

# ICPE 2023

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**August 23 - 27**

**HALIFAX, NOVA SCOTIA, CANADA**

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Eli Lilly and Co.	Panalgo
Epi Excellence, LLC	PHARMO
Evidera PPD	RTI Health Solutions
Exponent	Veradigm
IQVIA	

### **SILVER**

CHORDATA, Inc.	Merck & Co. Inc
Flatiron Health	ModernaTX
Genesis Research Group	Regeneron Pharmaceuticals
Johnson & Johnson	

### **BRONZE**

Bristol Myers Squibb	Lumanity
Harvard Pilgrim Health Care Institute	Roche

## **E X H I B I T O R S**

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## INDUCTION OF ISPE FELLOWS

Thamir Alshammari, FISPE  
Kwame Appenteng, FISPE  
Kimberly Brodovicz, FISPE  
Rachael DiSantostefano

Daniel Horton, FISPE  
Jessica Jalbert, FISPE  
Caitlin Knox, FISPE  
Edward Lai, FISPE

Daniela Moga, FISPE  
Elaine Morrato, FISPE  
Elisabetta Patorno, FISPE  
Sallie Pearson, FISPE

Robert Platt, FISPE  
Jennita Reefhuis, FISPE  
Mina Tadrus, FISPE

## EMERGING LEADER AWARD

Sebastian Jugl

## SUSTAINED SERVICE AWARD

Ariel Arias, FISPE  
Kenneth Rothman, FISPE

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

Sylvia Opanga

## RONALD D. MANN BEST PAPER AWARDS FOR MANUSCRIPTS PUBLISHED IN PHARMACOEPIDEMIOLOGY AND DRUG SAFETY (PDS), 2022

### 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, *Journals Publishing Manager, Health Sciences, Wiley*

## WINNER

### Novel Methods for Pregnancy Drug Safety Surveillance in the FDA Sentinel System

Michael Nguyen

Di Zhang

Yueqin Zhao

Danijela Stojanovic

Monica Munoz

Jane Liedtka

Abby Anderson

Wei Liu

Inna Dashevsky

David Cole

Sandra DeLuccia

Talia Menzin

Jennifer Noble

Judith Maro

## HONORABLE MENTION

### Risk of Myopericarditis Following COVID-19 mRNA Vaccination in a Large Integrated Health System: A Comparison of Completeness and Timeliness of Two Methods

David Dancoes

Jodi Longueil

Eric Johnson

Paul Lewis



The Exponent logo, featuring a stylized 'x' followed by the word 'ponent'.

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

Nana Ansah

Reporting Adverse Events Following Immunization in  
Ghana – Health Care Workers Experiences

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

Aditi Battu

The Impact of Nicotine Replacement Therapy on Maternal-Neonatal Outcomes  
and Smoking Cessation in Pregnant Women:  
A Systematic Review and Meta-Analysis

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

### FIRST PLACE

Yu-Chia Hsu

Using a Target Trial Framework  
to Compare the Effect of High/  
Low Opioid Dosing Strategies at  
Post-surgical Discharge on Newly  
Developed Opioid Use Disorder

### SECOND PLACE

Máté Szilcz

Use of Cholinesterase Inhibitors and  
Non-Steroidal Anti-Inflammatory  
Drugs and the Risk of Peptic Ulcers: A  
Population-based Self-Controlled Case  
Series Study

### THIRD PLACE

Dana Alsugeir

Risk of Osteoporotic Fractures in  
Menopausal Women with Common  
Mental Health Problems Using SSRI/  
SNRI Antidepressants: Cohort Study

## MOST HIGHLY RATED METHODS ABSTRACT SUBMITTED BY A STUDENT

Saad Abbasi

Sequential Safety Monitoring of Rofecoxib for  
Cardiovascular Adverse Effects

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

Katherine Callaway Kim

Impact of the COVID-19 Pandemic on Drug Shortage Incidence  
in the United States

# Make the Most of Your Conference Experience with the **ISPE Meetings Mobile App!**

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



Event Icon

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



# Schedule-at-a-Glance

**TUESDAY, AUGUST 22**

**P. 25**

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 Ready Room – MR102				
									4 PM - 6 PM Registration – Convention Hall Pre-Function			

**WEDNESDAY, AUGUST 23**

**P. 25**

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
7:30 AM - 6 PM Speaker Ready Room – MR102												
7:30 AM - 6 PM Registration – Convention Hall Pre-Function												
7:30 AM - 6 PM Lactation Room – MR505												
	8:30 AM - 12:30 PM <b>PRE-CONFERENCE COURSES</b> Introduction to DUR: The Conduct of Real-World Drug Utilization Studies: Describe and Compare – MR106/107 Pharmacoepidemiologist's Toolbox for Professional Empowerment – Argyle 1 Pharmacogenomics & Precision Medicine for Pharmacoepidemiologists – MR201 Practical Skills in Protocol Writing and Statistical Analytic Programming Relevant to Studies Generating RWE – MR202 Principles of Pharmacoepidemiology – Argyle 2 Regulatory Pharmacoepidemiology – MR501/502 Using Pharmacoepidemiology Database Resources to Address Drug Safety Research – Argyle 3				12:30 PM - 2 PM Lunch on Your Own		2:00 PM - 6 PM <b>PRE-CONFERENCE COURSES</b> Cancer Pharmacoepidemiology and Genomics: What You Should Know in the Era of Precision Medicine – MR501/502 Intermediate Pharmacoepidemiology: Approaches to Unmeasured Confounder – Argyle 1 Methods and New Approaches in Pragmatic Trials – MR201 Pediatric Pharmacoepidemiology: Adapting Pharmacoepidemiologic Principles to Studies of the Pediatric Population – MR106/107 Propensity Scores in Pharmacoepidemiology – Argyle 2 RWE Generation for Rare Disease Drug Development and Orphan Drug Approvals – MR605 Using Field Studies to Value-Add in Pharmacoepidemiology – MR202 Weighting the Benefits & Risks: The Science and Methods of Benefit-Risk Assessment in Drug Development – Argyle 3					
						1 PM - 5 PM ISPE Board of Directors' Meeting MR604						

# Schedule-at-a-Glance

THURSDAY, AUGUST 24

P. 27

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
7:30 AM - 6 PM Speaker Ready Room – MR102												
7:30 AM - 6 PM Registration – Convention Hall Pre-Function												
7:30 AM - 6 PM Lactation Room – MR505												
8:30 AM - 12:30 PM PRE-CONFERENCE COURSES Adherence to Medication – MR202 Advanced DUR: The Conduct of Real-World Drug Utilization Studies – MR106/107 Advanced Methods I: Evidence Synthesis Methods, Living Methods, and Applied Examples in Healthcare Research – Argyle 1 Applied Sensitivity Analyses in Pharmacoepidemiology Database Studies – Argyle 2 Foundations in Causal Inference – MR201 Introduction to Machine Learning for Pharmacoepidemiologists – Argyle 3 Medical Device Epidemiology – MR605 New Frontiers for Pharmacoepidemiology: Using New and Mixed Methods for Data Collection – MR501/502					12:30 PM - 2 PM Lunch on Your Own  12:45 PM - 2 PM New Member & Early Stage Investigator Lunch – Ballroom Salon <i>By invitation only; registration required.</i>		2:00 PM - 6 PM PRE-CONFERENCE COURSES Advanced Methods II: How to Make Sure Immortal Time Never Happens – Argyle 1 How to Design a Real-World Study of Biologics Including Biosimilars – MR106/107 Intermediate / Advanced Topics in Vaccine Safety and Effectiveness – MR202 Modern Pregnancy Pharmacoepidemiology: Non-Live Birth Outcomes – Argyle 2 Pharmacoepidemiologic Approaches to Studying Drug-Drug Interactions – MR201 Pharmacovigilance and Signal Detection – MR605 Risk Minimization and Communication: Effective Interventions for the Safe Use of Medicinal Products – Argyle 3				6:00 PM - 7:30 PM Welcome Reception & Academic Showcase Convention Hall & Argyle Pre-Function	

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# Schedule-at-a-Glance

FRIDAY, AUGUST 25

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	Speaker Ready Room – MR102											7 - 8 PM SIG MEETINGS  Adherence MR606  AsPEN MR603/604 Cell & Gene Therapy MR607  CER MR614  Database MR608/609 Digital Epi MR611  Drug-Drug Interaction MR602  Drug Utilization Research Ballroom  Environmental Pharmacoe- pidemiology MR615  Genomics & Precision Medicine Argyle 3  Geriatric Epi Argyle 2  Health Equity MR612/613  Medications in Pregnancy & Lactation MR109  Pediatric MR103  Rare Disease Argyle 1  RWE Collaborative MR202  Vaccines MR201
7 AM - 6 PM	Registration – Convention Hall Pre-Function											
7 AM - 6 PM	Lactation Room – MR505											
8 AM - 6 PM Exhibits/Poster Session A – Convention Hall												
7 - 8 AM Coffee with Exhibitors Convention Hall	8 - 10 AM Welcome and Keynote Session Ballroom		10:30 AM - 12 PM SYMPOSIA & WORKSHOPS  Curriculum in Pharmacoepidem- iology Training and Alignment with Updated Core Competencies – Argyle 1  Data to Action: Leveraging Drug Utilization Research to Shift Clinical Practice and Health Policy – Argyle 2  Developing Code Lists for Pharmacoepidem- iology: The How and Why? – Argyle 3  Privacy-Preserving Solutions for RWD Access and Collaboration: Challenges & Opportunities – MR201  Ready or Not, Here Come Estimands! The Emerging Attention to Causal Estimands in RWE Studies – MR202	12 - 1:30 PM Lunch Ballroom	1:30 - 3 PM ORAL PRESENTATIONS  Applied Methods for Evaluating Effectiveness – Argyle 1  Due Before, During, and After Pregnancy – Argyle 2  Effectiveness of Anticoagulant Therapy – Argyle 3  Effectiveness of Antidiabetic Treatments – MR109  Health Outcomes Research: What's in a Choice? – MR201  It Starts at the Very Beginning – MR202	3:30 - 5 PM SYMPOSIA & WORKSHOPS  Designing ECA Studies to Contextualize Effectiveness in Single-Arm Clinical Trials – Argyle 1  Integration of Systems Biology and Pharmacoepidem- iology for Drug Repurposing Research: DREAM Study Lessons – Argyle 2  Introducing CoLab: The Evolution of U.S.- Canada International Collaboration on Drug Safety and Effectiveness – Argyle 3  Leveraging Real-World Insights to Inform Long-Term Follow-up for Cell and Gene Therapies – MR201  Sustainable Drug Use: Role of Pharmacoepidem- iologists and Addressing Environmental Impact of Drug Utilization – MR202	5:15 - 6:45 PM ORAL PRESENTATIONS  Fear Not; Get the Shot – Argyle 1  Finding Balance in the Rising Tides of Drug Safety in Older Adults: A Global Perspective – Argyle 2  Lightning Session 1 – Argyle 3  Vaccine Potpourri – MR109  Mixing Up the Methods in Drug Utilization Research – MR201  COVID Consequences – MR202	8 PM	9 PM	10 PM		
7 - 8 AM Poster Session A Set-Up Convention Hall				12 - 1:30 PM COMMITTEE MEETINGS  Finance MR603/604  Public Policy MR605  History & Archives MR606  Membership MR607  <i>Open to all participants, lunch available</i>	12:15 - 1:15 PM Spotlight Poster Session A Convention Hall							
									8 - 10 PM PDS Editorial Board MR605  <i>By invitation.</i>			
									8:30 - 11 PM Students/Early Career Professionals Meet & Greet <i>The Roxbury Urban Dive Bar</i>			

# Schedule-at-a-Glance

SATURDAY, AUGUST 26

P. 39

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 Speaker Ready Room – MR102												
7 AM - 6 PM Registration – Convention Hall Pre-Function												
8 AM - 6 PM Lactation Room – MR505												
8 AM - 6 PM Exhibits/Posters Session B – Convention Hall												
7 - 8 AM Coffee with Exhibitors Convention Hall	8 - 9:30 AM <b>ORAL PRESENTATIONS</b> A Tour of Informatics: from Prediction to Prevalence – Argyle 1		10 - 11:30 AM <b>PLENARY SESSION</b> Ballroom	11:30 AM - 1 PM Lunch – Ballroom	1 - 2:30 PM <b>ORAL PRESENTATIONS</b> Lightning Session 2 – Argyle 1 Risky Business... – Argyle 2 Safety in Numbers: a Potpourri – Argyle 3 The "Sea" of Cancer – MR109 Vaccines: Boosting Confidence – MR201 Drug Safety in Diabetes – MR202	2:40 - 3:50 PM Annual Meeting of ISPE Members & Awards Ceremony Ballroom	4:15 - 5:45 PM <b>SYMPOSIA &amp; WORKSHOPS</b> Building Consensus on RWE Evaluation: Standardized Tool for Assessing Validity in RWE studies – Argyle 1 From Classic to Cutting Edge: Addressing Data Quality Challenges in Electronic Health Record Data – Argyle 2 Person-Generated Health Data: Is Pharmacoepidemiology Ready for This New Frontier? – Argyle 3 Sharing is Caring? A Symposium on Code Sharing in Pharmacoepidemiology – MR201 Translating RWE and Other Pharmacoepidemiological Research Findings into Policy and Clinical Practice – MR202	6 - 7 PM <b>COUNCIL MEETINGS</b> Industry/ Svc Provider Argyle 2 Student MR612/613 Open to all participants.				
7 - 8 AM African RIG MR604 Open to all participants.	Brainstorm NS Treatments/ Exposure – Argyle 2 Don't Lose Heart – Argyle 3 Let Us Give it a Trial: Methods in PE – MR109 Liver and Pregnancy Research Gone Viral – MR201 With Whom Do We Compare? – MR202			11:30 AM - 1 PM <b>COMMITTEE MEETINGS</b> Global Development MR604 Education MR605 Sustainability MR612/613 Open to all participants, lunch available								
7 - 8 AM Latin America RIG MR612/613 Open to all participants.				11:45 AM - 12:45 PM Spotlight Poster Session B Convention Hall								
7 - 8 AM Poster Session B Set-Up Convention Hall												
								7 PM	8 PM	9 PM	10 PM	11 PM
								7:30 - 11:30 PM Social Evening at the Grafton Connor Downtown Complex				

# Schedule-at-a-Glance

SUNDAY, AUGUST 27

P. 50

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 AM - 3:30 PM Speaker Ready Room – MR102											
7 AM - 4:30 PM Registration – Convention Hall Pre-Function											
7 AM - 4:30 PM Lactation Room – MR505											
7:15 - 8:15 AM 2024 Scientific Program Committee MR605  Open to ISPE members.											
7 - 8 AM Coffee with Exhibitors Convention Hall	8 AM - 1:30 PM Exhibits – Convention Hall										
	8 AM - 1:30 PM Posters Session C – Convention Hall										
7 - 8 AM Poster Session C Set-Up Convention Hall	8:30 - 10 AM ORAL PRESENTATIONS  Beyond the Beaver Tail in Clinical Epidemiology – Argyle 1  Pharmacoeipi Toolbox for Confounding Control – Argyle 2  Pharmacovigilance: Follow the Evidence – Argyle 3  Mapping the Road to Health Equity/Equality – MR109  Self-Controlled and Other Methods Stuff – MR201  Tracking Trends Around The World – MR202		10:30 AM - 12 PM SYMPOSIA & WORKSHOPS  Bias Introduced by COVID-19 Related Healthcare Disruptions in Safety and Effectiveness Studies – Argyle 1  Deep Learning for Pharmacoeipidemiologists: An Accessible Introduction to Neural Networks – Argyle 2  Emulation of a Target Trial in Pregnancy: Learning from the Chronic Hypertension and Pregnancy (CHAP) trial – Argyle 3  Optimizing Therapeutic Decision-Making for Off-Label Medicines Use: Challenges and Opportunities – MR201  Scaling-up RWE Generation for Regulators in Europe: DARWIN EU – MR202	12 - 1:30 PM Lunch Ballroom  12 - 1:30 PM ISPE Board of Directors' Lunch – MR604  12:15 - 1:15 PM Spotlight Poster Session C Convention Hall	1:30 - 3 PM ORAL PRESENTATIONS  Hali-FACTS: Navigating Benefit-Risk Decision-Making with RWE – Argyle 1  Lightning Session 3 – Argyle 2  The COVID-19 Lobster Trap – Argyle 3  Timing is Everything – MR109  Massive Mabs – MR201  What Can Be Learned from Machines – MR202		3:15 - 4:45 PM HOT TOPIC SESSION Ballroom	4:45 - 5:30 PM The Final Word Ballroom			

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# PRE-CONFERENCE Program Schedule

TUE

T U E S D A Y , A U G U S T 22

**2:00 - 6:00 PM**

## **SPEAKER READY ROOM – MR102**

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.

**4:00 - 6:00 PM**

## **REGISTRATION – CONVENTION HALL PRE-FUNCTION**

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

# PRE-CONFERENCE Program Schedule

WED

W E D N E S D A Y , A U G U S T 23

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

## **SPEAKER READY ROOM – MR102**

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 – CONVENTION HALL PRE-FUNCTION**

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

## **LACTATION ROOM – MR505**

Sponsored by EPI Excellence, LLC

**8:30 AM - 12:30 PM**

## **EDUCATIONAL SESSIONS**

### **HALF-DAY MORNING COURSES**

*Prepurchase required.*

**Introduction to Drug Utilization Research:  
The Conduct of Real-World Drug Utilization Studies –  
Describe and Compare – MR106/107**

Petra Denig, FISPE | Lotte Rasmussen | Mina Tadrous, FISPE  
Lisa Pont, FISPE | Björn Wettermark

**Pharmacoepidemiologist's Toolbox for Professional  
Empowerment – Argyle 1**

Caitlin Knox, FISPE | Juan Hincapie Castillo | Vin Lo Re, FISPE  
Mary Beth Ritchey, FISPE | Robert Platt, FISPE

# PRE - CONFERENCE Program Schedule

## Pharmacogenomics & Precision Medicine for Pharmacoepidemiologists – MR201

Amalia Issa, FISPE | Gillian Bartlett-Esquillant, FISPE  
Stephen Kimmel, FISPE | Bruce Carleton, FISPE  
Anke-Hilse Maitland-van der Zee, FISPE

## Practical Skills In Protocol Writing and Statistical Analytic Programming Relevant to Studies Generating Real-World Evidence (RWE) – MR202

Natasha Pratt | Christian Hampp, FISPE | Jessica Jalbert  
Ximena Camacho | Soko Setoguchi, FISPE

## Principles of Pharmacoepidemiology – Argyle 2

Tobias Gerhard, FISPE | Almut Winterstein, FISPE | Tania Schink

## Regulatory Pharmacoepidemiology – MR501/502

Danica Marinac-Dabic, FISPE | Katherine Donegan

## Using Pharmacoepidemiology Database Resources to Address Drug Safety Research – Argyle 3

Kevin Haynes | Rosa Gini | Matthew Reynolds, FISPE  
Daniel Beachler | Sudha Raman

## 12:30 - 2:00 PM

### LUNCH ON YOUR OWN

The convention centre is located in a busy downtown area with several nearby dining options.

