ahmadizar | Bruno H Stricker | Payam Peymani
(Netherlands)

300 – Novel Recruitment, Data Collection, and Safety Reporting Methods in the Era of COVID-19: Design of a Post-Emergency Use Authorization COVID-19 Vaccination Safety-surveillance Study [974]
Emily Obrien | Heather Rubino | Jack Shostak Laura Webb | Lauren Cohen | Patrick Caubel

Laura Webb | Lauren Cohen | Patrick Caubel
Stacey Mangum | Amy Abernethy | Cherise Wong
Katie Kendrick | Adrian Hernandez (United States)

301 – Estimation of Years of Life Lost Using Electronic Health Records: Application on Patients with Multiple Myeloma in the SNDS Database [975]

Helene Denis | Eleonore Herquelot | Nada Assi Matthieu Javelot | Fanny Raguideau (France)

302 – Ignoring Competing Event in Survival Analyses: The Amplitude of The Bias in Kaplan-Meier Estimates Assessed Through Simulations [976]

Helene Denis | Pauline Lemeille | Martin Prodel Eleonore Herquelot (France)

303 – Impacts of the COVID-19 Pandemic on Assessment of Progression and Surveillance Bias in Advanced Non-Small Cell Lung Cancer 19771 Lauren E. Johns | Yihua Zhao | Xinran Ma Rebecca A Miksad | Sandra D Griffith | Gregory Calip (United States)

304 – Methodologic Considerations for Emulating Target Trial for Discontinuation of Antidepressant Treatment in Pregnancy [978]

Mollie Wood | Hedvig Nordeng | Eivind Ystrom (United States)

305 – Validating The Standardized and ICD-9 Code of Type 2 Diabetes Mellitus in a Saudi Common Data Model 19791

Turki Ai Althunian | Meshael Alrasheed | Fatemah Alnofal Rawan Tafish | Mahmood A. Mira | Raseel A. Alroba Mohammed Kirdas | Thamir M Alshammari (Saudi Arabia)

#### **PHARMACOVIGILANCE**

306 – Assessing Causality in HIV-Positive Patients with Antituberculosis And/or Antiretroviral Therapy – Associated Liver Injury 19801 Hannah May Gunter | Karen Cohen | Gayle Tatz Gary Maartens | Wendy Spearman | Ushma Mehta (South Africa)

307 - Cardiovascular Adverse Events Associated with PARP Inhibitors: A Disproportionality Analysis of FDA Adverse Event Reporting System [981]

Subeesh Kulangara Viswam | Aarushi Kheterpal Ashwin Dhas | Zeba Zeba | Amrutha Shettigar Lipin Lukose | Gursimran Kaur (India)

308 – Evaluating The Efficacy of Clustering Methods Applied to Adverse Event Reports [982]

Nils Erlanson | Jim Barrett | Carlos Melgarejo Joe Mitchell | Lucie Gattepaille | Henric Taavola (Sweden)

309 – Comparison of Post-Marketing Drug Safety Surveillance Research Required by Regulators of the United States and Europe Through the Case of Dapaqliflozin [983]

Huieon Lee | Suvin Park | Na-Young Jeong | Hee-Jin Kim Nam-Kyong Choi (South Korea)

310 – Drug Use Pattern and Adverse Reactions Among Pregnant Women Accessing Care at the University College Hospital, Ibadan, Nigeria [984] Timothy Ao Oluwasola | Omolola Ogundare Onyinye O. Akunne | Aduragbenro D. Adedapo (Nigeria)

311 - Community Pharmacists' Vigilance Towards OTC Medication Abuse in Saudi Arabia [985]

Ahmed I. Fathelrahman | Mona Y. Alsheikh | Ali M. Alshahrani (Saudi Arabia)

312 – Gastrointestinal Adverse Events Associated with PI3K Inhibitors: A Disproportionality Analysis of FDA Adverse Event Reporting System 19861 Subeesh Kulangara Viswam | Raksha Kamath Jovita Sharon | Adithya Shivakumar | Anjana Shenoy

313 – An Active Surveillance of Medication Error Monitoring Programme in a Tertiary Care Teaching Hospital: A Clinical Pharmacist Approach [987] Ravina Ravi | Vikram Patil | Chalasani Sri Harsha Ramesh Madhan (India)

314 – Assessing The Pattern of Hypersensitivity Reactions Associated with Analgesics: An Ambispective Study 19881

Shilpa Palaksha | Prudhvi Raj | Mahesh P. A. (India)

Lipin Lukose | Gursimran Kaur (India)

315 - Machine Learning to Predict Safety Signals Using Molecular Similarity and Disproportionate Reporting Rates [989]

Lucy A. Quirant | Annette Rudolph | Rachel Cavill Eva-Lisa Meldau (Belgium)

316 – Risk of Retinal Vein Occlusion in Colorectal Cancer Patients Using Anti-Vascular Endothelial Growth Factor: A Population-based Cohort Study (990)

Wanju Annabelle Lee | Chung-Han Ho | Wei-Pang Chung Shih-Chieh Shao | Edward Lai (Taiwan)

317 – Ginkgo Biloba Interaction with Non-steroidal Anti-Inflammatory Drugs and the Potential Risk of Bleeding [991]

Mona A. Almaghrabi | Waad Alghamdi | Nouf Alfadel Fawaz F. Alharbi (Saudi Arabia)

318 – Risk of Oligospermia with Tyrosine Kiase Inhibitors: A Disproportionality Analysis from Vigibase and AERS Databases [992]

Luis Velez-Nandayapa | Anusmita Das | Vishaka Parulekar Naveen Chhabra | Miguel Izquierdo | Maria Nicolaides Pierre De Zeeuw | Alicia Rossiter | Johannes Eisinger Christiane Michel (Switzerland)

319 – Current Status of Spontaneous Adverse Event Reports Related to Polypharmacy in Korean Elderly Patients [993]

Heehyun Won | Hee-Jin Kim | Na-Young Jeong Byung-Joo Park | Nam-Kyong Choi (South Korea)

320 – Association Between Oral Corticosteroid Prescribing Patterns and Appropriate Fracture Preventive Care in People with Atopic Eczema in the UK 19941

Julian Matthewman | Mina Tadrous | Kathryn Mansfield Deva Thiruchelvam | Donald Redelmeier | Angela M. Cheung Iliana Lega | Daniel Prieto-Alhambra | Lawrence Cunliffe Sinéad Langan | Aaron M. Drucker (United Kingdom) 321 – A Retrospective Analysis of Adverse Drug Events Leading to Hospitalization or Prolonged Hospitalization in Saudi Arabia Using the Saudi Food and Drug Authority (SFDA) Spontaneous Reporting System [995]

Eman Khalid Alqadheeb | Fotoun Alblowi Rayan Ibrahim Alolayet | Asma Al-Sadaawi Muhanad Alharbi | Mobarak Alshahrani (Saudi Arabia)

322 – Pharmacovigilance Education in Pharmacy Programs' Curricula in Saudi Arabia [996]

Mona Y Alsheikh, | Ahmed I Fathelrahman Thamir M. Alshammari (Saudi Arabia)

323 – Lot-Specific Monitoring of Insulin Lispro Safety Following Changes in the Purification Process [998]

Ayad K. Ali John D. Ayres (United States)

324 – Factors Associated with Compliance to the Hepatotoxicity Risk Management Guide in Primary Care Facilities in Casablanca, Morocco [999]

Boubacar Traore | Samira Nani | Samira Hassoune (Mali)

# Intensive online short courses

Develop your skills in pharmacoepidemiology, pharmacovigilance, and real-world evidence with our modular short courses. Learn key concepts in epidemiology, statistics, and health economics from experts in a range of sectors, including academia, regulatory, and industry.

Block 1 (November)
Block 2 (February)
Block 3 (April)

Block 4 (October)

Introduction to Pharmacoepidemiology Introduction to Pharmacovigilance

Intermediate Pharmacoepi/Pharmacovigilance
Real-World Evidence in Pharmacoepidemiology

Study any Block, or complete Blocks 1, 2 & 3 with a Project (in May) and Exam (in June) to achieve the Professional Certificate (30 credits).

Already know the basics? Our 'Real-World Evidence in Pharmacoepidemiology' short course (Block 4) provides practical, hands-on experience working with real-world data.





Contact email:

shortcourses@lshtm.ac.uk





### **SPOTLIGHT POSTERS**

HEALTH EQUITY	118
MEDICAL DEVICES	118
PEDIATRICS	119
MEDICATIONS IN PREGNANCY AND LACTATION	120
RARE DISEASES	120
VACCINES	121
BIOSIMILARS_	122
DISEASE EPIDEMIOLOGY/ CLINICAL COURSE	124
DRUG UTILIZATION RESEARCH	127
INFORMATICS	132
METHODS IN PHARMACOEPIDEMIOLOGY	133
PEDIATRIC PHARMACOEPIDEMIOLOGY	136
PHARMACOVIGILANCE	138
VACCINES	141

### SUNDAY, AUGUST 28 | 8 AM - 1:30 PM

### SPOTLIGHT POSTERS

#### **HEALTH EQUITY**

A – Effect of The Refitted CKD-EPI Race-Free Formula to Estimate Glomerular Filtration Rate on The Chronic Kidney Disease Prevalence and Mortality in The Danish Population [1000] Uffe Heide-Jørgensen | Søren Vestergaard | Henrik Birn Christian Christiansen (Denmark)

B – Description of Concurrent CKD and HF by Race and Ethnicity Distribution in the US [1001] Daniel Fernandez Llaneza | Claudia Cabrera Moksnes Nitin Shivappa (United Kingdom)

C – A Dashboard to Visualize the Geographic Distribution of Incidence and Prevalence of Diseases by Race and Ethnicity in the United States Using Real-World Data [1002]
Brian Dreyfus | Siva Rayavaram | Leticia Ferri | Lorena Kuri (United States)

D – State-By-State Analysis of Medicaid Barriers to Medication for Opioid Use Disorder (MOUD) Access [1003]

Sophia L Balkovski | Catherine Psaras | Marissa Seamans (United States)

E – The Association Between Race, Social Determinants of Health, and Treatment for Major Depressive Disorder (MDD) in a Real-World Cohort [1004]

Jessica Paulus | Xi Qian | Pam Kumparatana Veena Hoffman | Zhaohui Su | Carl Marci (United States)

F – Rural-Urban Disparities in COVID-19 Related Mortality Across US Counties by Racial and Ethnic Composition [1005]

Wenxi Huang | Inmaculada Hernandez | Shangbin Tang Nico Gabriel | Nasser Sharareh | Nimish Patel Lucas A Berenbrok | Sean Dickson | Serena Jingchuan Guo (United States)

G – Impact of Contextual-Level Social Determinants of Health on Novel Antidiabetic Drug Adoption in Patients with Type 2 Diabetes [1006]

Yujia Li | Hui Hu | Yi Zheng | Jie Xu | Wei-Han Chen Ning Liu | Jiang Bian | Serena Jingchuan Guo (United States)

H – Racial Differences in US COVID-19 Testing, Positivity, Hospitalization, and Mortality [1007] Sruthi Adimadhyam | Adebola Ajao | Maria Kempner Hye Seung Lee | Caroline Jjingo | Jane Baumblatt Danijela Stojanovic | Yueqin Zhao | Joy Kolonoski Efe Eworuke (United States)

#### MEDICAL DEVICES

I – Development of a Python Notebook to Automate Predictive Modeling: Total Knee Arthroplasty Case Study [1008] Chantal Holy | Harshita Vemu | Saurabh Menon Julia Hwang | Yifan Zhang | Jill Ruppenkamp | Paul Coplan (United States)

J – Differences in Outcomes Among Patients with Atrial Fibrillation Undergoing Catheter Ablation with Versus Without Intracardiac Echocardiography Use [1009]

Rahul Khanna | Rhea C. Pimentel | Neloufar Rahai Sonia Maccioni (*United States*)

K – Catheter Ablation Procedure Using Advanced Porous Tip Contact-Force Sensing Radiofrequency Catheter: Impact on Healthcare Utilization Among Patients with Persistent Atrial Fibrillation [1010]

Rahul Khanna | Amit Doshi | Sonia Maccioni Meghana Sariki (United States)

L – Clinical and Economic Burden Associated with Uncontrolled Surgical Bleeding: A Retrospective Database Analysis [1011]

Stephen S Johnston | Pranjal Tewari | Mosadoluwa Afolabi Walter Danker (United States)

M – Comparison of Outcomes for Major Contemporary Endograft Devices Used for Endovascular Repair of Intact Abdominal Aortic Aneurysms [1012]

Michael O. Falster | Sarah K. Garland | Louisa Jorm C. Barry Beiles | Anthony J. Freeman | Art Sedrakyan Oluwadamisola Sotade | Ramon L. Varcoe (Australia)

N – Do Methods Matter in Diagnostic Yield Assessment in Bronchoscopy? A Simulation-based Analysis [1013]

Meijia Zhou | Anil Vachani | Fabien Maldonado Balaji Laxmanan | Iftekhar Kalsekar | Philippe Szapary Lisa Dooley | Septimiu Murgu (United States)

O – Association Between Use of Levonorgestrelreleasing and Copper Intrauterine Devices and The Risk for IUD Expulsion in Routine Clinical Practice: Results from EURAS-LCS12 [1014] Lisa Eggebrecht | Anja Bauerfeind | Tanja Boehnke Camille Cellier | Jens Lange | Klaas Heinemann (Germany)

P – Evaluating Implementation of HPV Selfcollection for Cervical Cancer Screening Among Low-income, Under-screened Women in the US [1015] Elvse M. Miller (United States)

#### PEDIATRICS

Q – Trends in The Incidence of Varicella Cases with Complications Among Korean Children During 2010-2020 After the Universal One-Dose Varicella Vaccination Program [1016] Hyunjeong Cho | Bongkyoo Choi | Eunbi Sun Seoyoung Jeon | Seonghee Ann (Republic of Korea)

R – Risk of Infection in Children with Psoriasis Receiving Treatment with Ustekinumab, Etanercept, or Methotrexate [1017]

Maria Schneeweiss | Timothy J Savage | Richard Wyss Julien Kirchgesner | Yinzhu Jin | Cassandra York Joseph F. Merola | Sebastian Schneeweiss | Robert Glynn (United States)

S – Off-Label Use of Drugs in Paediatric (Specialised) Outpatient Clinics – What Has Changed Between 2009 and 2019? [1018] Irmgard Toni | Jutta Hupfer | Christine Gerber Wolfgang Rascher | Antje Neubert (Germany)

T – Association Between Prenatal Antipsychotic Exposure and The Risk of Attention-Deficit/Hyperactivity Disorder and Autism Spectrum Disorder: A Systematic Review and Meta-Analysis [1019] Zixuan Wang | Kirstie Wong | Ian Wong | Kenneth Man (United Kingdom)

U – Outpatient Antibiotic Prescribing in Early Life: A Population-based Study Comparing Birth Cohorts from Denmark and Germany [1020] Ulrike Haug | Oliver Scholle | Lotte Rasmussen Mette Reilev | Jost Viebrock (Germany)

