APAC Community Call

European and APAC Symposium Recap

August 17, 2023

Agenda

- OHDSI News
  - Global Symposium: Registrations & Agenda
  - Global Symposium: 2023 Titan Awards
  - Global Symposium: OHDSI Got Talent!
- India Chapter Mid-Year Update by Swetha Kiran
- European Symposium Recap by Chungsoo Kim
- APAC Symposium Recap by Nicole Pratt and Sujeong Eom

Global Symposium: Registrations & Agenda

- Registrations are now open at https://www.eventbrite.com/e/544413795317!

Global Symposium: Registrations & Agenda

	Friday, Oct. 20	Saturday, Oct. 21	Sunday, Oct. 22
7:00 am	Registration/Lite Breakfast	Lite Breakfast	Lite Breakfast
8:00 am	Welcome to OHDSI2023!	Intro to OHDSI Tutorial & OHDSI Workgroup Activities	OHDSI collaborative workshop: HowOften (part 2)
9:00 am	State of the Community		
10:00 am	Community Networking		
11:00	Plenary Session		
12:00 pm	Buffet Lunch	Buffet Lunch + Collaborator Showcase: Posters & Demos	Buffet Lunch + Collaborator Showcase: Posters & Demos
1:00 pm	Panel: Network Studies	OHDSI collaborative workshop: HowOften (part 1)	OHDSI workgroup activites
2:00 pm	Collaborator Showcase: Posters & Demos		
3:00 pm	Collaborator Showcase: Lightning Talks		
4:00 pm	Collaborator Showcase: Posters & Demos		
5:00 pm	Closing Talk & Titan Awards	Free time	We'll see you again in 2024!
6:00 pm	Networking Reception		
7:00 pm	OHDSI Got Talent!		

** this agenda is tentative and subject to change*

https://www.ohdsi.org/wp-content/uploads/2023/07/SYMPOSIUM-ACTIVITY-DESCRIPTIONS.pdf

Global Symposium: 2023 Titan Awards

- About the OHDSI Titan Awards: https://www.ohdsi.org/titan-awards/
- Nominations are due Saturday, September 16, 9 a.m. Korea time
  - Nomination form: https://bit.ly/2023TitanNominations

Below are the awards and their descriptions:

1. **Titan Award for Data Standards -** to recognize extraordinary contributions by an individual, organization, or team in development or evaluation in community data standards, including OMOP common data model and standardized vocabularies

2. **Titan Award for Methodological Research -** to recognize extraordinary contributions by an individual, organization, or team in development or evaluation in analytical methods for clinical characterization, population-level effect estimation, or patient-level prediction

3. **Titan Award for Open-Source Development -** to recognize extraordinary contributions by an individual in design, development, testing, and deployment of open-source software to enable observational analyses

4. **Titan Award for Clinical Application -** to recognize extraordinary contributions by an individual, organization, or team in generating clinical evidence that improves health by informing better health decisions and better care

5. **Titan Award for Community Collaboration -** to recognize an individual for their collaborative spirit in helping their fellow community members reach their goals

6. **Titan Award for Community Leadership -** to recognize an individual for their leadership in advancing the OHDSI mission

7. **Titan Award for Community Support -** to recognize an individual, team, or organization for their contributions to ensuring the sustainability of the OHDSI community

Global Symposium: OHDSI Got Talent!

- First ever OHDSI talent show will take place at this year's global symposium!
- Submissions are due Saturday, September 23, 9 a.m. Korea time
  - Submission form: https://docs.google.com/forms/d/e/1FAIpQLScxU6bNAxCmbphmNOGUfUEqf-SIRnHHi_CZBtXLjped_QAbtA/viewform

2023 OHDSI GOT TALENT SUBMISSION FORM

The success of the OHDSI community rests entirely in the talents of our collaborators. As we have learned, that talent extends well beyond excellence in open community data standards, methodological research, open-source analytic development, and clinical applications.

At the OHDSI Global Symposium on Friday, October 20, at 7:00pmET, we will be holding our first ever 'OHDSI Got Talent' event.

As with the popular television series, we will have a series of contestants perform 4-6 minute routines to showcase their talent, and a panel of judges will share their thoughts on what they have seen. The OHDSI community will vote for their favorite and we will crown a winner!

Do you sing or play a musical instrument? Do you dance? Can you do magic or comedy? Do you have some other unique skill that you can demonstrate in 6 minutes or less? We want to see it!

If you are interested in participating, please fill out the form below. The deadline to submit this form is 8pm ET on Friday, September 22; you will be notified of your acceptance by Friday, September 29.

OHDSI India Chapter

From Raw Data to Reliable Evidence

 | © Copyright OHDSI India Chapter

Agenda

- OHDSI India Chapter Workgroups & Community Call
- On Going Project - Breast Cancer Study
- OHDSI India Chapter Development Initiatives
- Action plan
- Follow OHDSI India Chapter

OHDSI India Chapter Workgroups & Community Call

OHDSI Training and Upskilling WG Updates

- Create a robust RWD/RWE regional training infrastructure and Ensure regional upskilling and education to support OMOP data standards and tools
- Current Focus: To find Where India Stands in terms of Data standards for healthcare

Upcoming WGs

Data Partners WG

- Few hospitals and diagnostics are identified as potential data partners and the team is currently working on collaboration opportunities

Indian data OMOP Feasibility analysis

- Data Partners - JSS AHER Data
- Feasibility of Mapping JSS Breast cancer patient data to the OMOP Common Data Model

Community Call

- Timings: Monthly 2nd Thursday
- Knowledge sharing with OHDSI Collaborators

On Going Project - Breast Cancer Study

OHDSI India Chapter Initiative:

- GVW, JSS AHER Mysore & Janssen together has initiated a pathfinder project on Breast Cancer data.

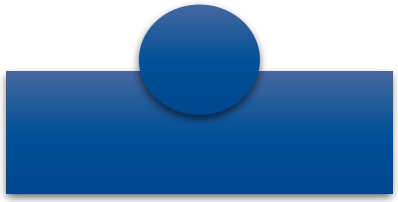
Challenge:

- Various formats of discharge summaries specific to breast cancer cases.
- The data in the data partner's platform is fragmented and not integrated.
- The data is in Text format in discharge summaries.
- Lacks a Standardized coding system.

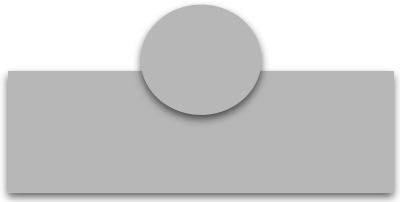
Solutions:

- Python scripts are being executed for data extraction and converting the data to readable format.
- Working on NLP Techniques to enhance data extraction and linking the extracted data to OMOP Concepts.

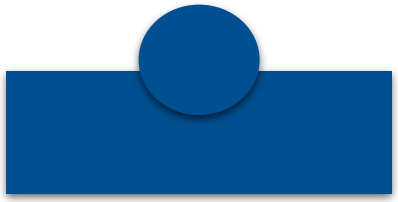
OHDSI India Chapter Development Initiatives



University: JSS (Data Partner)
Study: Breast Cancer

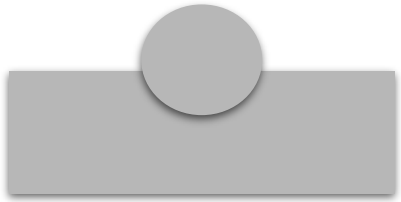


Company: Health Parliament
Exploring Opportunities for New Studies

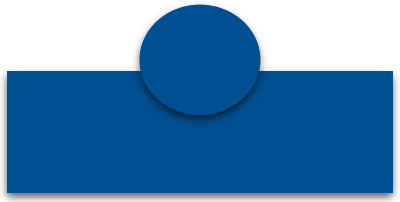


University: Ashoka
Exploring Opportunities for Performing new studies

Company: Bayer (Pareen)
Exploring Opportunities for collaboration

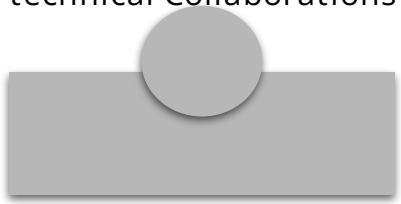


Company : L & T
Exploring Opportunities for technical Collaborations

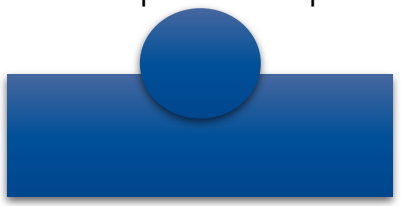


University: MS Ramaiah
Exploring Opportunities for data partnership

Hospital: NHS Lancashire Teaching Hospitals Exploring Opportunities to perform network studies
OHDSI India Initiatives



Company: GVW
Key OHDSI India Initiators



Company : Janssen
Study: Breast Cancer
Exploring opportunities for Network Studies

Action plan

- Complete Breast cancer data OMOP conversion
- Initiate the corresponding publication
- Expand and strengthen the active community
- Engage two additional data partners

Follow OHDSI India Chapter

INDIA

Reach us at

OHDSI

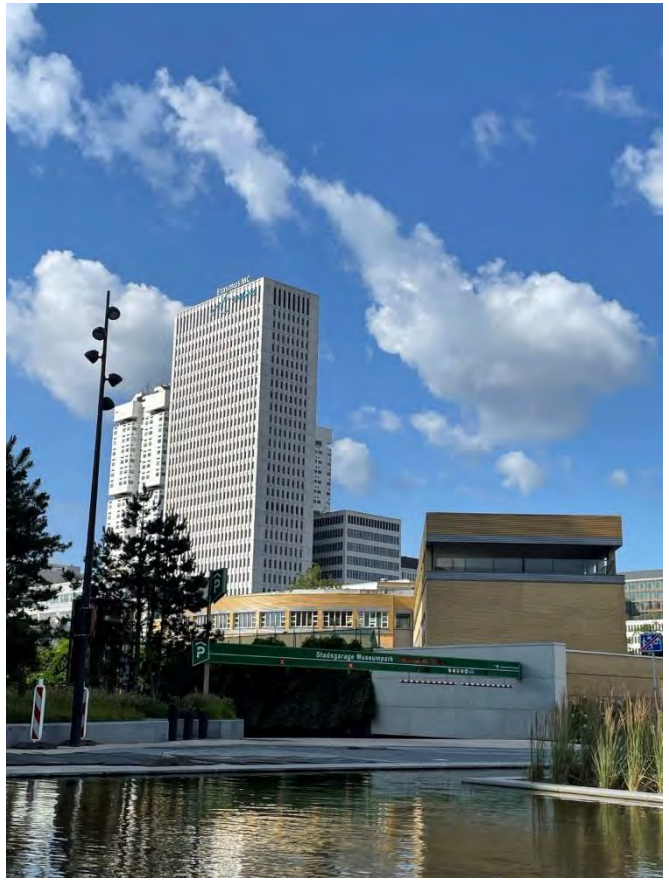
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

Thank You

23’ European OHDSI sympo recap

Chungsoo Kim, Pharm D, PhD Candidate
Dept of Biomedical Informatics, Ajou University