## 1:00 - 5:00 PM

### ISPE BOARD OF DIRECTORS' MEETING – MR604

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

## 2:00 - 6:00 PM

### EDUCATIONAL SESSIONS

#### HALF-DAY AFTERNOON COURSES

*Prepurchase required.*

## Cancer Pharmacoepidemiology and Genomics: What You Should Know in the Era of Precision Medicine – MR501/502

Andrew Freedman, FISPE | Bruce Carleton, FISPE  
Donna Rivera, FISPE | Wei Zhou, FISPE | Geoffrey Liu

## Intermediate Pharmacoepidemiology: Approaches to Unmeasured Confounder – Argyle 1

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

## Methods and New Approaches in Pragmatic Trials – MR201

Jennifer Christian | Priscilla Velentgas  
Cynthia Girman, FISPE | Anne Trontell

## Pediatric Pharmacoepidemiology: Adapting Pharmacoepidemiologic Principles to Studies of the Pediatric Population – MR106/107

Jenny Sun | Tamar Lasky, FISPE | Daniel Horton, FISPE  
Mehmet Burcu | Ann McMahon, FISPE

## Propensity Scores in Pharmacoepidemiology – Argyle 2

John Seeger, FISPE | Jeremy Rassen, FISPE

## Real-World Evidence (RWE) Generation for Rare Disease Drug Development and Orphan Drug Approvals – MR605

Emily Bratton | Laura Hester | Xabier Garcia de Albeniz Martinez

## Using Field Studies to Value-Add in Pharmacoepidemiology – MR202

Katja Taxis, FISPE | Lisa Pont, FISPE | Jennifer Isenor

## Weighting the Benefits & Risks: The Science and Methods of Benefit-Risk Assessment in Drug Development – Argyle 3

Alicia Gilsenan, FISPE | Tarek Hammad, FISPE  
Juhaeri Juhaeri | Bennett Levitan | Carol Mansfield

# PRE-CONFERENCE Program Schedule

THU

THURSDAY, AUGUST 24

## 7:30 AM - 6:00 PM

### **SPEAKER READY ROOM – MR102**

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

## 7:30 AM - 6:00 PM

### **REGISTRATION – CONVENTION HALL PRE-FUNCTION**

## 7:30 AM - 6:00 PM

### **LACTATION ROOM – MR505**

*Sponsored by EPI Excellence, LLC*

## 8:30 AM - 12:30 PM

### **EDUCATIONAL SESSIONS**

#### **HALF-DAY MORNING COURSES**

*Prepurchase required.*

#### **Adherence to Medication – MR202**

Jacqueline Hugtenburg | Julie Lauffenburger  
Robert Gross, FISPE

#### **Advanced Drug Utilization Research – The Conduct of Real-World Drug Utilization Studies: Development And Evaluation of Interventions to Improve the Quality of Medication Use – MR106/107**

Petra Denig, FISPE | Katja Taxis, FISPE  
Mina Tadrous, FISPE | Lotte Rasmussen

#### **Advanced Methods I: Evidence Synthesis Methods, Living Methods, and Applied Examples in Healthcare Research – Argyle 1**

Nivantha Naidoo | Deborah Layton, FISPE  
Samantha Lane | Tzuyung Douglas Kou

#### **Applied Sensitivity Analyses in Pharmacoepidemiology Database Studies – Argyle 2**

Sebastian Schneeweiss, FISPE | Jeremy Rassen, FISPE  
Richard Wyss | Elizabeth Garry

#### **Foundations in Causal Inference – MR201**

Geetha Iyer | Joshua Gagne, FISPE

#### **Introduction to Machine Learning for Pharmacoepidemiologists – Argyle 3**

Harriet Dickinson | Dana Yael Teltsch | Victoria Strauss  
Orla Doyle | Kathryn Rough

#### **Medical Device Epidemiology – MR605**

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

#### **New Frontiers for Pharmacoepidemiology: Using New and Mixed Methods for Data Collection – MR501/502**

Nancy Dreyer, FISPE | Christina Mack, FISPE  
Will Dixon | Nabarun Dasgupta

## 12:30 - 2:00 PM

### **LUNCH ON YOUR OWN**

The convention centre is located in a busy downtown area with several nearby dining options.

## 12:45 - 2:00 PM

### **NEW MEMBER & EARLY-STAGE INVESTIGATOR LUNCH – BALLROOM SALON**

*By invitation only; registration required.*

## 2:00 - 6:00 PM

### **EDUCATIONAL SESSIONS**

#### **HALF-DAY AFTERNOON COURSES**

*Prepurchase required.*

#### **Advanced Methods II: How to Make Sure Immortal Time Never Happens – Argyle 1**

Miguel Hernan | Deborah Layton, FISPE  
Xabier Garcia de Albeniz Martinez

#### **How to Design a Real-World Study of Biologics Including Biosimilars – MR106/107**

Jaclyn Bosco, FISPE | Rohini Hernandez  
Natasha Pratt | Ylenia Ingrasciotta

#### **Intermediate / Advanced Topics in Vaccine Safety and Effectiveness – MR202**

Jennifer Gerber | Morgan Marks | Hector Izurieta  
Robert Chen, FISPE | Joanne (Juan) Wu | Cindy Ke Zhou  
Deshayne Fell | Annette Regan | Leah McGrath

#### **Modern Pregnancy Pharmacoepidemiology: Non-Live Birth Outcomes – Argyle 2**

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

# PRE - CONFERENCE Program Schedule

## Pharmacoepidemiologic Approaches to Studying Drug-Drug Interactions – MR201

Katsiaryna Bykov | Todd Miano | Antonios Douros

## Pharmacovigilance and Signal Detection – MR605

Judith Maro | Monica Munoz | G. Niklas Norén | Greg Powell

## Risk Minimization and Communication: Science-Based Approaches and Case Studies for Designing and Evaluating Effective Interventions for the Safe Use of Medicinal Products – Argyle 3

Priya Bahri | Meredith Smith, FISPE | Peter Mol  
Elaine Morrato, FISPE | Amir Sarayani | Rania Mouchantaf

**6:00 - 7:30 PM**

## WELCOME RECEPTION ROGERS SQUARE

Tobias Gerhard, FISPE  
ISPE President

Robert Platt, FISPE, Chair  
ICPE 2023 Scientific Program Committee

## ACADEMIC SHOWCASE

Division of Pharmacoepidemiology & Pharmacoeconomics,  
Brigham & Women's Hospital & Harvard Medical School

Harvard School of Public Health & Medical School

ISPE Mentorship Program

ISPE Student Council

Johns Hopkins Center for Drug Safety and Effectiveness

London School of Hygiene & Tropical Medicine

McGill Pharmacoepidemiology Research Unit  
*McGill University, Department of Epidemiology, Biostatistics  
and Occupational Health*

Drug Safety Research Unit  
Pharmacovigilance MSc/ PgD/ PgC

Rutgers Center for Pharmacoepidemiology and  
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**For more information, visit [AnalysisGroup.com/epidemiology](https://www.analysisgroup.com/epidemiology) or contact:**

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# MAIN CONFERENCE

# Program Schedule

F R I

F R I D A Y , A U G U S T 2 5

**7:00 AM - 6:00 PM**

**SPEAKER READY ROOM – MR102**

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 – CONVENTION HALL PRE-FUNCTION**

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

**LACTATION ROOM – MR505**

*Sponsored by EPI Excellence, LLC*

**7:00 - 8:00 AM**

**CONTINENTAL BREAKFAST – CONVENTION HALL**

**7:00 - 8:00 AM**

**POSTER SESSION SET-UP – CONVENTION HALL**

**8:00 AM - 6:00 PM**

**EXHIBITS / POSTER SESSION A – CONVENTION HALL**

**8:00 - 8:15 AM**

**WELCOME / BALLROOM**

Tobias Gerhard, FISPE  
ISPE President

Robert Platt, FISPE, Chair  
ICPE 2023 Scientific Program Committee

**8:15 - 10:00 AM**

**PLENARY SESSION**

**Town Hall: Global Regulatory Forum on Real-World Evidence**

**Sponsored by ISPE's RWE Collaborative SIG – Ballroom**

This session provides a novel opportunity for ISPE membership to interact with international regulators on scientific initiatives and current approaches around the use of Real-World Data and Real-World Evidence to inform regulatory decision making as it pertains to pharmacoepidemiology. The new town hall format invites officials from Health Canada and the U.S. FDA to set the stage with a fireside chat to discuss key issues facing the field. The international discussion continues with applied RWD examples within specific therapeutic areas including oncology, rare diseases, and infectious diseases, concluding with an interactive panel discussion among global regulators moderated by the FDA Commissioner.

The objective is to facilitate an engaging discussion between ISPE and global regulatory agencies on high impact RWD topics that are at the intersection of regulatory science and pharmacoepidemiology.

**LEARNING OBJECTIVES**

1. Provide a collaborative forum to hear an exchange of ideas among regulatory agencies, academia, industry, and other stakeholders.
2. Illustrate examples of use of RWD and current RWE initiatives by global regulatory agencies.
3. Explore opportunities and challenges using RWD to support global regulatory science research and regulatory decision-making.

**SESSION CHAIR**

**Donna Rivera PharmD., MSc.**

*Oncology Center of Excellence, U.S. Food and Drug Administration*

**Fireside Chat**

**Robert Califf, MD, Commissioner, US Food and Drug Administration**

**Pamela Aung-Thin, Assistant Deputy Minister, Health Canada**

**MODERATOR**

**Brian Strom, MD, MPH**

*Chancellor, Rutgers Biomedical and Health Sciences, Rutgers University*

**Panel**

**Donna Rivera PharmD., MSc.**

*Oncology Center of Excellence,  
U.S. Food and Drug  
Administration*

**Melissa Kampman, PhD.,  
Manager, Data Analytics and  
Real-world Evidence Division,  
Health Canada**

**Yoshi Uyama, PhD.**

*Director, Office of Epidemiology,  
Japan Pharmaceuticals and  
Medical Devices Agency*

**Michal Hirsh-Vexberg, MD**

*Head of the Drug Registration,  
Israeli Ministry of Health*

**Patrice Verpillat**

*Health of Real-World Evidence,  
European Medicines Agency*

**Katherine Donegan, PhD**

*Head of Epidemiology,  
Medicines and Healthcare  
Products Regulatory Agency, UK*

**MODERATOR**

**Robert Califf, MD**

*Commissioner,  
US Food and Drug Administration*



# MAIN CONFERENCE

## Program Schedule

**10:00 - 10:30 AM**

**BREAK – CONVENTION HALL**

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

### CONCURRENT SESSIONS

*SYMPOSIA & WORKSHOPS*

**Curriculum in Pharmacoepidemiology Training and Alignment with Updated Core Competencies: State of the Field and Educational Needs Assessment [31] – Argyle 1**

Amie Goodin | Vicki Osborne | Deborah Layton | Daniela Moga  
Almut Winterstein | Andrew Bate | Catherine Cohet | Lisa Pont  
David Moeny | Olaf Klungel | Simone Pinheiro | John Seeger  
K. Arnold Chan | Joshua Brown | Stanley Edlavitch | Hugh Tilson

**Data to Action: Leveraging Drug Utilization Research to Shift Clinical Practice and Health Policy [32] – Argyle 2**

Mina Tadrous | Lotte Rasmussen | Juan Hincapie-Castillo  
Gillian Caughey

**Developing Code Lists for Pharmacoepidemiology: The How and Why? [33] – Argyle 3**

Sina Noshad | Vincent Lo Re | Tzuyung Douglas Kou  
Asieh Golozar | Susan Oliveria

**Privacy-Preserving Solutions for Real-World Data (RWD) Access and Collaboration: Challenges and Opportunities [34] – MR201**

Echo Wang | Mehmet Burcu | Jeremy Rassen | Randi Foraker Lucy  
Mosquera | Patrice Verpillat

**Ready or Not, Here Come Estimands! The Emerging Attention to Causal Estimands in Real-World Evidence Studies [35] – MR202**

Xabier Garcia de Albeniz Martinez | Costel Chirila  
Miguel Hernan | Daniel Morales Leaver

**12:00 - 1:30 PM**

**LUNCH – BALLROOM**

**12:00 - 1:30 PM**

**POSTER SESSION A/EXHIBITS – CONVENTION HALL**

**12:00 - 1:30 PM**

### ISPE COMMITTEE MEETINGS

*Open to all attendees; lunch available.*

Finance – MR603/604

History & Archives – MR606

Public Policy – MR605

Membership – MR607

**12:15 - 1:15 PM**

**SPOTLIGHT POSTER SESSION A**  
**CONVENTION HALL**

Health Equity

Medical Devices

Medications in Pregnancy and Lactation

Pediatrics

Rare Diseases

RWE Collaborative

Vaccines

**1:30 - 3:00 PM**

### CONCURRENT SESSIONS

*ORAL PRESENTATIONS*

**Applied Methods for Evaluating Effectiveness – Argyle 1**

*MODERATORS:* Mugdha Gokhale | Kenneth Man

**1:30 PM**

**The Augmentation Therapy and Suicide Risk in Patients with Treatment-Resistant Depression Using Target Trial Emulation Framework [36]**

Daniel Hsiang-Te Tsai | Avery Shuei He Yang | Zi Xuan Wong  
Edward Chia-Cheng Lai (*Taiwan*)

**1:45 PM**

**Long-Term Effects of Intra-Articular Corticosteroid Injections Among Knee Osteoarthritis Patients: An Instrumental Variable and Propensity Score Analysis [37]**

Samuel Hawley | Albert Prats-Urbe | Gulraj Matharu  
Antonella Delmestri | Daniel Prieto-Alhambra | Andrew Judge  
Michael Whitehouse (*United Kingdom*)

**2:00 PM**

**Combining Randomized Trials and Observational Studies Data for Comparison of Treatment Effects: An Application to Disease Modifying Therapies for Multiple Sclerosis [38]**

Erwan Muros-Le Rouzic | Yanic Heer | Sean Yiu | Viola Tozzi  
Stefan Braune | Philip van Hóvell | Arnfin Bergmann  
Corrado Bernasconi | Fabian Model | Licinio Craveiro (*Switzerland*)

**2:15 PM**

**Comparative Effectiveness of Generic Versus Brand-Name Fluticasone-Salmeterol Dry Powder Inhalers to Treat COPD [39]**

William Feldman | Aaron Kesselheim | Jerry Avorn  
Massimiliano Russo | Shirley Wang (*United States*)

# MAIN CONFERENCE

## Program Schedule

### 2:30 PM

Cardiovascular Outcomes with SGLT2 Inhibitors Versus DPP4 Inhibitors and GLP-1 Receptor Agonists in Patients with Heart Failure with Reduced and Preserved Ejection Fraction [40]

Chintan Dave | Jimmy Gonzalez | Benjamin Bates  
Soko Setoguchi | Tobias Gerhard (United States)

### 2:45 PM

Assessing Comparability of Osteoporosis Treatment Groups Using Real World Healthcare Data from the U.K. and Denmark: Evaluating Propensity Score and Negative Control Outcome Methods to Address Confounding by Indication [41]

Eng Hooi (Cheryl) Tan | Trishna Rathod-Mistry | Victoria Strauss  
James O'Kelly | Francesco Giorgianni | Richard Baxter  
Alma Pedersen | Vera Ehrenstein  
Daniel Prieto-Alhambra (United Kingdom)

### Due Before, During, and After Pregnancy – Argyle 2

MODERATORS: Ursula Kirchmayer | Srikanth Siddalingegowda

### 1:30 PM

Drug Utilisation of Valproate-Containing Medicinal Products in Women of Childbearing Potential in 5 European Countries: A Population-Based Network Cohort Study Part of DARWIN EU® [42]

Albert Prats-Urbe | Martí Català Sabaté | Katia Verhamme  
Maria de Ridder | Carlen Reyes Reyes | Talita Duarte-Salles  
Peter Rijnbeek | Edward Burn | Daniel Prieto-Alhambra  
Annika Jödicke (United Kingdom)

### 1:45 PM

Determinants of Non-Compliance with the Pregnancy Prevention Program in Women Initiating Oral Isotretinoin Therapy: A Cohort Study from the French Nationwide Claims Database [43]

Anaïs Havet | Clara Bouvard | Aurélie Moskal | Marc Chanelière  
Jérôme Massardier | Bénédicte Lebrun-Vignes  
Annie Pierre Jonville-Bera | Cécile Payet | Marie Viprey (France)

### 2:00 PM

Use of Oral Preventive and Emergency Hormonal Contraceptives: Recent Trends and Response to the U.S. Supreme Court's Dobbs Decision [44]

Dima Qato | Jenny Guadamuz | Andrew Shoostari  
G. Caleb Alexander (United States)

### 2:15 PM

New Long-Acting Reversible Contraceptive Insertions More Than Doubled Among a Commercially Insured, U.S.-Based Outpatient Population from 2010 to 2020 [45]

Chase Latour | Clara Busse | Mekhala Dissanayake | Sara Dejene  
Andrea Knittel | Mollie Wood | Alan Kinlaw (United States)

### 2:30 PM

Antithyroid Drug Use Before and During Pregnancy: Assessment of Switching Patterns and Changes Over Time [46]

Tania Schink | Bianca Kollhorst | Ulrike Haug (Germany)

### 2:45 PM

Lithium in Pregnancy: A Utilization Study in the Five Nordic Countries [47]

Felix Wittström | Carolyn Cesta | Jacqueline Cohen | Marie Bendix  
Mette Bliddal | Mika Gissler | Maarit Leinonen | Laura Pazzagli  
Lotte Rasmussen | Helga Zoega | Johan Reutfors (Sweden)

### Effectiveness of Anticoagulant Therapy – Argyle 3

MODERATORS: Xiaojuan Li | Ya-Hui Yu

### 1:30 PM

Comparative Effectiveness and Safety of Clopidogrel Versus Aspirin in Patients with Acute Ischemic Stroke: A Nationwide Population-Based Study [48]

Hsin-Yi Huang | Chi-Chuan Wang | Chung-Hsuen Wu (Taiwan)

### 1:45 PM

Effectiveness and Safety of Apixaban, Rivaroxaban and Warfarin in Patients with Advanced Kidney Disease and Atrial Fibrillation: A Nationwide U.S. Cohort Study [49]

Edouard Fu | Rishi Desai | Julie Paik | Dae Kim | Yichi Zhang  
Julianna Mastroilli | Alexander Cervone  
Kueiyu Joshua Lin (United States)

### 2:00 PM

Emulating Randomized Controlled Trials of Non-Vitamin K Antagonist Oral Anticoagulants in Patients with Venous Thromboembolism [50]

Dongwon Yoon | Han Eol Jeong | Sohee Park | Seng Chan You  
Soo-Mee Bang | Ju-Young Shin (Republic of Korea)

### 2:15 PM

Framework for Assessing the Reproducibility of Observational Comparative Effectiveness Research: Direct Oral Anticoagulants and Ischemic or Hemorrhagic Events Case Study [51]

Asieh Golozar | Martin Lavalley | Anna Ostropelets  
M. Ines Neves | Priyamvada Desai | Thomas Falconer  
Scott DuVall | Michael Matheny | Marc Suchard  
Christian Reich (United States)

### 2:30 PM

The Comparative Effectiveness and Safety of Warfarin, Rivaroxaban, and Apixaban in Patients with Venous Thromboembolism: An Analysis of Three Real-World U.S. Healthcare Databases [52]

Geetha Iyer | Helen Tesfaye | Gregory Brill | Heidi Zakoul  
Sebastian Schneeweiss | Katsiaryna Bykov (United States)

# MAIN CONFERENCE

## Program Schedule

### 2:45 PM

Effectiveness and Safety of Reduced Dose Prasugrel Versus Standard Dose Ticagrelor in East Asian Patients with Acute Coronary Syndrome Undergoing Percutaneous Coronary Intervention [53]

Hsin-Yi Huang | Chi-Chuan Wang | Yee-Jen Wu  
Chien-Chih Wu | Ling-Ya Huang (Taiwan)

### Effectiveness of Antidiabetic Treatments – MR109

MODERATORS: Cynthia Gorman | Edward Chia-Cheng Lai

### 1:30 PM

Heterogenous Effects of Sodium-Glucose Cotransporter-2 Inhibitors on Nephrolithiasis in Older Adults with Type 2 Diabetes [54]

Yujia Li | Hui Shao | Yi Guo | Yongkang Zhang | Vivian Fonseca  
Lizheng Shi | Jiang Bian | Almut Winterstein  
Serena Jingchuan Guo (United States)