V – Trends in Psychotropic Prescriptions Dispensed to US Children Early in the COVID-19 Pandemic [1021]

Greta A Bushnell | Jenny Sun | Wendy Camelo Castillo Angela Czaja | Susan Dosreis | Tobias Gerhard Florentia Kaguelidou | Haeyoung Lee Sangita Pudasainee-Kapri | Sudha Raman O'mareen Spence | Durrieu Geneviève | Daniel B Horton (United States)

X – Association Between Antihistamine Exposure and Newly Diagnosed Juvenile Idiopathic Arthritis: A Nationwide Analysis [1022] Daniel B. Horton | Tania J. Atanassova | Cecilia Huang Joanna Madej | Sarah E. Mcguire | Tobias Gerhard Brian L Strom (United States)

Y – Use of Valganciclovir/Ganciclovir [(v)GCV] for Treatment of Congenital Cytomegalovirus (cCMV) Infection in the United States: Evidence from The Sentinel Distributed Database, 2008-2020 [1023]

Ashish Rai | Emmanuel Ojo | Takashi Komatsu Mayura Shinde | Danijela Stojanovic | Adebola Ajao Hengrui Sun | Amy Bishara | Joy Kolonoski Ann Mcmahon | Prabha Viswanathan (United States)

### MEDICATIONS IN PREGNANCY AND LACTATION

Z – COVID-19 Infection and Medication Use in Pregnancy (CONSIGN) -A Multinational Drug Utilisation Study Using Linked Healthcare Data [1024] Eimir Hurley | Beatriz Poblador-Plou Gabriel Sanfelix-Gimeno | Francisco Sanchez-Saez Isabel Hurtado | Clara Rodriguez-Bernal | Sue Jordan Daniel Thayer | Ieuan Scanlon | Carys Jones Claudia C. Bartolini | Rosa Gini | Giorgio Limoncella

Miriam Sturkenboom | Hedvig Nordeng (Norway)

AA – Emulation of a Target Trial of Metformin in Pregnancy in Women with Pre-Gestational Type 2 Diabetes Mellitus [1025] Jennifer Yland | Krista Huybrechts | Amelia Wesselink Lauren Wise | Sonia Hernandez-Diaz (United States)

AB – National Trends and Utilization Patterns of Benzodiazepines and Z-Hypnotics Among 2,883,162 Pregnant Women in Taiwan: An Interrupted Time Series Analysis [1026] Lin-Chieh Meng | Chih-Wan Lin | Shih-Tsung Huang Fei-Yuan Hsiao (Taiwan)

AC – Intrauterine Exposure to SSRI Antidepressants and Risk of Emotional Disorder till Age 22: A Danish National Register Study [1027] Ardesheer Talati | Mette Bliddal | Rikke Wesselhoeft Katrine Strandberg-Larsen | Myrna Weissman Jay Gingrich | Anton Pottegård (United States)

AD – Association of Maternal Levothyroxine Use During Pregnancy with Offspring Birth and Neurodevelopmental Outcomes [1028] Menggin Ge | Edmund Cl Cheung | Kenneth Man Patrick Ip | Wing Cheong Leung | Gloria Li | Annie Kung Ching-Lung Cheung | Ian Wong (Hong Kong)

to Ascertain Gestational Age Among Multiple Pregnancy Outcomes [1029] Jennifer Judy | Deepa Malhotra | Amy Law | David Oliveri

AE – Application of Claims-based Algorithms

Jennifer Nguyen | Kimberly Shea (United States)

#### RARE DISEASES

AF – Development and Testing of Diagnostic Algorithms for Identifying Subjects with Acromegaly in Administrative Claims Databases [1030] Salvatore Crisafulli | Andrea Fontana | Valentina lentile Luca L'abbate | Isabela Alexandra Chiorean Francesco Barone-Adesi | Gianluca Trifiro (Italy)

AG – A Population-based Study on the Prevalence of Diagnosed Primary Immune Thrombocytopenia in the United States, 2016-2021 [1031]

Sherry Xiao | Sara Burns | Stephen Schachterle Lawrence Charnas | David Readett (United States)

AH – Algorithm to Identify Patients with Hypereosinophilic Syndrome (HES) in Electronic Health Record Databases [1032] Sandra Joksaite | Gema Requena | Nicholas Galwey Rupert Jakes | Melissa Van Dyke (United Kingdom)

Al – Risk of Hospitalization for Vaso-Occlusive Episode in Patients with Sickle-Cell Disease After Out-patient Exposure to Systemic Corticosteroids [1033]

Margaux Lafaurie | Ondine Walter | Pierre Cougoul Julien Maguet | Pablo Bartolucci | Maryse Lapeyre-Mestre Guillaume Moulis (France)

AJ – The Use of United States Administrative Claims Data to Study Patients with Friedreich Ataxia: The Impact of Specific and Non-Specific Coding Periods [1034]

Christina Qian | Katharina Buesch | Lauren Powell Karissa Johnston (Canada)

AK – An Innovative Way to Generate Blinded Data in Single Arm Clinical Trials [1035]

Cynthia Girman | Katherine Brind'amour PhD Susan Hartmaier PhD | Xinruo Zhang | Emma Rosen David A. Weinstein Md Mmsc (United States)

AL – Use of Provider Notes in Novel Identification of Cancer at the Gastroesophageal Junction [1036]

Katherine Gilpin | Gulce Askin | Clark Jackson

David Hallett | Wendy Sebby | Leon Raskin (United States)

AM – Natural History of Wilson's Disease in the United States Using Optum® Electronic Health Records [1037]

Scott Kelly | Karla Therese Sy | Kennedy Cook Steven Arkin | Jose Francisco Cara | Marko Pregel Kasia Lobello | Shawkat Hassan | Rongjun Shen

Xiaofeng Zhou | Caihua Liang | Kui Huang (United States)

#### VACCINES -

AN - Characteristics Associated with Residual Risk of COVID-19 Hospitalisation After a Complete Vaccination Schedule in 28 Million People in France [1038]

Laura Semenzato | Jeremie Botton | Jérôme Drouin Bérangère Baricault | Marion Bertrand Marie-Joelle Jabagi | François Cuenot | Kim Bouillon Stephane Le Vu | Rosemary Dray-Spira | Alain Weill Mahmoud Zureik (France)

AO – Heterogeneity Across European Electronic Healthcare Data Sources: Identification of Adverse Events of Special Interest (AESI) and Impact in Multi-Databases Assessment – An ACCESS Study [1039]

Corinne Willame | Caitlin Dodd | Carlos Duran Daniel Weibel | Olaf H Klungel | Miriam Sturkenboom Roel Elbers | Rosa Gini | Elisa Barbieri | Nicolas H Thurin Tania Schink | Felipe Villalobos | Ainara Mira-Iglesias Patrick Souverein | Mar Martin-Perez | Régis Lassalle Cécile Droz-Perroteau | Jérémy Jové | Consuelo Huerta Airam De Burgos Gonzalez | Veronica Bryant Patricia García-Poza | Maria Martinez-Gonzalez (Belgium)

AP - Cohort Monitoring of 29 Adverse **Events of Special Interest Prior to and After** COVID-19 Vaccination in Four Large European Data Sources [1040]

Miriam Sturkenboom | Davide Messina | Olga Paoletti Airam De Burgos Gonzalez | Patricia García-Poza Consuelo Huerta | Ana Llorente | Olaf H Klungel Mar Martin-Perez | Maria Martinez-Gonzalez Ivonne Martin | Jetty Overbeek | Marc Padros-Goossens Patrick Souverein | Karin Swart, Daniel Weibel | Rosa Gini (Netherlands)

AQ – Vaccination and Acute Flares in Rheumatoid Arthritis: A Nationwide Casecrossover Study Using the French SNDS Health Care Databases [1041]

Lamiae Grimaldi | Yann Hamon | Tom Duchemin Philippe Attias | Jacques Benichou | Lucien Abenhaim Yola Moride (France)

AR – Changing Characteristics Over Time of Individuals Receiving COVID-19 Vaccines in Denmark: A Population-based Descriptive Study of Vaccine Uptake [1042]

Mette Reilev | Morten Olesen | Helene Kildegaard Henrik Støvring | Jacob Harbo Andersen | Jesper Hallas Lars Christian Lund | Louise Ladebo | Martin Ernst Per Damkier | Peter Jensen | Anton Pottegård Lotte Rasmussen (Denmark)

AS – Clinical Outcomes and Safety of Live-Attenuated Vaccines in Children Exposed to Biologics Response Modifiers in Utero [1043]

Ousseny Zerbo | Kristin Goddard | Edwin Lewis Darios Getahun | Kristin Palmsten | Candace C Fuller Bradley Crane | James Donahue | Matthew F Daley Lisa A Jackson | Nicola Klein | Shararareh Modaressi (United States)

AT – Post-Emergency Use Authorization (EUA) Active Safety Surveillance Study Among Individuals in the Veterans Affairs Health System Receiving Pfizer-BioNTech Coronavirus Disease 2019 (COVID-19) Vaccine [1044]

Kofi Asomaning | Mei Sheng Duh | Maral Dersarkissian Cynthia De Luise | Catherine Nguyen | Mu Cheng Angela Lax | Suna Park | Mianzhao Guo | Mingfang Zhang Pierre Cremieux | Yinong Young-Xu (United States)

AU – Real-World Effectiveness of mRNA COVID-19 Vaccines Among Elderly US Nursing Home Residents [1045]

Hector Izurieta | Yun Lu | Arnstein Lindaas Kathryn Matuska | Xiangyu Shi | Mikhail Menis Whitney Steele | Michael Wernecke | Yoganand Chillarige Hui-Lee Wong | Jeffrey Kelman | Richard A. Forshee (United States)

#### BIOSIMILARS

1 – Developing and Testing of Diagnostic Algorithms for the Identification of Inflammatory Bowel Diseases Using a Claims Database from Southern Italy [1046]

Elena Sofia Fiore | Ylenia Ingrasciotta | Valentina Isgrò Valentina Ientile | Saveria S Foti | Luca L'abbate Andrea Fontana | Michele Tari | Angela Alibrandi Gianluca Trifiro (Italy)

2 – Rheumatoid Arthritis, Psoriasis and Other Auto Immune Diseases – Prescribing Patterns and Characteristics of Patients Undergoing Biological Therapy in Portugal (2020) [1047]

Claudia Furtado | Isabel Tovar | Cristina Gaspar (United States)

3 – Trends in The Use of Biologics for Treatment of Plaque Psoriasis in the Real-World Setting [1048]

Lawrence Rasouliyan | Amanda G. Althoff | Vikas Kumar Carla Zema | Stacey Long | Mitesh B. Rao (United States)

4 – Comparative Risk of Herpes Zoster and Postherpetic Neuralgia in Patients with Psoriasis Receiving IL-17 Inhibitor and IL-12/23 Inhibitor Versus Traditional Systemic Immunosuppressants [1049]

Edward Lai | Chaw-Ning Lee | Miyuki Hsing-Chun Hsieh Che-Yu Chen | Chao-Chun Yang | Tzu-Chi Liao (*Taiwan*)

5 – Evaluation of The Effectiveness and Safety of Biological Disease-Modifying Drugs for the Treatment of Ankylosing Spondylitis in the Unified Health System [1050]

Francisco De Assis Acurcio | Bárbara Santos Gerusa A. Oliveira | Luila C Henriques | Marina Morgado Natália Dias Brandão | Isabella C. Ferreira Fernanda De Frias Campos | Juliana Álvares-Teodoro (*Brazil*)

6 – Evaluation of The Rate of Discontinuation of Treatment with Biological Drugs in Patients with Ankylosing Spondylitis:

with Ankylosing Spondylitis:
Pre-Pandemic and Pandemic Period [1051]
Francisco De Assis Acurcio | Fernanda De Frias Campos
Bárbara Santos | Isabella C. Ferreira | Luila C. Henriques
Gerusa A. Oliveira | Natália Dias Brandão | Marina Morgado
Juliana Álvares-Teodoro (Brazil)

7 – Evaluation of the Use Profile of Biological Medicines and Synthetic Target-Specific Medicines for the Treatment of Rheumatoid Arthritis in the Sus in the State of Minas Gerais, Brazil [1052]

Francisco De Assis Acurcio | Isabella C. Ferreira Bárbara Santos | Fernanda De Frias Campos Gerusa A. Oliveira | Natália Dias Brandão | Marina Morgado Luila C. Henriques | Juliana Álvares-Teodoro (*Brazil*)

8 – Brodalumab Assessment of Hazards: A Multinational Safety (BRAHMS) Study of a Biological Anti-Psoriatic Drug Across Six European Countries [1053]

Mette Reilev | Peter Jensen | Henrik Støvring
Lise Skov Ranch | Rosa Gini | Claudia C. Bartolini
Gianluca Trifiro | Ursula Kirchmayer
Alessandro Cesare Rosa | Valeria Belleudi | Ulrike Haug
Sarina Schwarz | Wiebke Schaefer | Ron Herings
Elisabeth Smits | Jetty Overbeek | Emily Holthuis
Kari Furu | Karin Gembert | David HäggMichele Tari
Valentina lentile | Ylenia Ingrasciotta | Alexander Egeberg
Jesper Hallas (Denmark)

9 – Traceability of Insulin Glargine's Innovator and Its Biosimilar Products Adverse Drug Events Reports in Saudi Arabia [1054]

Fares Alrubaish | Solaiman Alhawas | Abdulrahman Alnuaim Nouf Alfadel | Fawaz F Alharbi (Saudi Arabia)

10 – Exploring The Relationship Between Utilization Patterns of Biologic Disease-Modifying Anti-Rheumatic Drugs and Disease Activity in Rheumatoid Arthritis Patients [1055]

Irma Convertino | Massimiliano Cazzato | Silvia Tillati Sabrina Giometto | Rosa Gini | Giulia Valdiserra Emiliano Cappello | Sara Ferraro | Marco Bonaso Claudia C. Bartolini | Olga Paoletti | Valentina Lorenzoni Matteo Filippi | Giuseppe Turchetti | Michele Cristofano Corrado Blandizzi | Marta Mosca | Ersilia Lucenteforte Marco Tuccori (Italy)

11 – The Risk of Serious Infection in Crohn's Disease Patients Treated with Biologics: An External Comparator Cohort Study [1056] Nai-Yu Chen | Chiao-Hsiung Chuang | Yu-Ching Chang Ching-Lan Cheng (Taiwan)

### 12 – A Regulatory Overview of Biosimilars Across Selected Countries [1057]

Luciane Lopes | Gustavo M Santos | Svetlana Doubova Lisa Pont | Efe Eworuke | Martín Cañás | Marco Tuccori Lily Iracema Gordillo Alas | Angela Acosta Santamaria Gustavo H. Marin | José Crisóstomo Landeros Flavia C. Albuquerque | Golnoosh Alipour Haris Martin A. Urtasun | Boya Lin | Juan Roldán-Saelzer Patricia Carmona-Sepulveda | Dino Viveros Felipe D. Vera | Irma ConvertinoMarco Bonaso Claudia Garcia Serpa Osorio-De-Castro | Ursula Kirchmayer Mariama G. Falcao | Fernanda Lacerda L Machado Lourdes Abigail Orellana Tablas Saul Eduardo Contreras Sanchez Manuel Machado Beltrán (Brazil)