European OHDSI symposium



European OHDSI 2023, Erasmus MC, July 1st

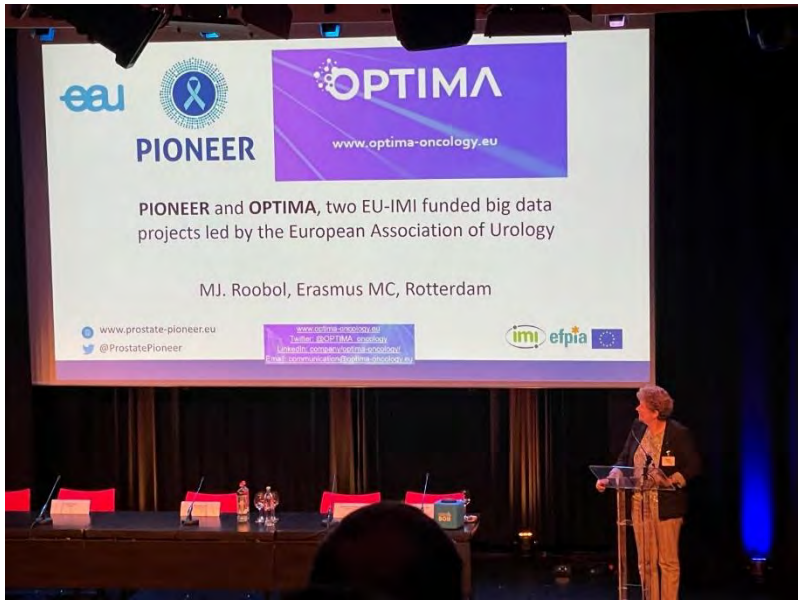
Pre-workshop: Phenotyping

European OHDSI 2023, Erasmus MC, July 2nd

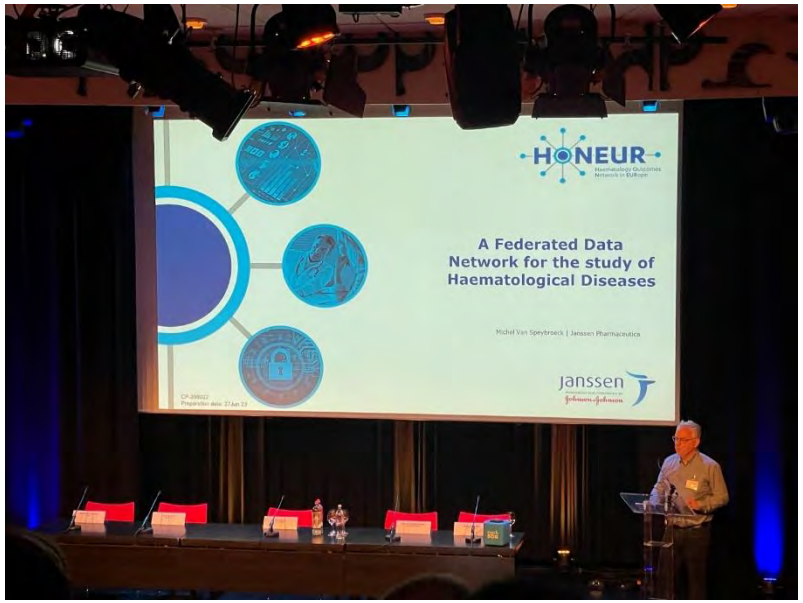
Pre-workshop: Oncology WG

European OHDSI 2023, SS Rotterdam, July 3rd

Main Symposium



PIONEER & OPTIMA
Solid cancer

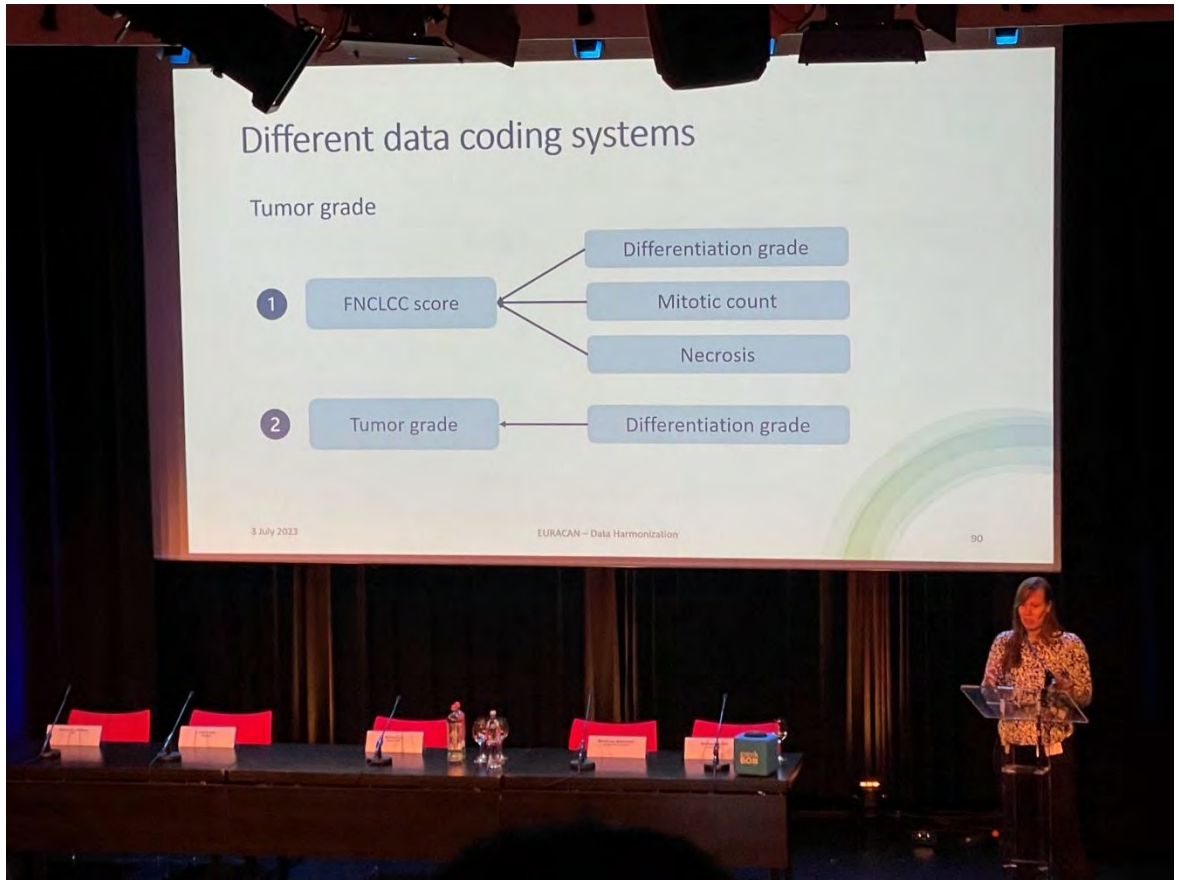


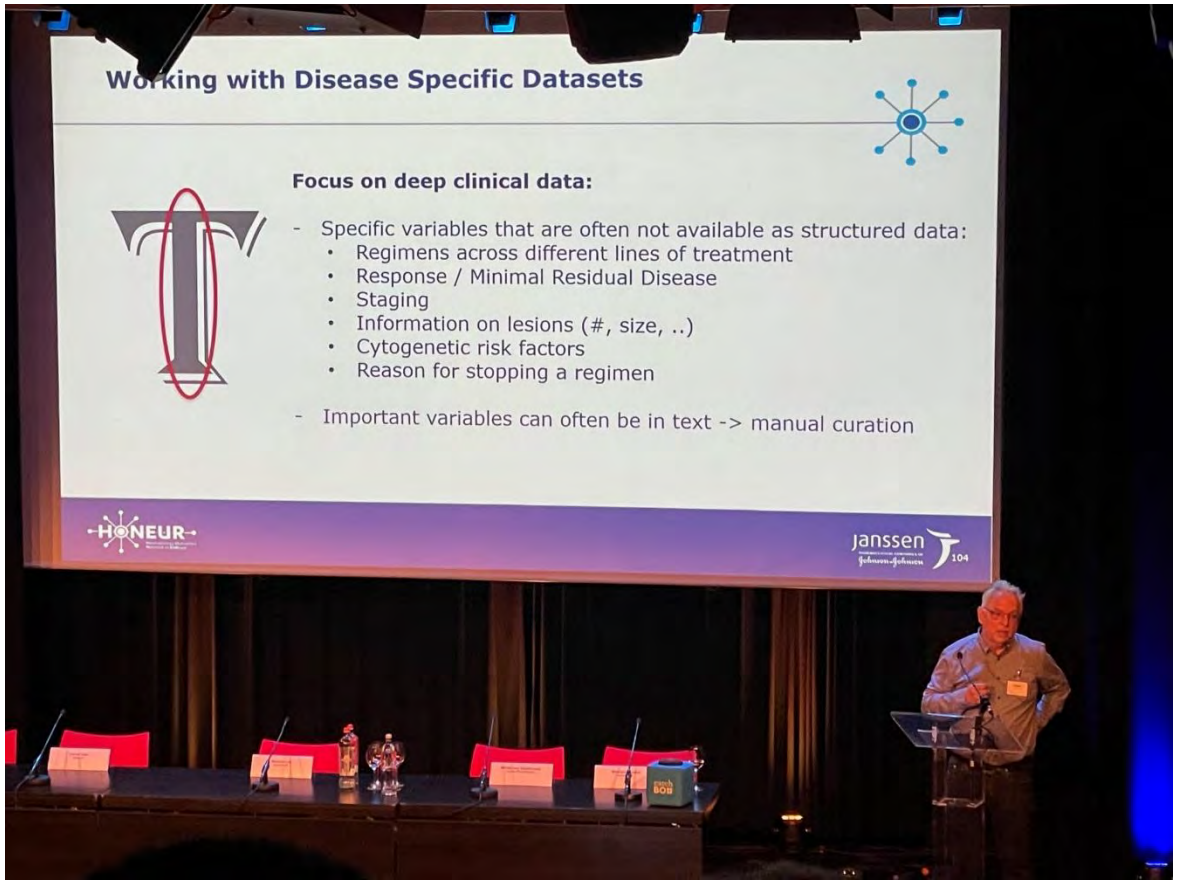
HONEUR
Heamatologic cancer

EURACAN
Rare cancer

European OHDSI 2023, SS Rotterdam, July 3rd

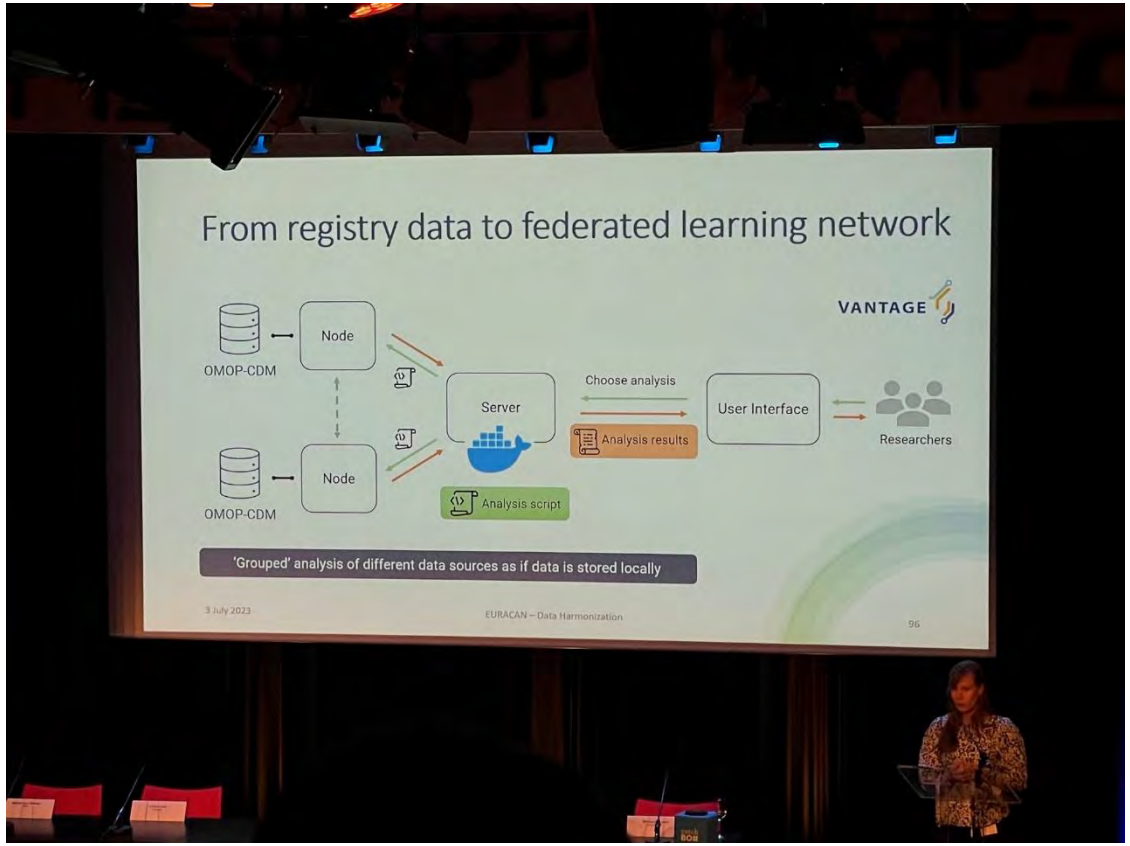
Cancer data standardization

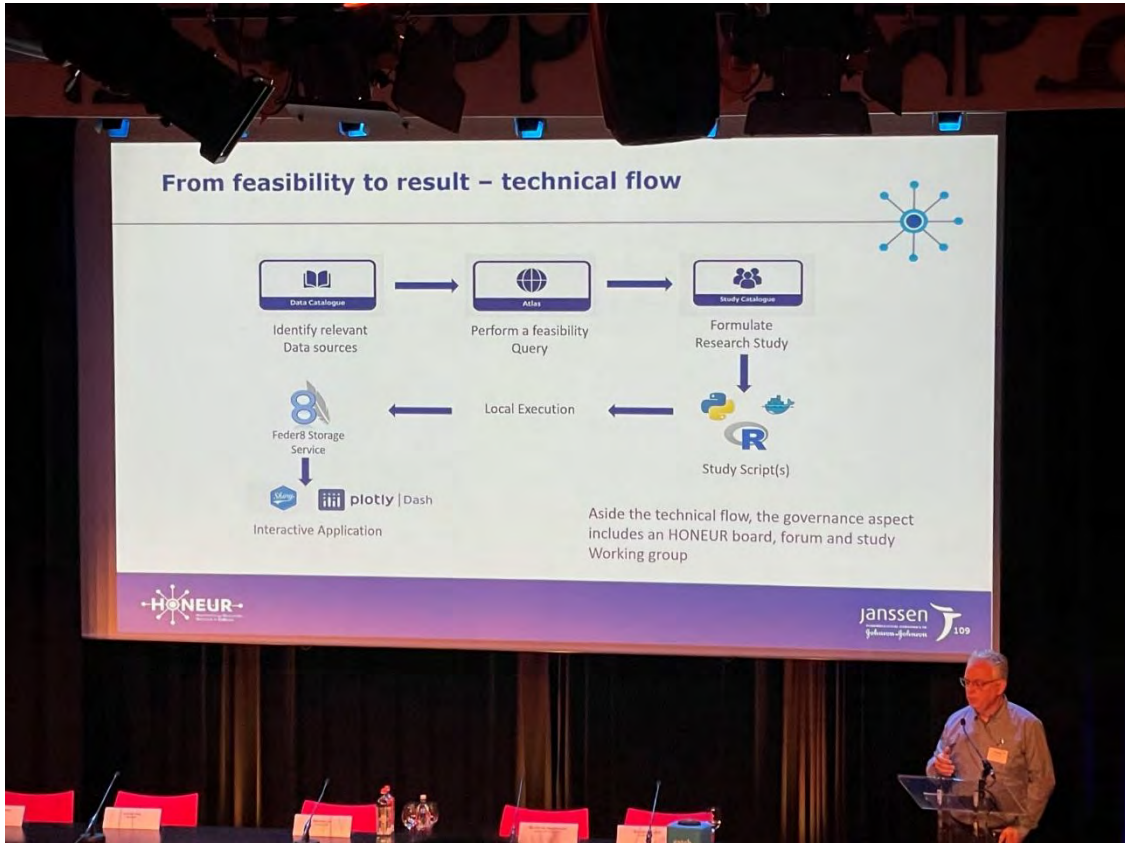




European OHDSI 2023, SS Rotterdam, July 3rd

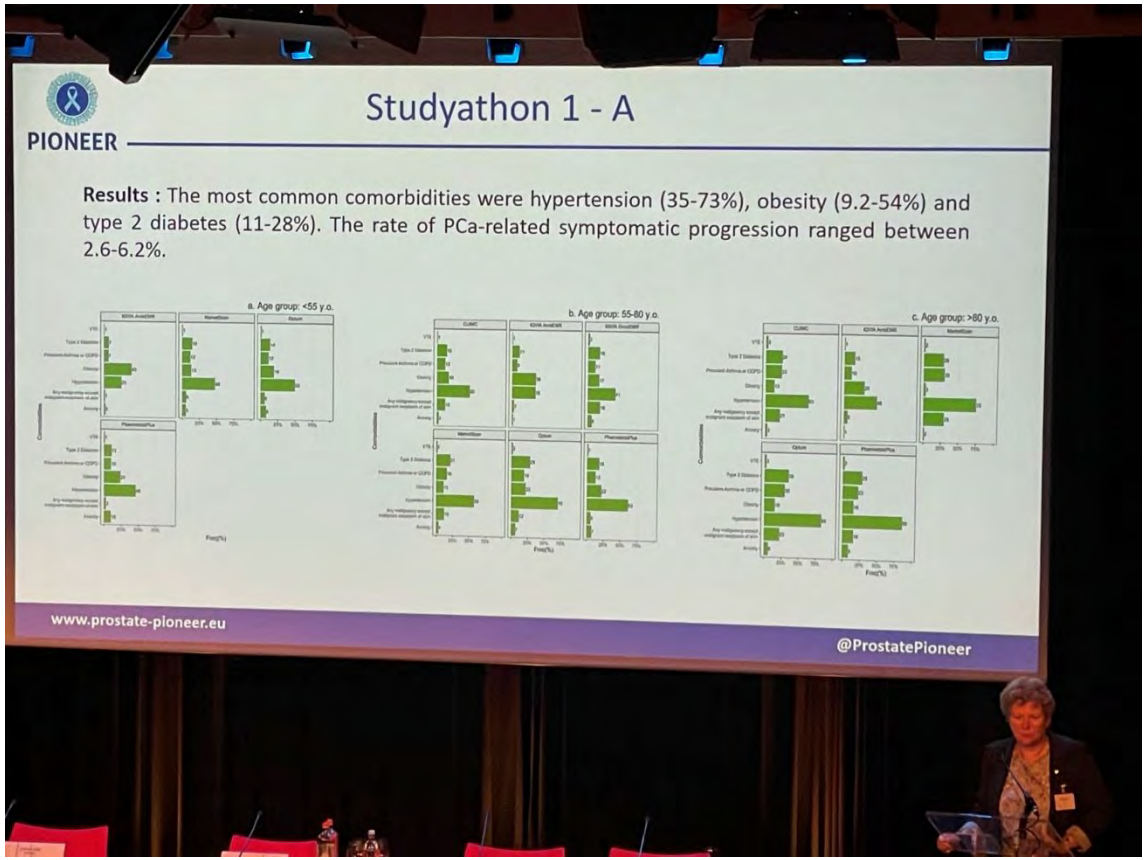
Analytic infrastructure

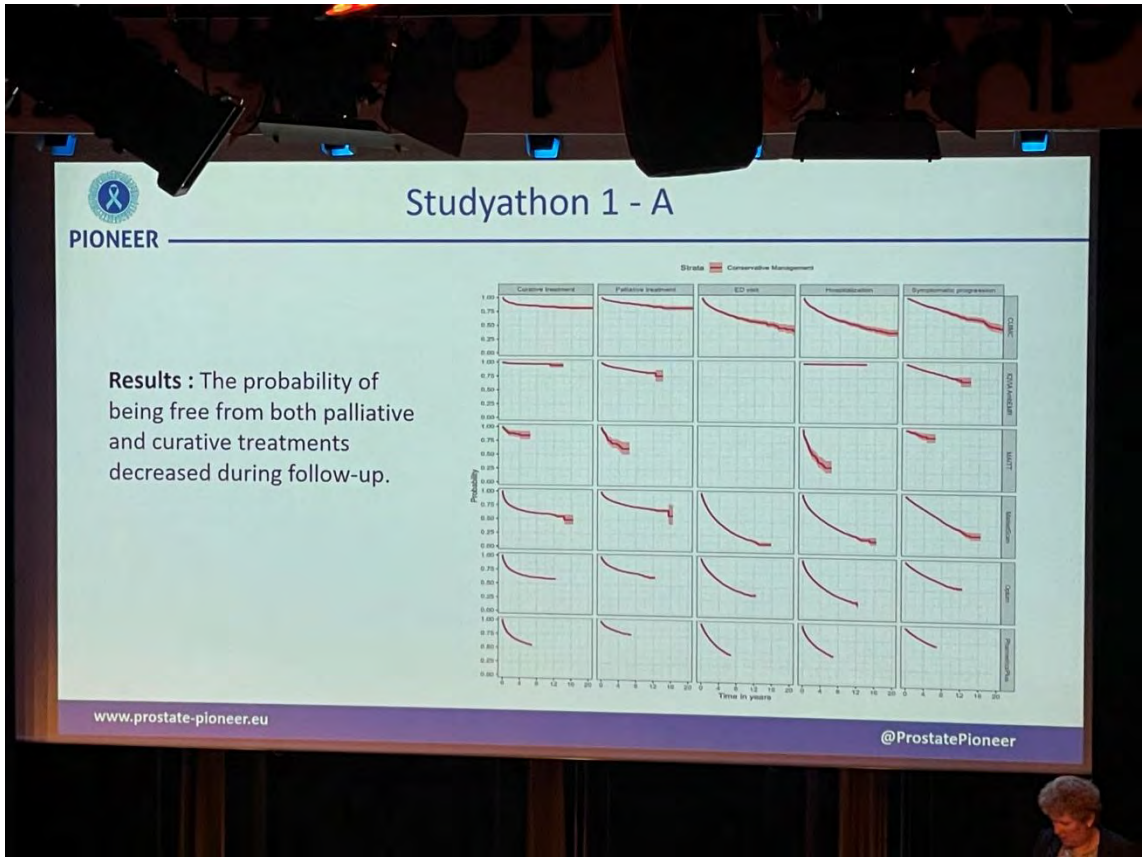




European OHDSI 2023, SS Rotterdam, July 3rd

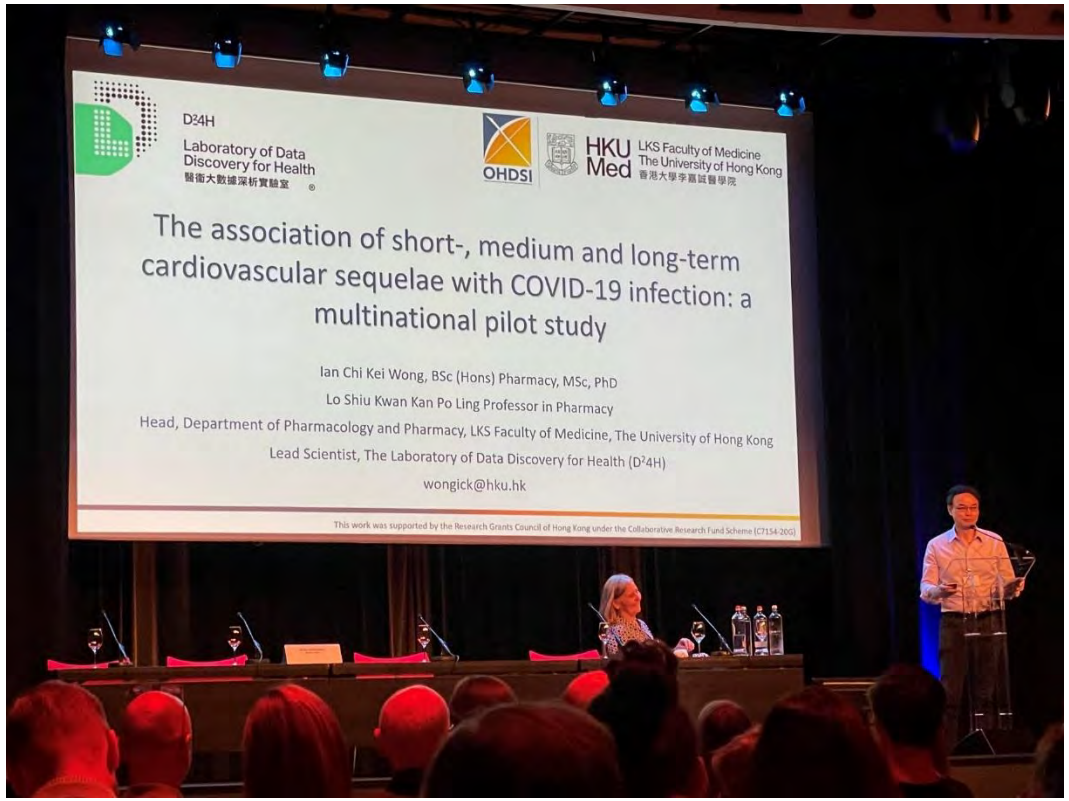
Study-a-thon





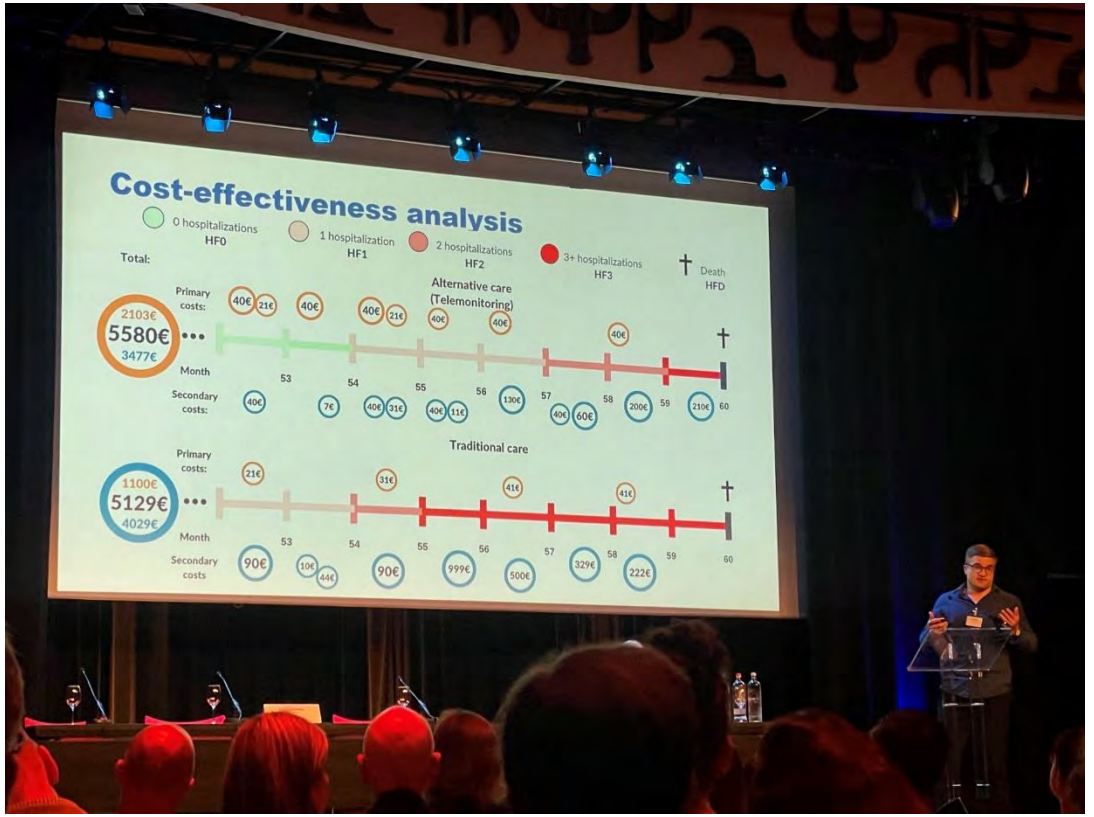