### 1:45 PM

Dipeptidyl Peptidase-4 Inhibitors and the Risk of Skin Cancer Among Patients with Type 2 Diabetes: Population-Based Cohort Study [55]

Richeek Pradhan | Laurent Azoulay | Robert Platt | Oriana Yu  
(Canada)

### 2:00 PM

Healthcare utilization and cost associated with Empagliflozin in Older Adults with Type 2 Diabetes: Results from the EMPRISE Study [56]

Phyo Than Htoo | Helen Tesfaye | Sebastian Schneeweiss  
Deborah Wexler | Robert Glynn | Niklas Schmedt  
Anouk Déruaz-Luyet | Lisette Koenenman | Julie Paik  
Elisabetta Paterno (United States)

### 2:15 PM

SGLT2 Inhibitors Associated with Decreased Risk of Nephrolithiasis Compared to GLP-1 Receptor Agonists: An Active Comparator, New User Cohort Study [57]

Adrian Martinez-De la Torre | Andrea Burden | Anton Pottegård  
Lars Christian Lund (Switzerland)

### 2:30 PM

Sodium-Glucose Cotransporter-2 Inhibitors, and Glucagon-Like Peptide-1 Receptor Agonists, and the Risk of Macrovascular, and Microvascular Complications Among Patients with Type 2 Diabetes and Non-Alcoholic Fatty Liver Disease [58]

Sungho Bea | Kristian Filion | Ju-Young Shin (Republic of Korea)

### 2:45 PM

Empagliflozin on the Risk of Retinopathy in Patients with Type 2 Diabetes: Results from the EMPRISE Study [59]

Helen Tesfaye | Phyo Than Htoo | Julie Paik | Heidi Zakoul  
Niklas Schmedt | Anouk Déruaz-Luyet | Lisette Koenenman  
Deborah Wexler | Elisabetta Paterno (United States)

### Health Outcomes Research:

#### What's in a Choice? – MR201

MODERATORS: Danica Marinac-Dabic | Susana Perez-Gutthann

### 1:30 PM

Association Between Angiotensin Receptor Blocker Drug Recalls and Adverse Clinical Outcomes in Patients with Heart Failure [60]

Katie Suda | Joshua Devine | Mina Tadrous  
Nandita Mukhopadhyay | Inmaculada Hernandez  
Scott Rothenberger | Katherine Callaway Kim (United States)

### 1:45 PM

Regulatory and Health Technology Assessment of Cell and Gene Therapies in Europe: Convergence or Divergence? [61]

Lourens Bloem | Mark Hoogendoorn | Babs Fabriek (Netherlands)

### 2:00 PM

Using a Target Trial Framework to Compare the Effect of High/Low Opioid Dosing Strategies at Post-Surgical Discharge on Newly Developed Opioid Use Disorder [62]

Yu-Chia Hsu | Hezekiel Nanda | Paul Drawz | Genevieve Melton  
Christopher Tignanelli | Bronwyn Southwell | Wendy St. Peter  
(United States)

### 2:15 PM

Novel Uses of Adaptive Designs to Guide provider Engagement in Electronic Health Records (NUDGE-EHR): A Pragmatic Adaptive Database-Randomized Trial [63]

Julie Lauffenburger | Lorenzo Trippa | Robert Glynn  
Massimiliano Russo | Punam Keller | Ted Robertson  
Kaitlin Hanken | Nancy Haff | Niteesh Choudhry (United States)

### 2:30 PM

Personalizing Communication To Improve Medication Adherence Using Reinforcement Learning: A Pragmatic Randomized Trial [64]

Julie Lauffenburger | Elad Yom-Tov | Punam Keller  
Marie McDonnell | Katherine Crum | Gauri Bhatkhande  
Kaitlin Hanken | Nancy Haff | Niteesh Choudhry (United States)

### 2:45 PM

Treatment Effectiveness of Oral Disease-Modifying Agent in Multiple Sclerosis Adjusting for Adherence Trajectories [65]

Jagadeswara Earla | Jieni Li | George Hutton | Rajender Aparasu  
(United States)

# MAIN CONFERENCE

## Program Schedule

### It Starts at The Very Beginning – MR202

MODERATORS: Susan dosReis | Daniel Horton

#### 1:30 PM

Health Canada Advisory Impact on the Prevalence and Trends of Oral Codeine Use in The Pediatric Canadian Population: A Comparative Study Across Provinces [66]

Odile Sheehy | Sherif Eltonsy | Steven Hawken | Padma Kaul  
Brandace Winquist | Olesya Barrett | Anamaria Savu  
Roxana Dragan | Michael Pugliese | Sasha Bernatsky  
Jessica Gorgui | Anick Bérard (Canada)

#### 1:45 PM

The use of ADHD Medication and the Risk of Suicide Attempt: A Multinational Population-Based Self-Controlled Case Series Study [67]

Adrienne Chan | Amy Chan | Edward Chia-Cheng Lai | Sohee Park  
Chin-Yao Shen | Ju-Young Shin | Li Wei | Kenneth Man  
Ian Wong (Hong Kong)

#### 2:00 PM

Antidepressant Treatment Initiation Among Children with Long COVID [68]

Puong Tran | Alejandro Amill-Rosario | Susan dosReis  
(United States)

#### 2:15 PM

The Comparative Effectiveness and Safety of Amoxicillin Alone Versus Amoxicillin/Clavulanate for the Outpatient Treatment of Acute Sinusitis in Children [69]

Timothy Savage | Matthew Kronman  
Sushama Kattinakere Sreedhara | Su Been Lee | Theresa Oduol  
Krista Huybrechts (United States)

#### 2:30 PM

Early-Life Cancer Risk Among Children Conceived by Assisted Reproductive Technology: A Comparative Nationwide Cohort Study from the French National Mother-Child Register "EPI-MERES" [70]

Paula Rios | Philippe Herlemont | Patricia Fauque | Brigitte Lacour  
Pierre Jouannet | Alain Weill | Mahmoud Zureik  
Jacqueline Clavel | Rosemary Dray-Spira (France)

#### 2:45 PM

Performance of Different Computable Phenotypes for the Identification of Opioid-Exposed Infants in the Electronic Health Record [71]

Andrew Wiese | Julia Phillippi | Alexandra Muhar  
Aleksandra Polic | Ge Liu | Sarah Loch | Henry Ong  
Wu-Chen Su | Wei-Qi Wei | Stephen Patrick (United States)

### 3:00 - 3:30 PM

BREAK / POSTERS / EXHIBITS – CONVENTION HALL

### 3:30 - 5:00 PM

#### CONCURRENT SESSIONS

##### SYMPOSIA & WORKSHOPS

Evaluating Challenges in Designing External Control Arm (ECA) Studies to Contextualize Effectiveness in Single-Arm Clinical Trials: A Case in Hematologic Malignancies [72] – Argyle 1

Wenzhen Ge | Christian Hampp | Bingcao Wu | Paul Spin  
K. Arnold Chan | Catherine Lerro

Integration of Systems Biology and Pharmacoepidemiology for Drug Repurposing Research: Lessons From the Drug Repurposing for Effective Alzheimer's Medicines (DREAM) Study [73] – Argyle 2

Rishi Desai | Tobias Gerhard | Jodi Segal | Madhav Thambisetty

Introducing CoLab: The Evolution of U.S.-Canada International Collaboration on Drug Safety and Effectiveness [74] – Argyle 3

Judith Maro | Tarry Ahuja | Melissa Kampman  
David Moeny | Kristian Filion

Leveraging Real-World Insights to Inform Long-term Follow-up for Cell and Gene Therapies: Opportunities for Pharmacoepidemiologists [75] – MR201

Jamie Geier | Kui Huang | Emily Bratton | Peter Mol  
Quazi Ataher | Rosa Gini

Sustainable Drug Use: Role of Pharmacoepidemiologists and Their Tools Addressing Environmental Impact of Drug Utilization [76] – MR202

Björn Wettermark | Elisabetta Poluzzi | Ana Tomas  
Elkanah Linder | Soko Setoguchi | Johanna Villén

### 5:00 - 5:15 PM

BREAK



# MAIN CONFERENCE

## Program Schedule

**5:15 - 6:45 PM**

### CONCURRENT SESSIONS

#### ORAL PRESENTATIONS

#### **Fear Not; Get the Shot – Argyle 1**

MODERATORS: Deborah Layton | Jaclyn Bosco

#### **5:15 PM**

Reporting Adverse Events Following Immunization in Ghana - Health Care Workers Experiences [77]

Nana Ansah | Daniel Weibel | Samuel Oladokun | Enyonam Duah  
Patrick Ansah | Abraham Oduro | Miriam Sturkenboom (Ghana)

#### **5:30 PM**

Concordance Between Analyses from the Moderna Global Safety Database (GSD) and a U.S. Population-Based Study for COVID-19 Vaccine, mRNA-1273 [78]

Priyadarshani Dharia | Samantha St. Laurent | Vaishali Khamamkar  
Walter Straus | Veronica Urdaneta | Magalie Emilebacker  
Katherine Mues | Christopher Bush | Neloufar Rahai | David Martin  
Daina Esposito (United States)

#### **5:45 PM**

Active Vaccine Safety Surveillance Utilizing Administrative Data: Evaluating the Use of Open and Closed Claims Vs. Closed Claims Alone [79]

Deesha Patel | Victoria Cooley | Christopher Bush  
Neloufar Rahai | Katherine Mues | Rebecca Taylor | Sahar Syed  
Shaina Desai | Pippa Hodgkins | Brent Arakaki  
Priyadarshani Dharia | David Martin | Daina Esposito (United States)

#### **6:00 PM**

Myocarditis Risk Following Immunization with Spikevax Primary Series and Booster Doses in a U.S. Administrative Database [80]

Daina Esposito | Christopher Bush | Neloufar Rahai  
Katherine Mues | Deesha Patel | Victoria Cooley | Sahar Syed  
Shaina Desai | Brent Arakaki | Priyadarshani Dharia  
David Martin (United States)

#### **6:15 PM**

Evaluation of Potential Adverse Events Following COVID-19 mRNA Vaccination Among Adults Aged 65 Years and Older: A Self-Controlled Study in the U.S. [81]

Hui-Lee Wong | Azadeh Shoaibi | Patricia Lloyd Tainya Clarke  
Yoganand Chillarige | Rose Do | Mao Hu | Yixin Jiao  
Andrew Kwist | Arnstein Lindaas | Rowan McEvoy  
Michelle Ondari | Shruti Parulekar | Xiangyu Shi | Jing Wang  
Kathryn Matuska | Yun Lu | Joyce Obidi | Cindy Zhou  
Jeffery Kelman | Richard Forshee | Steven Anderson (United States)

#### **6:30 PM**

Safety of Concomitant Administration of 23-Valent Polysaccharide Pneumococcal Vaccine and Influenza Vaccine Among the Elderly [82]

Heehyun Won | Jeong Ah Kim | Na-Young Jeong  
Nam-Kyong Choi (Republic of Korea)

#### **Finding Balance in the Rising Tides of Drug Safety in Older Adults: A Global Perspective – Argyle 2**

MODERATORS: Jennifer Lund | Shanna Trenaman

#### **5:15 PM**

Use of Cholinesterase Inhibitors and Non-Steroidal Anti-Inflammatory Drugs and the Risk of Peptic Ulcers: A Population-Based Self-Controlled Case Series Study [83]

Máté Szilcz | Jonas Wastesson | Amaia Calderón-Larrañaga  
Daniel Prieto-Alhambra | Pierre-Olivier Blotiere | Géric Maura  
Kristina Johnell (Sweden)

#### **5:30 PM**

Association of Anticholinergic Burden and Risk of Pneumonia in Aged People [84]

Avery Shuei He Yang | Xin-Yu Fan Jiang | Daniel Hsiang-Te Tsai  
Edward Chia-Cheng Lai (Taiwan)

#### **5:45 PM**

National Surveillance Using a Clinical Quality Indicator for Prolonged Antipsychotic Use Among Older Australians Living with Dementia Who Access Aged Care Services [85]

Janet Sluggett | Tracy Air | Maria Inacio | Catherine Lang  
Stephanie Ward | Susannah Ahern | Xiaoping Lin | Kasey Wallis  
Gillian Caughey (Australia)

#### **6:00 PM**

Effect of Non-benzodiazepine Hypnotics on Motor Vehicle Crashes Among Older Adults: A Sequential Target Trial Emulation [86]

Andrew Zullo | Marzan Khan | Melissa Pfeiffer | Seth Margolis  
Brian Ott | Allison Curry | Nina Joyce (United States)

#### **6:15 PM**

Association Between Antihypertensive Medication Initiation and Risk of Fractures Among Older Adults in VA Long-Term Care Facilities [87]

Chintan Dave | Yongmei Li | Michelle Odden (United States)

#### **6:30 PM**

Cumulative Sodium-Glucose Cotransporter 2 Inhibitor Exposure and Incident Dementia: A Population-Based Cohort Analysis [88]

Che-Yuan (Joey) Wu | Carina Iskander | Christa Wang  
Lisa Xiong Baiju Shah | Jodi Edwards | Moira Kapral  
Nathan Herrmann | Krista Lanctôt | Hugo Cogo-Moreira  
Bradley MacIntosh | Jennifer Rabin | Sandra Black | Refik Saskin  
Walter Swardfager (Canada)

# MAIN CONFERENCE

## Program Schedule

F R I

**5:15 - 6:45 PM**

### **LIGHTNING FORUM SESSION 1** *ARGYLE 3*

#### **Polypharm**

*MODERATORS*

Helga Gardarsdottir | Christopher Rentsch

**5:15 PM**

Trends in Psychotropic Polypharmacy Among Medicaid-Enrolled Youths in One U.S. State, 2015-2020 [89]

Yueh-Yi Chiang | Alejandro Amill-Rosario | Haeyoung Lee  
Phuong Tran | Susan dosReis *(United States)*

**5:20 PM**

Contribution of Incident Potentially Inappropriate Medications to Polypharmacy-Associated Mortality in Individuals 41-64 Years of Age [90]

Jordan Guillot | Amy Justice | Kirsha Gordon | Melissa Skanderson  
Antoine Pariente | Julien Bezin | Christopher Rentsch *(France)*

**5:25 PM**

Ten-Year Trajectories of Multimorbidity and Impact on Polypharmacy in Older People [91]

Marc Simard | Elham Rahme | Marjolaine Dubé  
Véronique Boiteau | Denis Talbot | Caroline Sirois *(Canada)*

**5:30 PM**

Depressive Symptoms and Polypharmacy Among Adults: A Population-Based Analysis Using National Health and Nutrition Examination Survey (NHANES) Data [92]

Elyse Miller | Michele Jonsson Funk *(United States)*

**5:35 PM**

Polypharm Panel Discussion

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validation**



# MAIN CONFERENCE

## Program Schedule

### Pregnancy

#### MODERATORS

Marleen Van Gelder | Helga Gardarsdottir

#### 5:45 PM

Characterizing Medication Use Patterns Among Pregnant and Non-Pregnant Patients with COVID-19 in the Sentinel System [93]

Mayura Shinde | Austin Cosgrove | Jolene Mosley Maria Kempner  
Jennifer Lyons | Elizabeth Messenger-Jones | Emma Hoffman  
José Hernández-Muñoz | Danijela Stojanovic | Ben Wong Leyla  
Sahin | Yueqin Zhao Susan Andrade | Darren Toh  
Wei Hua (United States)

#### 5:50 PM

Disorders of Glycemic Control in Child Following Exposure to Antibiotics: A Nationwide Cohort Study [94]

Eun-Young Choi | Sungho Bea | Ju-Young Shin (Republic of Korea)

#### 5:55 PM

Differences in Urinary Tract Infection Incidence During Pregnancy by Racial and Ethnic Group in an Integrated Health System in the U.S., 2010-2022 [95]

Paige Wartko | Sharon Fuller | Anne Butler | Susan Shortreed  
Michael Durkin | Sarah Osmundson | Katelin Nickel  
Sandra McAteer | Robin Garcia | Sascha Dublin (United States)

#### 6:00 PM

Prescription Medication Use During Pregnancy in the United States from 2011 to 2019 [96]

Omar Mansour | Rienna Russo | Loreen Straub  
Krista Huybrechts | Sonia Hernandez-Diaz (United States)

#### 6:05 PM

Pregnancy Panel Discussion

### Trends

#### MODERATORS

Helga Gardarsdottir | Lawrence Rasouliyan

#### 6:15 PM

Urinary Escherichia Coli Antimicrobial-Resistance Trends and Antibiotic Use in Australian Residential Aged Care from 2016-2018: An Ecological Study [97]

Chloe Smit | Lisa Pont | Hamish Robertson | Katja Taxis  
Kris Rogers | Caitlin Keighley | Spiros Miyakis (Australia)

#### 6:20 PM

Trends and Inequalities in Statin Use for the Primary and Secondary Prevention of Cardiovascular Disease [98]

Rutendo Muzambi | Krishnan Bhaskaran | Emily Herrett  
(United Kingdom)

#### 6:25 PM

Increase in Mental Health Conditions and Psychotropic Prescribing in Teenage Girls During the COVID-19 Pandemic in the U.S. [99]

Loreen Straub | Brian Bateman | Krista Huybrechts | Seanna Vine  
(United States)

#### 6:30 PM

Non-Antibiotic Prescription Drug Use Among Danish Children and Adolescents 2005-2021 [100]

Helene Kildegaard | Morten Olesen | Lotte Rasmussen (Denmark)

#### 6:35 PM

Trends Panel Discussion

### Vaccine Potpourri – MR109

MODERATORS: Nkuchia M'ikanatha | Morgan Marks

#### 5:15 PM

The Contribution of Immunization Information System Data to Claims-Based Capture of Vaccines Used to Prevent Mpox and Implications for Claims-Based Mpox Surveillance [101]

Lauren Peetluk | Michael Wilkinson | Wafa Tarazi | Tainya Clarke  
Joann Gruber | Alexandra Stone | Grace Yang | Kandace Amend  
Patricia Lloyd | Azadeh Shoaibi | Richard Forshee  
Steven Anderson | John Seeger | Elizabeth Bell (United States)

#### 5:30 PM

High-Dose Influenza Vaccine Receipt: Geographic Variation in Racial Health Disparities [102]

Joe Silva | Channele Howe | John Jackson | Melissa Riester  
Barbara Bardenheier | Liou Xu | Gary Puckrein | Robertus van Aalst  
Matthew Loiacono | Andrew Zullo (United States)

#### 5:45 PM

Effectiveness of Recombinant Zoster Vaccine Against Herpes Zoster in a Real-World Setting. The Vaccine Safety Datalink [103]

Ousseny Zerbo | Joan Bartlett | Bruce Fireman | Ned Lewis  
Kristin Goddard | Kathleen Dooling | Jonathan Duffy | Jason Glanz  
Allison Naleway | James Donahue | Nicola Klein (United States)

#### 6:00 PM

Comparing Vaccination Timeliness Among U.S. Children in the 2019 and 2021 National Immunization Survey-Child [104]

Sophia Newcomer | Sarah Michels | Alexandria Albers  
Rain Freeman | Christina Clarke | Matthew Daley | Jason Glanz  
(United States)

#### 6:15 PM

Statins May Modulate the Effectiveness of the Flu Vaccine According to the Type of Respiratory Outcome: Results from the Statin Treatment Options During Vaccination Against inFLUenza (STOPFlu) Study [105]

William Henley | Adam Streeter (United Kingdom)

# MAIN CONFERENCE

## Program Schedule

FR I

### 6:30 PM

Assessment of Neurological and Immunological Adverse Events Following Childhood Pneumococcal Vaccination: A Population-Based Self-Controlled Risk Interval Analysis [106]

Ju Hwan Kim | Dongwon Yoon | Hyesung Lee | Ju-Young Shin  
(Republic of Korea)