13 – Real-World Effectiveness and Persistence of Methotrexate Versus Adalimumab: A Comparative Study from The British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR) [1058] Oras Alabas | Kayleigh Mason | Zenas Yiu | Richard Warren Mark Lunt | Catherine Smith | Christopher Griffiths (United Kingdom)

### 14 - Recent Biosimilar Uptake in the United States [1059]

Elizabeth Dee | Caitlin Elliott | Shangzhi Gao | Caitlin Dodd Tiffany Siu Woodworth (United States)

15 – Assessment of the Issues on Understanding and Use of Biologics in Clinical Practice and Their Regulations [1060] Imelda G. Peña | Bryan Paul I. Bulatao (Philippines)



#### DISEASE EPIDEMIOLOGY/ CLINICAL COURSE -

16 – Long-Term Health Events and Healthcare Utilization After COVID-19 Hospitalization Among Children and Adults Insured by Medicaid, North Carolina, United States, 2020-2021 [1061] Rachel Sendor | Sharon Peacock Hinton | Til Stürmer Michele Jonsson Funk (United States)

17 – Association Between Tumor Location and Pathological Stage in Patients with Resectable Low Rectal Cancer: Evidence from 20-Years of Data in China [1062]

Qingqing Hu | Zheng Kuo Md | Yuting Yao | Yuan Zhou Enda Yu Md | Zheng Lou Md | Guanyu Yu Md Leqi Zhou Md | Yongjing Zhang | Hong Qiu Md, PhD Wei Zhang (China)

18 – A Scoping Review of Drug Exposures and The Development of Parkinson's Disease [1063] Takahiro Itaya | Brendan Hallam | Mine Orlu Anette Schrag | Irene Petersen | Kate Walters (United Kingdom)

20 – Treatment-Resistant Depression and Labor Market Affiliation in the Danish Welfare Society: A Register-based Study [1065]

Frederikke H. Gronemann | Thomas Lund | Louise Lindholdt Kathrine Bang Madsen | Martin Balslev Jørgensen Merete Nordentoft | Merete Osler (Denmark)

21 – Long-Term Clinical and Health Outcomes Following COVID-19 Disease: An Umbrella Review [1066]

Hu Li | Jin Xia | Dimitri Bennett | Fatima Roque Rujuta Phadke | Ana Bárbara Tavares | Mugdha Gokhale Fidelia Ida | Jinnie J. Rhee | Montse Soriano Gabarro (United States)

22 – Incident Dementia Identified by Redeemed Prescriptions Recorded in The Danish National Prescription Registry [1067]

Cecilia Fuglsang | Nils Skajaa | Péter Szentkúti Erzsebet Horvath-Puho | Henrik Toft Sørensen Victor Henderson (Denmark)

23 – Comorbidity, Trauma and Mortality in Children and Young Adults Using ADHD Medications in Quebec Between 2000 and 2020 [1068]

Carlotta Lunghi | Helen-Maria Vasiliadis | Elham Rahme Louis Rochette | Martin Gignac | Victoria Massamba Fatoumata Binta Diallo | Alvine Fansi | Samuele Cortese Alain Lesage (Italy) 24 – Comparison of Methods to Quantify Uncertainties in Averaging Incidence Estimates: An Illustration of Approximating Lyme Borreliosis (LB) Incidence in High-Risk Regions in Europe [1069] Thao Mp Tran | Leah Burn | Maxim Blum | James H. Stark (Belgium)

25 – Nursing Home Facility Characteristics and Occurrence of Severe COVID-19 Outcomes Among US Medicare Beneficiaries Ages 65 and Older in the Vaccine Era [1070]

Hector Izurieta | Mikhail Menis | Yun Lu | David Graham Yixin Jiao | Heng-Ming Sung | Yue Wu | Yoganand Chillarige Michael Wernecke | Jeffrey Kelman | Richard A. Forshee (United States)

26 – Identification of Drugs Associated with Lower Risk of Parkinson's Disease Using Systematic Screening Approach in a Nationwide Nested Case-control Study [1071]

Anna-Maija Tolppanen | Marjaana Koponen | Anne Paakinaho Julian Lin | Sirpa Hartikainen (*Finland*)

27 – Prevalence and Predictors of COVID-19 Associated Mucormycosis: A Systematic Review and Meta-Analysis [1072]

Asha K Rajan | Muhammed Rashid | Dhruv Patel Viji Chandran | Sreedharan Nair | Vishal Shanbhag Girish Thunga (India)

28 – Kidney Function Before and After Acute Kidney Injury: A Nationwide Populationbased Cohort Study [1073]

Simon Jensen | Uffe Heide-Jørgensen | Søren Vestergaard Henrik Gammelager | Henrik Birn | Dorothea Nitsch Christian Christiansen (Denmark)

29 – The Impact of Antidepressant Treatment on Insulin Commencement in Type 2 Diabetes: A UK Electronic Health Record Nested Case-control Study [1074]

Annie Jeffery | Kate Walters | David Osborn | Ian Wong Joseph F. F. Hayes (United Kingdom)

30 – Quality Assessment of Latest National Comprehensive Cancer Network Guidelines Using The AGREE-II Instrument and RIGHT Statement [1075]

G. Nethravathi | Pravallika Mudimala | Christy Thomas Krishna Undela (India)

31 – Antihypertensive Prescription and Blood Pressure Patterns in Patients with Chronic Kidney Disease at a Nephrology Outpatient Clinic in Lagos University Teaching Hospital, Idi-Araba [1076]

Ifedolapo Adesola Adejumo | Babawale Bello Sunday O. Olayemi (Nigeria)

32 – Return-To-Work in Premenopausal Breast Cancer Patients Prescribed Taxane-based Chemotherapy, a Population-based Cohort Study Investigating the Impact of 26 Single Nucleotide Polymorphisms [1077]

Cathrine Hjorth | Per Damkier | Tore B Stage Søren Feddersen | Stephen Hamilton-Dutoit | Bent Ejlertsen Timothy Lash | Henrik Bøggild | Henrik Toft Sørensen Deirdre Cronin-Fenton (Denmark)

33 – Antiplatelet Drugs and Breast Cancer Risk in a Large Nationwide Danish Case-control Study [1078]

Manon Cairat | Anton Pottegård | Morten Olesen Laure Dossus | Agnès Fournier | Blánaid Hicks (France)

34 – Techniques for Characterising Long COVID in Real World Data [1079]

Kristin Kostka | Evan Minty | Antonella Delmestri Barrack Omondi | Daniel Prieto-Alhambra | Annika Joedicke (United States)

35 – Association Between Antiseizure Medication Prescribing and Its Indications During Pregnancy and Offspring Neuro-Developmental Outcomes Between 1995 and 2020 in the UK [1080] Paul Madley-Dowd | Harriet Forbes | Viktor H. Ahlqvist Jessica Rast | Caichen Zhong | Brian K Lee | Dheeraj Rai (United Kingdom)

36 – A Nationwide Registry-Linkage Study of Mental Disorders in Chronic Pain Patients: Characteristics of Users of Opioid Versus Non-Opioid Analgesics [1081]

Line C. Gjerde | Marte Handal | Ragnar Nesvåg Thomas Clausen | Torgeir G Lid | Aleksi Hamina Svetlana Skurtveit | Ingvild Odsbu (Norway)

37 – Natural History of COVID-19 Among US Nursing Home Residents Ages >65 Years: Vaccine Era [1082]

Hector Izurieta | Yun Lu | Yixin Jiao | David Graham Michael Wernecke | Mikhail Menis | Yoganand Chillarige Heng-Ming Sung | Yue Wu | Jeffrey Kelman Richard A. Forshee (United States)

38 – Urticaria and Risk of Cancer: A Danish Population-based Cohort Study [1083] Dóra Körmendiné Farkas | Sissel Toft Sørensen Christian Vestergaard | Sigrún Alba Jóhannesdóttir Schmidt Lise Maria Lindahl | Kathryn Mansfield | Sinéad Langan Henrik Toft Sørensen (Denmark)

39 – An Evaluation of Survival Comparing Women with Breast Cancer Receiving Surgery or Primary Endocrine Therapy and Women without Cancer [1084]

Yubo Wang | Douglas Steinke | Sean Gavan | Li-Chia Chen (United Kingdom)

40 – Bayesian Nonparametric Comorbidity Analysis of Type 2 Diabetes Mellitus (T2DM) [1085] Adrian Martinez De La Torre | Fernando Perez-Cruz Stefan Weiler | Andrea Burden (Switzerland)

41 – Establishing a Standing Cohort Using Claims Data to Mimic the Population of a Clinical Trial in The Cardiovascular Therapeutic Area [1086] Nicole L. Baker | Darcy E Ellis | Quazi Ataher | James Brash Sarah Seager | Christian Reich | Xiaoyu Lin (United States)

42 – Trends of Hospital Admissions Due to Neoplasms in England and Wales Between 1999 and 2019: An Ecological Study [1087] Abdallah Naser | Hassan Hasan Alwafi (Jordan)

43 - Trends in Hospital Admissions for Mental, Behavioural and Neurodevelopmental Disorders in England and Wales Between 1999 and 2019: An Ecological Study [1088] Abdallah Naser | Eman Zmaily Dahmash (Jordan)

44 – Health-Related Quality of Life of Multiple Myeloma Patients from a Brazilian Metropolis Improves After First Line of Treatment [1089] Paula Drummond | Roberta M Santos | Adriano M Reis Jéssica Malta | Lívia Silveira Iwyson H Costa | Bárbara Marques Cristiane Aparecida A Menezes De Pádua (Brazil)

45 – Incidence of First-Time HbA1c-Defined Prediabetes in Denmark 2012-2018 and Risk of Progression to Type 2 Diabetes: A Nationwide Study based on Routine Care Laboratory Data [1090] Sia Nicolaisen | Reimar Thomsen | Cathrine Juel Lau Daniel Witte | Henrik Toft Sørensen | Lars Pedersen (Denmark)

- 46 Metformin Use and Risk for COVID-19
  Infection and Severe COVID-19 Outcomes [1091]
  Sascha Dublin | Jennifer Kuntz | James Floyd | Rod Walker
  Stephen Fortmann | Elizabeth Bayliss | Susan Shortreed
  Laura Harrington | Mi Lee | Ladia Albertson-Junkans
  John Powers | Sharon Fuller (United States)
- 47 Comparisons of Twenty-Year Trends in Direct Costs, Absence Payments and Lost Time for Employee "Caregivers" of Patients with Breast, Skin, GI, Female, Male, and "Other" Cancers [1092] Richard A. Brook | Ian A. Beren | Nathan L. Kleinman Alek A. Drnach | Justin L. Schaneman | Eric M. Rosenberg (United States)
- 48 Outcome Predictability of Serum Uric Acid Among Non-Dialyzed Chronic Kidney Disease Patients – A Hospital Based Prospective Cohort Study [1093]

Ishfaq Rashid | Pramil Tiwari | Sanjay D Cruz Shivani Jaswal (India)

- 49 Changes in Weight Across the Life Span in Patients with Bipolar Disorder I Treated with Second Generation Antipsychotics [1094] Veena Hoffman | Harry Cheng | Thomas Brecht Jessica Paulus | Carl Marci (United States)
- 50 Real-World Experience of Hospitalized COVID-19 Patients Requiring Mechanical Ventilation [1095]

Lawrence Rasouliyan | Amanda G. Althoff | Vikas Kumar Stacey Long | Mitesh B Rao (United States)

51 – Incidence of Lyme Borreliosis in the Dutch General Practice Population: A Large-Scale Population-based Cohort Study Across the Netherlands Between 2015 and 2019 [1096] Hilda J. De Jong | Eline Houben

Fernie J. Penning-Van Beest | Josephina Kuiper
Emily Holthuis | Maxim Blum | Jozica Skufca
Margarita Riera-Montes | Bradford Gessner | Andreas Pilz
Andrew John Vyse | Elizabeth Begier | Mendwas Dzingina
Ron Herings | James H. Stark (Netherlands)

52 – Improving The Accuracy of Automated Gout Flare Ascertainment Using Natural Language Processing of Medical Records and Linked Medicare Claims Data [1097]

Kazuki Yoshida | Tianrun Cai | Lily Bessette | Erin Kim Su Been Lee | Luke E Zabotka | Alec Sun Julianna M. Mastrorili | Theresa A. Oduol | Jun Liu Daniel H. Solomon | Katherine P. Liao | Seoyoung Kim (United States) 53 – Prevalence, Characteristics, and Impacts of Frailty Measured by Multimorbidity Frailty Index Developed Using The ICD-9 CM and ICD-10 CM Codes Among Patients with Heart Failure in Taiwan: A Nationwide Cohort Study [1098] Hsi-Yu Lai | Shih-Tsung Huang | Liang-Kung Chen Fei-Yuan Hsiao (Taiwan)

54 – All-Cause Readmission Rates, In-Hospital Mortality, and Resource Use Outcomes for Patients with Type 1 Vs. Type 2 Diabetic Nephropathy in the United States [1099] Laura A. Clark | Rosa C. Banuelos | Evelyn Rizzo Koen Degeling | Kathy Belk (United States)

55 – Demographic Distribution of Parkinson's Disease (PD) and LRRK2-PD in the United States [1100]

Nancy Maserejian | Feiby L. Nassan | Isha Mehta Qiang Hou | Cathy Lally | Christopher Simpson Jeremy D. Furtado | Nicholas J Everage (United States)

56 – Incidence and Prognosis of Young Japanese Patients with Stroke: A Population-based Registry Database Research [1101] Sachiko Tanaka (Japan)

57 – Retrospective Study Estimating the Incidence of Acute Alcoholic Hepatitis in the United Kingdom [1102]

Olorunfemi A. Oshagbemi | Michelangelo N. Ribeiro Sigrid Behr | Olessia Zorina (Switzerland)

58 – Treatment Pathway and Mortality-Causing Mechanism of Treatment-Resistant Depression: A Six-Year Population-based Retrospective Cohort Study [1103]

Vivien Ky Chan | Edmund Cl Cheung | Min Fan | Hao Luo Francisco Lai | Rosa Wong | Ian Wong | Xue Li (Hong Kong)

59 – Incidence of Second Primary Malignancies (SPMs) in Relapsed/Refractory (R/R) B-Cell Non-Hodgkin's Lymphoma (NHL) and Multiple Myeloma (MM) Patients in England [1104]

Amanda M. Anderson | Montserrat Miret | Pooja Hindocha Lorena Cirneanu | Christina Lymperopoulou Emanuil Markov | Svetomir Hitov | Ferdinando E Vegni (United States)