European OHDSI 2023, SS Rotterdam, July 3rd

Rapid fire session – PASC study



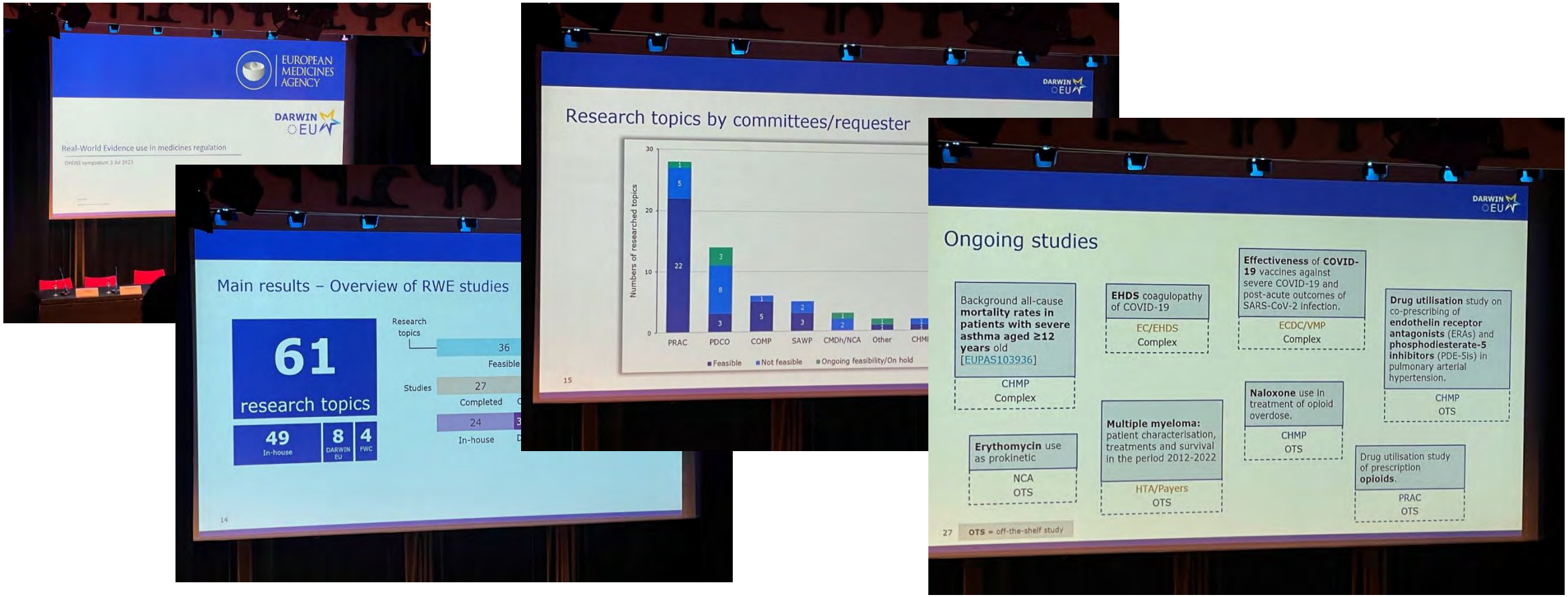
European OHDSI 2023, SS Rotterdam, July 3rd

Rapid fire session – Cost effectiveness study



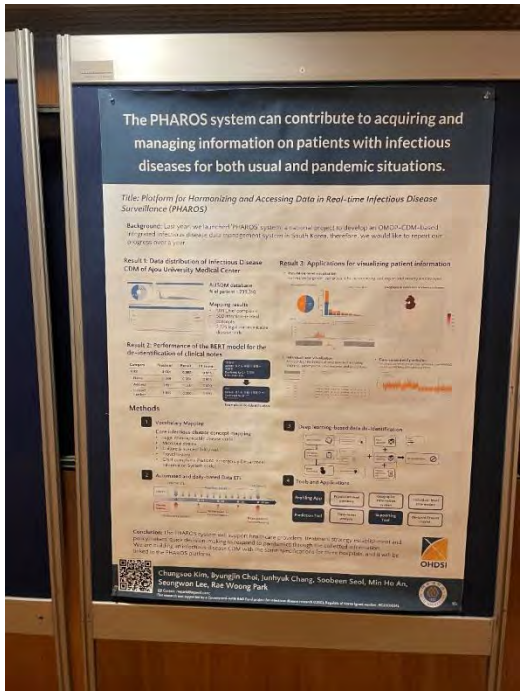
European OHDSI 2023, SS Rotterdam, July 3rd

DARWIN EU – EMA driven studies



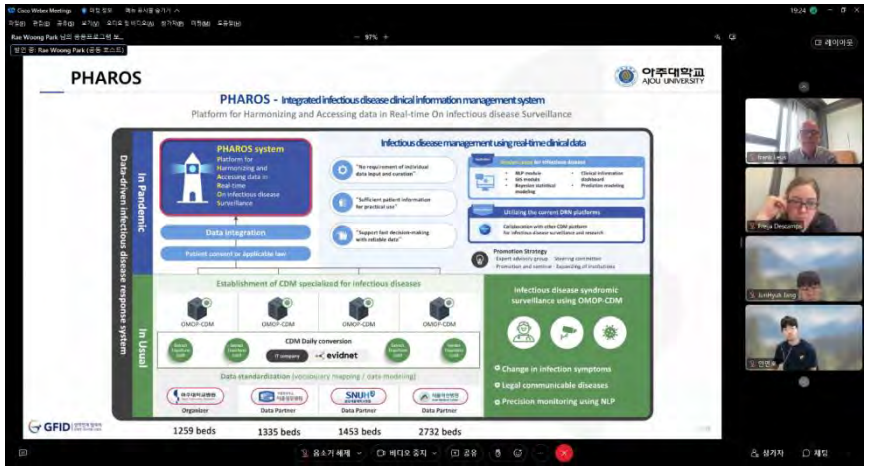
European OHDSI 2023, SS Rotterdam, July 3rd

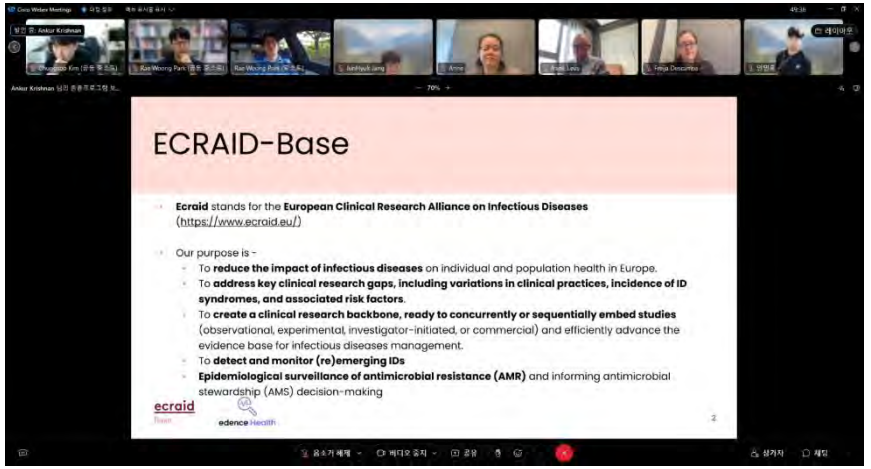
Poster session



PHAROS (Infectious disease platform project)

Initiate a new collaboration





European OHDSI 2023, SS Rotterdam, July 3rd

Closing event

Summary

- Focusing on cancer research using OMOP-CDM
  - Standardization of disease-specific data
  - Building infrastructure for a federated data network

- DARWIN EU

- Activating the national nodes / SMEs

2023 OHDSI APAC SYMPOSIUM

SYDNEY, AUSTRALIA

A collaborative recipe for generating reliable real world evidence

Reflections

Nicole Pratt

University of South Australia

OHDSI Australia Chapter Lead

OHDSI Australia 2023

- **Two-day in-person event**
  - Symposium Day 1: Main Conference
  - Symposium Day 2: Tutorials + Oncology Workgroup discussions
- **110 attendees**
  - 58% Aus (*All Aus regions represented excl. NT*)
  - 42% international
    - 32% APAC (Korea, Taiwan, Japan, Singapore, Hong Kong, China)
    - 10% Other (US, UK & Sweden)
- **Diverse participant representation**
  - Academics, clinicians, students, regulators, industry, not-for-profit (Minderoo Foundation), OHDSI devotees & one consumer!
- **Eight Symposium sessions including**
  - 30 speakers
  - 12 speaker presentations including,
    - 7 lightning talks representing Asia-Pacific
    - 2 panel discussions
    - 6 tutorial presentations
    - **1 (Oncology) workgroup brain-storm session**
  - 21 poster presentations
- **One phenomenal APAC Steering Committee – thanks all!**
- **…** and AI-generated beer!