### Mixing Up the Methods in Drug Utilization Research – MR201

MODERATORS: Andrea Burden | Petra Denig

### 5:15 PM

Approach to Standardised Drug Utilisation Analyses in DARWIN EU© [107]

Annika Jödicke | Albert Prats-Urbe | Martí Català Sabaté  
Edward Burn | Maria de Ridder | Peter Rijnbeek | Katia Verhamme  
Daniel Prieto-Alhambra (United Kingdom)

### 5:30 PM

Using Day-Level Registry Data to Assess Heterogeneous and Time-Varying Medication Exposure Patterns in Patients Receiving Long-Term Outpatient Antibiotic Therapy, 2015-2022 [108]

Madison Ponder | Renae Boerneke | Asher Schranz  
Michael Swartwood | Claire Farel | Alan Kinlaw (United States)

### 5:45 PM

Projected Impact of Weight-Loss Medication Use on Racial-Ethnic Disparities in Adolescent Obesity [109]

Mary Ellen Vajravelu | Patricia Chu | David Frank | Ravy Vajravelu  
(United States)

### 6:00 PM

Approaches to the Description of Patterns of Care After Colitis Diagnosis in Melanoma Patients Treated with Immune Checkpoint Inhibitors (ICIs) [110]

Xianying Pan | Vishal Kulkarni | Raminder Pathak | Stefano Monda  
Imran Hasan (United States)

### 6:15 PM

Characteristics of U.S. Middle-Aged Adults with Polypharmacy: An Unsupervised Machine Learning Approach [111]

Michael Munsell | April Duddy | Matthew Lucci  
Tiffany Woodworth (United States)

### 6:30 PM

Assessing the Performance of Group-Based Trajectory Modelling Method to Discover Patterns of Medication Adherence [112]

Alind Gupta | Awa Diop Iouis Dron | Sabrina Mueller | Gerald Smith  
(Canada)

### COVID Consequences – MR202

MODERATORS: Alec Walker | Debabrata Roy

### 5:15 PM

Association between COVID-19 Vaccination and Healthcare Contacts for Menstrual Disturbance and Pre- and Post-Menopausal Bleeding – A Nationwide Cohort Study of 3 Million Swedish Women [113]

Yiyi Xu | Rickard Ljung | Anders Sundström | Susannah Leach  
Ebba Hallberg | Maria Bygdell | Maria Larsson | Veronica Arthursen  
Magnus Gisslen | Rolf Gedeberg | Fredrik Nyberg (Sweden)

### 5:30 PM

Stroke, Myocardial Infarction, and Pulmonary Embolism after COVID-19 mRNA bivalent booster in People Aged 50 Years or Older [114]

Marie-Joelle Jabagi | Marion Bertrand | Jérémie Botton  
Stéphane Le Vu | Jérôme Drouin | Alain Weill  
Rosemary Dray-Spira | Mahmoud Zureik (France)

### 5:45 PM

Myocarditis Associated with Sars-Cov-2 Vaccines by Dose and Brand in Three European Countries Using Large Electronic Health Care Data Sources: A Self-Controlled Risk Interval Study in the COVID-19 Vaccine Monitor Study [115]

Carlos Durán | Svetlana Belitser | Sophie Bots | Fabio Riefolo  
Davide Messina | Rosa Gini | Patricia García-Poza  
Mar Martín Pérez | Juan José Carreras | Elisa Correcher-Martínez  
Arantxa Urchueguía | Patrick Souverein | Felipe Villalobos  
Judit Riera-Arnau | Anna Schultze | Ian Douglas | Olaf Klungel  
Miriam Sturkenboom (Netherlands)

### 6:00 PM

Cerebral Venous Sinus Thrombosis without Thrombocytopenia After ChAdOx1 nCoV-19 Vaccination [116]

Mi-Sook Kim | Jeong Pil Choi | Eunsil Yoon | Joongyub Lee  
Joung-Ho Rha (Republic of Korea)

### 6:15 PM

Effect of COVID-19 Vaccination on Thromboembolic and Cardiovascular Complications Following SARS-CoV-2 Infection [117]

Núria Mercadé Besora | Annika Jödicke | Elena Roel  
Antonella Delmestri | Clara Prats | Daniel Prieto-Alhambra  
Martí Català Sabaté (Spain)

### 6:30 PM

Risk of Guillain-Barré Syndrome Following COVID-19 Vaccines: A Nationwide Self-Controlled Case Series Study [118]

Jérémie Botton | Stéphane Le Vu | Jérôme Drouin  
Marion Bertrand Marie-Joelle Jabagi | Laura Semenzato  
Alain Weill | Rosemary Dray-Spira | Mahmoud Zureik (France)



# MAIN CONFERENCE

## Program Schedule

**7:00 - 8:00 PM**

### ISPE SPECIAL INTEREST GROUP MEETINGS

*Open to all attendees.*

Adherence – MR 606

AsPEN – MR603/604

Cell & Gene Therapy – MR607

CER – MR614

Database – MR608/609

Digital Epidemiology – MR611

Drug-Drug Interaction – MR602

Drug Utilization Research (DUR) – Ballroom

Environmental Pharmacoepidemiology – MR615

Genomics & Precision Medicine —Argyle 3

Geriatric Pharmacoepidemiology – Argyle 2

Health Equity – MR612/613

Medications in Pregnancy & Lactation – MR109

Pediatric – MR103

Rare Disease – Argyle 1

RWE Collaborative – MR202

Vaccines – MR201

**8:30 - 11 PM**

### STUDENTS/EARLY CAREER PROFESSIONALS MEET & GREET

*Hosted by the ISPE Student Council*

Roxbury Urban Dive Bar,  
Grafton Connor Downtown Complex

## The PHARMO Institute and Lumanity are Partnering to Invest in New Solutions to Support Enhanced Real World Data Analytics

Check out our presentations at ICPE, including  
eight posters and three oral presentations

- Impact of the COVID-19 Pandemic in the Netherlands on Primary Healthcare Use and Clinical Outcomes in People With Type 2 Diabetes.
- Risk of Cardiovascular Events After an Exacerbation of Chronic Obstructive Pulmonary Disease: A Cohort Study Using the PHARMO Data Network.
- Impact of 2018 EU Risk Minimization Measures and Revised Pregnancy Prevention Program on Utilization and Prescribing Trends of Valproates.



Working together to address global use cases in pharmacoepidemiology and HEOR to help optimize patient access to care.

Reach out to [contact@lumanity.com](mailto:contact@lumanity.com) for more information.





# MAIN CONFERENCE

## Program Schedule

SAT

S A T U R D A Y , A U G U S T 26

**7:00 AM - 6:00 PM**

**SPEAKER READY ROOM – MR102**

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 – CONVENTION HALL PRE-FUNCTION**

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

**LACTATION ROOM – MR505**

*Sponsored by EPI Excellence, LLC*

**7:00 - 8:00 AM**

**CONTINENTAL BREAKFAST – CONVENTION HALL**

**7:00 - 8:00 AM**

**ISPE REGIONAL INTEREST GROUP MEETINGS**

*Open to all attendees.*

**Africa – MR604**

**Latin America – MR612/613**

**7:00 - 8:00 AM**

**POSTER SESSION B SET-UP – CONVENTION HALL**

**8:00 AM - 6:00 PM**

**EXHIBITS / POSTER SESSION B – CONVENTION HALL**

**8:00 - 9:30 AM**

**CONCURRENT SESSIONS:  
ORAL PRESENTATIONS**

**A Tour of Informatics:  
From Prediction to Prevalence – Argyle 1**

*MODERATORS:* Julie Lauffenburger | Rosa Gini

**8:00 AM**

**Breast Cancer Cohort Comparison Among Four Real-World Databases [119]**

Xinyue Liu | Golnoosh Alipour Haris | Changxia Shao  
Mehmet Burcu | Edward Bortnichak | Sarah Markt | Thao Vo  
Chu-Ling Yu (*United States*)

**8:15 AM**

**Comparison of EHR Data-Completeness in Patients with Different Types of Medical Insurance Coverage in the United States [120]**

Priyanka Anand | Yichi Zhang | David Merola | Yinzhu Jin  
Shirley Wang | Joyce Lii | Jun Liu | Kueiyu Joshua Lin (*United States*)

**8:30 AM**

**Variation in Mother-Infant Linkage Rates by Jurisdiction in U.S. Medicaid Data [121]**

Bradley Hammill | Michael Stagner | Judith Maro | Sarah Dutcher  
David Moeny | Robert Rosofsky | Daniel Kiernan | Laura Shockro  
Alexander Mai | Jessica Pritchard | Steven Lippmann  
Pratap Adhikari (*United States*)

**8:45 AM**

**Developing Clinically Interpretable Machine Learning Algorithms for Pressure Injury Safety Surveillance with Explainable AI [122]**

Andy Wilson | Jenny Alderden | Jace Johnny (*United States*)

**9:00 AM**

**Brain Metastasis Prediction in Patients with Metastatic Breast Cancer using a U.S. Nationwide Clinico-genomic Database [123]**

Yunru Huang | Tianyi Sun | Thibaut Sanglier | Chiara Lambertini  
Adam Knott | Yolande Du Toit | Raf Poppe | Eleonora Restuccia  
Sanne de Haas | Patricia Luhn (*United States*)

**9:15 AM**

**Prevalence of Probable Alzheimer's Disease in Veteran Patients Based on Clinical Notes from Electronic Health Records [124]**

Donald Miller | Guneet Jasuja | Byron Aguilar | Xuyang Li  
Ekaterina Shishova | Dan Berlowitz | Peter Morin  
Maureen O'Conner | Andrew Nguyen | Cindy Christiansen  
Raymond Zhang | Amir Abbas Tahami Monfared | Quanwu Zhang  
Weiming Xia (*United States*)

# MAIN CONFERENCE

## Program Schedule

### Brainstorm NS Treatments/Exposure – Argyle 2

MODERATORS: Ian Douglas | Kristian Filion

#### 8:00 AM

Methotrexate and the Risk of Alzheimer's Disease Among U.S. Patients with Rheumatoid Arthritis [125]

Caitlin Dodd | Elsie Divinagracia | Gally Reznor | Michael Munsell  
(Netherlands)

#### 8:15 AM

Association Between Gabapentinoids and the Risk of Severe Exacerbations in Patients with Chronic Obstructive Pulmonary Disease [126]

Alvi Rahman | Sophie Dell'Aniello | Erica Moodie  
Madeleine Durand | Janie Coulombe | Jean-François Boivin  
Pierre Ernst | Christel Renoux (Canada)

#### 8:30 AM

Comparative Safety of Alprazolam Versus Other Benzodiazepines and Bupirone and Risk of Suicidal Behavior [127]

Jill Lavigne | Kwan Hur | J. John Mann | Robert Gibbons  
(United States)

#### 8:45 AM

Use of Hypnotic-Sedative Medication and Risk of Falls and Fractures in Danish Adults: A Self-Controlled Time-Series Study [128]

Merete Osler | Maarten Pieter Rozing | Marie Kim Wium-Andersen  
Ida Kim Wium-Andersen | Terese Sara Høj Jørgensen  
Martin Jørgensen (Denmark)

#### 9:00 AM

Risk of Osteoporotic Fractures in Menopausal Women with Common Mental Health Problems Using SSRI/SNRI antidepressants: Cohort Study [129]

Dana Alsugeir | Li Wei | Matthew Adesuyan | Vikram Talaulikar  
Ruth Brauer (Saudi Arabia)

#### 9:15 AM

Risk of Opioid Overdose with Concomitant Use of Oxycodone and Selective Serotonin Reuptake Inhibitors [130]

Katsiaryna Bykov | C. Andrew Basham | Nazleen Khan  
Seanna Vine | Heba Edrees | Julianna Mastroilli | Brian Bateman  
Robert Glynn | Krista Huybrechts (United States)

### Don't Lose Heart – Argyle 3

MODERATORS: Elena Rivero-Ferrer | Elizabeth Bell

#### 8:00 AM

Signal Evaluation Using Observational Databases to Examine Methylphenidate Use and the Risk of Epistaxis [131]

David Kern | Steven Smugar | Azza Shoaibi | Patrina Muller  
Anthony Sena | Martijn Schuemie | James Gilbert  
Mitchell Conover | Patrick Ryan (United States)

#### 8:15 AM

Statin Use and the Risk of Cancer in Patients with Heart Failure: A Target Trial Emulation [132]

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

#### 8:30 AM

Sequential Safety Monitoring of Rofecoxib for Cardiovascular Adverse Effects [133]

Saad Abbasi | Lars Christian Lund | Jesper Hallas  
Martin Thomsen Ernst | Anton Pottegård (Denmark)

#### 8:45 AM

Impact of Beta-Blockers on Mortality and Cardiovascular Disease Outcomes in Patients with Obstructive Sleep Apnoea: A Target Trial Emulation Study [134]

Anthony Chen | Chengsheng Ju | Isla Mackenzie | Allan Struthers  
Li Wei | Kenneth Man (United Kingdom)

#### 9:00 AM

Cardiovascular Safety of Ibuprofen Use for Acute Pericarditis: A Danish Population-Based Cohort Study [135]

Kasper Bonnesen | Morten Schmidt Jakob Kjølby Eika  
Vera Ehrenstein | Henrik Toft Sørensen (Denmark)

#### 9:15 AM

Sclerostin Inhibition, Cardiovascular Biomarkers, Risk Factors, and Clinical Outcomes: A Mendelian Randomisation Analysis Using U.K. Biobank Data [136]

Marta Alcalde-Herraiz | Junqing Xie | Danielle Newby | Clara Prats  
Dipender Gill | Daniel Prieto-Alhambra | Albert Prats-Urbe  
Martí Català Sabaté (United Kingdom)

# MAIN CONFERENCE

## Program Schedule

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T

### Let Us Give it a Trial: Methods in PE – MR109

MODERATORS: Jessica Franklin | Soko Setoguchi

#### 8:00 AM

Conditions for Unbiased Complete Case Analysis in External Control Arms: A Simulation Study [137]

Michael Webster-Clark | Jessie Edwards | Rachael Ross (Canada)

#### 8:15 AM

Large-Scale Empirical Identification of Candidate Comparators for Pharmacoepidemiological Studies [138]

Justin Bohn | James Gilbert | Christopher Knoll | David Kern  
Patrick Ryan (United States)

#### 8:30 AM

A Meta-Analysis of Bias in Non-Small Cell Lung Cancer External Control Validation Studies Using PFS and Real-World PFS Endpoints [139]

Michael Bretscher | Sanaa Bahmane | Chris Harbron  
Devin Incerti (Switzerland)

#### 8:45 AM

Evaluation of Methods for Building a Hybrid Real-World (RW) Control Arm for Baricitinib Phase IIB Randomized Controlled Trial (RCT) in Patients with Rheumatoid Arthritis (RA) [140]

Heather Litman | Oksana Pugach | Kristin Sheffield  
Anita Loughlin | Mingyang Shan | Douglas Faries  
Carla Roberts-Toler | Paul Lakin | Zhanglin Cui | Leslie Harrold  
(United States)

#### 9:00 AM

A Bayesian Framework to Summarize Negative Control Outcome Models Assessing the Comparability of Patients Initiating Migraine Preventive Medications [141]

Shia Kent | David Pritchard | Sam Oh | Robert Urman  
Paul Muntner | Rohini Hernandez | M. Alan Brookhart (United States)

#### 9:15 AM

Using Negative Control Outcomes to Identify Unmeasured Confounding in a Self-Controlled Risk Interval Study Evaluating the COVID-19 Vaccine Myocarditis Safety Signal [142]

Sophie Bots | Svetlana Belitser | Carlos Durán | Judit Riera-Arnau  
Anna Schultze | Davide Messina | Elena Segundo | Ian Douglas  
Juan José Carreras | Patricia García-Poza | Rosa Gini  
Consuelo Huerta | Mar Martín-Perez | Ivonne Martin  
Olga Paoletti | Carlo Alberto Bissacco | Elisa Correcher-Martínez  
Patrick Souverein | Arantxa Urchueguía | Felipe Villalobos  
Miriam Sturkenboom | Olaf Klungel (Netherlands)

### Liver and Pregnancy Research Gone Viral – MR201

MODERATORS: Emily Brouwer | Jacinthe Leclerc

#### 8:00 AM

Comparative Effectiveness and Safety of Apixaban and Rivaroxaban in Cirrhosis and Atrial Fibrillation [143]

Kueiyu Joshua Lin | Tracey Simon | Yichi Zhang  
Julianna Mastrorilli | Alexander Cervone (United States)

#### 8:15 AM

Comparative Effectiveness of Non-Selective Beta Blockers in Cirrhosis [144]

Kueiyu Joshua Lin | Tracey Simon | Yichi Zhang  
Julianna Mastrorilli | Alexander Cervone (United States)

#### 8:30 AM

Sodium-Glucose Cotransporter-2 Inhibitors and Risk of Hepatocellular Carcinoma Among Patients with Type 2 Diabetes: A Population-Based Cohort Study [145]

Sungho Bea | Han Eol Jeong | Yunha Noh | Sohee Park  
Dong Hyun Sinn | Jae Hyeon Kim | Oriana Yu | Laurent Azoulay  
Ju-Young Shin (Republic of Korea)

#### 8:45 AM

Association of Oral Direct-Acting Antiviral Therapy with Development of Parkinson's Disease in Patients with Chronic Hepatitis Virus [146]

Pilar Hernandez-Con | Raj Desai | Haesuk Park (United States)

#### 9:00 AM

Comparative Effectiveness of the Levonorgestrel (LNG) Implant and Depot Medroxyprogesterone Acetate (DMPA) Injectable for Prevention of Pregnancy Among Women Living with HIV on Efavirenz [147]

Katie Mollan | Daniel Westreich | Brian Pence | Agatha Bula  
Clara Lemani | John Chapola | Jennifer Winston | Karen Diepstra  
Jill Hagey | Sam Phiri | Jane Chiwoko | Mina Hosseinipour  
Michael Hudgens | Mackenzie Cottrell | Jennifer Tang  
(United States)

#### 9:15 AM

Treating Genital Herpes Infection During Pregnancy to Reduce the Risk of Preeclampsia: A Prospective Cohort Study of more than 89,000 Pregnant Women [148]

De-Kun Li | Jeannette Ferber (United States)

# MAIN CONFERENCE

## Program Schedule

### With Whom Do We Compare? – MR202

MODERATORS: Stanley Edlavitch | Anick Bérard

#### 8:00 AM

Case Validation in Electronic Health Records linked with a Disease-Specific Clinical Database: Use Case in Pulmonary Arterial Hypertension [149]

Eva-Maria Didden | Di Lu | Haley Hedlin | Andrew Hsi  
Monika Brand | Roham Zamanian (Switzerland)

#### 8:15 AM

Does Misclassification Due to Electronic Health Record Discontinuity Cause Biased Effect Estimates in Comparative Effectiveness Research? [150]

Yin Zhu Jin | Richard Wyss | Shirley Wang | Rishi Desai  
Kueiyu Joshua Lin (United States)

#### 8:30 AM

International Classification of Diseases (ICD-10) Code Identification of Lab-Confirmed SARS-CoV-2 within Electronic Health Data [151]

Sasha Bernatsky | Marina Birk | Autumn Neville | Louise Pilote  
Erik Youngson | James King | Anick Bérard | Sherif Eltonsy  
Cristiano Moura (Canada)

#### 8:45 AM

Using Tree-Based Scan Statistics for Signal Identification: Screening for Elevated Congenital Malformation Risk Following Prenatal Antipsychotic Exposure [152]

Loreen Straub | Shirley Wang | Sonia Hernandez-Diaz  
Seanna Vine | Massimiliano Russo | Brian Bateman | Yanmin Zhu  
Krista Huybrechts (United States)

#### 9:00 AM

How to Underpower Your Real-World Data Study: Examples and Ways to Avoid Them Using Quantitative Bias Analysis [153]

Sudhir Venkatesan | Christen Gray (United Kingdom)

#### 9:15 AM

A Methodology Study to Evaluate External Comparator Arm Study Results Versus Randomised Controlled Trial Results: Metastatic Hormone-Sensitive Prostate Cancer Case Study [154]

Wilhelmina Hoogendoorn | Héctor Sanz | Chantal Quinten  
Joan Largent | Gerd Rippin (Netherlands)

### 9:30 - 10:00 AM

BREAK / POSTERS / EXHIBITS – CONVENTION HALL

### 10:00 - 11:30 AM

#### PLENARY SESSION

#### Patient Involvement in the Development and Safe Use of Medicines – Ballroom

Regional authorities worldwide have called for greater patient involvement in the development and safe use of medicines, including:

- IMI-Prefer (EU) for obtaining patient preferences in medical product decision making
- U.S. FDA Patient-Focused Drug Development (PDUFA VII Commitment) for capturing meaningful incorporation of patient voice into drug development and evaluation
- EMA Good Pharmacovigilance Practice (GVP Module XVI, Rev 3) for patient engagement concerning additional risk minimization measures, including selection of tools and effectiveness indicators.