126 | ICPE 2022 | Copenhagen, Denmark

#### DRUG UTILIZATION RESEARCH

- 60 Optimizing Monitoring Frequency for Clozapine Patients Across the Department of Veterans Affairs Health System [1105]
- Paul Fina | John Roehm | Amy Ou | Oluwabusayo Akinola Jennifer Martin | Francesca Cunningham (United States)
- 61 Antidepressants and Antipsychotics Before and During Pregnancy in the Netherlands [1106] Robiyanto Robiyanto | Ccm Schuiling -Veninga Jens H. J. Bos | Eelko Hak | Eugene Van Puijenbroek (Netherlands)
- 62 Immediate Release Fentanyl: Real-World Data on Abuse and Dependence in Spain [1107] Raquel Gutierrez Machin | Diana González | Alfonso Rodríguez | Pilar Rayón | Marta Monreal | Dolores Montero Consuelo Huerta (Spain)
- 63 Community Pharmacist-Led Interventions and Their Impacts on Patients with Type 2 Diabetes in Low-and Middle-Income Countries: A Scoping Review [1108]
- Indriastuti Cahyaningsih | Maarten Lambert | Taichi Ochi Fang Li | Xinyu Li | Petra Denig | Katja Taxis (Netherlands)
- 64 Antipsychotic Drugs Use in Spain During the COVID-19 Pandemic: A Time Series Analysis Using Autoregressive Integrated Moving Average (ARIMA) and Exponential Smoothing (ETS) Models [1109]
- Raquel Gutierrez Machin | Diana González | Belén Castillo Marta Monreal | Consuelo Huerta | Alfonso Rodríguez Dolores Montero (Spain)
- 65 Introducing the Dutch ISPE Student Chapter [1110]
- Melissa Leung | David Liang | Taichi Ochi | Ajda Bedene Helga Gardarsdottir (Netherlands)
- 66 Drug Utilization Patterns During Preconception and Pregnancy Period in Women with Systemic Lupus Erythematosus in Korea [1111] Yuseon Jung | Seung-Hun You | Sun-Young Jung (South Korea)
- 67 Opioid Utilization Profile in Brazilian Federal Hospitals [1112]
- Luciane Lopes | Patricia Krauze De Almeida | Claudia Garcia Serpa Osorio-De-Castro | Elaine Silva Miranda (Brazil)

- 68 Use of Symptomatic Treatments for Alzheimer's Disease Dementia [1113] Alicia Mcdonald | Julia Dibello | Wenjun Zhong Jina Swartz | Xinyue Liu (United States)
- 69 The Issue of Antibiotic Combinations Prescribing in Outpatients in Syria [1114] Ana Tomas | Saleh Aljadeeah (Serbia)
- 70 Antimicrobial Use in Sweden During the COVID-19 Pandemic: Prescription Filling and Inpatient Care Requisition Patterns [1115] Aya Nakitanda | Pär Karlsson | Lukas Löfling Carolyn Cesta | Ingvild Odsbu (Sweden)
- 71 Assessments of Potential Adverse Drug Reactions According to a Trigger Tool -A Descriptive Analysis [1116] Johan Lönnbro | Lina Holmqvist | Elisabeth Persson Per Thysell | N. David Åberg | Susanna M Wallerstedt (Sweden)
- 72 Trends and Disparities in Real-World Biomarker Testing and Overall Survival (OS) Among US Patients with Advanced Non-Small Cell Lung Cancer (aNSCLC), 2015–2020 [1117] Wenzhen Ge | Scott Antonia | Ning Wu | Ruben Gw Quek Hilary Dietz | Jean-Francois Pouliot | Jessica Jalbert James Harnett (United States)
- 73 Persistence and Adherence to Antihypertensive Drugs in the Participants of Social Health Insurance Attending a Primary Care Clinic in Banjarmasin, Indonesia [1118] Alfi Yasmina | Haura Maulida Rahmatika | Farida Heriyani Djallalluddin Djallalluddin | Hendra Wana Nur'Amin (Indonesia)
- 74 Persistence and Adherence to Antidiabetic Drugs in Social Health Insurance Participants Attending a Primary Care Clinic in Banjarmasin, Indonesia [1119]
- Alfi Yasmina | Farida Heriyani | Muhammad Arifial Asyum Djallalluddin Djallalluddin | Hendra Wana Nur'Amin (Indonesia)
- 75 Use of Psychotropic and Antidepressant Medicines in the Brazilian Amazon: Analysis of Two Cross-Sectional Population-based Studies, 2015 and 2019 [1120]
- Tais Freire Galvao | Gustavo Magno B. Tiguman Marcus Silva (Brazil)

76 – Roll-Out of HIV Pre-Exposure Prophylaxis Use in France: A Nationwide Study from 2016 to 2021 [1121]

Sophie Billioti De Gage, | David Desplas Rosemary Dray-Spira (France)

77 – Facilitators & Barriers of Medication Adherence Amongst the Geriatric: A Developing Country Scenario [1122]

Chalasani Sri Harsha | Ramesh Madhan | Prathibha Pereira Anmaria Thomas | Steby Mol Stephen Mohamed Dharvees T. | Sandy Crasta D. Jehath M. Syed (India)

78 – Will The Implementation of ISO/CEN Standards for Global Identification of Medicinal Products (IDMP) Make Any Difference for Pharmaco-Epidemiology? [1123]

Robert H. Vander Stichele | Miriam Sturkenboom Carlos Duran | Luc Nicolas | Dipak Kalra (Belgium)

79 – Risk of Major Adverse Cardiovascular Events in Patients with Rheumatoid Arthritis Using Janus Kinase Inhibitors [1124]

Seung-Hun You | Soo-Kyung Cho | Yeo-Jin Song Yoon-Kyoung Sung | Sun-Young Jung (South Korea)

80 – Systemic and Biologic Therapy in Atopic Dermatitis [1125]

Lawrence Rasouliyan | Amanda G. Althoff | Vikas Kumar Stacey Long | Carla Zema | Mitesh B Rao (United States)

81 – A Pharmacoepidemiologic Study of Antibiotics Prescription Patterns in a Tertiary Care Hospital [1126]

Sherif Eltonsy | Payam Peymani | Paria Oskuie Navid Omidifar | Alekhya Lavu (Canada)

82 – Utilization, User Characteristics, and Adverse Outcomes of Insulin Glargine Originators and Follow-on Drug in Patients with Diabetes in the US [1127]

Aaron B. Mendelsohn | Young Hee Nam | James Marshall Cara Mcdermott | Sengwee Toh | Cate Lockhart (United States)

83 - Angiotensin Converting Enzyme Inhibitors-Related Adverse Drug Reactions and the Risk of Subsequent Cardiovascular Events and All-Cause Mortality: A Retrospective Cohort Study in the United Kingdom [1128]

Widya Norma Insani | Cate Whittlesea | Chengsheng Ju Kenneth Man | Hassan Hasan Alwafi | Matthew Adesuyan Sarah Chapman | Li Wei (United Kingdom)

128 | ICPE 2022 | Copenhagen, Denmark

84 – Comparing Diabetes Care Outcomes of the Centrally Organized Hoorn Diabetes Care System with Regular Care by General Practitioners in the Netherlands [1129]

Jetty Overbeek | Karin Swart | Emma Van Der Pal Marieke Blom | Joline Beulens | Giel Nijpels | Petra Elders Ron Herings (Netherlands)

85 – Trajectories of Concurrent Opioid and Benzodiazepine Use and Associated Opioid Overdose Risk Among Arizona Medicaid Beneficiaries [1130]

Weihsuan Jenny Lo-Ciganic | Seonkyeong Yang Ching-Yuan Chang | Juan Hincapie-Castillo | Walid Gellad Bobby Jones | Jeannie Lee | James Huang Debbie Wilson | Gary Reisfield | Chian Kwoh Khoa Nguyen | Chris Delcher | Christopher Harle Yong Ge | Ronald Shorr | Pei-Lin Huang | Lauren Adkins (United States)

86 – Antihyperglycemic Use in Hemodialysis-Dependent Kidney Failure [1131] Til Stürmer | Klara Klein | Virginia Pate Magdalene M. Assimon | John Buse | Jenny Flythe (United States)

87 – Understanding Opioid Use Prior to and Immediately Following Cancer Diagnosis Using Group-based Trajectory Models (GBTM) [1132] Benjamin Daniels | Tim Luckett | Michael O Falster Winston Liauw | Natasa Gisev | Sallie-Anne Pearson (Australia)

88 – Dynamic Pattern of Anti-Epileptic Drug During Pregnancy Among Women with Epilepsy by Using Linking Database in Taiwan [1133] Ju-Ling Chen | Yea-Huei Kao Yang | Ching-Lan Cheng (Taiwan)

89 - Impact of the COVID-19 Controlled Drugs and Substances Act Exemption on Pharmacist Prescribing of Opioids and Benzodiazepines in Ontario: A Cross-Sectional Time-series Analysis [1134]

Mina Tadrous | Ann Chang | Shanzeh Chaudhry Daniel Mccormack | Tara Gomes | Anisa Shivji (Canada)

90 – International Trends in Prescription Opioid Sales Among Developed and Developing Countries Prior To, and During the COVID-19 Pandemic: A Cross-Sectional Analysis of 66 Countries [1135]

Mina Tadrous | Tara Gomes | Katie Suda Katherine Callaway Kim | Ria Garg (Canada)

91 – Global Extent of the Valsartan Drug Recall and Its Effect on Antihypertensive Drug Use: A Multi-National Study [1136]

Mina Tadrous | Yuna Choi | Katie Suda Inmaculada Hernandez | Jared Magnani (Canada)

92 – Risk of Drug-Related Upper Gastrointestinal Bleeding in the Total Population of the Netherlands: A Time-trend Analysis [1137]

Ajda Bedene | Eveline La Van Dorp | Frits R. Rosendaal Albert Dahan | Willem M Lijfering (Netherlands)

93 – Melatonin Use Among Children, Adolescents, and Young Adults: A Danish Nationwide Drug Utilization Study [1138]

Mette Bliddal | Helene Kildegaard | Lotte Rasmussen Martin Ernst | Poul Jørgen Jennum | Stine Mogensen Anton Pottegård | Rikke Wesselhoeft (Denmark)

94 – An Epidemiological Evaluation of Topical Ophthalmologic Prescriptions Across Age Spectrums Using US Claims Database: 2005 to 2019 [1139]

Scott M. Vouri | Phuong Tran | Maryam Deravi | Eric Grieser Almut Winterstein (United States)

95 – The Trends of Racial/Ethnic Disparities in Pain Treatment Among Older Cancer Patients in the US from 2007-2016 [1140]

Macarius Donneyong | Mohamed Elsaid | Ashley Felix (United States)

96 – Trends in Insulin Types and Devices Used by Adults with Type 2 Diabetes in the United States, 2016 to 2020 [1141]

James Heyward | Sudipa Sarkar | G. Caleb Alexander Rita Kalyani (United States)

97 – Drug Utilization Pattern Among Patients with Benign Prostatic Hyperplasia in Korea: A Large Cohort Study [1142]

Nakyung Jeon | Minjune Yang (Republic of Korea)

98 – Primary Non-Adherence to Biologics and Immunomodulatory Therapies for Rheumatoid Arthritis, Psoriatic Arthritis, and Spondyloarthritis Using Linked EHR and Pharmacy Claims Data [1143] Jeffrey Curtis | Yujie Su | Cassie Clinton | Patrick Stewart Bryant England | Fenglong Xie (United States)

99 – Group-based Trajectory Modeling of Medication Refill Patterns of Novel Oral Anticoagulant (NOACs): An Analysis of the Phollow Cohort [1144]

Antonio Teixeira Rodrigues | José Guerreiro | Carla Torre (Portugal)

100 – Prevalence and Determinants of Over- and Undertreatment of Thyroid Dysfunctions in the Rhineland Study [1145]

Nersi Alaeddin | Rutchanna Ms Jongejan | Robin P Peeters Yolanda B. De Rijke | Monique Mb Breteler Folgerdiena M. De Vries (*Germany*)

101 – Barriers and Enablers of Decision-Making Considering Use of Antidepressants – A Mixed-Method Study Among Pregnant and Postpartum Women with a Mental Illness [1146]

Fatima Tauqeer | Angela Lupattelli | Anne Moen (Norway)

102 – A Point Prevalence Study of the Use of Antibiotics at Six Tertiary Care Hospitals in the Kathmandu Valley, Nepal [1147]

Nisha Jha | Bibechan Thapa | Samyam Bikram Pathak Akrity Pandey | Estory Pokhrel | Pathiyil Ravi Shankar Shital Bhandary | Ganesh Dangal (Nepal)

103 – Persistent Opioid Use in Lymphoma Survivors Following Treatment [1148] Katherine Stafford | Anita J. Kumar | Virginia Pate Alison Loren | Alan Kinlaw (United States)

104 – The Effects of a Patient-Centered Communication Training on Identifying Drug Related Problems – A Pre and Post Intervention Study in Pharmacy Practice in Denmark and the Netherlands [1149]

Ellen Van Loon | Stijn Crutzen | Ulla Hedegaard Ramune Jacobsen | Armin Andersen | Marcia Vervloet Laura Schackmann | Liset Van Dijk | Susanne Kaae Katja Taxis (Netherlands)

106 – The Effects of Virtual Care Use on Prescription Drug Claims Among Older Adults with Dementia Before and During COVID-19 [1151] Cherry Chu | Vess Stamenova | Janette Brual Jiming Fang | Cathleen Fleury | Onil Bhattacharyya

Mina Tadrous (Canada)

107 – Association of The Swissmedic Safety Alert Regarding Skin Cancer and The Use of Hydrochlorothiazide and Other Antihypertensives in Switzerland [1152]

Tamino Zappalà | Anton Pottegård | Carola A. Huber Christoph Meier | Julia Spoendlin (Switzerland)

108 - Self-Reported Challenges Obtaining Ongoing Prescription Opioids Among Australians with Chronic Non-Cancer Pain [1153]

Ria E Hopkins | Gabrielle Campbell | Louisa Degenhardt Nicholas Lintzeris | Briony Larance | Suzanne Nielsen Natasa Gisev (Australia)

109 – Use of Fingolimod and Teriflunomide in Women of Childbearing Age and During Pregnancy in Germany [1154]

Katharina Platzbecker | Bianca Kollhorst | Ulrike Haug (Germany)

110 – Psychotropic Medication Use After the COVID-19 Pandemic Transition to Telepsychiatry Services Among the Privately Insured in the United States [1155]

Alejandro Amill-Rosario | Haeyoung Lee Chengchen Zhang | Susan Dosreis (United States)

111 - Mortality Consequences of Misuse of Psychoactive Prescription Drugs in Portugal – The MisuMedPT Project [1156]

Ana Araujo | Carolina Bulhosa | José Guerreiro João Goulão | Ana Martins (Portugal)

112 – Profile of Antiplatelet Use in Patients After Myocardial Infarction in a General Hospital in Banjarmasin During 2016-2020 [1157] Pandji Winata Nurikhwan | Muhammad Nur Mahmudi