Sponsors

University of South Australia | Quality Use of Medicines and Pharmacy Research Centre

UNSW SYDNEY

Medicines Intelligence CRE

ARDC Australian Research Data Commons

IQVIA

A recipe for generating reliable real-world evidence that can guide clinical practice, shape health policies, and ultimately improve patient outcomes

Ingredients:

High-quality data (that captures the full spectrum of healthcare experiences)

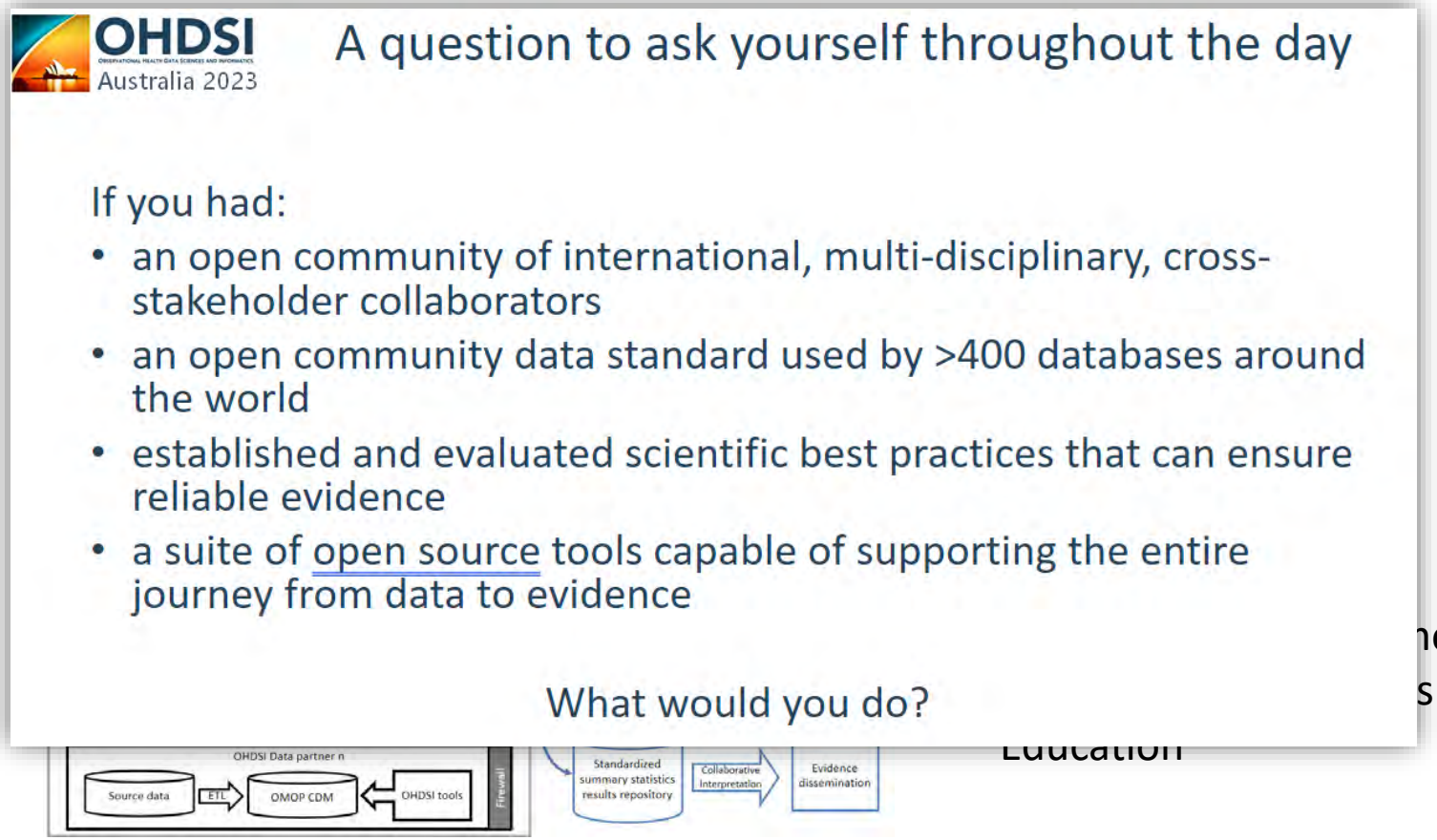
Instructions:

- STEP 1: Collaborate
  - Bring together researchers, clinicians, data scientists, and policymakers from diverse backgrounds to pool expertise, harmonize methodologies, and overcome the challenges inherent in analyzing real-world data.
- STEP 2: Standardize
  - Use the OMOP Common Data Model, to harmonizing disparate data sources, ensuring interoperability, and enabling large-scale analyses.
- STEP 3: Spice with innovation
  - Implement cutting-edge best practice techniques that uncover hidden patterns and generate novel insights
- STEP 4: Report
  - Report all results, data sources used, analytical techniques, assumptions and biases to accelerate the translation of evidence into practice
- STEP 5: Consume!

Session 1: OHDSI, an artisanal approach to crafting real-world evidence

Engineering an open science system that builds trust, confidence and addresses the needs of decision makers, clinicians and consumers

Patrick Ryan



nent

s

Education

Session 1: OHDSI, an artisanal approach to crafting real-world evidence

Asieh Golozar

What has OHDSI done?

Most Common Drug Disease Pairs in Observational Studies Published in PubMed (2015-2021)

OHDSI
Australia 2023

A question to ask yourself throughout the day

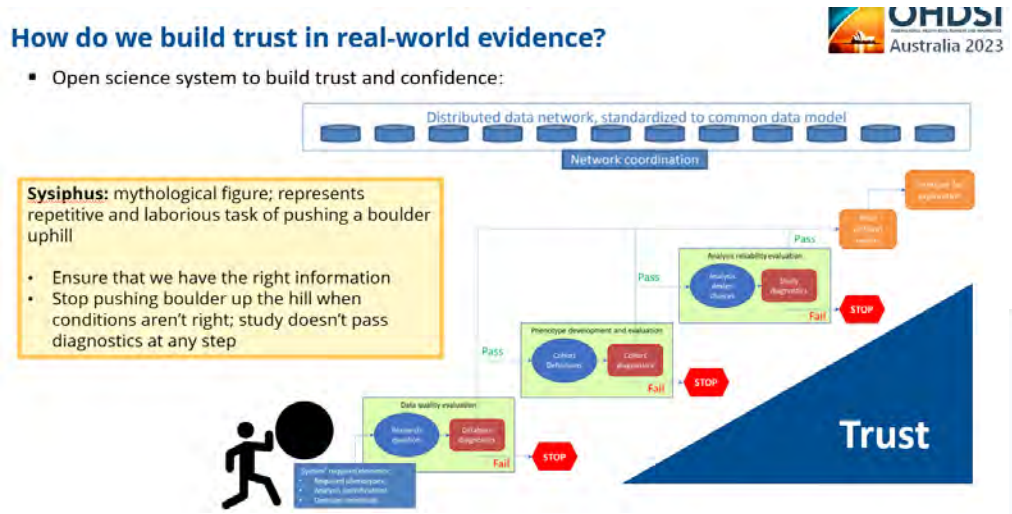
If you had:

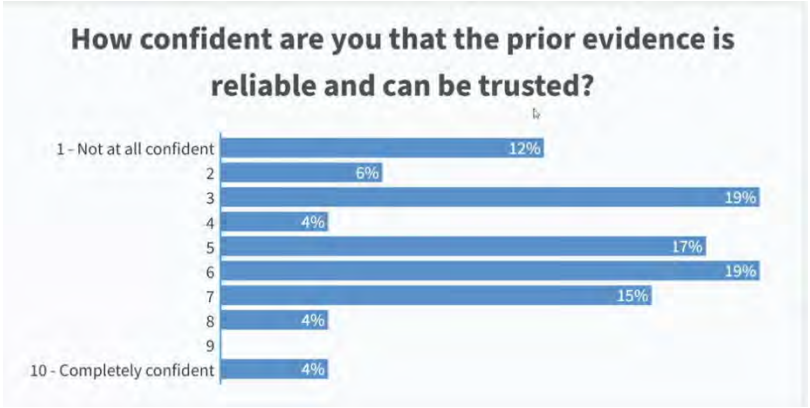
- an open community of international, multi-disciplinary, cross-stakeholder collaborators
- an open community data standard used by >400 databases around the world
- established and evaluated scientific best practices that can ensure reliable evidence
- a suite of open source tools capable of supporting the entire journey from data to evidence

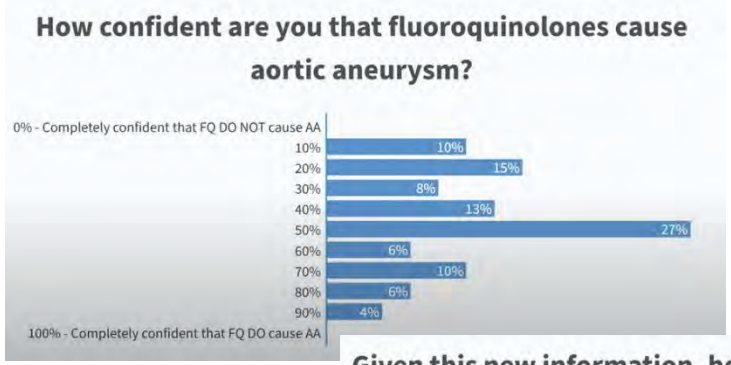
What would you do?

Session 2: A step-by-step recipe for RWE: the OHDSI Save-Our-Sisyphus Challenge

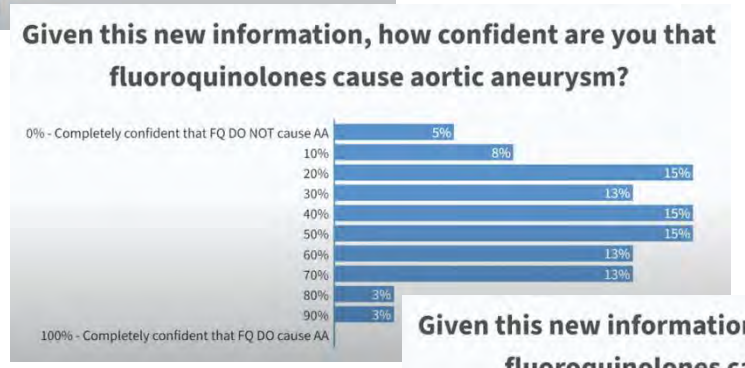
Jack Janetzki



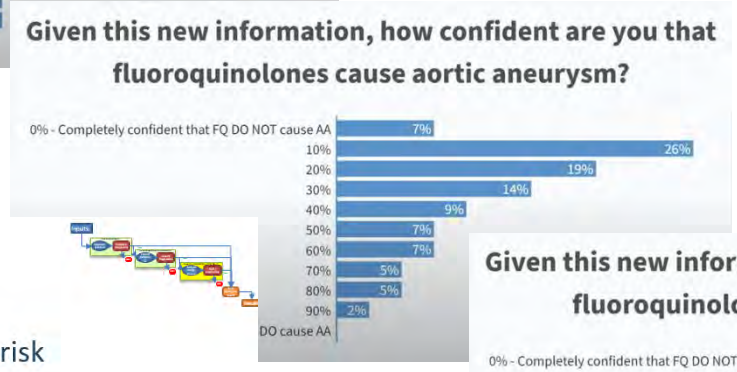




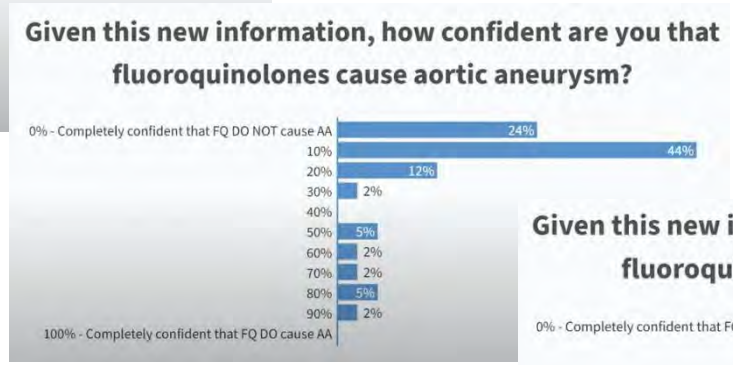
"Nice normal distribution 50/50"



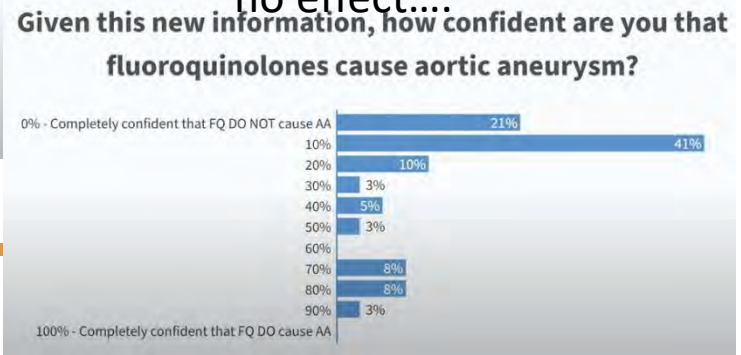
1 database: "still tremendous uncertainty"
"95% of studies we read are a single persons study in a single database"



2 databases: "one slightly underpowered, one more powered but not suggestive of increased risk – distribution has shifted…"

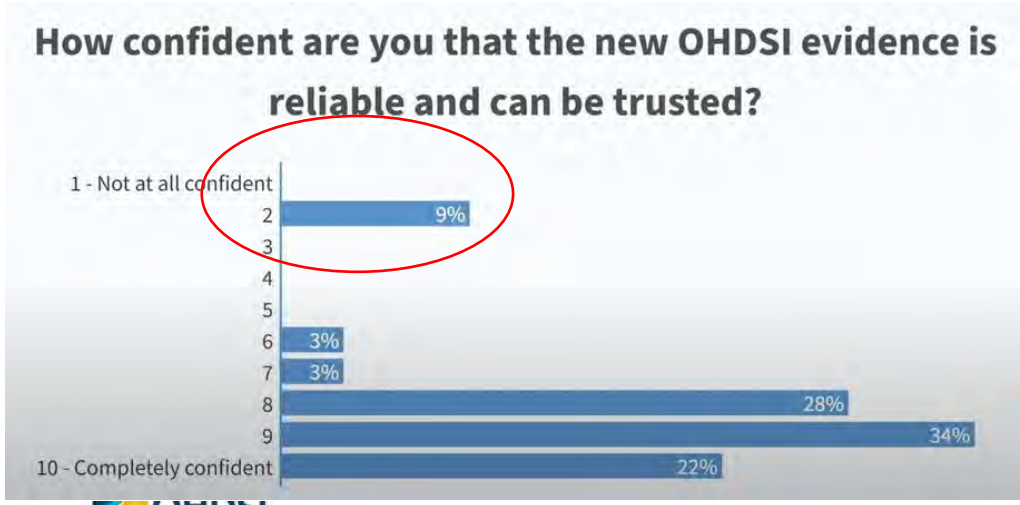


Meta-analysis: "substantial shift" "collectively showing you consistent evidence of no effect…."