The 2022 Report from the Working Group XI Council for International Organizations of Medical Sciences (CIOMS) advanced the global importance of systematically involving patients throughout a medicine's life – from its early development through the regulatory process to ongoing monitoring and safe use in everyday healthcare.

ISPE member feedback indicates interest in simple, pragmatic approaches for engaging patients in routine drug safety research and emerging regulatory and scientific guidance.

Priya Bahri, PhD, RPh

Senior Lead

(Pharmacovigilance and Risk Management Guidance and Policy),  
European Medicines Agency

Stella Blackburn, MB BS, MA, MSc, FRCP (Edin) FISPE,  
FFPM, DLSHTM, Dip Pharm Med

Vice President,

Global Head of Early Access and Risk Management, RWES, IQVIA

Michael Wolf, PhD, MPH

Associate Vice Chair for Research, Institute for Public Health and Medicine

MODERATOR

Elaine Morrato, DrPH, MPH, FISPE

Dean and Professor,

Parkinson School of Health Sciences and Public Health,  
Loyola University Chicago

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

LUNCH – BALLROOM

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

POSTER SESSION B / EXHIBITS – CONVENTION HALL





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# MAIN CONFERENCE

## Program Schedule

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

### ISPE COMMITTEE MEETINGS

*Open to all attendees; lunch available*

Global Development – *MR604*

Education – *MR605*

Sustainability – *MR612/613*

**11:45 AM - 12:45 PM**

### SPOTLIGHT POSTER SESSION B

CONVENTION HALL

Adherence

ASPEN

Biologics

BRACE

Cancer

Cell & Gene Therapy

Comparative Effectiveness Research

**1:00 - 2:30 PM**

### LIGHTNING FORUM SESSION 2

ARGYLE 1

#### Equity

MODERATORS

Mary Beth Ritchey | Leo Russo

**1:00 PM**

Genetic Variants and Social Benefit Use in Premenopausal Breast Cancer Patients Treated with Docetaxel: A Danish Population-Based Cohort Study [155]

Julie Schmidt | Cathrine Hjorth | Dóra Farkas | Per Damkier  
Søren Feddersen | Stephen Hamilton-Dutoit | Bent Ejlersen  
Timothy Lash | Henrik Toft Sørensen | Deirdre Cronin-Fenton  
(Denmark)

**1:05 PM**

Structural Racism and Inequities in Real-World Treatment and Survival Among Patients with Four Solid-Tumor Cancers [156]

Harlan Pittell | Jenny Guadamuz | Amy Pierre | Cleo Ryals  
Gregory Calip (United States)

**1:10 PM**

Patient Diversity and Personalized Treatment of Non-Small Cell Lung Cancer [157]

Carla Vossen | Jessica Albano (Netherlands)

**1:15 PM**

Pharmacist Prescribing in Nova Scotia: Uptake and Adaptation to Policy-Related Changes [158]

Jennifer Isenor | Amy Grant | Alice Bruce | Judith Fisher  
Katelyn Frizzell | Elizabeth Jeffers | Rebecca Lawrence | Lihui Liu  
Andrea Murphy | Ingrid Sketris | Samuel Stewart  
Shanna Trenaman | Lisa Woodill (Canada)

**1:20 PM**

Equity Panel Discussion

### Target Trials/Causal

MODERATORS

Robert Platt | Mary Beth Ritchey

**1:30 PM**

Emulated Target Trial Assessing the Effect of Empiric Potassium Supplementation on All-Cause Mortality Among Furosemide Initiators [159]

Todd Miano | Thanh Phuong Pham Nguyen | Sean Hennessy  
Colleen Brensinger | Warren Bilker | Laura Dember | Allison Willis  
Charles Leonard (United States)

**1:35 PM**

Effects of SGLT2 Inhibitors on Anemia in Patients with Diabetes and Chronic Kidney Disease: A Population-Based Cohort Study Using Target Trial Emulation Framework [160]

Jia-Chian Hu | Shih-Chieh Shao | Daniel Hsiang-Te Tsai  
Albert Tzu-Ming Chuang | Kuan-Hung Liu  
Edward Chia-Cheng Lai (Taiwan)

**1:40 PM**

Risk of Stroke with Various Types of Menopausal Hormone Therapy: A Swedish Nationwide Register-Based Emulated Target Trial [161]

Therese Johansson | Philip Fowler | Alkistis Skalkidou  
Weronica Ek | Torgny Karlsson | Åsa Johansson (Sweden)

**1:45 PM**

A Causal Inference Approach to Evaluate the Effect of Comprehensive Medication Reviews on All-Cause Mortality Among Medicare Beneficiaries [162]

Daniela Moga | Ximena Gonzalez | Erin Abner  
Anna Kucharska-Newton | Patricia Freeman  
David Fardo (United States)

**1:50 PM**

Target Trials/Causal Panel Discussion

# MAIN CONFERENCE

## Program Schedule

SAT

### Vaccines-COVID

MODERATORS

Jessica Jalbert | Mary Beth Ritchey

#### 2:00 PM

The EU Vaccine Monitoring Platform: A New Framework Leveraging European Union Pharmacoepidemiological Expertise and Data Sources to Monitor the Effectiveness and Safety of Vaccines [163]

Catherine Cohet | Luca Giraldi | Manuela Mura | Lorna Leal  
Kate Olsson | Karam Adel | Kim Brolin | Piotr Kramarz  
Sabrina Bacci | Marco Cavaleri | Karl Ekdahl  
Peter Arlett (Netherlands)

#### 2:05 PM

VAC4EU Study Tracking Post-Authorization Safety of mRNA-1273 in Five European Countries: How to Overcome the Methodological Challenges [164]

Brianna Goodale | Wout Aarts | Jungyeon Choi | Debabrata Roy  
Catherine Fry | Samantha Lane | Rosa Gini | Anna Girardi  
Olga Paoletti | Felipe Villalobos | Carlo Alberto Bissacco  
Elena Segundo | Angela Lupattelli | Jing Zhao | Daniel Weibel  
Daina Esposito | David Martin | Samantha St. Laurent  
Magalie Emilebacker | Vera Ehrenstein | Signe Sørup (Netherlands)

#### 2:10 PM

The Contribution of Immunization Information System Data to Claims-Based Vaccine Administration Capture Over Time and Implications for Claims-Based COVID-19 Vaccine Studies [165]

Lauren Peetluk | Michael Wilkinson | Alexandra Stone  
Tainya Clarke | Wafa Tarazi | Grace Yang | Patricia Lloyd  
Hui-Lee Wong | Azadeh Shoaibi | Richard Forshee  
Steven Anderson | Kandace Amend | John Seeger  
Elizabeth Bell (United States)

#### 2:15 PM

Interpreting Relative Vaccine Effectiveness: Challenges and Real Examples from the REFORCO-Brazil Study on COVID-19 Vaccines [166]

Sylvia Taylor | Wilhelmine Meeraus | Christen Gray  
Eduardo Conde-Sousa | Andrew Lee | Abigail Postema  
Andre Santa Maria | Bárbara Emoingt Furtado | Claudia Corte  
Mario Ouwers (United Kingdom)

#### 2:20 PM

Vaccines-COVID Panel Discussion

### 1:00 - 2:30 PM

#### CONCURRENT SESSIONS: ORAL PRESENTATIONS

#### Risky Business... – Argyle 2

MODERATORS: Alys Havard | Leyla Sahin

#### 1:00 PM

Benzodiazepine Use Early in Pregnancy and Risk of Congenital Malformations [167]

Ayesha Sujan | Brian Bateman | Loreen Straub  
Sonia Hernandez-Diaz | Yanmin Zhu | Gregory Brill  
Krista Huybrechts (United States)

#### 1:15 PM

Risk of Preterm Birth Associated with ADHD Medication Use in Pregnancy [168]

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

#### 1:30 PM

Prenatal Exposure to Selective Serotonin Reuptake Inhibitors and Risk of Disorders of Gut-Brain Interaction in the Offspring [169]

Helene Kildegaard | Mette Bliddal | Martin Thomsen Ernst  
Rikke Wesselhoeft | Anton Pottegård | Kara Margolis  
Ardesheer Talati (Denmark)

#### 1:45 PM

Antiseizure Medication During Pregnancy and Offspring Neurodevelopmental Outcomes: A Study of Two Cohorts from the U.K. and Sweden [170]

Viktor Ahlqvist | Paul Madley-Dowd | Harriet Forbes | Jessica Rast  
Caichen Zhong | Michael Lundberg | Ciarrah-Jane Barry  
Florence Martin | Lars Torbjorn Tomson | Daniel Berglind  
Neil Davies | Kristen Lyall | Dheeraj Rai | Cecilia Magnusson  
Brian Lee (Sweden)

#### 2:00 PM

Comparing Long-Term Neurodevelopmental Outcomes in Children with Prenatal Exposure to Buprenorphine and Methadone: A Population-based Study [171]

Mennatullah Hasan | Todd Brothers | Kristina Ward  
Xuerong Wen (United States)

#### 2:15 PM

Fetal and Early Life Exposure to Antibiotics and the Risk of Neurodevelopmental Disorders: A Nationwide Population-Based Cohort Study with Sibling Analysis [172]

Ahhyung Choi | Hyesung Lee | Han Eol Jeong  
Ju-Young Shin (South Korea)

# MAIN CONFERENCE

## Program Schedule

### Safety in Numbers: A Potpourri – Argyle 3

MODERATORS: Antonios Douros | Tania Schink

#### 1:00 PM

Use of Proton Pump Inhibitors and Risk of Severe COVID-19: A Case-Control Study in U.S. Medicare Beneficiaries [173]

Michael Wernecke | Andrew Mosholder | Hector Izurieta  
Rongmei Zhang | Shanlai Shanguan | Yun Lu  
Sandia Akhtar Jiwei He | Yoganand Chillarige | Yuhui Feng  
Armen Avagyan | Kira Leishear | Richard Forshee  
Thomas MaCurdy | Jeffery Kelman | David Graham (United States)

#### 1:15 PM

The Risk of Acute Transverse Myelitis after COVID-19 Vaccination: Self-Controlled Case Series Study [174]

Eunsun Lim | Yoo Hwan Kim | Na-Young Jeong | Jong-Seok Bae  
Nam-Kyong Choi (Republic of Korea)

#### 1:30 PM

Comparative Safety of Antibiotics for the Treatment of Outpatient Community-Acquired Pneumonia [175]

Anne Butler | Katelin Nickel | John Sahrmann | Margaret Olsen  
Elizabeth Neuner | Michael Durkin (United States)

#### 1:45 PM

Comparative Risk of Hepatitis C Virus Infection in Patients with Rheumatoid Arthritis Receiving Target-Synthetic Disease-Modified Anti-Rheumatic Drugs (tsDMARDs) Vs. Biological DMARDs (bDMARDs): A Population-Based Study [176]

Albert Tzu-Ming Chuang | Chih-Ying Tsai | Hsun-Yin Liang  
Chih-Wan Lin | Wei-I Huang | Pi-Hui Chao | Wen-Wen Chen  
Meng-Yu Weng | Edward Chia-Cheng Lai (Taiwan)

#### 2:00 PM

Potential Drug-Drug Interactions Among U.S. Adults Treated with Nirmatrelvir/Ritonavir (Paxlovid): A Cross-sectional Study of the National COVID Cohort Collaborative (N3C) [177]

Xuya (Rayna) Xiao | Hemalkumar Mehta | Jill Curran  
Brian Garibaldi | G. Caleb Alexander (United States)

#### 2:15 PM

Real-World Data to Evaluate Severe Acute Liver Injury After Outpatient Initiation of Potentially Hepatotoxic Medications: A Series of Nationwide Cohort Studies [178]

Vincent Lo Re | Jessie Torgersen | Alyssa Mezocho  
Craig Newcomb | Dena Carbonari | Sean Hennessy  
Christopher Rentsch | Lesley Park | Janet Tate | Norbert Bräu  
Debika Bhattacharya | Joseph Lim | Jason Roy | Tamar Taddei  
Amy Justice (United States)

### The "Sea" of Cancer – MR109

MODERATORS: Donna Rivera | Tzuyung Douglas Kou

#### 1:00 PM

Trajectories of Antidepressant Adherence Before Tamoxifen Initiation Among U.S. Women with Breast Cancer [179]

Oluwadamilola Onasanya | Susan dosReis | Udim Damachi  
Eberechukwu Onukwugha | Zafar Zafari | Paula Rosenblatt  
Wendy Camelo Castillo (United States)

#### 1:15 PM

The Association Between Pre-Existing Type 2 Diabetes on Breast Cancer-Related and Overall Mortality Among Women with Breast Cancer [180]

Kristina Parsons | Hui Yin | Oriana Yu | Farzin Khosrow-Khavar  
Laurent Azoulay (Canada)

#### 1:30 PM

Risk of Childhood Leukemia and Lymphoma after In-utero Exposure to Maternal Diabetes and Antidiabetics – A Nordic Population-Based Study [181]

Maarit Leinonen | Laura Seppälä | Justine Benevent  
Marie Hargreave | Caroline Hemmingsen | Sarah Hjorth  
Susanne Kjaer | Lina Mørch | Ulrika Nörby  
Hedvig Nordeng (Finland)

#### 1:45 PM

Incidence of Second Primary Malignancies (SPMs) in Patients in the U.S. with Triple-Class-Exposed (TCE) Relapsed or Refractory Multiple Myeloma (RRMM) [182]

Wenzhen Ge | Alexi Archambault | Thomas Delea  
Karen Rodriguez Lorenc | James Harnett | Aaron Moynahan  
Derek Weycker | Yariv Houvras | Glenn Kroog | Ning Wu  
Christian Hampf | Qiufei Ma | Sikander Ailawadhi (United States)

#### 2:00 PM

Maintenance Proton Pump Inhibitor Usage and Risk of Colorectal Cancer: A Population-Based Swedish Cohort Study [183]

Qing Liu | Xinchun Wang | Lars Engstrand | Omid Sadr-Azodi  
Katja Fall | Nele Brusselaers (China)

#### 2:15 PM

Multiple Models to Evaluate the Prognostic Factors of Disease Progression After R0 Esophagectomy for Chinese Patients with Squamous Cell Carcinoma [184]

Qingqing Hu | Yuqin Cao | Yuan Zhou | Chengqiang Li  
Yajie Zhang | Yongjing Zhang | Hong Qiu | Hecheng Li (China)

# MAIN CONFERENCE

## Program Schedule

SAT

### Vaccines: Boosting Confidence – MR201

MODERATORS: Priscilla Valentgas | Leah McGrath

#### 1:00 PM

Effectiveness of BNT162b2 COVID-19 Vaccine in U.S. Children Aged 5-17 Years [185]

Rachel Ogilvie | J. Bradley Layton | Hui-Lee Wong | Yixin Jiao Ron Parambi | Jie Deng | Michael Miller | Jennifer Song  
Patricia Lloyd | Lisa Weatherby | Lauren Peetluk | Elizabeth Bell  
Grace Yang | Kandace Amend | Alison Kawai | An-Chi Lo  
Kathryn Matuska | Michael Wernecke | Joann Gruber  
Tainya Clarke | Richard Forshee | Steven Anderson  
Mary Anthony | Yoganand Chillarige | John Seeger  
Azadeh Shoaibi (United States)

#### 1:15 PM

Short-Term Effectiveness of Bivalent COVID-19 mRNA Booster Vaccinations in the Veterans Health Administration Using Self-Controlled Risk Interval and Test-Negative Case-Control Designs [186]

Caroline Korves | Hector Izurieta | Abirami Balajee | Gabrielle Zwain  
Jeremy Smith | David Graham | Yinong Young-Xu (United States)

#### 1:30 PM

COVID-19 Vaccine Effectiveness Against Post COVID-19 Condition – A Register-Based Cohort Study Among 589,722 Individuals In Sweden [187]

Lisa Lundberg | Susannah Leach | Yiyi Xu | Jari Martikainen  
Ailiana Santosa | Magnus Gisslen | Huiqi Li | Fredrik Nyberg  
Maria Bygdell (Sweden)

#### 1:45 PM

Risk of Breakthrough SARS-CoV-2 Infection and Clinical Outcomes Among Patients with Type 2 Diabetes [188]

Sungho Bea | Ahhyung Choi | Jae Hyeon Kim | Young Min Cho  
Won Suk Choi | Jaehun Jung | Ju-Young Shin (Republic of Korea)

#### 2:00 PM

Associations Between HLA Variations and Serological Response to COVID-19 vaccination: An Analysis of U.K. Biobank Antibody Survey Data [189]

Junqing Xie | Beatriz Mothe | Daniel Prieto-Alhambra  
(United Kingdom)

#### 2:15 PM

The Impact of HLA-DQB1\*06 alleles on COVID-19 Vaccine Effectiveness: An Analysis of SARS-CoV-2 Antibodies and Breakthrough Infections Based on U.K. Biobank [190]

Junqing Xie | Beatriz Mothe | Daniel Prieto-Alhambra  
(United Kingdom)

### Drug Safety in Diabetes – MR202

MODERATORS: Almut Winterstein | Christian Hampp

#### 1:00 PM

Sodium-Glucose Cotransporter 2 Inhibitors and Risk of Fractures in Postmenopausal Women with Type 2 Diabetes: A Nationwide Cohort Study [191]

Hwa Yeon Ko | Sungho Bea | Han Eol Jeong | Sohee Park  
Ju-Young Shin (Republic of Korea)

#### 1:15 PM

Risk of Acute Pancreatitis Among New Users of Empagliflozin Compared to Sulfonylureas in Patients with Type 2 Diabetes: A Post-Authorization Safety Study [192]

Soulmaz Fazeli Farsani | Kristy Iglay | Ling Zhang  
Christian Niyonkuru | Laurieann Nessralla | Cynthia Girman  
(Germany)

#### 1:30 PM

Insulin Use in Type 2 Diabetes and the Risk of Dementia: A Comparative Population-Based Cohort Study [193]

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

#### 1:45 PM

Fluoroquinolones and the Risk of Severe Hypoglycemia Among Sulfonylurea Users [194]

Dimakos Jenny | Ying Cui | Kristian Filion | Christel Renoux  
Robert Platt | Antonios Douros (Canada)

#### 2:00 PM

Dipeptidyl Peptidase-4 Inhibitors and the Risk of Biliary Tract Diseases Among Patients with Type 2 Diabetes [195]

Samantha Shapiro | Hui Yin | Oriana Yu | Laurent Azoulay (Canada)

#### 2:15 PM

Ambient Heat, Exogenous Insulin, and Risk of Hypoglycemia Among Older Medicare Beneficiaries with Diabetes [196]

Aayush Visaria | Soko Setoguchi (United States)



# MAIN CONFERENCE

## Program Schedule

2:40 - 3:50 PM

### ANNUAL MEETING OF ISPE MEMBERS & AWARDS CEREMONY

BALLROOM

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

Tobias Gerhard, FISPE, *ISPE President*

#### Financial Report

Caitlin Knox, FISPE, *Vice President/Finance*

#### Strategic Plan 2020-2024 Update

Lisa Pont, FISPE, *Chair, Strategic Planning Committee*

#### New Business

#### Awards Ceremony

#### ISPE Board Transition

##### RETIRING BOARD MEMBERS & OFFICERS

Vincent Lo Re, FISPE | Tomoko Kobayashi  
Montserrat Soriano Gabarro, FISPE | Shirley Wang, FISPE

##### INDUCTION OF NEW & RE-ELECTED DIRECTORS

Keiko Asao, *Industry/Service Provider (Asia/Pacific)*  
Marianne Cunningham, *Industry/Service Provider (Europe/Africa)*  
Mette Norgaard, *Academic (Europe/Africa)*  
Elisabetta Patorno, FISPE, *Academic (Americas)*  
Jeremy Rassen, FISPE, *Industry/Service Provider (Americas)*

##### INSTALLATION OF 2023-2024 OFFICERS

Lisa Pont, FISPE, *President*  
Caitlin Knox, FISPE, *Vice President/Finance*  
Jennifer Christian, FISPE, *Vice President/Finance-Elect*  
Tobias Gerhard, FISPE, *Immediate Past President*  
Mary Beth Ritchey, FISPE, *President-Elect*

#### Passing of the Gavel

## A better way to optimize real-world evidence

Supporting your evidence  
needs with **scientific rigor**  
and **fit-for-purpose** data.