Alfi Yasmina | Diallalluddin Diallalluddin Dwi Laksono Adiputro (Indonesia)



113 – Profile of Antihypertensive Class Drug Usage in Post-Myocardial Infarction Patients in a General Hospital in Banjarmasin During 2016-2020 [1158]

Pandji Winata Nurikhwan | Djallalluddin Djallalluddin Muhammad Nu'man Akmal | Alfi Yasmina Dwi Laksono Adiputro (Indonesia)

114 – Impact of National Negotiation and "4+7" Pilot Pooled Procurement on Hepatitis B Antiviral Treatment in Shanghai, China [1159]

Shiyang Liu | Hanchao Cheng | Jing Sun | Simon Luo Linh-Vi Le | Zhongdan Chen | Polin Chan (China)

115 – Utilization of Biologics Used for Plague Psoriasis: A Descriptive Study [1160]

Nanna Engel-Andreasen | Jesper Hallas | Peter Jensen Alexander Egebjerg | Mette Reilev (Denmark)

116 – Sex Differences Among Users of NSAIDs and Opioids During COVID-19 Pandemic in Manitoba, Canada [1161]

Roseanne Offiah | Laila Nabil Mahmoud Helmy Aboulatta Payam Peymani | Basma Aloud | Kaarina Kowalec Christine Leong | Joseph Delaney | Jamie Falk Silvia Alessi-Severini | Sherif Eltonsy (United Kingdom)

117 – Susceptibility Reporting and Antibiotic Prescribing for UTIs in The Inpatient Setting: A Nudge Toward Improved Stewardship [1162] Madison Ponder | Kevin Alby | Lindsay M Daniels Ashlyn M. Norris | Alan Kinlaw (United States)

118 – Disparities and Changes in PReP Coverage for HIV Prevention Before and During the COVID-19 Pandemic in the US [1163] Mahdi Fallahi | Jenny Guadamuz | Carter Mccormick Dima Qato (United States)

119 – Use of Psychoactive Medicines in Portugal: A Regional Retrospective Cross-Sectional Study – The MisuMedPT Project [1164]

Ana Araujo | Carolina Bulhosa | José Guerreiro João Goulão | Ana Martins (Portugal)

120 – A Multivariate Interrupted Time Series Analysis Assessing the Impacts of Half-Pack Sizes and Increased Access Restrictions on Publicly Subsidised Opioids in Australia [1165] Forrest C. Koch | Jake Olivier | Sallie-Anne Pearson Benjamin Daniels (Australia)

121 – Prescribing Patterns of Codeine and Alternatives in Children Across Five EEA Countries Between 2010 and 2017 [1166] Kelly Plueschke | Robert Flynn | Aikaterini Christina Deli Patricia García-Poza | Miguel-Angel Macia-Martinez David B. Olsen | Rosemary Dray-Spira | Chantal Quinten (Netherlands)

122 - Personalized Prescribing in Type 2 Diabetes Following The 2015 UK Treatment Guidelines: Description of Non-Insulin Anti-Diabetic Drug (NIAD) Utilization and Polypharmacy Patterns [1167]

Maria Luisa Marques De Sa Faquetti Adrian Martinez De La Torre | Theresa Burkard Andrea Burden (Switzerland)

123 – Evaluation of Antimicrobial Stewardship Metrics in Medical Intensive Care Unit: A Prospective Interventional Study [1168] Rekha B. | Ramesh Madhan | Chalasani Sri Harsha Jehath M. Syed | Subhash Chandra Bj | Sumana M. N. (India)

124 – Trends in Dispensing and Utilisation of Tapentadol in Australia [1169] Ximena Camacho | Andrea Schaffer | Nicholas A. Buckley Nicole Pratt | David Henry | Sallie-Anne Pearson (Australia)

125 – The Impact of Polypharmacy on Restarting Antidepressant Treatment in Individuals with Comorbid Depression and Type 2 Diabetes: A UK Primary Care Cohort Study [1170] Annie Jeffery | Kate Walters | David Osborn | Ian Wong Joseph F F Hayes (United Kingdom)

126 – Pharmacoepidemiologic Study on the Use of Psychiatric Medicines in Greece During the Period of 2015-2020 [1171]

Foteini Dermiki-Gkana | Panagiotis Nikolaos Lalagkas Christos Kontogiorgis | Theodoros Constantinides Dimitra Hadjipavlou-Litina (Greece)

#### INFORMATICS

127 – Drug Repurposing Using Real-World Data: A Scoping Review [1172]

George SQ Tan | Erica K Sloan | Pete Lambert Carl M. Kirkpatrick | Jenni Ilomaki (Australia)

128 – Agreement Between Interaction Alerts in Different Sources Regarding Classification and Suggested Clinical Management [1173]

Carina Tukukino | Walaa Hamdan | Frida Wallin Hybelius Anna L. Eriksson | Susanna M. Wallerstedt (Sweden)

129 – Characterization of a Novel Oncology Electronic Health Records-Derived Data Linkage to Commercial Claims [1174]

Mustafa Ascha | Prakirthi Yerram | Jocelyn Wang Samantha Reiss | Trevor Royce | Sarah Brake Gregory Calip (United States)

130 – Linkage of German Healthcare Administrative Claims and The MSDS 3D Registry for Enhancing Real-World Evidence Capabilities in Multiple Sclerosis [1175]

Erwan Muros Le Rouzic | Marco Ghiani | Evi Zhuleku Licinio Craveiro | Anja Dillenseger | Tjalf Ziemssen Ulf Maywald | Thomas Wilke (Switzerland)

131 – Al Literature Search to Support Rapid Analytics in Epidemiology [1176]

Chris Leo Pashos | Matthew Michelson | Tiffany Chow Jacob Kahrs | Nidia Rodriguez-Ormaza | Rennie Joshi Changxia Shao | Mehmet Burcu | Nicole Cossrow (United States)

132 – Integrating Healthcare Databases to Establish Screening Cohort for Asian Nomadic Descendants in China Inner Mongolia Autonomous Region: Cohort Profile of Scan-China [1177]

Yuelin Yu | Xuefeng Lai | Yunjing Zhang | Guozhen Liu Ruogu Meng | Jing Ren | Mingyuan Wang | Siyan Zhan Yunfeng Xi | Shengfeng Wang (China)

133 – Distilling a High Precision Drug Adverse Effect Benchmark Using Wikipedia's Wisdom of The Crowd [1178]

Yonatan Bilu | Chen Yanover (Israel)

134 – Predicting Risk-Stratified Unmet Needs Among Adolescents and Young Adult Cancer Survivors in USA [1179]

Sujin Kim | Gyeon Oh (United States)

135 – Engagement with Digital Health Technologies for Self-Monitoring of Symptoms Among Adolescents with Mood Disorders Treated with Antidepressants [1180]

Wendy Camelo Castillo | Gloria Reeves | Susan Dosreis Oluwadamilola Onasanya | Udim Damachi Margaret Woodbury | Martine Solages | Michael C. Davis Leonard Sacks (United States)

136 – Data-Driven Approaches to Improve Phenotype Sensitivity Using EHR Data [1181]

Sengwee Toh | David Carrell | Joshua C Smith
Daniel Park | Jill Whitaker | Michael F Mclemore
Elizabeth E Hanchrow | Dax Westerman | Joshua Osmanski
Robert Winter | Saranrat Wittayanukorn
Danijela Stojanovic | Arvind Ramaprasan | Ann Kelley
Mary Shea | David J Cronkite | Jing Zhou | Yueqin Zhao
Kevin B. Johnson | David Aronoff (United States)

137 – Study Scripts Supporting Multiple Common Data Models [1182]

Rosa Gini | Olga Paoletti | Romin Pajouheshnia Patrick Souverein | Nicolas H Thurin | Vera Ehrenstein Manuel Barreiro-De Acosta | Miriam Sturkenboom Lia Gutierrez | Susana Perez-Gutthann (Italy)

138 – Barriers and Facilitators in Reporting Medication Errors: A Nurse's Perspective [1183] Chalasani Sri Harsha | Ravina Ravi | Janet Mathias Ramesh Madhan (India)

139 – Developing a COVID-19 Vaccine Distribution and Tracking System for The Veterans Health Administration [1184]

Ashir Shumunov | Jennifer Martin | Francesca Cunningham (United States)

140 – The Utility of Data Tokenization for Real World Data (RWD) Access in Clinical Trials [1185]

Paul Petraro | Carla Heywood | Christian Niyonkuru Ling Zhang | Devin Gilliam | Gordon Cummins (United States)

### **METHODS IN** PHARMACOEPIDEMIOLOGY

141 – Scalable Feature Engineering from **Electronic Free Text Notes to Supplement** Confounding Adjustment of Claims-based Pharmacoepidemiologic Studies [1186]

Richard Wyss | Joseph M. Plasek | Li Zhou | Lily Bessette Sebastian Schneeweiss | Jeremy Rassen Theodore Tsacogianis | Joshua Lin (United States)

142 - Validation of Safety Outcomes in Routinely Collected Data: Lessons Learned from a Multinational Post-Approval Safety Study [1187]

Patrick J Arena | Kui Huang | Lukas Löfling Shahram Bahmanyar | Jingping Mo | Stephen Schachterle Anthony Nunes | Elisabeth Smits | Rosa Juuti Fabian Hoti | Pasi Korhonen | Kasper Adelborg Jens Sundbøll | Torben Rasmussen | Anders Løkke Vera Ehrenstein (United States)

143 – Validation of a Case-Finding Algorithm for **Endometrial Cancer Using ICD10 Diagnostic** Codes in Insurance Claims [1188]

Djeneba Audrey Djibo | Andrea Margulis Cheryl N. Mcmahill-Walraven | Catherine Saltus Patricia Shuminski | James A. Kaye | Catherine B. Johannes Brian Calingaert | Mark Libertin | Shelli Graham (United States)

144 - Treatment Effects of Angiotensin-Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in People Underrepresented from The ONTARGET Trial: Analysis of Routinely Collected Data Using Trial Replication Methods [1189]

Paris J. Baptiste | Angel Wong | Anna Schultze Marianne Cunnington | Johannes F. Mann | Catherine Clase Clémence Leyrat | Laurie Tomlinson | Kevin Wing (United Kingdom)

145 – Imputation of Missing Diagnosis Date and Implications for Analyses in Registries: A Simulation Study [1190]

Elissa H. Wilker | Ema Rodrigues | J. Alexander Cole (United States)

146 – Trajectories of Severity Pattern Among Patients with Systemic Lupus Erythematosus: A Retrospective Cohort Study [1191]

Seung-Hun You | Soo-Kyung Cho | Yoon-Kyoung Sung Sun-Young Jung (South Korea)

147 – A Comparison of Structured Algorithms for Identifying Men with Metastatic Prostate Cancer within the Veterans Affairs Health Care System [1192]

Irene Shui | Jessica L. Janes | Shannon Stock Michael Burns | Justin Waller | Amanda M. De Hoedt Sameer Ghate | Jeri Kim | Thomas J. Polascik Stephen J. Freedland (United States)

148 - External Validation of a Machine Learning Algorithm to Distinguish Death from Disenrollment in Claims Data [1193]

Bethany Diprete | Jessica Young | Nabarun Dasgupta Kenneth Pack | Toska Cooper | Sarah Bloemers Brian Pence | Debra E. Irwin | Teresa B. Gibson (United States)

149 - Two Component Claims-based Algorithm to Identify Heart Failure Ejection Fraction Phenotypes [1194]

Phillip R. Hunt | Karolina Andersson-Sundell Hung-Ta Chen | Cindy Khordoc (United States)

150 - Multimorbidity Ascertainment in Health Administrative Data and Role of the Time Window [1195]

Marc Simard | Elham Rahme | Marjolaine Dubé Véronique Boiteau | Caroline Sirois (Canada)

151 – Use of Patient Profiles to Validate Acute Myocardial Infarction in Claims Data [1196] Tania Schink | Katharina Platzbecker | Annemarie Voss Jonas Reinold | Anne Elbrecht | Wolfgang Biewener Daniel Prieto-Alhambra | Annika Joedicke (Germany)

152 – A Step-By-Step Guide for Causal Study Design When Estimating Treatment Effects Using Real-World Data [1197]

Sarah Hoffman | Nilesh Gangan | Xiaoxue Chen Joseph L. Smith | Arlene K Tave | Yiling Yang Michael Grabner (United States)

153 – A Pragmatic Comparison of Logistic Regression vs. Machine Learning Methods for Propensity Score Estimation [1198]

Daniel Beachler | Xiaodan Mai | Chia-Chen (Jenny) Teng Yuewen Gao | Samuel B Governor | Xintong He Sarah Hoffman | Geetika Kalloo (United States)

154 – Utilization and Timing of Z3A Codes in Pregnancy to Estimate Gestational Age Using Administrative Claims [1199]

Liza Gibbs | Clark Jackson | Debra E Irwin
Dawn G Albright | Emily Rubinstein | Amanda Patrick
(United States)

155 – The Data Analysis and Real-World Interrogation Network (DARWIN EU®):
A Federated Network of Data Sources and Services in the European Union [1200]
Xavier Kurz | Andrej Segec | François Domergue Peter Arlett (Netherlands)

156 – A Longitudinal Early-Indicator of Overall Survival Based on Prognostic Scores [1201] Hugo Loureiro | Tim Becker | Anna Bauer-Mehren (Germany)

157 Standardizing to Specific Target Populations in Distributed Networks: A Proof of Concept [1202]
Michael Webster-Clark | Robert Platt (Canada)

158 – Adapting Sufficient Component Cause Models to Pharmacoepidemiology: Incorporating Continuous Variables [1203]

Michael Webster-Clark | Imaani Easthausen | Ulka Campbell Elizabeth M Garry | Nicolle Gatto (Canada)

159 – Development of a Feasibility and Conceptual Design Framework for Comparative Effectiveness Research [1204]

Gema Requena | Victoria Banks | Alexandrosz Czira Robert Wood | Theo Tritton | Olivia Massey | Rosie Wild Afisi Ismaila (United Kingdom)

160 – Random Forests Quantile Classifier, a Novel Proposal to Account for Imbalanced Data Sets in The Prediction Model Development: A Feasibility Study Using Retrospective Registry Data of Kawasaki Disease in Japan [1205] Masato Takeuchi (Japan)

161 – Bias in Observational Studies on the Effectiveness of Hydroxychloroquine in COVID-19 [1206]

Mirjam Hempenius | Rolf Hh Groenwold | Anthonius De Boer Olaf H. Klungel | Helga Gardarsdottir (Netherlands)

162 – Selective Sampling: A Novel Approach to Simulating Biased Samples for Methods Research [1207]

Megan Delgado | Chase Latour | I-Hsuan Su | Virginia Pate Charles Poole | Jessie Edwards | Til Stürmer Jennifer Lund | John Concato | Jie Li | Kenneth Quinto Nahleen Lopez | Michele Jonsson Funk (United States)