Study diagnostics: A (short) checklist

- Statistical power: minimum detectable relative risk
- Target-comparator similarity: empirical equipoise
- Between-person confounding: covariate balance
- Generalizability: attrition fraction
- Residual bias: expected absolute systematic error
- Other design/analysis-specific checks:
  - SCCS: time trends, pre-exposure outcomes, etc.
  - Prediction: PROBAST criteria

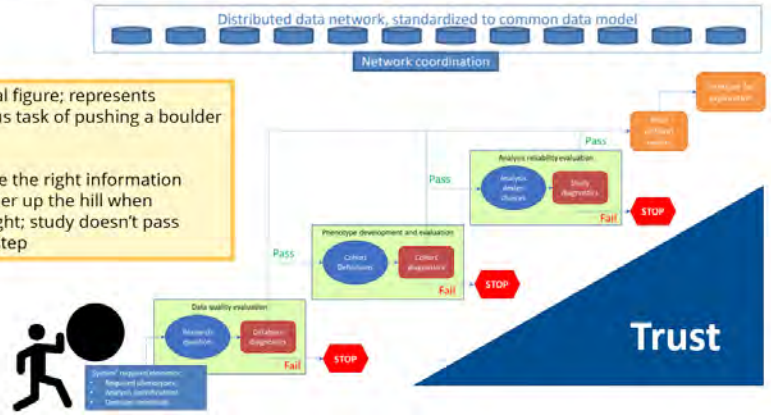


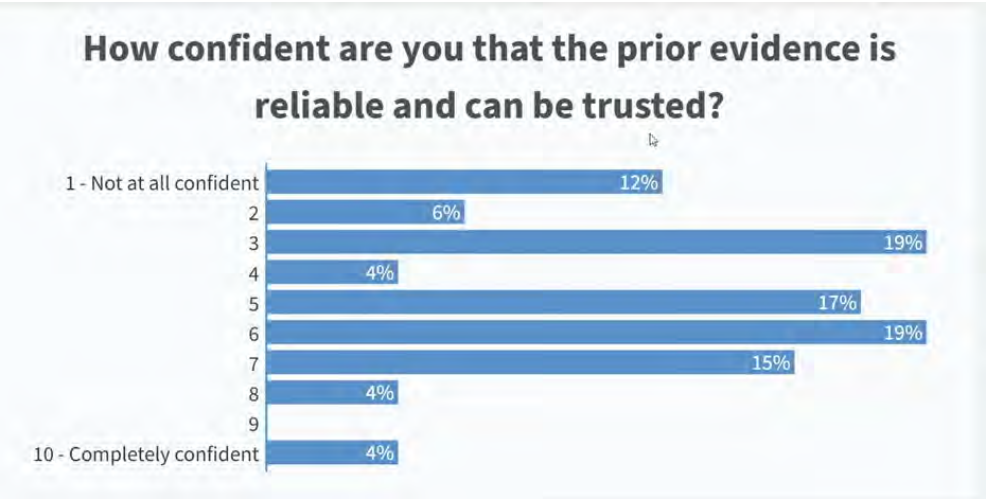
How do we build trust in real-world evidence?

- Open science system to build trust and confidence:

Sysiphus: mythological figure; represents repetitive and laborious task of pushing a boulder uphill

- Ensure that we have the right information
- Stop pushing boulder up the hill when conditions aren't right; study doesn't pass diagnostics at any step





We need everyone at the table to not only consume the evidence but also to set the menu!

How can OHDSI help *[you]* by generating evidence for the ***questions that matter*** to *[you]*?

What else can OHDSI do to ***build trust*** that the evidence we provide is reliable and can be used in decision making?

How can OHDSI ***improve understanding*** about real world evidence we produce so that it can be used in decision making?

New OHDSI Work Group Proposed: Knowledge Translation

Collaborator Showcase: 35 Posters!

Session 3: Too many cooks is never enough: collaborative data harmonization to improve patient care

FHIR-> OMOP

OMOP/FHIR – Overcoming challenges through collaboration

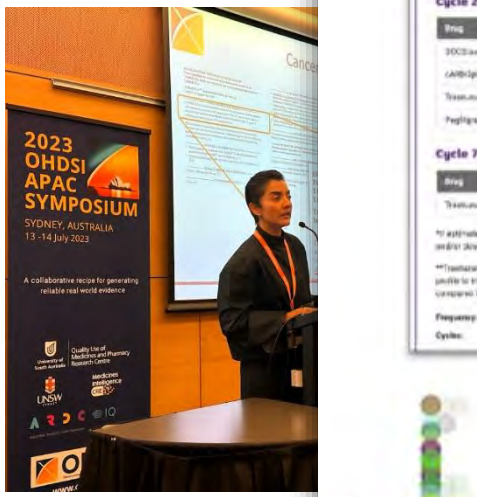
Grahame Grieve

OMOP + FHIR Engagement Opportunities

- **OHDSI Weekly Community Call**: each Tuesday, 11 am EASTERN, US
  - July 18, Vulcan: An HL7 FHIR Accelerator Transforming Clinical & Translational Research
    - https://ohdsi.org/community-calls/
- **OHDSI Global Symposium**: Oct. 20-22, East Brunswick, New Jersey,
  - OMOP + FHIR Connectathon: 8a-5p, Sunday, October 22
    - https://ohdsi.org/ohdsi2023/
- **OHDSI OMOP + FHIR Working Group Main Calls**
  - Mondays (weekly) 6-7 pm EASTERN US (via MS Teams)
    - https://www.ohdsi.org/upcoming-working-group-calls/

- Use established FHIR IG Profiles (IPA, or IPS / US Core)
- Project report /white paper
  - Environmental scan: breadth of prior work discovered
  - IG Profile overlap/ gap analysis
- Iterative Connectathon Engagement
  - Validate & Refine SME-curated maps

Session 3: Too m… harm… …ollaborative data …t care

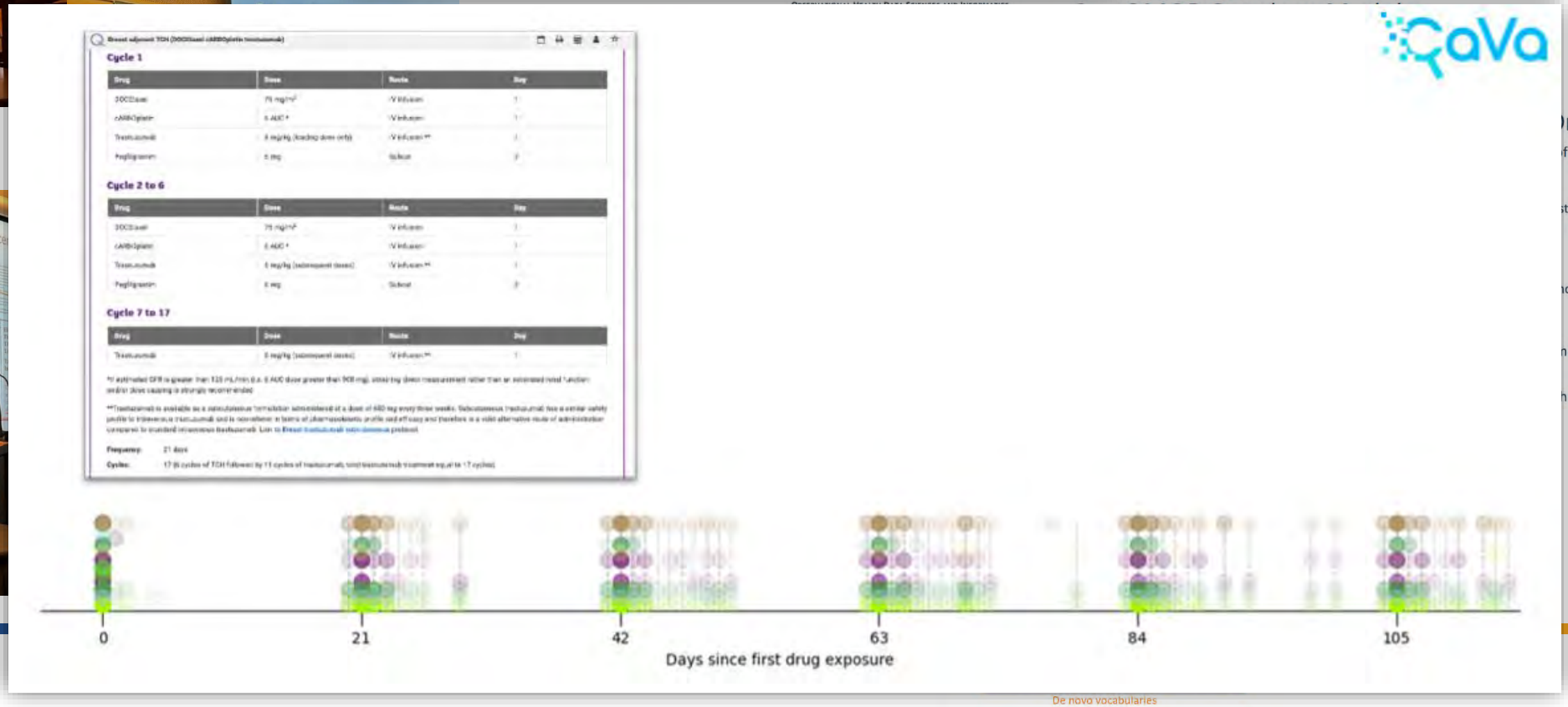


practical
application
chemotherapy dose monitoring

Maridulu **Budyari** **Gumal**
Working together for good health and wellbeing

…im is to provide a foundation for …senting cancer data at the levels of …ularity and abstraction required to …ort observational cancer research

… Oncology Network



…ncology Module
…f oncology research
…stic Modifiers
…dividual Level (standard OMOP)
…ment with distinct clinical meaning

De novo vocabularies

Session 4: A smorgasbord of health data insights from across the APAC region

Internationalization Efforts for Real-World Evidence Creation at Core Hospitals for Clinical Research in Japan

National Cancer Center Hospital East

Yoshihiro Aoyagi

13th July 2023

OHDSI

HKU Med LKS Faculty of Medicine The University of Hong Kong 香港大學李嘉誠醫學院

The association of short-, medium and long-term cardiovascular sequelae with COVID-19 infection: a multinational pilot study

Ivan Chun Hang Lam, MPharm

Department of Pharmacology and Pharmacy, LKS Faculty of Medicine, The University of Hong Kong

OHDSI

Establishment of Evidence Sharing Network Through Common Data Model for Chinese Clinical Research: an Overview

Presenter: Meng Zhang, Sanbao Chai, Zilin Long, Tianmou Liu, Xiaowei Chen, Zuoxiang Liu, Mui Van Zandt, Jing Li, Chao Li, Yexiang Sun, Peng Shen, Hongbo Lin, Siyan Zhan, Feng Sun, Lei Liu

AHRA

ARDC Australian Research Data Commons

THE UNIVERSITY OF MELBOURNE

Successes and Challenges of a Multi-State EMR to OMOP Conversion Project in Australia

Roger Ward, Christine Mary Hallinan, Dougie Boyle

OHDSI

Comparative Risk for Neuropsychiatric Events in Leukotriene Receptor Antagonists versus Inhaled Corticosteroids in Children with Asthma

Subin Kim[1,2], Chang Hoon Han[3], Jaehyeong Cho[1,2], Kyung Won Kim[2,3], Seng Chan You[1,2]

[1]Department of Biomedical Systems Informatics, Yonsei University College of Medicine
[2]Institute for Innovation in Digital Healthcare, Yonsei University
[3]Department of Pediatrics, Yonsei University College of Medicine

臺北醫學大學 TAIPEI MEDICAL UNIVERSITY

OHDSI TAIWAN

OHDSI

Lightning talk

Prediction of Dementia incidence among patients with Type 2 Diabetes

Presenter: PHAN THANH-PHUC, MBA, Ph.D. candidate

Session 4: APAC Regional Chapters

Panel Discussion: We have the ingredients – now let's generate the evidence!