Where some providers are limited by the  
datasets they use, our **data-agnostic approach**  
means we consider the best available data  
to develop impactful evidence.

We combine this with our **methodological**  
**and therapeutic expertise** to ensure we  
maximize the value of RWE to decision-makers.

- > Comparative effectiveness and safety studies
- > External control arms and label expansions
- > Drug utilization and treatment patterns
- > Fit-for-purpose data assessments
- > RWE dashboards and visualizations
- > Post-marketing requirements, commitments, and PASS
- > Systematic literature reviews and meta-analyses
- > RWE regulatory strategy

Don't miss our  
ICPE symposium

'Developing Code Lists for  
Pharmacoepidemiology:  
The How and Why?'  
10:30 ADT, Friday 25 Aug.

Scan to  
Arrange a  
meeting



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# MAIN CONFERENCE

## Program Schedule

SAT

**3:50 - 4:15 PM**

**BREAK / POSTERS / EXHIBITS – CONVENTION HALL**

**4:15 - 5:45 PM**

### CONCURRENT SESSIONS

*SYMPOSIA & WORKSHOPS*

**Building Consensus on RWE Evaluation: Standardized Tool for Assessing Validity in RWE Studies of Medication Safety and Effectiveness [197] – Argyle 1**

Katsiaryna Bykov | Jessica Franklin | Cynthia Girman  
Jennifer Lund | Elisabetta Patorno

**From Classic to Cutting Edge: Addressing Data Quality Challenges in Electronic Health Record Data [198] – Argyle 2**

Michele Jonsson Funk | Hythem Sidky  
Anne-Marie Meyer | Jennifer Fusco

**Person-generated Health Data: Is Pharmacoepidemiology Ready for this New Frontier? [199] – Argyle 3**

Darmendra Ramcharran | Mary Beth Ritchey | Paul Coplan  
Robert Platt | Will Dixon

**Sharing is Caring? A Symposium on Code Sharing in Pharmacoepidemiology [200] – MR201**

Anna Schultze | John Tazare | Katherine Donegan  
Sebastian Schneeweiss | Rosa Gini | Ian Douglas  
Daniel Prieto-Alhambra | Shirley Wang | Caroline Morton  
John Logie | Jennifer Popovic | Daniel Morales Leaver

**Translating Real-World Evidence and Other Pharmacoepidemiological Research Findings into Policy and Clinical Practice: How Well are We Doing and What are the Opportunities for Improvement? [201] – MR202**

Meredith Smith | Vincent Lo Re | Donna Rivera | Tobias Gerhard



**6:00 - 7:00 PM**

### ISPE COUNCIL MEETINGS

*Open to all attendees.*

**Industry/Service Provider – Argyle 2**

**Student – MR612/613**

**7:00 - 11:00 PM**

**Social Evening at the Grafton Connor Downtown Complex**

# MAIN CONFERENCE

## Program Schedule

### SUNDAY, AUGUST 27

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

**SPEAKER READY ROOM – MR102**

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 – CONVENTION HALL PRE-FUNCTION**

**7:30 AM - 4:30 PM**

**LACTATION ROOM – MR505**

*Sponsored by EPI Excellence, LLC*

**7:15 - 8:15 AM**

**2024 SCIENTIFIC PROGRAM COMMITTEE – MR605**

*Open to all attendees.*

**7:00 - 8:00 AM**

**CONTINENTAL BREAKFAST – CONVENTION HALL**

**7:00 - 8:00 AM**

**POSTER SESSION C SET-UP – CONVENTION HALL**

**7:00 - 8:00 AM**

**ISPE SPECIAL INTEREST GROUP MEETINGS**

*Open to all attendees.*

**Cancer – Argyle 1**

**Environmental Pharmacoepidemiology – MR201**

**8:00 AM - 1:30 PM**

**EXHIBITS / POSTER SESSION C – CONVENTION HALL**

**8:30 - 10:00 AM**

**CONCURRENT SESSIONS:  
ORAL PRESENTATIONS**

**Beyond the Beaver Tail in  
Clinical Epidemiology – Argyle 1**

*MODERATORS:* Vincent Lo Re | Patrice Verpillat

**8:30 AM**

Association between Dietary Supplement Use and Mortality Among U.S. Adults with Diabetes: A Longitudinal Cohort Study [202]

Rong Hua | Chun Sing Lam | Natural Chu | Aimin Yang  
Elaine Chow | Yin Ting Cheung (*Hong Kong*)

**8:45 AM**

Frequency of Vaso-Occlusive Crises Among Patients with Severe Sickle Cell Disease Receiving Standard-of-Care Treatment [203]

Katherine Ender | Lina Titievsky | Janna Manjelienskaia Daoyuan Shi  
Timothy Lillehaugen | Timothy Beukelman (*United States*)

**9:00 AM**

Sickle Cell Disease Acute Event Frequencies in the United States – A Retrospective Cohort Study Using Optum Electronic Health Records [204]

Xunming Sun | Yun Gu | Steven Arkin | Stephen Schachterle  
Xiaofeng Zhou | Thomas Edwards | Shannon Marraffino  
(*United States*)

**9:15 AM**

Likelihood of Antimicrobial Resistance in Urinary E. coli Isolates Comparing Female Patients with Recurrent Versus Non-recurrent Uncomplicated Urinary Tract Infection in the United States [205]

Fanny Mitrani-Gold | Debra Fromer | Wendy Cheng | Chi Gao  
Malena Mahendran | Annalise Hilts | Mei Sheng Duh | Ashish Joshi  
Aruni Mulgirigama (*United States*)

**9:30 AM**

Risk of Cardiovascular Events After an Exacerbation of Chronic Obstructive Pulmonary Disease: A Cohort Study Using the PHARMO Data Network [206]

Karin Swart | Brenda Baak | Louise Lemmens  
Fernie Penning-van Beest | Camilla Bengtsson | Muriel Lobier  
Fabian Hoti | Dina Vojinovic | Lindy van Burk | Kirsty Rhodes  
Sami Simons | Clementine Nordon | Ron Herings (*Netherlands*)

**9:45 AM**

Trends in Prescribing Preferences for Anticoagulants Among Non-Valvular Atrial Fibrillation Patients in the U.K. with and without Chronic Kidney Disease, 2010-2020 [207]

Julia Liaw | Chintan Dave | Deborah Liaw (*United States*)

# MAIN CONFERENCE

## Program Schedule

### Pharmacoepi Toolbox for Confounding Control – Argyle 2

MODERATORS: Jesper Hallas | Sophie Bots

#### 8:30 AM

Principled Approaches to Handle Partially Observed  
Confounder Data from Electronic Health Records:  
A Plasmode Simulation Study [208]

Janick Weberpals | Sudha Raman | Pamela Shaw | Hana Lee  
Bradley Hammill | Darren Toh | John Connolly | Kimberly Dandreo  
Luke Zobotka | Fang Tian | Wei Liu | Jie Li  
José Hernández-Muñoz | Robert Glynn | Rishi Desai (United States)

#### 8:45 AM

Accounting for Treatment Switching by Pairwise Censoring:  
Is This Needed, Sufficient to Mitigate Attrition Bias, or  
Should More Advanced Methodology Be Used? [209]

Sudhir Venkatesan | Jonatan Hedberg | Carla Talarico  
Mario Ouwens (United Kingdom)

#### 9:00 AM

Orthogonalized Regression for Causal Inference:  
A Pharmacoepidemiologist's Dream? [210]

Nuvan Rathnayaka | Kathleen Hurwitz (United States)

#### 9:15 AM

Use of Standardization to Increase the Precision of  
Site-Specific Estimates in Multi-Site Studies and  
Distributed Networks [211]

Michael Webster-Clark | Kristian Filion | Robert Platt (Canada)

#### 9:30 AM

Nonparametric Assignment of Stratum Membership to  
Achieve Covariate Balance in Small Cohorts [212]

Alec Walker | Massimiliano Russo | Maria Schneeweiss  
(United States)

#### 9:45 AM

Using Inverse Odds Weights to Separate  
Modification from Better Confounding Control  
When Restricting on Covariates [213]

Michael Webster-Clark | Jennifer Lund | Qoua Her | Charles Poole  
Kenneth Rothman | Robert Glynn | Til Stürmer (Canada)

### Pharmacovigilance: Follow the Evidence – Argyle 3

MODERATORS: Nelson Pace | Caitlin Knox

#### 8:30 AM

On the Use of Different Reference Sets in Data Mining  
Spontaneous Reports for Pharmacovigilance [214]

Christopher Gravel | Antonios Douros (Canada)

#### 8:45 AM

Statistical Outlier Detection to Identify Uncoded High-Dose  
Case Reports in VigiBase for Medication Error Signals [215]

Eva-Lisa Meldau | Alem Zekarias | Sara Hedfors Vidlin  
Ingrid Lönnstedt | Ghita Benabdallah | Loubna Alj  
Houda Sefiani (Sweden)

#### 9:00 AM

Development and Evaluation of Phenotype Algorithms  
for the European Medicines Agency Designated Medical  
Events in a Network of Real-World Data [216]

Azza Shoaibi | Gowtham Rao | Joel Swerdel | Ruth Namuyinga  
Santhi Mantravadi | Brigitte Schaufelberger | Nancy Parker  
Eva De la Torre | Susan Sabol | Evan Minty | Dmytro Dymshyts  
Amy Purrington | Patrick Ryan (United States)

#### 9:15 AM

Application of New Signal Detection Methods to  
EUROmediCAT Data: Bayesian Confidence Propagation  
Neural Network-Biclustering (BCPNN-Bic) and BCPNN-  
Bicluster-Bayesian Hierarchical Modelling (BBBHM) [217]

Hannah Johnson | Joan Morris (United Kingdom)

#### 9:30 AM

Signal Detection Using Longitudinal Healthcare Claims  
Data: A Pilot Study Using Lantus As Case Drug [218]

Lockwood Taylor | Marie-Laure Kürzinger | Ruben Hermans  
Bernadette Dwan | Priyanka Chhikara | Xinyu Li  
Sreenivas Thummisetti | Sandrine Colas | Marielle Duverne  
Juhaeri Juhaeri (United States)

#### 9:45 AM

Investigating Potential Differences in the Safety Profiles  
of Biosimilars relative to Originator Products using a  
Tree-Based Scan Statistic [219]

José Hernández-Muñoz | Mallika Mundkur | Monica Munoz  
Qin Ryan | Rosanna Setse | Sarah Dutcher | Meredith Epperson  
Laura Hou | James Marshall | Elizabeth Sirasonian | Emma Whited  
Michael Blum | Judith Maro (United States)

# MAIN CONFERENCE

## Program Schedule

### Mapping the Road to Health Equity/Equality – MR109

MODERATORS: Macarius Donneyong | Eileen Ming

#### 8:30 AM

Disparities in the Uptake of Newer Second-Line Antidiabetic Therapies Among Medicare Beneficiaries [220]

Chintan Dave | Eric Wang | Elisabetta Patorno  
Stephen Crystal (United States)

#### 8:45 AM

Socioeconomic Position and Adherence to Adjuvant Endocrine Therapy in Premenopausal Breast Cancer Patients – A Danish Population-Based Cohort Study [221]

Julie Schmidt | Kirsten Woolpert | Cathrine Hjorth | Dóra Farkas  
Bent Ejlersen | Henrik Toft Sørensen | Deirdre Cronin-Fenton  
(Denmark)

#### 9:00 AM

A Pan-Formulary Analysis of the Association Between Community Pharmacy Dispensations with Local Area-Level Deprivation in England [222]

Florence Ma | Natalie Tikhonovsky | Danielle Robinson  
Jonathan Pearson-Stuttard | Benjamin Bray (United Kingdom)

#### 8:30 AM

Regional Deprivation and Stocking of Meningococcal Vaccines in the United States: Does Locati on Matter? [223]

Christopher Prener | Eva Jodar | Jessica Presa | Sarah Willis  
Katharina Schley (United States)

#### 9:30 AM

Racial Disparities in Paxlovid Use Treating for High Risk COVID-19 Patients – A Large Population Based Study Using U.S. Claim Data [224]

Xiaofeng Zhou | Ling Li | Scott Kelly | Heidi Leister-Tebbe  
Steven Terra | Rongjun Shen | Mark Cullen | Michael Gaffney  
Leo Russo (United States)

#### 9:45 AM

Mediators of Racial/Ethnic Inequities in Clinical Trial Participation Among U.S. Patients with Cancer, 2011-2022 [225]

Gregory Calip | Jenny Guadamuz | Xiaoliang Wang  
Ivy Altomare (United States)

### Self-Controlled and Other Methods Stuff – MR201

MODERATORS: Olaf Klungel | Hiraku Kumamaru

#### 8:30 AM

Hypersensitivity of Self-Controlled Designs Towards Exposure Misclassification When There is Abundant Chronic Use – A Simulation Study [226]

Jesper Hallas | Malcolm Maclure | Suzanne Cadarette  
Joseph Delaney | Heather Whitaker | Nicole Pratt  
Lars Christian Lund (Denmark)

#### 8:45 AM

Real World Evidence BRIDGE (BRing Intelligence about Data to Generation of Evidence): A Method to Connect Protocol with Programming Practice [227]

Albert Cid-Royol | Roel Elbers | Ema Alsinal | Vjola Hoxhaj  
Contanza Andaur Navarrol | Fariba Ahmadizar | Carlos Durán  
Daniel Weibell | Rosa Ginil | Miriam Sturkenboom  
Tiago Andres Vaz (Netherlands)

#### 9:00 AM

Diagnosing Informative Left Truncation Due to Delayed Cohort Entry in Clinico-Genomic Real-World Data [228]

Jonas Walheim | Nives Rombin | Kim Van Naarden Braun  
(Switzerland)

#### 9:15 AM

An Analytic Method to Weight Longitudinal Treatment Patterns for Visualization with Sankey Diagrams [229]

Catherine Wiener | M. Alan Brookhart (United States)

#### 9:30 AM

Adjusting for Unmeasured Confounding Bias in the Statin Treatment Options During Vaccination Against Flu (STOPFlu) Study: An Application of the Prior Event Rate Ratio Pairwise Method [230]

Adam Streeter | William Henley (Germany)

#### 9:45 AM

Is the Sequence Ratio an Unbiased Estimate of the Incidence Rate Ratio? A Simulation Study [231]

Lars Christian Lund | Thomas Delvin | Sofie Egsgaard  
Helene Kildegaard | Martin Torp Rahbek (Denmark)



# MAIN CONFERENCE

## Program Schedule

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### Tracking Trends Around The World – MR202

MODERATORS: Jason Simeone | Gabriel Sanfeliu

#### 8:30 AM

Gabapentinoid Consumption In 65 Countries and Regions From 2008 to 2018: A Longitudinal Study [232]

Siu Chung | Andrew Yuen | Adrienne Chan | Wallis Lau  
Li Wei | Kenneth Man (Hong Kong)

#### 8:45 AM

Is Zolpidem Still the Top Medication Used for Insomnia? Trends in Dispensing of Zolpidem and Low-Dose Trazodone for New and Continued Use Among Commercially Insured U.S. Adults, 2011-2021 [233]

Jenna Wong | Suzanne Bertisch | Darren Toh (United States)

#### 9:00 AM

National Trends in Antidepressant Utilisation within Australian Residential Aged Care Facilities, 2006-2019 [234]

Georgina Hughes | Maria Inacio | Debra Rowett | Catherine Lang  
Robert Jorissen | Megan Corlis | Janet Sluggett (Australia)

#### 9:15 AM

The Risk of Serious Opioid-Related Harms Associated with Discharge Opioid and Non-Opioid Analgesic Regimens Among Patients Hospitalized with Long-Bone Fracture [235]

Kyle Hart | Ashley Leech | Avirath Vaidya | Stacie Dusetzina  
Andrew Medvecz | Andrew Wiese (United States)

#### 9:30 AM

Prescribing of Opioid Analgesics in Germany: Opposite Trends When Different Quantification Measures are Used [236]

Oliver Scholle | Kathrin Jobski | Jost Viebrock  
Ulrike Haug (Germany)

#### 9:45 AM

Tramadol Use in the United States, 2004-2021 [237]

C. Andrew Basham | Catherine Hwang | Heba Edrees  
Krista Huybrechts | Katsiaryna Bykov (United States)

### 10:00 - 10:30 AM

BREAK / POSTERS / EXHIBITS – CONVENTION HALL

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

#### CONCURRENT SESSIONS

##### SYMPOSIA & WORKSHOPS

Bias Introduced by COVID-19 Related Healthcare Disruptions in Safety and Effectiveness Studies: Proposing Methodological Solutions [238] – Argyle 1

Kieran Rothnie | Mei Sheng Duh | Catherine Cohet  
Melissa Van Dyke | Marianne Cunnington | Ian Douglas

Deep Learning for Pharmacoepidemiologists: An Accessible Introduction to Neural Networks [239] – Argyle 2

Kathryn Rough | Harriet Dickinson | Orla Doyle  
Dana Teltsch | Christina Mack

Emulation of a Target Trial in Pregnancy: Learning from the Chronic Hypertension and Pregnancy (CHAP) Trial [240] – Argyle 3

Gretchen Bandoli | Erin Delker | Mollie Wood  
Sascha Dublin | Sarah Osmundson

Optimizing Therapeutic Decision-Making for Off-Label Medicines Use: Challenges and Opportunities for Improving Practice and Research in the Age of Real-World Evidence (RWE) [241] – MR201

Madlen Gazarian | Daniel Horton | Bruce Carleton  
Greta Bushnell | Emily Gorman | Lina Titievsky  
Jonathan Slaughter | Susan dosReis

Scaling-up Real-World Evidence Generation for Regulators in Europe: DARWIN EU [242] – MR202

Daniel Prieto-Alhambra | Katia Verhamme | Edward Burn  
Daniel Morales Leaver | Andrej Segec | Patrick Ryan | Robert Platt  
Peter Rijnbeek | Patrice Verpillat | Gianmario Candore