163 – Development and Evaluation of The Algorithm Certainty Tool KIT (ACE-IT) to Evaluate Safety Outcomes Using Electronic Medical Record and Claims-based Algorithms [1208] Sonal Singh | Julie Beyrer | Xiaofeng Zhou Joel N. Swerdel | Raymond A. Harvey | Kenneth Hornbuckle Leo Russo | Kanwal Ghauri | Ivan H Abi-Elias Carla V. Rodriguez-Watson (United States)

164 – Benzodiazepine Drug-Drug-Drug Interactions and Unintentional Traumatic Injury: Pharmacoepidemiologic Screening to Detect Three-Way Drug Interaction Signals [1209] Charles Leonard | Cheng Chen | Sean Hennessy Colleen Brensinger | Emily Acton | Warren Bilker Todd Miano | Thanh Phuong Pham Nguyen (United States)

165 – Length of Lookback Period for The Charlson Comorbidity Index and Prediction of Mortality Among Hip-Fracture Patients in Denmark [1210]

Morten Madsen | Morten Schmidt | Alma Becic Pedersen Vera Ehrenstein | Johnny Kahlert (Denmark)

166 – MINERVA: Metadata for Data Discoverability and Study Replicability in Observational Studies [1211]

Lia Gutierrez | Rosa Gini | Romin Pajouheshnia
Eleanor Hyde | Morris A. Swertz | Miriam Sturkenboom
Andrea Margulis | Carla Franzoni | Alejandro Arana
Vera Ehrenstein | Karin Gembert | Ella Jansen
Ron Herings | Nicolas H Thurin | Igor Locatelli
Janja Jazbar | Špela Žerovnik | Mitja Kos | Steven Smit
Sirje LindAndres Metspalu | Silvia Zaccagnino
Maria Paula Busto | Bas Middelkoop
Manuel Barreiro-De Acosta | Francisco Sanchez-Saez
Clara Rodriguez-Bernal | Gabriel Sanfelix-Gimeno
Beatriz Poblador-Plou | Jonás Carmona-Pírez
Antonio Gimeno-Miguel | Miguel Gil | Wiebke Schaefer
Ulrike Haug | Stefania Simou | Chantal Quinten
Ana Cochino | Paolo Alcini | Xavier Kurz
Susana Perez-Gutthann (Spain)

167 – Updated Core Competencies in Pharmacoepidemiology to Inform Contemporary Curricula and Training for Academia, Government, and Industry [1212]

Vicki Osborne | Deborah Layton | Amie Goodin Almut Winterstein | Andrew Bate | Catherine Cohet Xavier Kurz | Lisa Pont | David Moeny | Olaf H Klungel Simone Pinheiro | John Seeger | K. Arnold Chan Joshua Brown (United Kingdom)

168 – Poor Pain Control and Risk for Anxiety and Sleeping Disorders Among Older Patients with Dementia [1213]

Nistha Shrestha | Yu-Jung Jenny Wei (United States)

169 – Identification of Obesity and Tobacco Use in Claims Compared to Electronic Health Record (EHR) Data [1214]

Casie Horgan | Po-Yin Chang | Meg Her Rebecca Hawrusik | Alexander Peters | Catherine Corey David Graham | Judith Maro | Noelle M Cocoros (United States)

170 – Racial and Ethnic Categories in Propensity Score Analyses: An Application in US Medicare Beneficiaries Initiating DPP4 Inhibitors vs Sulfonvlureas [1215]

Alan Kinlaw | Alan Ellis | Chantel Martin Michael Webster-Clark | Michael Jonsson Funk Charles Poole | Virginia Pate | Qoua Her | Madison Ponder Jennifer Lund | Til Stürmer (United States)

171 - Concordance Between Subgroup Disproportionality Scores and PRAC Discussions of Subgroup Risk [1216]

Olivia Mahaux | Gregory Powell | François Haguinet Paulina Sobczak | Namrata Saini | Allen Barry Amira Mustafa | Andrew Bate (Belgium)

172 – Impact of Live Attenuated Measles, Mumps and Rubella (MMR) Vaccines on The Risk of Hospitalization with COVID-19 in Children: A Cohort Study of 7 million Children in France [1217] Epiphane E. Kolla | Jérôme Drouin | David Desplas Marion Taine | Alain Weill | Mahmoud Zureik Lamiae Grimaldi-Bensouda (France)

173 – Safety-Related Drug Label Changes After Large Cardiometabolic Trials, A Review of European Public Assessment Reports [1218] Viktoriia Starokozhko | Fatima Tarrahi | Patrick Jws Vrijlandt Peter Gm Mol (Netherlands)

174 – Evaluation of Changes in Lung Cancer Care Patterns During The COVID-19 Pandemic [1219] Thanh Gn Ton | Lu Chen | Huong Trinh | Rvan Ross Lauren E. Johns | Shivani K Mhatre (United States)

175 – PHARMACOM-EPI: A Framework for Integrating Pharmacometric Modelling into Pharmacoepidemiological Research Using Real-World Data [1220]

Hiie Soeorg | Eva Sverrisdóttir | Morten Andersen Trine Meldgaard Lund | Maurizio Sessa (Denmark)

176 – Quantitative Bias Analysis in Comparative Effectiveness Research: A Cautionary Word [1221] James Weaver | Patrick Ryan | Victoria Y. Strauss Marc Suchard | Joel N. Swerdel | Daniel Prieto-Alhambra (United States)

177 – Justification for The Acceptance of **Uncontrolled Pivotal Trials to Support** Marketing Authorisation of Medicines in Europe (1995-2020) [1222]

Jasmin Schelhaas | Lourens Bloem | Jarno Hoekman Aukje Mantel-Teeuwisse | Paula B. Hennik | Carla Herberts (Netherlands)

178 – EHR Continuity in a Multicenter EHR Data Repository: Potential Implications for Studies Evaluating COVID-19 Therapy [1223]

Hythem Sidky | Jessica Young | Andrew Girvin | Eileen Lee Kenneth Wilkins | Soko Setoguchi | Yu Shao Michele Jonsson Funk (United States)

179 – Developing a Framework for Rapid Analytics: A Self-Controlled Case Series Study Replication [1224]

Caitlin Dodd | Sara Burns | April Duddy Marten Van Den Berg | Tiffany Siu Woodworth (United States)

180 – Patient Satisfaction, Outcomes and **Experience Measures Amongst Patients** Receiving Propofol: A Patient Reported Outcomes Measure Study [1225]

Arushi Garlapati | Chalasani Sri Harsha | Jalapa Pradhan Spoorthy S. Murthy | C. Rozampuii | Mohan C. H. Ramesh Madhan | Cl Gurudath | Jehath M. Syed (India)

### PEDIATRIC PHARMACOEPIDEMIOLOGY

181 – Acid Suppressive Medication and The Incidence of Chronic Childhood Immunological Diseases: A Scoping Review [1226] Joanna Madej | Yingting Zhang | Tania J. Atanassova Sarah E Mcguire | Daniel B Horton (United States)

182 – Tolerated Juvenile Idiopathic Arthritis Disease Activity States in The Childhood Arthritis and Rheumatology Research Alliance Registry [1227]

Melissa L Mannion | Fenglong Xie | Timothy Beukelman Jeffrey Curtis for the Carra Registry Investigators (United States)

183 – Prevalence and Factors Associated with Guideline Concordant Antiviral Treatment in Children at High Risk for Influenza Complications [1228]

James Antoon | Matthew Hall | James Feinstein Kathryn Kyler | Samir Shah | Sonya Tang Girdwood Jennifer Goldman | Carlos Grijalva | Derek Williams (United States)

184 – The Challenges with Identifying Pediatric Recurrent Wheezing in Real World Data [1229] Jacob Kahrs | Rennie Joshi | Nicole Cossrow Georges J. Nahhas | Patricia Saddier (United States)

185 – Prevalence of Childhood and Adolescent Overweight/Obesity in South Asian Countries: A Systematic Review and Meta-Analysis [1230] Dipika Bansal | Nagita Devi | Karamsetty D Babu Mohammed Safeer (India)

186 – Common Diagnoses, Procedures and Medications in The First Year of An Infant's Life [1231]

Bora Plaku | Stephen M. Ezzy | Monica Bertoia (United States)

187 – Continued Benefits of Pharmacological Treatment of ADHD on Unintentional Injuries: Emulation of a Target Trial with Swedish Real-World Data [1232]

Le Zhang | Laura Ghirardi | Patrick Quinn Brian D'onofrio | Henrik Larsson | Zheng Chang (Sweden) 188 – Healthcare Utilization and Treatment Among Newly Diagnosed and Prevalent Children with Juvenile Idiopathic Arthritis During the First Year of COVID-19 Pandemic in the US [1233]

Lauren E Parlett | Yiling Yang | Cecilia Huang Amanda Neikirk | Amy Davidow | Kevin Haynes Tobias Gerhard | Carlos D. Rose | Brian L. Strom Daniel B. Horton (United States)

189 – Epidemiology of Pediatric Ewing Sarcoma in the United States [1234]

Eric Wang | Charles Dharmani (United States)

190 – Trends in Antiviral Use for Influenza Among Children in the US Between 2010-2019 [1235]

Jyotirmoy Sarker | Abdullah Abdelaziz | Pei-Wen Lien
Carlos Grijalva | Derek Williams | Todd A. Lee

James Antoon (United States)

192 – Safety and Effectiveness of Inhaling
Different Dosage Recombinant Human
Interferon A1b for Bronchiolitis in Children:
A Systematic Review and Meta-Analysis [1237]
Jiefeng Luo | Mengting Yang | Linan Zeng
Xiangcheng Pan | Dan Liu | Sha Diao | Liang Huang
Ting Chen | Zhi-Jun Jia | Guo Cheng | Qin Yu
Lingli Zhang (China)

193 – Stimulant Drug Use in Children Before Six Years of Age and Antipsychotic Add-on Therapy: A Population Based Longitudinal Study [1238] Hans Juergen Gober | Kathy H. Li | Mahyar Etminan Bruce Carleton (Austria)

194 – Prescription Pattern of Empirical Antibiotic Used and The Factors Affecting Death in Children with Bacteremia in Taiwan [1239]

Lu Hsuan Wu | Chien-Chou Su | Wen-Liang Lin Ching-Yao Shih | Pei-Chin Lin | Mei-Hsien Lin Pai-Hsiu Chien | Ching-Lan Cheng (*Taiwan*)

195 – Differences in Psychotropic Drug Use Among Children and Adolescents in Scandinavia [1240]

Rikke Wesselhoeft | Anne Mette Skov Soerensen
Peter Jensen | Jacob Harbo Andersen | Johan Reutfors
Svetlana Skurtveit | Ingeborg Hartz | Kari Furu
Poul Jørgen Jennum | Carolyn Cesta
Katrine Strandberg-Larsen | Ardesheer Talati | Per Damkier
Anton Pottegård | Mette Bliddal
Lotte Rasmussen (Denmark)

196 – So Many Countries, So Many Customs: A Register-based Analysis of Conduct Disorder Prevalence and Treatment Patterns in Four Western Countries [1241]

Mette Bliddal | Christian Bachmann | Susan Dosreis Ingvild Odsbu | Oliver Scholle | Svetlana Skurtveit Annika Vivirito | Rikke Wesselhoeft Stephen Scott (Denmark)

197 – Maternal Antibiotics Use in Pregnancy and The Risk of Neurodevelopmental Disorders in Children: A Systematic Review and Meta-Analysis [1242] Le Gao | Hira Pirzada | Kenneth Man | Ian Wong (Hong Kong)

198 – Reports of Adverse Events Related with Second Generation Antipsychotics in Children in The FDA Adverse Event Reporting System (FAERS) [1243] Lorenzo Villa Zapata | Janese Bibbs | Mariah Crapps Ainhoa Gomez Lumbreras | Daniel Malone (United States)

199 – Potential Drug-Drug Interactions in Pediatric Patients with Cancer: A Hospital-based Prospective Study [1244] Sherif Eltonsy | Payam Peymani | Narges Zarsani Seyed Omid Reza Zekavat | Alekhya Lavu (Canada)

200 – Characterizing Infants in the Sentinel Distributed Database Mother-Infant Linkage Table [1245]

Ashley Martinez | James Marshall | Samantha Smith Danijela Stojanovic | Catherine Corey (United States)

201 – Characterizing Pediatric Members in the Sentinel Distributed Database [1246] Ashley Martinez | Emmanuel Ojo | Kimberly Barrett Samantha Smith | Danijela Stojanovic (United States)



202 – Pediatric Drug Safety Surveillance in Saudi Arabia: A Description of Adverse Drug Reactions from The Saudi Vigilance Database [1247] Meshael Alrasheed | Rayan Ibrahim Alolayet Fawaz F. Alharbi | Aljoharah M. Algabbani | Radwan Hafiz (Saudi Arabia)

203 – New Child and Adolescent Users of Psychotropic Medication After the Start of the COVID-19 Pandemic [1248]

Haeyoung Lee | Susan Dosreis | Chengchen Zhang Alejandro Amill-Rosario (United States)

204 – A Real-World Study of Incidence Rates of Safety Outcomes of Interest in Infants Aged 1 Month to < 1 Year and Patients Aged 1 to < 2 Years Treated with Intravenous Pantoprazole Sodium Using an Electronic Health Records Database from the US [1249]

Sampada K. Gandhi | Benjamin Taylor | Lexie Rubens Nileesa Gautam | Kevin D. Wolter | Nancy A. Sherman Kanti Chittuluru (*United States*)

#### **PHARMACOVIGILANCE**

205 – Role of Human Leukocyte Antigen in Anti-Epileptic Drugs Induced Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis: A Meta-Analysis [1250]

Girish Thunga | Asha K Rajan | Muhammed Rashid Manik Chhabra | Viji Chandran | Sreedharan Nair Ananth Kashyap | Rajesh Venkataraman (India)

206 – Evaluation of The Safety Information in "Fertility, Pregnancy and Lactation" Section of Product Information in Saudi Arabia [1251] Sara Waleed Almishari | Eman Ali Alghamdi Mona A. Almaghrabi | Nouf Alfadel | Fawaz F Alharbi (Saudi Arabia)

207 – Disproportionality Analysis for Post-Manufacturing Change Safety Monitoring of Biologics: Example of Insulin Lispro [1252] Ayad K Ali | John D. Ayres (United States)

208 – Overview of Biases Affecting the Interpretation of Signals Identified in Drug Safety Surveillance Systems [1253]

Ayad K. Ali (United States)

209 – A Systematic Process Using Robust Signal Detection and Contextualization Methods in Treescan® and E360® to Reduce False Positives in Routine Pharmacovigilance [1254]

Lockwood Taylor | Ruben Hermans | Bernadette Dwan Priscilla Velentgas | Elizabeth Powers (United States)

210 – Trends in FDA Post-Marketing Commitments and Requirements for Newly Approved Drugs, 2016-2021 [1255] Jayashri Desai | Jane C. Carsey | William Thatcher 211 – Non-Steroidal Anti-Inflammatory Drugs Use and Micronutrient Status [1256] Omar M. Albalawi | Abdulrahman Almarshad Adel A. Alrwisan (Saudi Arabia)