Closing Session

Nicole Pratt & Patrick Ryan

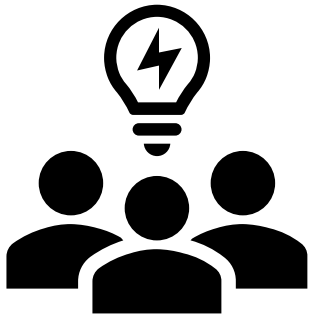
The beer brewing process:

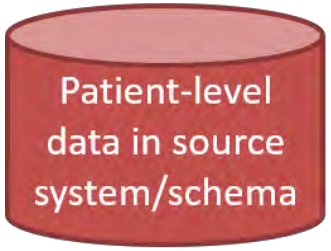
A metaphor that encapsulates our journey together in our pursuit of real-world evidence.

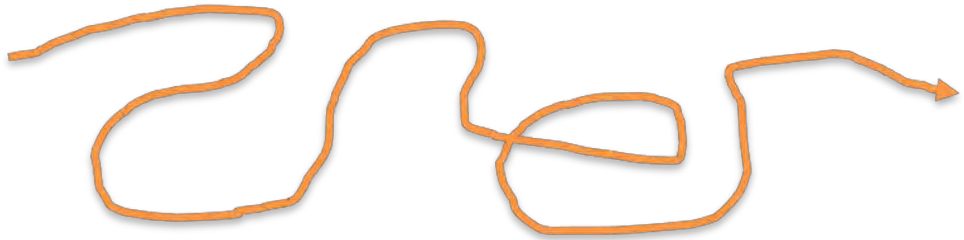
malt
hops
beer
water
yeast

Different types of observational data:

- **Populations**
  - Pediatric vs. elderly
  - Socioeconomic disparities
- **Care setting**
  - Inpatient vs. outpatient
  - Primary vs. secondary care
- **Data capture process**
  - Administrative claims
  - Electronic health records
  - Clinical registries
- **Health system**
  - Insured vs. uninsured
  - Country policies

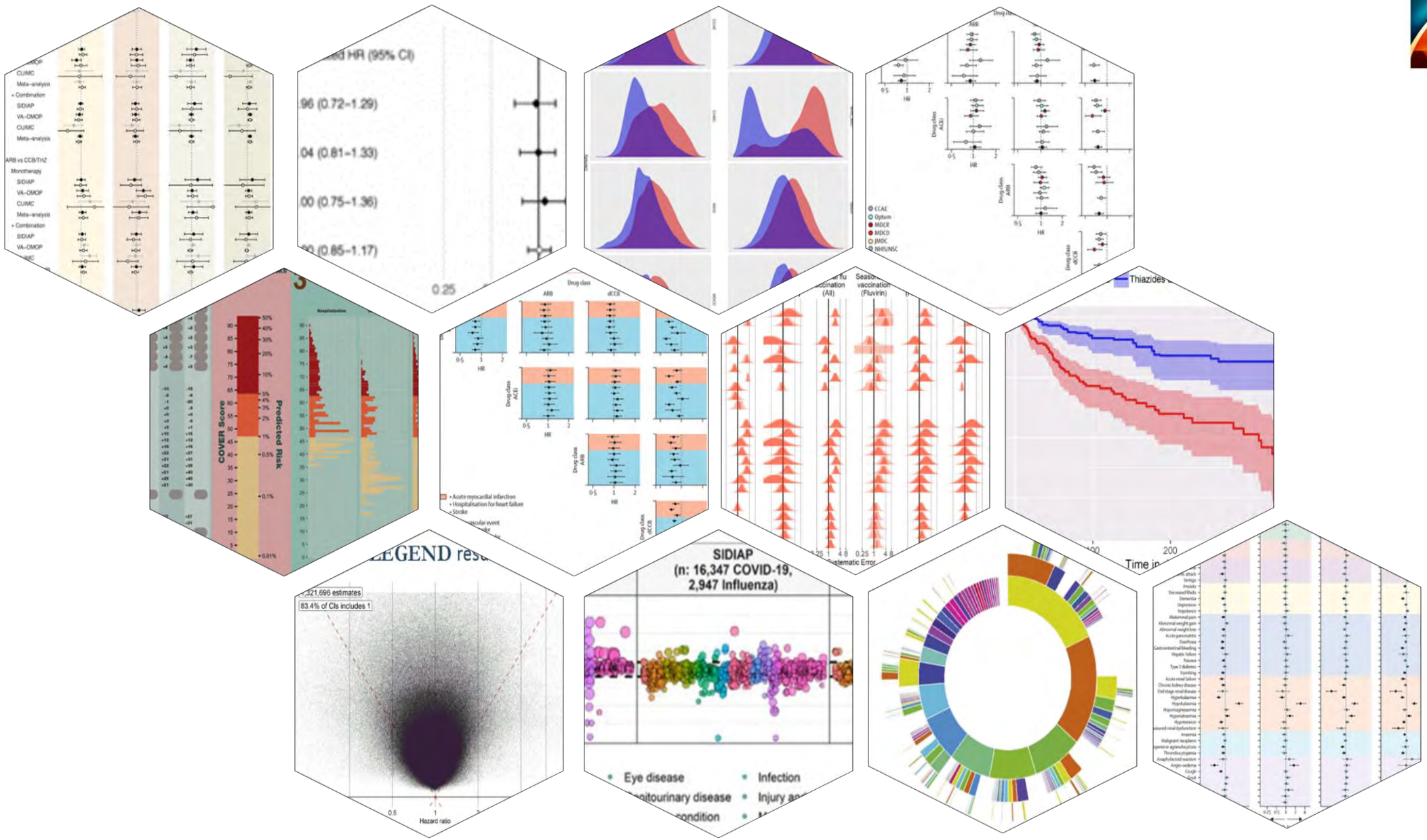






Types of evidence desired:

- **Clinical characterization**
  - Clinical trial feasibility
  - Treatment utilization
  - Disease natural history
  - Quality improvement
- **Population-level effect estimation**
  - Safety surveillance
  - Comparative effectiveness
- **Patient-level prediction**
  - Precision medicine
  - Disease interception



96 (0.72–1.29)
04 (0.81–1.33)
00 (0.75–1.36)
0.25
COVER Score
Predicted Risk
Drug class
ARB
dCCB
HR
Thiazides
Time in
Systematic Error
SIDIAP
(n: 16,347 COVID-19,
2,947 Influenza)
Eye disease
Infection
Hazard ratio
83.4% of CIs includes 1

Our ingredients are data

Our craft is science

Our brew is evidence

UNSW
SYDNEY
2023
OHDSI
APAC
SYMPOSIUM
SYDNEY, AUSTRALIA
OHDSI

Tutorial: The OHDSI Save-our-Sisyphus Challenge Journey

Time	Schedule Day 2 (Tutorial) A step-by-step recipe for RWE	Moderator
Morning Session 1	Welcome and Overview of the Day	Nicole Pratt
	The OMOP CDM, vocabularies and ETL process	
09:00-09:30	- Overview of the OMOP CDM and vocabularies (Lecture)	Global: Mui Van Zandt
09:30-10:00	- The ETL process (Lecture)	Global: Mui Van Zandt
10:00-10:20	- Live demo of a dataset translation (with focus on PBS data)	APAC: Song Gyeol
10:20-10:40	**Break**	
Morning Session 2	**Using OHDSI Tools to generate evidence (the Fluroquinolone SOS Challenge study process)**	
10:40-11:00	- How to define a clinical question as an OHDSI study (Lecture)	Global: Patrick Ryan
11:00-11:45	- Defining cohorts and phenotypes using ATLAS (Lecture)	APAC: Seng Chan You
11:45-12:30	- Cohort hands-on in ATLAS	APAC: Seng Chan You
12:30-13:30	**Break**	
Afternoon Session 1	**Research study in depth (analytic study design and execution)**	
13:30-14:30	- Overview of OHDSI modules (characterization, estimation, prediction) (Lecture)	Global: Patick Ryan
14:30-15:00	- Live demo of execution of a module (preferrably characterization and/or cohort diagnostics)	APAC: Thanh-Phuc Phan (TMU)
15:00-15:20	**Break**	
Afternoon Session 2	**Research study in depth (interpretation)**	
15:20-17:20	Clinical interpretation and study diagnostics - Exploration of results in OHDSI analysis viewer	Global: Matijn Scheumie APAC: Nicole Pratt
15:20-17:20	Technical hands-on access to Strategus results database	Global: Marc Suchad APAC: Jack