### 12:30 - 1:30 PM

LUNCH – BALLROOM

### 12:30 - 1:30 PM

POSTER SESSION C / EXHIBITS – CONVENTION HALL

### 12:30 - 1:30 PM

ISPE BOARD OF DIRECTORS' LUNCH – MR604

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



# MAIN CONFERENCE

## Program Schedule

**12:15 - 1:15 PM**

### SPOTLIGHT POSTER SESSION C CONVENTION HALL

Databases

Digital Epidemiology

Drug Utilization Research

Drug-Drug Interaction

Environmental Pharmacoevidence

Genomics

Geriatrics

**1:30 - 3:00 PM**

### CONCURRENT SESSIONS: ORAL PRESENTATIONS

#### Hali-FACTS: Navigating Benefit-Risk Decision-Making with RWE (sponsored by BRACE SIG) – Argyle 1

MODERATORS: Kenneth Hornbuckle | Marie Louise De Bruin

**1:30 PM**

Benefit-Risk Assessment to Support the FDA's Decision  
on Vaccines for SARS-CoV-2 [243]

Hong Yang (United States)

**1:45 PM**

Rethinking Survey Samples in Patient Preference Studies:  
A First-Degree Relative Sample Versus a General Public  
Proxy Sample in Rheumatoid Arthritis Prevention [244]

Rachael DiSantostefano | Gwenda Simons | Matthias Englbrecht  
Jennifer Humphreys | Ian Bruce | Karin Schölin Bywall  
Christine Radawski | Karim Raza | Marie Falahee | Jorien Veldwijk  
(United States)

**2:00 PM**

Impact of 2018 EU Risk Minimisation Measures and Revised  
Pregnancy Prevention Programme on Utilisation and  
Prescribing Trends of Valproates [245]

Shahab Abtahi | Romin Pajouheshnia | Carlos Durán  
Judit Riera-Arnau | Miriam Sturkenboom | Olaf Klungel  
(Netherlands)

**2:15 PM**

Prenatal Exposure to Valproic Acid in the United States [246]

Nicole Smolinski | Amir Sarayani | Thuy Thai | Sebastian Jugl  
Celeste Ewig | Almut Winterstein (United States)

**2:30 PM**

Assessment of the Effectiveness of Risk Evaluation  
and Mitigation Strategy for the Prevention of Fetal  
Exposure to Phentermine-Topiramate Using Two Large  
Nationwide Cohorts [247]

Yanmin Zhu | Sonia Hernandez-Diaz | Priyanka Anand  
Katsiaryna Bykov | Ameet Sarpatwari | Mufaddal Mahesri  
Elyse Dicesare | Seanna Vine | Helen Mogun | Krista Huybrechts  
(United States)

**2:45 PM**

A Descriptive Observational Cohort Study to Assess  
Effectiveness of Risk Minimization Activities in  
Baricitinib Incident Users Treated for Rheumatoid  
Arthritis in Nordic Countries [248]

Marius Flege | Mikkel Ankarfeldt | Aleksander Søltoft-Jensen  
Karoline Doser | Eero Pukkala | Kristian Bolin | Janne Petersen  
Espen Jimenez-Solem (Denmark)

**1:30 - 3:00 PM**

### LIGHTNING FORUM SESSION 3 ARGYLE 2

#### Cancer

MODERATORS

Rachel Sobel | Lisa Pont

**1:30 PM**

Comparative Cardiovascular Risk Associated with  
Enzalutamide and Abiraterone Use in Patients with  
Metastatic Castration-Resistant Prostate Cancer [249]

Yue Cheng | Chris Delcher | Daniela Moga | Bin Huang  
Val Adams (United States)

**1:35 PM**

Cardiovascular Risks in Prostate Cancer Patients  
Undergoing Androgen Deprivation Therapy Among the  
Southern Chinese: A Population-Based Cohort Study [250]

Tung Hiu Li | Vincent Ka Chun Yan | Wei Kang | Xuxiao Ye  
Aya El Helali | Shing Fung Lee | Jessica Shami | Xue Li  
Hei Hang Edmund Yiu | Ian Wong | Esther Wai Yin Chan (Hong Kong)

**1:40 PM**

Risk of Thyroid Cancer Associated with Incretin-Based  
Drugs Among Patients with Type 2 Diabetes [251]

Sungho Bea | Heejun Son | Jae Hyun Bae | Sun Wook Cho  
Ju-Young Shin | Young Min Cho (Republic of Korea)

**1:45 PM**

Comparison of Tisagenlecleucel with Historical Treatments  
for Relapsed or Refractory Diffuse Large B-cell Lymphoma:  
A Retrospective Study Using External Comparator from the  
Korean Lymphoma Registry Data [252]

Ju Hwan Kim | Sohee Park | Songhee Kim | Seok Jin Kim  
Ju-Young Shin (Republic of Korea)

**1:50 PM**

Cancer Panel Discussion

# MAIN CONFERENCE

# Program Schedule

S  
U  
N



**Real-world data.**  
**Real-world evidence.**  
**Real-world impact.**

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**Booth #505**

## COVID Safety

### MODERATORS

J. Bradley Layton | Lisa Pont

### 2:00 PM

COVID-19 Vaccination and the Risk of Abnormal Uterine Bleeding: A Population-Based Self-Controlled Case Series Study [253]

Na-Young Jeong | SiHyun Cho | Jung Ryeol Lee | JaeYen Song  
Eunsun Lim | Joong Shin Park | Nam-Kyong Choi  
(Republic of Korea)

### 2:05 PM

Incidence of Diabetes Following COVID-19 Vaccination and SARS-CoV-2 Infection: A Population-Based Cohort Study [254]

Xi Xiong | David Tak Wai Lui | Matthew Shing Hin Chung  
Ivan Chi Ho Au | Francisco Tsz Tsun Lai | Eric Yuk Fai Wan  
Celine Sze Ling Chui | Xue Li | Franco Wing Tak Cheng  
Ching-Lung Cheung | Esther Wai Yin Chan | Chi Ho Lee  
Yu Cho Woo | Kathryn Choon Beng Tan | Carlos King Ho Wong  
Ian Wong (Hong Kong)

### 2:10 PM

Safety Monitoring of BNT162b2 (Pfizer-BioNTech) COVID-19 Vaccines in U.S. Children Aged 5-17 years [255]

Patricia Lloyd | Mao Hu | Hui-Lee Wong | Yuhui Feng  
Elizabeth Smith | Kandace Amend | Daniel Beachler  
Joann Gruber | Mahasweta Mitra | John Seeger | Alex Secora  
Joyce Obidi | Jing Wang | Jennifer Song  
Cheryl McMahon-Walraven | Djeneba Audrey Djibo | Rowan McEvoy  
Rose Do | Yoganand Chillarige | Robin Clifford | Azadeh Shoaibi  
Richard Forshee | Steven Anderson (United States)

### 2:15 PM

Safety of COVID-19 mRNA Vaccination Among Young Children in the Vaccine Safety Datalink [256]

Kristin Goddard | James Donahue | Ned Lewis | Kayla Hanson  
Bruce Fireman | Nicola Klein (United States)

### 2:20 PM

COVID Safety Panel Discussion

# MAIN CONFERENCE

## Program Schedule

### Policy

MODERATORS

Kourtney Davis | Lisa Pont

### 2:30 PM

Quantifying the Impact of Novel Metastatic Cancer Therapies on Health Disparities in Survival Outcomes Based on Published Aggregate Data [257]

Koen Degeling | Karolina Zebrowska | Rosa Banuelos  
Evelyn Rizzo | Kathy Belk | Gary Schneider (United Kingdom)

### 2:35 PM

Enhancing Clinical Trials by Linking Them to Real-World Data [258]

Mehdi NajafZadeh | Akiko Shimamura | Ben McConnochie  
Jimmy Polewaczky | Sevtap Demirci | Aniketh Talwai  
Amir Ahmed (United States)

### 2:40 PM

Using Real-World Data to Evaluate Trends in Female Elective Contraception Procedures Among Women of Childbearing Age Surrounding Key Legal and Policy Events from 2008 to 2022 [259]

Djeneba Audrey Djibo | Jennifer Pigoga | Patricia Shuminski  
Cheryl McMahl-Walraven (United States)

### 2:45 PM

Use of Antiepileptic Drugs During Pregnancy in France between 2010 and 2021 [260]

Pounesh Shahriari | Jérôme Drouin | Rosemary Dray-Spira (France)

### 2:50 PM

Policy Panel Discussion

### The COVID-19 Lobster Trap – Argyle 3

MODERATORS: Daniel Prieto-Alhambra | Daniela Moga

### 1:30 PM

Impact of the COVID-19 Pandemic in the Netherlands on Primary Healthcare Use and Clinical Outcomes in People with Type 2 Diabetes [261]

Jesse van den Berg | Marieke Blom | Karin Swart  
Jetty Overbeek | Sharon Remmelzwaal | Petra Elders  
Ron Herings (Netherlands)

### 1:45 PM

Impact of COVID-19 Pandemic Restrictions on Diagnosis and Treatment of Hypertension in the United Kingdom [262]

Kyle Johnson | Sarah Beradid | James Brophy | Robert Platt  
Christel Renoux (Canada)

### 2:00 PM

Impact of the COVID-19 Pandemic on Drug Shortage Incidence in the United States [263]

Katherine Callaway Kim | Scott Rothenberger | Mina Tadrous  
Inmaculada Hernandez | Walid Gellad | Lisa Maillart | Katie Suda  
(United States)

### 2:15 PM

A Dynamic Prognostic Model for Identifying Vulnerable COVID-19 Patients at High Risk of Rapid Deterioration [264]

Priyanka Anand | Elvira D'Andrea | William Feldman | Shirley Wang  
Rishi Desai | Jun Liu | Gregory Brill | Elyse Dicesare  
Kueiyu Joshua Lin (United States)

### 2:30 PM

Hospitalized Arterial and Venous Thrombotic Events in Patients Diagnosed in the Ambulatory Setting with COVID-19 Compared to Influenza [265]

Noelle Cocoros | Sarah Dutcher | John Connolly  
Silvia Perez-Vilar | Dena Carbonari | Terese DeFor  
Djeneba Audrey Djibo | Laura Harrington | Laura Hou  
Sean Hennessy | Rebecca Hubbard | Maria Kempner  
Jennifer Kuntz | Cheryl McMahl-Walraven | Jolene Mosley  
Pamala Pawloski | Andrew Petrone | Allyson Pishko  
Meighan Rogers Driscoll | Claudia Steiner | Yunping Zhou  
Vincent Lo Re (United States)

### 2:45 PM

Defining Post-COVID Conditions Using Changes in Symptomatology in Electronic Health Record Data from the United States [266]

Kathleen Andersen | Farid Khan | Peter Park | Timothy Wiemken  
Birol Emir | Deepa Malhotra | Tuka Alhanai | Mohammad Ghassemi  
Leah McGrath (United States)

### Timing is Everything - MR109

MODERATORS: Andrea Margulis | Mollie Wood

### 1:30 PM

Are Major Congenital Malformations (MCMs) Identifiable Among Claims for Non-Live Births? [267]

Elizabeth Bell | Michael Doherty | Rishav Singla | John Seeger  
(United States)

### 1:45 PM

Validity of Algorithms for Congenital Malformations in United States Claims, Registry, and Surveillance Databases: A Systematic Literature Review [268]

Mengying Li | Megan Farris | Sophie Jacobovitz | Laura Walsh  
Shangzhi Gao | Sarah Irvin | Camelia Graham (United States)

### 2:00 PM

Identifying Pediatric Patients for an External Control Arm for a Set of Rare Disease Trials Using Multiple Administrative Healthcare Data Sources: Lessons from the Road [269]

Sarah Hoffman | Francesca Kolitsopoulos | Aziza Jamal-Allial  
Keith Wilner | Cynthia Senerchia | Daina Esposito | James Harnett  
(United States)

# MAIN CONFERENCE

## Program Schedule

### 2:15 PM

Triple Challenges – Small Sample Sizes in Both Exposure and Control Groups When Scanning Rare Maternal Outcomes in Signal Identification: A Simulation Study [270]

Thuy Thai | Almut Winterstein | Elizabeth Suarez | Jiwei He  
Yueqin Zhao | Di Zhang | Danijela Stojanovic | Jane Liedtka  
Abby Anderson | José Hernández-Muñoz | Monica Munoz  
Wei Liu | Inna Dashevsky | Elizabeth Messenger-Jones  
Elizabeth Siranosian | Judith Maro (United States)

### 2:30 PM

Factors Associated with Abortion of Women with Systemic Lupus Erythematosus (SLE): Using a National Claims Database in Korea [271]

Yu-Seon Jung | Yeo-Jin Song | Jihyun Keum | Soo-Kyung Cho  
Yoon-Kyoung Sung | Sun-Young Jung (Republic of Korea)

### 2:45 PM

No Time to Lose – Prenatal Exposure to Teratogenic Medications and New Abortion Laws in the United States [272]

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

### Massive Mabs – MR201

MODERATORS: Mina Tadrous | Chioma Ejemam

### 1:30 PM

Longitudinal Associations Between Body Mass Index and Disease Activity, and Radiographic Progression in Rheumatoid Arthritis Patients Receiving Infliximab [273]

Theresa Burkard | Enriqueta Vallejo-Yagüe | Kim Lauper  
Axel Finckh | Thomas Hügler | Andrea Burden (United Kingdom)

### 1:45 PM

A Pilot Evaluation of Switchback from Biosimilars to Originator-Biologics in the Veterans Affairs Population: A Signal of Biosimilar Failure? [274]

Kelly Bryan | Qoua Her | Diane Dong | Rong Jiang  
Jennifer Martin | Fran Cunningham (United States)

### 2:00 PM

Decreased Discontinuation and Switching of b/tsDMARDs in RA When Treatment Aligns with Molecular Signature Response Classifier Results: An Analysis from the Study to Accelerate Information of Molecular Signatures (AIMS) [275]

Jeffrey Curtis | Lixia Zhang | Johanna Withers | Sam Asgarian  
(United States)

### 2:15 PM

Trends in Initiation Patterns of Disease-Modifying Therapies for Multiple Sclerosis Among Commercially Insured Adults and Children in the United States, 2001-2020 [276]

Chintan Dave | Mackenzie Henderson | Daniel Horton  
Vikram Bhise | Gian Pal | Greta Bushnell (United States)

### 2:30 PM

Integration of Immuno-oncology (IO) Treatments into Routine Clinical Practice for the Treatment of Patients with Advanced or Metastatic Cancers: Analysis of the England National Cancer Registry [277]

Hamid Mahmoudpour | Craig Knott | Amerah Amin  
Emmanuelle Boutmy | Patrice Verpillat (Germany)

### 2:45 PM

The Use Of Denosumab and the Risk of Incidence of Diabetes in Patients with Osteoporosis [278]

Albert Tzu-Ming Chuang | Huei-Kai Huang | Tzu-Chi Liao  
Peter Pin-Sung Liu | Shih-Chieh Shao | Edward Chia-Cheng Lai  
(Taiwan)

### What Can be Learned from Machines – MR202

MODERATORS: Jeremy Rassen | Katia Verhamme

### 1:30 PM

Opportunities and Challenges Surrounding the Incorporation of Laboratory Test-Result Information within High-Dimensional Confounder Adjustment Procedures [279]

John Tazare | Jeremy Brown | Daniel Morales | Elizabeth Williamson  
Ian Douglas (United Kingdom)

### 1:45 PM

Comparison of Stable Balancing Weights Vs. Propensity Score Weighting for RWE or External Clinical Study Comparison Arms to Single Arm Clinical Trials [280]

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

### 2:00 PM

Standardization Over Disease Risk Score Versus Propensity Score for Confounding Control When Using Random Forests for Model Fitting [281]

Yi Li | Tibor Schuster | Kazuki Yoshida | Robert Platt (Canada)

### 2:15 PM

High-dimensional Iterative Causal Forest (hdiCF): A Novel Algorithm for Subgroup Identification in Claims Data [282]

Tiansheng Wang | Virginia Pate | John Buse | Richard Wyss  
Til Stürmer (United States)

### 2:30 PM

Can Machine Learning Approaches Help Accelerating Rare Diseases Diagnosis? The Acromegaly Case Study [283]

Salvatore Crisafulli | Luca L'Abbate | Andrea Fontana  
Giacomo Vitturi | Daniele Gianfrilli | Alessia Cozzolino  
Maria Cristina De Martino | Gianluca Trifirò (Italy)

### 2:45 PM

Severity Score Extraction from Clinical Notes Using Natural Language Processing: Applications to Dermatology [284]

Vikas Kumar | Lawrence Rasouliyan | Amanda Althoff  
Stella Chang | Stacey Long (United States)

# MAIN CONFERENCE

## Program Schedule

**3:00 - 3:15 PM**

**BREAK**

**3:15 - 4:45 PM**

### HOT TOPIC SESSION

**Health Equity and Diversity in Pharmacoepidemiology Research: Making Change Happen – Ballroom**

Health equity and health disparities have become familiar terms, particularly as the SARS-Cov2 pandemic exposed longstanding racial, ethnic, socio-economic, and geographic inequities in health. However, years of research have shown that even though we are more familiar with these terms, actively measuring, addressing, and dismantling unfair differences in health remains difficult. As a field that studies the effects of both diseases and their treatment in large groups of people, pharmacoepidemiology can play an important role in ensuring the health of real-world populations. The question is, how can pharmacoepidemiologists put health equity into practice? In this session, we will first define important concepts in Health Equity Research and consider these terms in the broader context research and healthcare. Next, we will discuss how to apply/adapt methods in pharmacoepidemiology research to measure health disparities. We will learn from the experiences of researchers in other fields of public health as well as from colleagues in pharmacoepidemiology in industry and academia. Attendees will leave the session with an understanding of what information and resources are needed to begin to put knowledge to practice.

**Paula Braveman, MD, MPH**

*Professor, Family Community Medicine,  
University of California San Francisco*

**Stephen Thomas, PhD**

*Professor, Health Policy and Management,  
University of Maryland School of Public Health*

**Sieta de Vries, PhD**

*Researcher, Department of Clinical Pharmacy and Pharmacology,  
University Medical Centre Groningen*

**4:45 - 5:30 PM**

**THE FINAL WORD – BALLROOM**

– 39<sup>th</sup> ICPE Awards

Robert Platt, FISPE

*Chair, ICPE 2023 Scientific Program Committee*

– Spotlight Poster Awards

### FUTURE MEETINGS

**15<sup>th</sup> Asian Conference on Pharmacoepidemiology (ACPE)**

**Bengaluru, India | October 26-28, 2023**

Soto Setoguchi, FISPE

*Program Chair*

**Mid-Year Meeting**

**Orlando, Florida, U.S.A. | April 14-16, 2024**

Almut Winterstein, FISPE

*Program Chair*

**40<sup>th</sup> ICPE**

**Berlin, Germany | August 24-28, 2024**

Andrea Margulis, FISPE

*Chair, ICPE 2024 Scientific Program Committee*

### ADJOURNMENT OF ICPE 2023

Robert Platt, FISPE

*Chair, ICPE 2023 Scientific Program Committee*





**As you packed your bags for Halifax, were innovative approaches to registries, safety, RWE, and AI on your list? If so, we should meet.**



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## 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 Halifax Convention Centre will be responsible for any material left on display overnight or is lost or damaged.