212 – Factors Associated with Under-Reporting of Adverse Drug Reactions: A Systematic Review [1257]

Carla Torre | Catarina Rego Costa | Patricia Abeijón Adolfo Figueiras | Maria Herdeiro (*Portugal*)

213 – A Clinical Pharmacist-Led Integrated Approach for The Evaluation of Drug-Related Problems Among Critically III Patients [1258] Chalasani Sri Harsha | Priya Aradhya | Ramesh Madhan Subhash Chandra Bj (India)

214 – Patient Reported Adverse Events Following Anaesthesia: A Patient Centric Study [1259] Chalasani Sri Harsha | Arushi Garlapati | Spoorthy S. Murthy C. Rozampuii | Jalapa Pradhan | Mohan C. H. | Cl Gurudath Ramesh Madhan | Jehath M. Syed (India)

215 – Prevalence, Attributes, and Risk-Factors of QT-Interval Extending Drugs & Drug-Drug Interactions in Cancer Patients: A Prospective Study in a Tertiary Care Hospital [1260]
Biswadeep Das | Aakash Agnihotri | Manjunath Bidarolli Chayna Sarkar (India)

216 – Bidirectional Relationship Between Urinary Retention and The Use of Antipsychotics [1261] Grace (Hsin Min) Wang | Scott M. Vouri | Edward Lai (United States)

(United States)

217 – Risk of Osteoporosis Associated with HMG-CoA Reductase Inhibitors in Patients with Dyslipidemia [1262]

Hyeri Yang | Eunmi Choi | Dayoung Shim | Bonggi Kim (South Korea)

218 – Safety and Effectiveness of N-Methyl-D-Aspartate (NMDA) Receptor Antagonists for Depression: A Narrative Review [1263] G. Caleb Alexander | Thomas J. Moore | Abdallah Alami Donald Mattison (United States)

219 – A Description of Nephrolitiasis Associated with Sodium Glucose Co-Transporter 2 Inhibitors Use: A Vigibase Study [1264]

Andreea Maria Farcas | Ioana Frent | Daniel Leucuta Camelia Bucsa | Cristina Mogosan (Romania)

220 - BBIBP-Corv Vaccine: An Analysis of Adverse Events on Health Personnel by a Peruvian Pharmacovigilance Center [1265] Yesenia Rodriguez | Anaís Lazarte | Raquel Delgado Violeta Saromo | Enrique Cachay | Tania Solis (Peru)

221 – Adverse Drug Reactions of Sulpha Drugs: High Burden, Adequate Treatment Outcome But Poor Reportage in Maiduguri, Northeast Nigeria [1266] Sulayman Tunde Balogun | Emmanuel N. Linus Bala Shamaki (Nigeria)

222 - Anti-NMDA Receptor Encephalitis and Vaccines [1267]

Thierry Trenque | Salomé Martin | Brahim Azzouz Federica Tralongo (France)

223 – A Description of Acute Renal Failure Associated with Sodium Glucose Co-Transporter 2 Inhibitors Use: A Vigibase Study [1268] Camelia Bucsa | Ioana Frent | Daniel Leucuta Andreea Maria Farcas | Cristina Mogosan (Romania)

224 - Psoriatic Conditions After Lithium Exposure: French Pharmacovigilance Data [1269] Thierry Trengue | Brahim Azzouz | Clara Khatib-Chahidi Federica Tralongo | Salomé Martin (France)

225 - Medication Related Problems Among Adult Diabetic Outpatients at a National Referral Hospital in Kenya [1270]

Sylvia Atisa Opanga | Mary A. Mundia | Eric M. Guantai Dorothy Aywak (Kenya)

226 – Determination of Predictors of Drug Related Problems Associated with Narrow Therapeutic Index Drugs [1271]

Ramesh Madhan | Charmi Chhatrala | Bhanu Kumar M. Chalasani Sri Harsha | Jehath M Syed (India)

227 – Comparison of Hemorrhagic Profile Amongst Direct Acting Oral Anti-Coagulants (DOACs): Risk Quantification by Using US FDA Adverse Event Reporting System (FAERS) [1272] Pudi Chiranjeevi | Saraswathy G. R. Subeesh Kulangara Viswam | Ann Mary Swaroop (India)

228 - Gastrointestinal Adverse Events Associated with Hedgehog Pathway Inhibitors: A Real-World Pharmacovigilance Study [1273] Adithya Shivakumar | Anjana Shenoy | Jovita Sharon Raksha Kamath | Lipin Lukose | Gursimran Kaur

229 – Investigating Self-Poisoning in The FDA Adverse Event Reporting System: Clinical Features and Lethal Dose Estimation [1274] Michele Fusaroli | Guido Pelletti | Valentina Giunchi Narmine Elena Necibi | Emanuel Raschi | Susi Pelotti Elisabetta Poluzzi (Italy)

Subeesh Kulangara Viswam (India)

230 – Tumor Lysis Syndrome Associated with Bruton's Tyrosine Kinase Inhibitor: A Disproportionality Analysis in a Spontaneous Reporting Database [1275] Subeesh Kulangara Viswam | Zeba Zeba Amrutha Shettigar | Aarushi Kheterpal | Ashwin Dhas Lipin Lukose | Gursimran Kaur (India)

231 – Adverse Effects Following Immunization (AEFI) of COVID-19 Vaccines in Two Tertiary Health Facilities in Lagos Nigeria [1276] Ibrahim Adekunle Oreagba | Adebowale Adewunmi (Nigeria)

232 - Purine Antimetabolites Associated with Pneumocystis Jiroveci Pneumonia: A Disproportionality Analysis in a Spontaneous Reporting Database [1277] Lipin Lukose | Gursimran Kaur | Beulah E Thomas Subeesh Kulangara Viswam (India)

233 – Cytomegalovirus Infection Reactivation in Multiple Myeloma Patients Administered Proteasome Inhibitor-combination Therapy: A Disproportionality Analysis in a Spontaneous Reporting Database [1278]

Gursimran Kaur | Lipin Lukose | Beulah E. Thomas Subeesh Kulangara Viswam (India)

234 – Features of Case Reports That Support Putative Causal Relationships Between Medicinal Products and Suspected Adverse Drug Reactions. Preliminary Results from a Scoping Review [1279]

Daniele Sartori | Jeffrey Aronson | Igho Onakpoya (Sweden)

235 – What Makes EU Regulators Want to Communicate About Drug Safety Signals: Results from an Online Survey Study [1280] Sonia Roldan | Douwe Postmus | Sieta De Vries Hans Hillege | Peter Mol (Netherlands)

236 – Signal Detection for Adverse Events of Dapagliflozin Using the Korea Adverse Event Reporting System Database [1281]

Suvin Park | Huieon Lee | Hee-Jin Kim | Na-Young Jeong Eunsun Lim | Nam-Kyong Choi (Republic of Korea)

237 – Dipeptidyl Peptidase-4 Inhibitors and Acute Pancreatitis - A Systematic Review of Descriptive Studies [1282]

Fathima Thashreefa Basheer | Leelavathi D. Acharya Girish Thunga | Rashmi Shetty | Viji Pulikkel Chandran Muhammed Rashid (India)

238 – QT Prolongation After the Combined Use of Haloperidol and Contraindicated Drugs: A Case/Non-Case Study Using Korea Adverse Event Reporting System (KAERS) Database, 2016-2020 [1283]

Dal Ri Nam | Da-Young Kim | Sun-Young Jung (South Korea)

239 – Performance of Subgrouped Proportional Reporting Ratios in the US Food and Drug Administration (FDA) Adverse Event Reporting System [1284]

Dan Dauner | Rui Zhang | Terrence Adam | Eleazar Leal Joel F. Farley (United States)

240 – Incidence Rate of Skin Cancers in Adult Patients with Atopic Dermatitis [1285]

Huifang Liang | Brenna Kirk | Dionna Attinson
Dongmu Zhang | Jianzhong Liu | Ryan Kilpatrick
(United States)

241 – Evaluation of Published Data on Risk Minimization Measures in the Gulf Region: A Systematic Review [1286]

Leena A. Al-Sheikh | Sadeem Fahad Alelayan | Haya Almalaq Nasser Alqahtani | Hadeel Alkofide | Rahaf Almesned Lujain K. Alnoghaimshi | Maryam Badah | Noura Altulahi (Saudi Arabia)

242 – Are Drug Safety Measures Harmonized? A Real-World Data from Three Regulatory Authorities [1287]

Sadeem Fahad Alelayan | Leena A. Al-Sheikh Rana Almutawa | Hadeel Alkofide | Thamir M. Alshammari (Saudi Arabia)

243 – Evaluation of Remifentanil's Safety Profile: A Multicenter Post Marketing Surveillance in Indonesia [1288]

Jonathan Hasian Haposan | Jarir At Thobari Lukman Ade Chandra | Nastia Hidayati Rianiasa Karunia Dewi | Rita Purnamasari Dyah Juliana Pudjiati (Indonesia)

244 – Flaxseed Interaction with Warfarin and Clopidogrel and The Potential Risk of Bleeding [1289]

Waad Alghamdi | Nouf Alfadel | Fawaz F Alharbi (Saudi Arabia)

245 – Benefits of Telepharmacy Services for Improving Medication Safety in Cardiovascular Diseases [1290]

Merlin Erhan Esad | Mihaela Popova | Evelina Gavazova Radiana Staynova | Daniela Grekova-Kafalova (*Bulgaria*)

#### VACCINES

246 – Experiences and Barriers of Community Pharmacists Towards Participation in COVID-19 Vaccination Campaigns [1291]

Hristina Ivanova Stoynova | Radiana Staynova Evelina Gavazova | Daniela Grekova-Kafalova (Bulgaria)

247 – Background Incidence Rates of Adverse Events of Special Interest for SARS-CoV-2 Vaccines Safety Monitoring in the US [1292] Sonja Banga | Laurence Serradell | Irisdaly Estevez Samantha Schilsky | Anne-Laure Chabanon Hannah Kreisberg | Alena Khromava (Canada)

248 – Prospective Monitoring of COVID-19 Vaccine Safety in the Republic of Croatia [1293] Barbara Kovacic | Nikica Mirošević Skvrce | Morana Pavičić Sandra Dujmović Blažok | Ivana Ljubičić Siniša Tomić (Croatia)

249 – Exploring The Impact of Mental Health Conditions on Vaccine Uptake in High-Income Countries [1294]

Anne M Suffel | Oyinkansola Ojo-Aromokudu Helena Carreira | Sandra Mounier-Jack | David Osborn Charlotte Warren-Gash | Helen Mcdonald (United Kingdom)

250 – The Coverage of Influenza Vaccination and Predictors of Not Receiving the Influenza Vaccination in Danish Cancer Patients [1295] Lau Amdisen | Lars Pedersen | Niels Abildgaard Christine Stabell Benn | Mikael Rørth

Deirdre Cronin-Fenton | Signe Sørup (Denmark)

251 – Methodological Considerations for Matching Algorithms in Cohort Studies of

COVID-19 Vaccine Effectiveness [1296]
Wilhelmine Meeraus | Sudhir Venkatesan | Mark Joy
Kathryn S. Taylor | Mario Ouwens | Trung N Tran
John Dennis | Debasish Kar | Anna Forbes | Sneha Anand
Anke Stuurman | Sylvia Taylor | F. D. Richard Hobbs
Simon De Lusignan (United Kingdom)

253 – Combining COVID-19 Vaccine Data from Claims with Data from Immunization Information Systems (IIS) to Address Exposure Misclassification: An Approach within the FDA Biologics Effectiveness and Safety (BEST) Initiative [1298]
Elizabeth Bell | Cindy Zhou | Karen L. Schneider

Elizabeth Bell | Cindy Zhou | Karen L. Schneider Patricia Lloyd | Tainya Clarke | Grace Yang Michael Wilkinson | Kandace Amend | Emily Myers Steven Anderson | Azadeh Shoaibi | John Seeger Hui-Lee Wong (United States)

254 – COVID-19 Vaccine Hesitancy Among Health Care Workers: The Case of Pharmacy Staff of the Korle Bu Teaching Hospital [1299]

Daniel Ankrah | Daisy Lamptey | Charles Ofei-Palme Florence Nkansah | Collins Addae | Dorcas Boateng Frempomaa Nelson | Godfried Adjei | Grace Aboagye Isaiah Sagoe | Justice Dogbey | Obedia Seaneke Oksana Corquaye | Desmond Osenda | Priscilla Ekpale Souliasnaia Bruce | Stanley Lagoh | Stephen Corquaye Anthony Osei | Abredu SomuahSuad Abubakari Nathan Coompson (Ghana)

255 – Factors Associated with COVID-19 Vaccine Hesitancy in the United States [1300]
Sydney Manning | Christy A. Xavier | Rafia Rasu
Usha Sambamoorthi (United States)

256 – Risk of Rhabdomyolysis After Influenza Vaccination: A Case-Centered Analysis [1301] Che-Yu Chen | Edward Lai | Wan-Ting Huang Miyuki Hsing-Chun Hsieh (*Taiwan*)

257 – Background Rates of Adverse Events of Special Interest for COVID-19 Vaccine Safety Monitoring Among Adults in the United States [1302]

Shayan Hobbi | Keran Moll | Bradley Lufkin | Cindy Zhou Xiangyu Shi | Kathryn R. Fingar | Mao Hu | Minya Sheng Jeffrey C. Joyce | Timothy Burrell | Yoganand Chillarige Jeffrey Beers | Patrick Saunders-Hastings | Stella G. Muthuri Kathryn M. Edwards | Steven Black | Jeffrey Kelman Christian Reich | Kandace Amend | Daniel Beachler Rachel Ogilvie | Alex Secora | John Seeger Patricia Lloyd | Deborah Thompson | Rositsa Dimova Joyce Obidi | Steve Anderson | Richard A. Forshee Hui-Lee Wong | Azadeh Shoaibi | Shanlai Shangguan (United States)

258 – Cognitive and Other Neuropsychiatric Symptoms in COVID-19: Analysis of Person-Generated Health Data from a Community-based Registry [1303]

Joan Largent | Yiqiong Xie | Matthew Reynolds Kendall B Knuth | Emma Brinkley | Christina Mack Stephen Toovey | Nancy Dreyer (United States)

259 – Getting Prepared for COVID-19 Vaccines: How European Regulators Anticipated the Need for Real-World Evidence [1304]

Catherine Cohet | Marcia Rueckbeil | Kelly Plueschke Kate Browne | Thomas Goedecke | Robert Flynn Chantal Quinten | Mathijs Goossens | Gianmario Candore Peter Arlett | Xavier Kurz (Netherlands)

260 – COVID Brain: The CARE Experience [1305]
Joan Largent | Yiqiong Xie | Matthew Reynolds
Kendall B. Knuth | Emma Brinkley | Christina Mack
Stephen Toovey | Nancy Dreyer (United States)

261 – Real-World Safety of the Pfizer-BioNTech COVID-19 Vaccine in Pregnancy: Data from the Organization of Teratology Information Specialists (OTIS) Pregnancy Registry [1306]