## POSTER SESSIONS EXPLAINED

The Spotlight and General poster sessions are separated, but hosted in the same function space, the **Convention Hall**. Each day is allocated a session and scheduled at the following times:

**Session A: Friday, August 25 | 8:00 AM - 6:00 PM**

**Session B: Saturday, August 26 | 8:00 AM - 6:00 PM**

**Session C: Sunday, August 27 | 8:00 AM - 1:30 PM**

## SETUP/TAKE DOWN

7:00-8:00am; 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 6:30pm on Friday and Saturday, and by 2:00pm 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

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

### Saturday – Session B

Adherence | ASPEN | Biologics | BRACE | Cancer  
Cell & Gene Therapy | Comparative Effectiveness Research

### Sunday – Session C

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

## 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 27.

## 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

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RWE COLLABORATIVE_____	62
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DRUG EFFECTIVENESS_____	76
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METHODS_____	79

## SPOTLIGHT POSTERS

## HEALTH EQUITY

**A01 – Disparities in Guideline-Recommended Pharmacotherapy for Prevention of Atherosclerotic Cardiovascular Disease by Race, Ethnicity, and Sex: A Nationally Representative Cross-Sectional Analysis of Adults in the United States [285]**

David Frank | Amber Johnson | Leslie Hausmann  
Walid Gellad | Eric Roberts | Ravy Vajravelu

**A02 – Ethnic Differences in the Indirect Impacts of the COVID-19 Pandemic on Hospitalisations for Non-COVID Conditions in England: An Observational Cohort Study Using OpenSAFELY [286]**

Ruth Costello | John Tazare | Dominik Piehlmaier  
Emily Herrett | Laurie Tomlinson  
Sinéad Langan | Rohini Mathur

**A03 – Ethnicity Differences in Risk of Cardiovascular Events in COVID-19: An England-Wide Population Analysis [287]**

Marta Pineda-Moncusí | Freya Allery | Antonella Delmestri  
Laura Coates | Irene Petersen | Gary Collins  
Kamlesh Khunti | Daniel Prieto-Alhambra | Sara Khalid

**A04 – Representation of Patients of Minority Race and Ethnicity in Real-World Databases and Tumor Registries of Patients with Breast Cancer [288]**

Yoojin Jung | Lauren Stevens | Alexander Davies  
James Glenister | Scott Pohlman | Jessica Paulus

**A05 – Social Determinants of Health and Disparities in T2DM Severity in the United States [289]**

Yaa Ababio | Adina Lemeshow | Xiaofeng Zhou  
Chunyang Feng | John Ryan | Brett South  
Leo Russo | Mark Cullen

**A06 – The Impact of Contextual-Level Social Determinants of Health on Heart Failure Readmission and Mortality in Patients Hospitalized for Heart Failure [290]**

Wenxi Huang | Stephen Kimmel | Mustafa Ahmed  
Steven Smith | Md Mahmudul Hasan | Masoud Rouhizadeh  
Jiang Bian | Serena Jingchuan Guo

**A07 – The Use of Computational Phenotypes within Electronic Healthcare Data to Identify Transgender People: A Narrative Review [291]**

Theo Beltran | Elle Lett | Tonia Poteat | Kathleen Thomas  
Brian Pence | Erin Carey | Juan Hincapie-Castillo

**A08 – Using Real-World Data to Support Clinical Trial Diversity and Inclusion Strategies: A Case Study of Cancer of the Cervix [292]**

Brenna Brady | Liisa Palmer

## MEDICAL DEVICES

**A09 – Clinical Validation Studies for SARS-CoV-2 Diagnostic Tests in a Real-World Setting [293]**

Ronna Chan | Delphine Saragoussi  
Tracy Horner | Susan Oliveria

**A10 – Continuous Glucose Monitoring in Diabetes Patients with Cognitive Impairment [294]**

Pareeta Kotecha | Wei-Han Chen | Yujia Li  
William Troy Donahoo | Jiang Bian | Serena Jingchuan Guo

**A11 – COVID-RED: A Randomized Trial Demonstrating Earlier COVID-19 Remote Detection Using Wearable Technology and Artificial Intelligence [295]**

Timo Brakenhoff | Brianna Goodale | Duco Veen  
Vladimir Kovacevic | Andjela Markovic | Marianna Mitratza  
Santiago Montes | Marcel Van Willigen | Serkan Korkmaz  
Xi Bai | Billy Franks | Kirsten Grossman | Weideli Ornella  
Janneke Van De Wijgert | Eskild Fredslund | Jakob Kjellberg  
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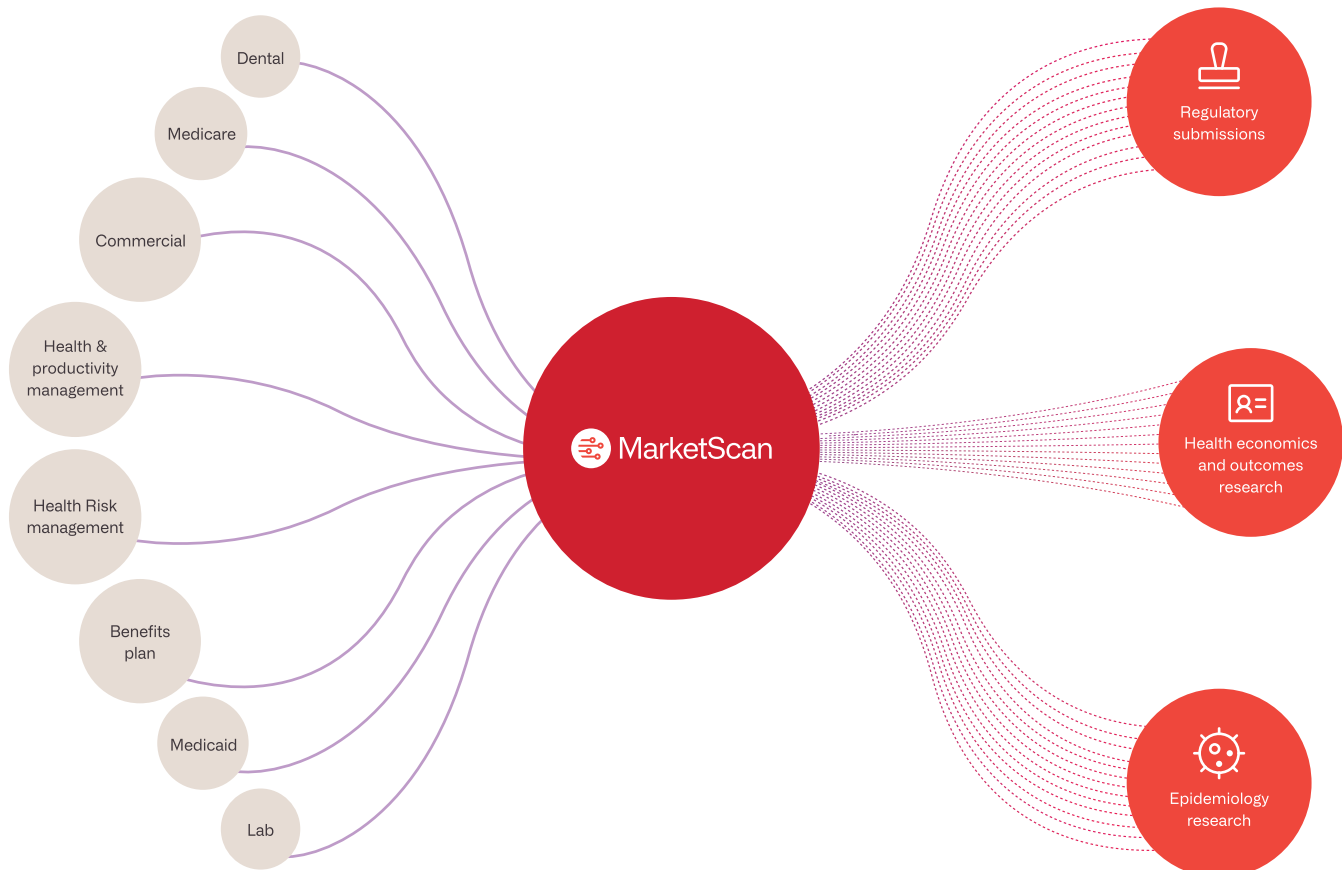
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- Measure outcomes: Drug utilization, comparative safety, comparative effectiveness, patient/caregiver burden
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**Our experts will be available to discuss their presentation topics, including:**

- Pharmacoepidemiology
- External control arms
- Clinical endpoints for real-world studies
- Pediatric EU PAS studies
- Lactation studies
- Pregnancy surveillance
- Immunocompromised conditions
- Long-term effectiveness



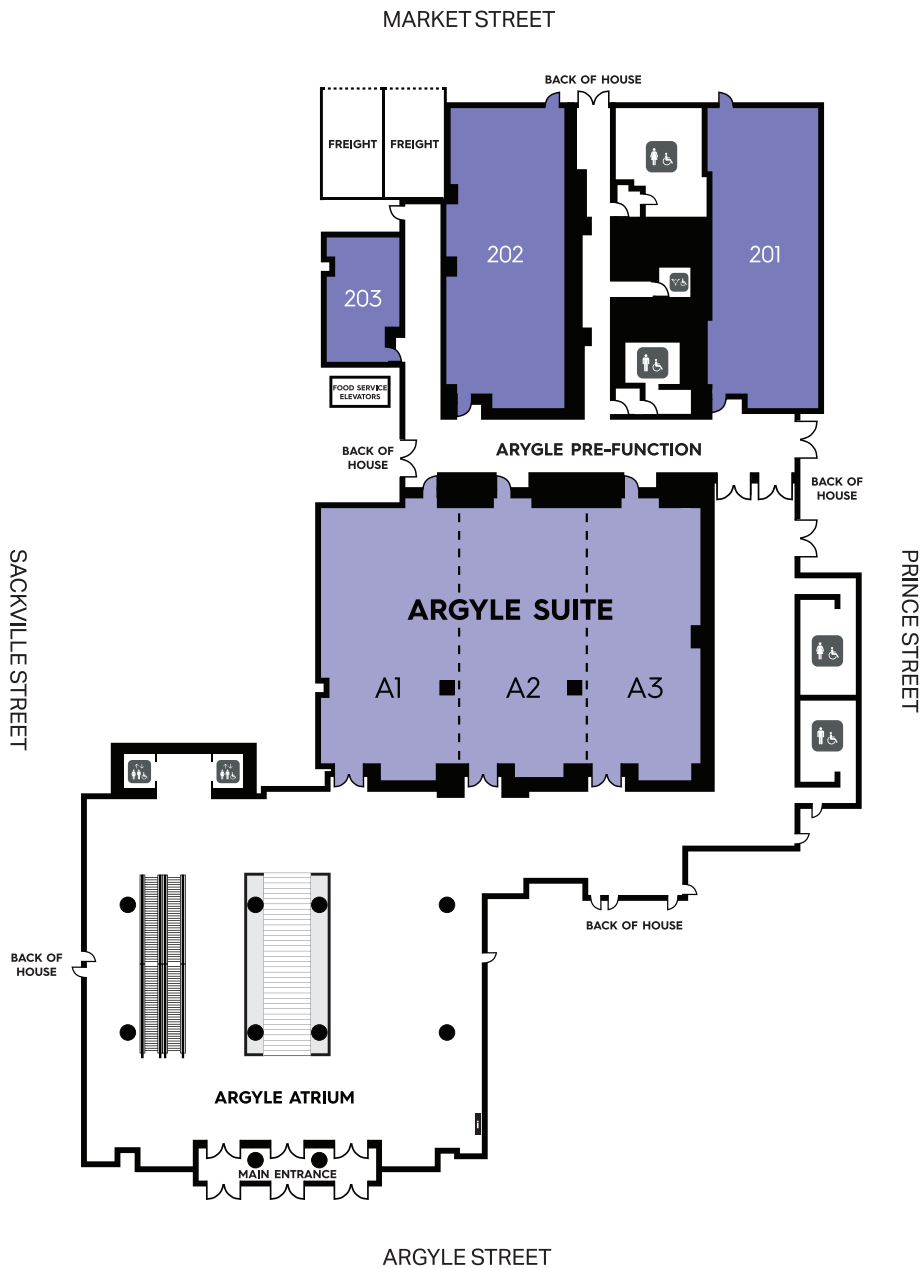
# Convention Centre Floor Plan

## CONVENTION HALL LEVEL



# Convention Centre Floor Plan

## ARGYLE LEVEL & ATRIUM





# Convention Centre Floor Plan

## BALLROOM LEVEL

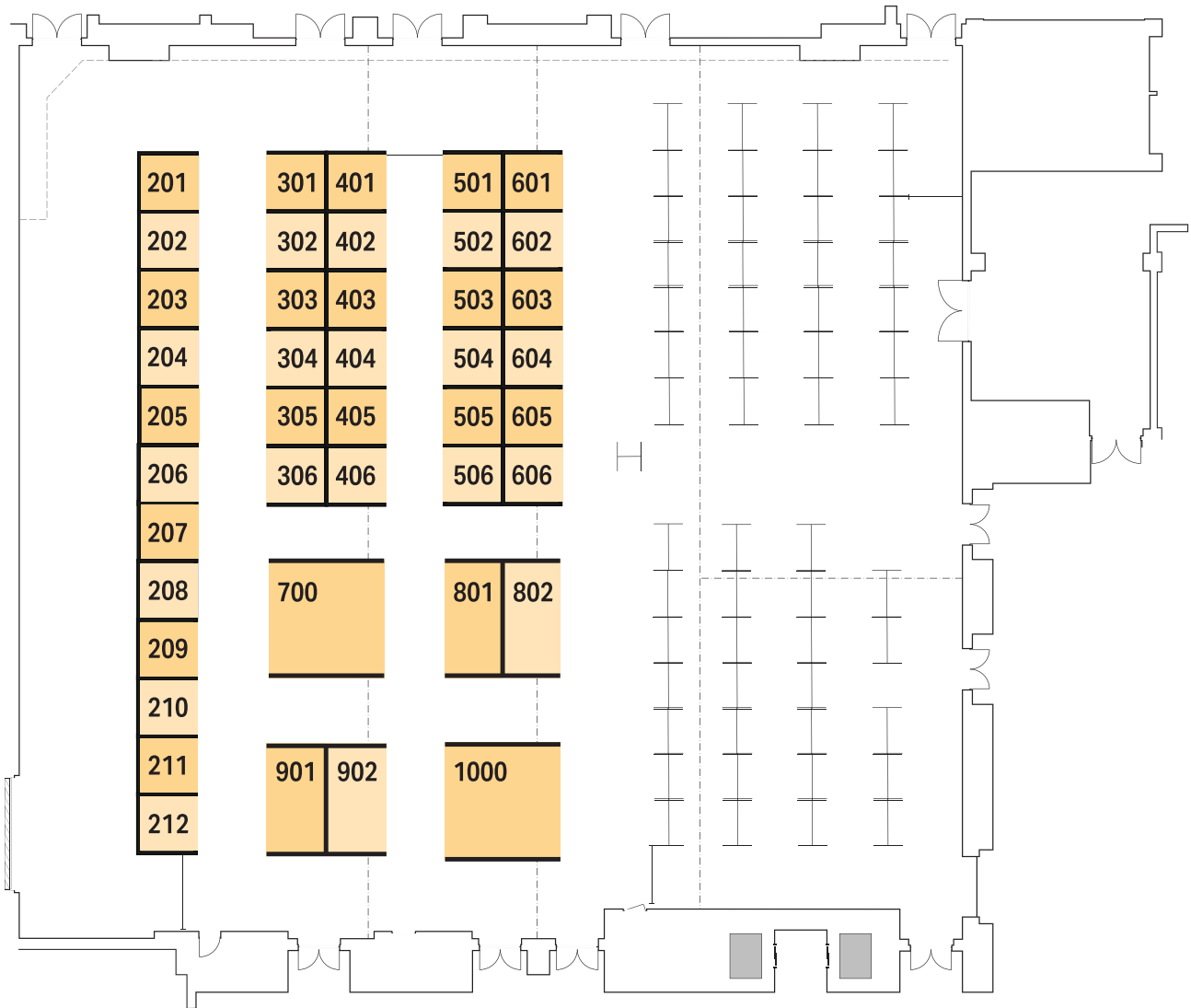


# Convention Centre Floor Plan

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# Exhibit Hall Floor Plan



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# What science can do



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## Generating Impactful Evidence

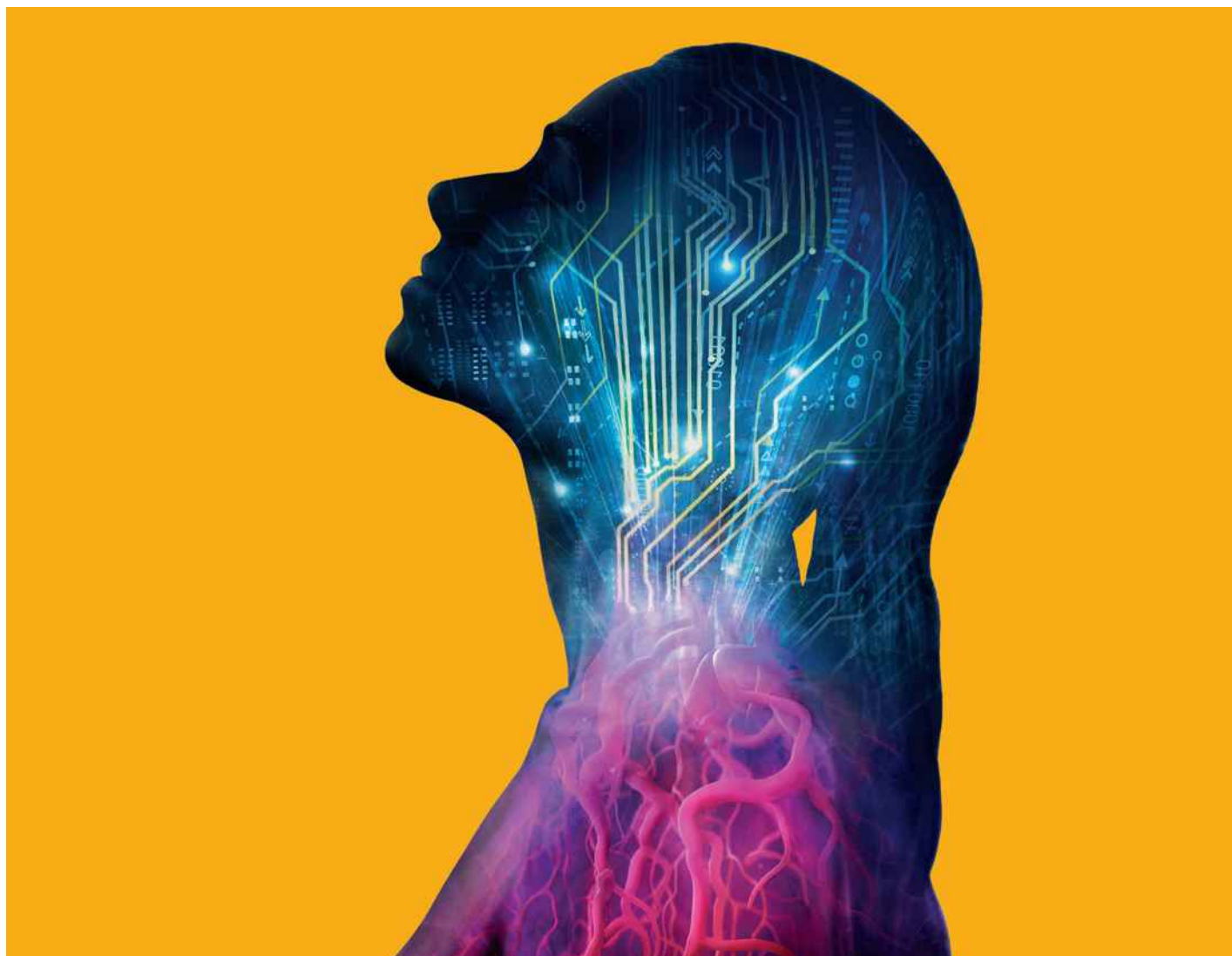
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### KEY DATES

**Sep 2023:** Call for plenary session proposals opens

**Oct 1, 2023:** Submission deadline for plenary session proposals

**Dec 2023:** Call for abstracts opens

**Feb 15, 2024:** Abstracts submission deadline

**Mar 2024:** Abstracts reviewed by ISPE's Scientific Program Committee

**May 2024:** Acceptance notifications issued

**Jun 2024:** ICPE registration opens