Christina Chambers | Kenneth L Jones | Diana Johnson Michael Schatz (United States)

262 – Association Between Antibody Titer Levels, Time from COVID-19 Vaccine and Booster Receipt Among an Occupational Cohort of Fully Vaccinated Individuals [1307]

Erin Wasserman | Saamir Pasha | Deverick J. Anderson Patti Walton | Christopher J Hostler | Damion A. Martins Emily Myers | Daniel Eichner | Sabrina Smith | Helen Chen Madeline Lassiter | Hiba Kouser | Navdeep Singh Allen K. Sills | Christina Mack (United States)

263 – Assessing The Effect of Statin Use on Influenza Vaccine Effectiveness: A Prior Event Rate Ratio Analysis in Primary Care Data [1308] Adam J Streeter | Sarah J Walker | Lauren Rodgers Andrea Shelley | Ian Wellaway | Fergus Hamilton William Hamilton | William Henley (Germany)

264 – Association Between Influenza Vaccination and the Risk of Acute Kidney Injury Among Older People in Korea: Self-Controlled Case Series Analysis [1309] Haerin Cho | Eunsun Lim | Hee-Jin Kim | Na-Young Jeong Nam-Kyong Choi (South Korea) 265 – Vaccine Adverse Event Reporting System (VAERS): Evaluation of 31 Years of Reports and Pandemics Impact [1310]

Ohoud A. Almadani | Thamir M. Alshammari (Saudi Arabia)

266 – Evaluating The Effectiveness of Interventions to Improve Human Papillomavirus (HPV) Vaccine Uptake in Africa:

A Systematic Review [1311]

Omotayo Carolyn Olaoye | Sara Macdonald (United Kingdom)

267 – Hospitalizations After COVID-19 Vaccination: Self-Reported Patient Characteristics [1312]

Matthew Reynolds | Kendall B. Knuth | Yiqiong Xie Emma Brinkley | Tom Kwon | Christina Mack Nancy Dreyer (United States)

268 – Increased SARS-CoV-2 Positivity Rates Among Individuals Tested at CVS Health Retail Sites During the Time of Delta and Omicron [1313] Scott Chavers | Hannah Kaneck (United States)

269 – Self-Reported Demographics of Unvaccinated and Moderna Vaccinated Individuals Who Test Positive for SARS-CoV-2 at CVS Retail Sites [1314] Scott Chavers | Hannah Kaneck (United States)

270 – Pfizer-BioNTech COVID-19 Vaccine and the Potential Risk of Hypoesthesia: Analysis of the Global and Local Individual Case Safety Reports [1315] Mona A Almaghrabi | Lama J Alhusayni | Nouf Alfadel

Mona A Almaghrabi | Lama J Alhusayni | Nouf Alfadel Fawaz F. Alharbi (Saudi Arabia)

271 – COVID-19 Booster Protection Against Incident Omicron Infection in a Highly Vaccinated Cohort [1316]

Christina Mack | Caroline Tai | Sarah Connolly Kendall B. Knuth | Radhika M Samant | John Difiori Leroy Sims | Eleanor H. Adams | Gabriel Farkas Deverick Anderson | Michael Merson | David D. Ho Lisa L. Maragakis | Yonatan Grad (United States)

272 – Diabetics Report Fewer Side Effects from COVID-19 Vaccination Than Non-Diabetics in the US [1317]

273 – A Nationwide Survey of mRNA COVID-19 Vaccinee's Experiences on Adverse Events and Its Associated Factors [1318]

Dongwon Yoon | Ha-Lim Jeon | Yunha Noh (Republic of Korea)

274 – Risk of Stroke Following Influenza Vaccination in Elderly: A National-based Self-Controlled Case Series Study in Korea [1319] Hee-Jin Kim | Joongyub Lee | Eunsun Lim | Haerin Cho Heehyun Won | Nam-Kyong Choi (Republic of Korea)

275 – Influenza Vaccine and Risk of Myocardial Infarction in The Korean Elderly [1320]

Eunsun Lim | Hee-Jin Kim | Haerin Cho | Na-Young Jeong Joongyub Lee | Yejee Kim | Nam-Kyong Choi (Republic of Korea)

276 – Pneumococcal Serotype Distribution: Data in Pediatric Populations Under 5 Years Around the World, 2011–2021 [1321]

Nicole Cossrow | Rennie Joshi | Henok Ayele Danielle Badgley | Hanane Khoury | Patricia Saddier (United States)

277 - Pneumococcal Serotype Distribution in Adults 65 Years and Older Around the World, 2011–2021 [1322]

Nicole Cossrow | Rennie Joshi | Henok Ayele Danielle Badgley | Hanane Khoury | Patricia Saddier (United States)

278 – The Acceptability of Mixing Different Generic Types of COVID-19 Vaccine Among the General Population; A Cross Sectional Study in Saudi Arabia [1323]

Hassan Hasan Alwafi | Faisal Minshawi (Saudi Arabia)

279 – Should We Worry About Flare-ups Following Vaccination in Systemic Lupus Patients? A Nationwide Case-Crossover Study Using the French Healthcare Database [1324] Lamiae Grimaldi | Philippe Attias | Tom Duchemin Yann Hamon | Jacques Benichou | Lucien Abenhaim Yola Moride (France)

280 – Adapting to The Dynamic Landscape of the COVID-19 Pandemic: Proposed Study Design Approaches for a Postauthorization Safety Study for Pfizer-BioNTech COVID-19 Vaccine in the United States [1325]

Alicia W. Gilsenan | Alison Tse Kawai | Candace C. Fuller Cynthia De Luise | J. Bradley Layton | Catherine B. Johannes Jeffrey Brown, Richard Platt (United States)

281 – Adverse Events Following COVID-19 Immunization: Active Vaccine Safety Study from a South Indian City [1326] Juny Sebastian | Juny Sebastian | Merrin Mathew (India)

282 - Immunization:

Are We Confident or Hesitant? [1327] Juny Sebastian | Reshma Bobby | Devyani Josh Mohamed B. Moosa | Besty Biju (India)

283 – An Assessment of the Risk of Anaphylaxis Following Influenza Vaccination in the Korean Elderly: Implementing Near-Real Time Vaccine Safety Surveillance Methods [1328] Na-Young Jeong | Hee-Jin Kim | Eunsun Lim Byung-Joo Park | Nam-Kyong Choi (Republic of Korea)

284 - The Effectiveness of Single and Two-dose Pfizer-BioNTech Vaccine: A Real-World Evidence from Saudi Arabia [1329] Yasser Albogami | Abdulaziz Alalwan | Mohammed A. Batais Khaled Alabdulkareem | Abdullah Abdulaziz Alalwan (Saudi Arabia)

285 - Capacity for Identifying Janssen Ad26. COV2.S COVID-19 Vaccination in Four US Health Insurance and State Immunization Information System Databases: Preparation for a Post Authorization Safety Study [1330]

Candace C Fuller | Alison Tse Kawai | Kevin Haynes Kevin Coughlin | Juliane Reynolds | Rebecca Hawrusik Casie Horgan | Brian Calingaert | Catherine B. Johannes J. Bradley Layton | Aliza Peterson | Nicolas Praet Corinne Willame | Emily Yost | Carla Brannan Cheryl N. Mcmahill-Walraven | Maria Guzman Aziza Jamal-Allial | Vinit Nair | Ryan SealsFlorence Wang Mano Selvan | Qianli Ma | Richard Platt | Alicia W Gilsenan Jeffrey Brown (United States)

286 - SARS-CoV-2 Breakthrough Infections Among the Healthcare Workers Post-Vaccination with ChAdOx1 nCoV-19 Vaccine in The South Indian State of Kerala [1331] Jose J Kochuparambil | Aleena Issac Jais Vayalikunnel (India)

287 – Knowledge About SARS-CoV-19 Booster Vaccines Among the General Public in India -A Web-based Cross-sectional Study [1332] Jose J Kochuparambil | Aleena Issac Jais Vayalikunnel (India)

288 – Risk of SARS-CoV-2 Infection Following Initial COVID-19 Vaccination by Location [1333]

Mina Tadrous | Cherry Chu | Tonya Campbell Dave Juurlink | Jeff Kwong | Michael Paterson Tara Gomes (Canada)

289 – What Distinguishes People Who Experience Side Effects of COVID-19 Vaccines from Those Who Don't? [1334]

Nancy Dreyer | Yiqiong Xie | Matthew Reynolds Kendall B. Knuth | Emma Brinkley | Tom Kwon Christina Mack (United States)

290 – Myocarditis and Pericarditis in Immunocompromised Individuals Following COVID-19 mRNA Vaccination: A Living Review of Spontaneous Reports [1335] Samantha Lane | Alison Yeomans | Saad Shakir (United Kingdom)

291 – Knowledge Build-Up on The Safety of EMA Approved COVID-19 Vaccines: An Overview [1336] Florence Van Hunsel | Armin Armiri | Agnes Kant (Netherlands)

292 – Tree-based Data-Mining for COVID-19 Vaccine Safety Assessment [1337]

Judith Maro | Katherine Yih | David L Mcclure Jennifer Nelson | Gabriela Vazquez-Benitez Joshua Williams | Stanley Xu | Martin Kulldorff (United States)

293 – Side Effects of Vaccines Against COVID-19 in Valencia Region. Results of The ProVaVac Survey Study with 13,837 People in Spain [1338] Gabriel Sanfelix-Gimeno | Francisco Sanchez-Saez Salvador Peiró | Aníbal García-Sempere | Isabel Hurtado Clara Rodriguez-Bernal (Spain)

294 – Reduction in Data Lag Using Optum Pre-adjudicated Health Insurance Claims [1339]

Rachel Ogilvie | Jennifer Song | Cindy Zhou Patricia Lloyd | Hui-Lee Wong | Tainya Clarke Azadeh Shoaibi | Kandace Amend | John Seeger (United States)

295 – COVID-19 Epidemiology, Prophylaxis and Treatment in The Africa Region [1340]

Maribel Salas | Ilse Truter Johanna Catharina Catharina Meyer | Johanita Burger Joseph O. Fadare | Laura Novelli Horne (United States) 296 – Study of Myocarditis and Pericarditis Following Vaccination with COMIRNATY in Persons Under 21 Years of Age [1341] Cynthia De Luise | Stephan Lanes | Julia Coleman Bing Cai | Brian Harty | Julie E. Miller | Devon Payne

Katie Kendrick | Gail Pearson | Dongngan Truong

Jane Newburger (United States)

297 – Distinguishing Patterns of Serious Adverse Events with mRNA COVID-19 Vaccines Using Vigibase: A Latent Class Analysis [1342] Min Taek Lee | Seung-Hun You | Ju Won Lee | Sewon Park

Jeong-Yeon Kim | Dal Ri Nam | Sun-Young Jung (Republic of Korea)

298 – The Social Patterning of COVID-19 Vaccine Uptake in Older Adults: A Register-based Study in Sweden Within the SCIFI-PEARL Project [1343]

Fredrik Nyberg | Malin Spetz | Lisa Lundberg Chioma Nwaru | Huiqi Li | Ailiana Santosa Susannah Leach | Magnus Gisslén | Niklas Hammar Maria Rosvall *(Sweden)* 

299 – Monitoring of Adverse Events Following COVID-19 Vaccines in Department of Veterans Affairs [1344]

Kwan Hur | Francesca Cunningham | Jennifer Martin Lucy Pandey | Bharat Thakkar | Rongping Zhang Cedric Salone (United States)

300 – Risk of Myocarditis/Pericarditis After mRNA COVID-19 Vaccination in Commercial Insurance Claims [1344]

Alex Secora | Michael Goodman | Christian Reich (United States)

301 – VAC4EU Active Safety Surveillance Study of the BNT162b2 COVID-19 Vaccine in Five European Countries: Study Design and First Results [1345]

Daniel Weibel | Miriam Sturkenboom | Rene Eijkemans Rutger Van Den Bor | Roel Elbers | Estel Plana Xabier Garcia De Albeniz | Rachel Weinrib Natasha Yefimenko | Beatriz Poblador-Plou | Elisa Bianchini Luca Stona | Karin Swart | Claudia C Bartolini Giulia Hyeraci | Debabrata Roy | Angela Lupattelli Felipe Villalobos | Elisa Barbieri | Renu Garg Heather Rubino | Cynthia De Luise | Alejandro Arana (Netherlands)



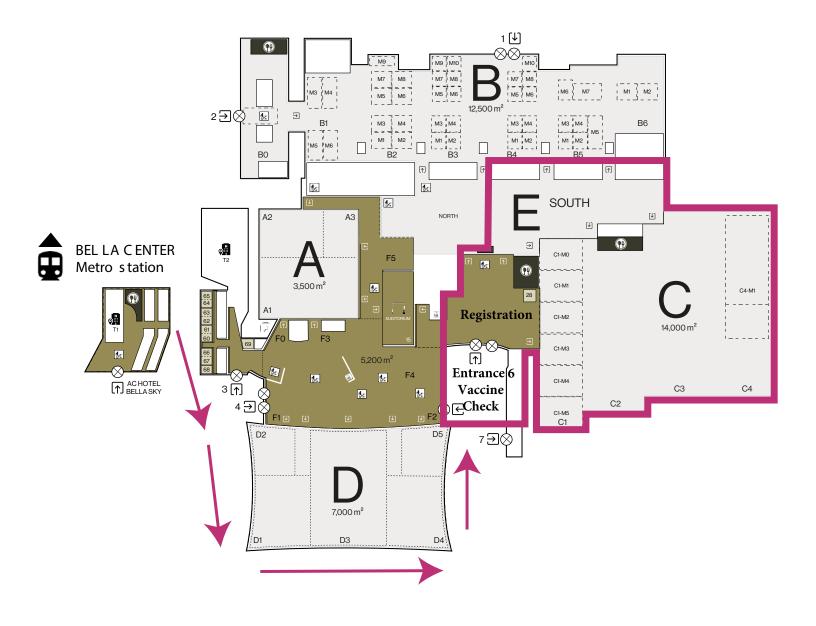
### **OUR SERVICES**

Systematic Literature Reviews
Consultancy Epi/Stat-IT/MW Qualitative Research
Epidemiological Studies: Primary Data Collection/ HER Studies
Pharmacovigilance and Pharmaco-Epidemiology Support



+32 016 23 50 13

## Floor Plan



### What science can do



#### **Generating Impactful Evidence**

We ensure the right evidence is delivered at the right time, to the right stakeholders.

At AstraZeneca, we have an ambitious Global Evidence team, aspiring to be trusted leaders in practice-changing evidence, to positively impact people's lives.

We shape the Evidence strategy and deliver high-quality studies across the globe in partnership with colleagues, from clinical development through launch and beyond.

Find out more about opportunities in our expanding Evidence teams by following the QR.







ACPE 2022 October 21 - 23, 2022 Tainan, Taiwan

ISPE 2023 Mid-Year Meeting April 23 - 25, 2023 Reykjavik, Iceland

ICPE 2023
August 23 - 27, 2023
Halifax, Nova Scotia, Canada