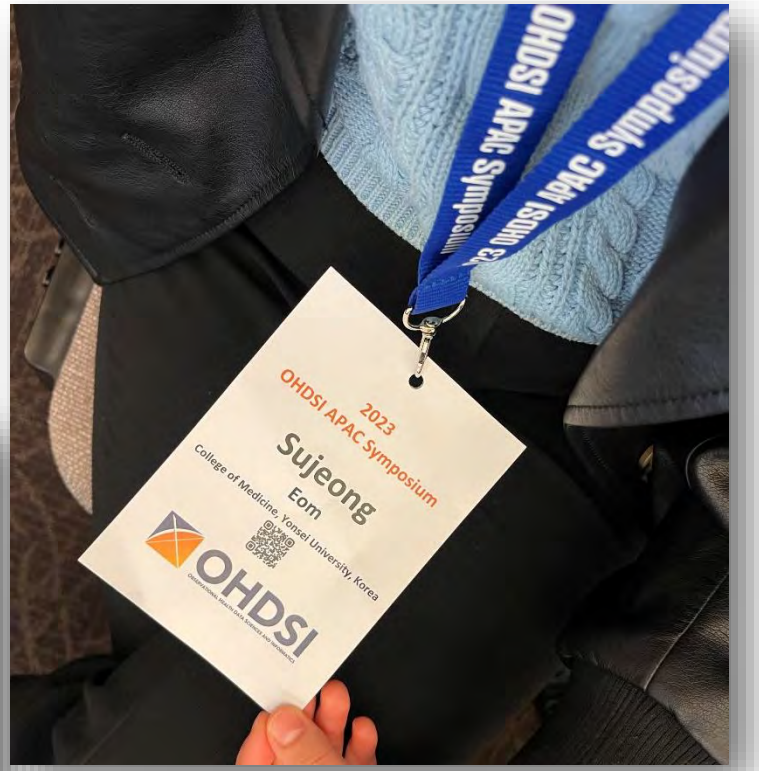
OHDSI-APAC Community Call

Recap: 23’ OHDSI-APAC Symposium

Sujeong Eom, graduate student

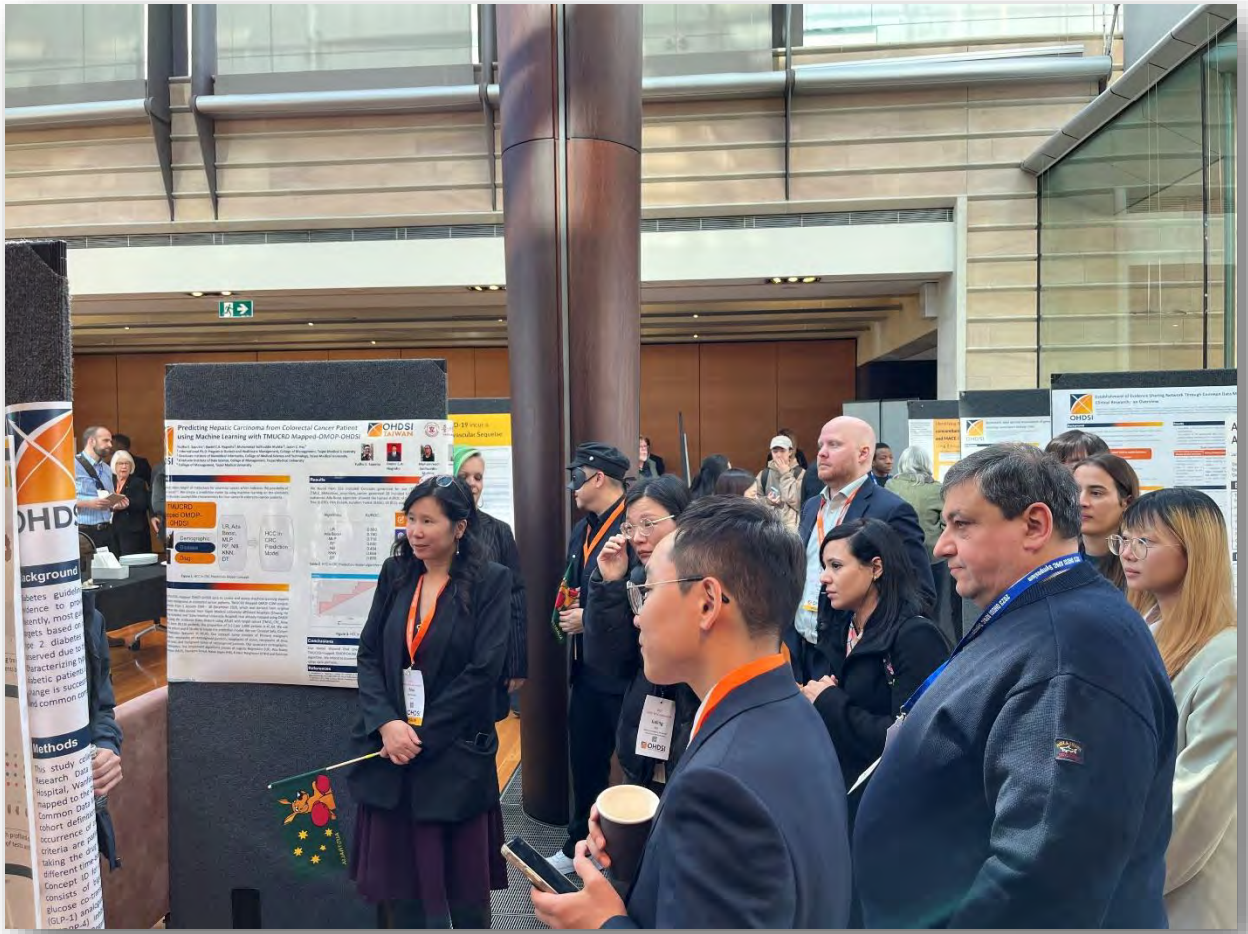
Dept of Biomedical Informatics, Yonsei University

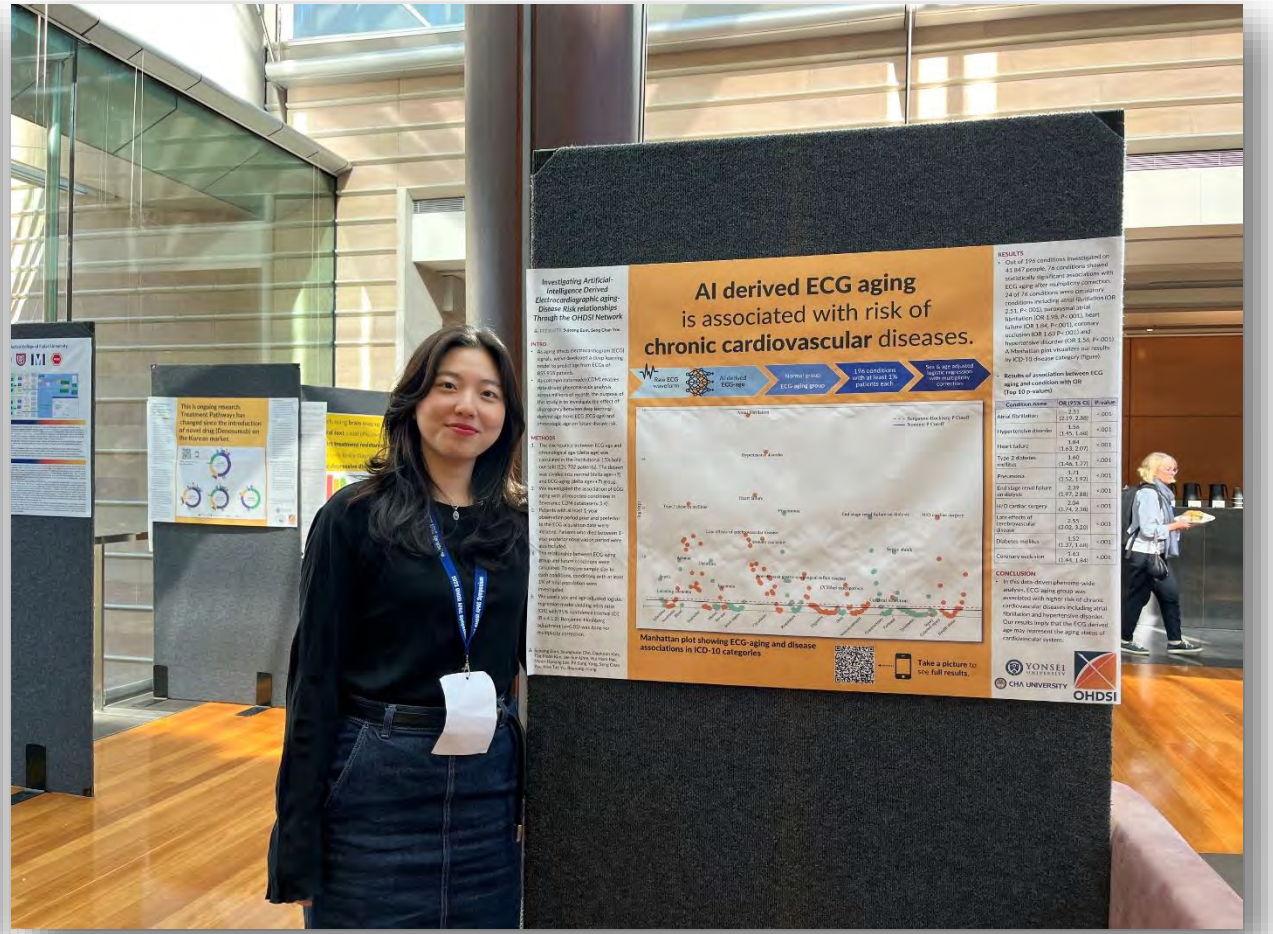
Registration



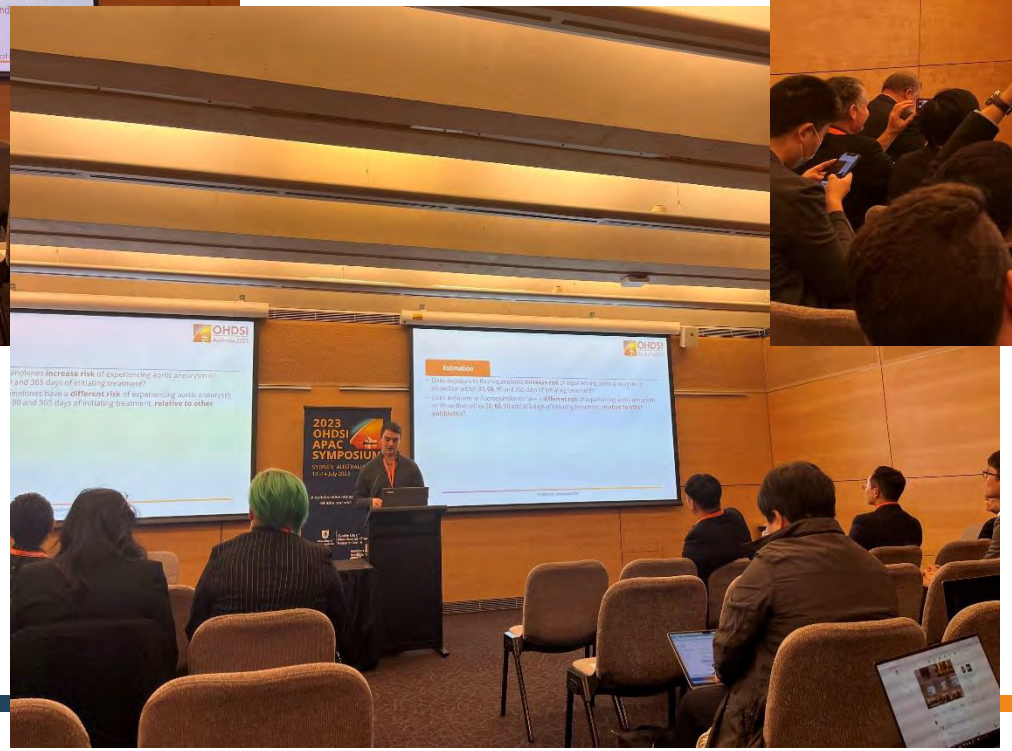
Welcome session

Poster presentation

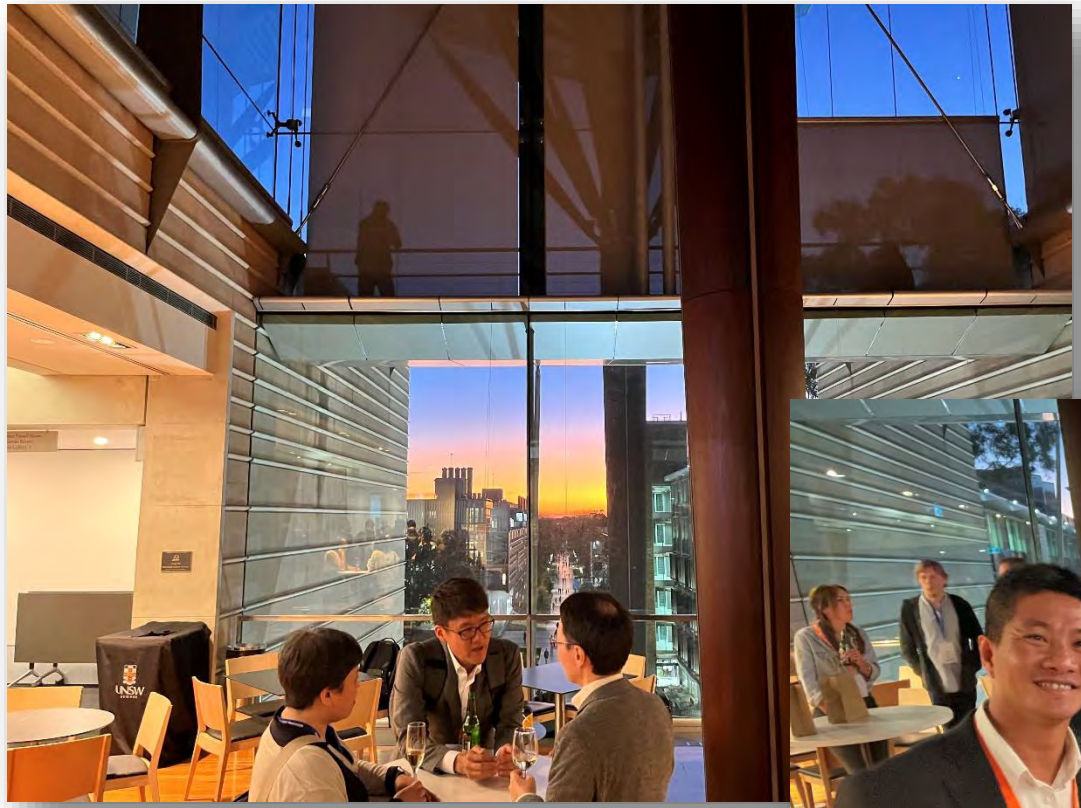




Day 1 Sessions



Networking reception



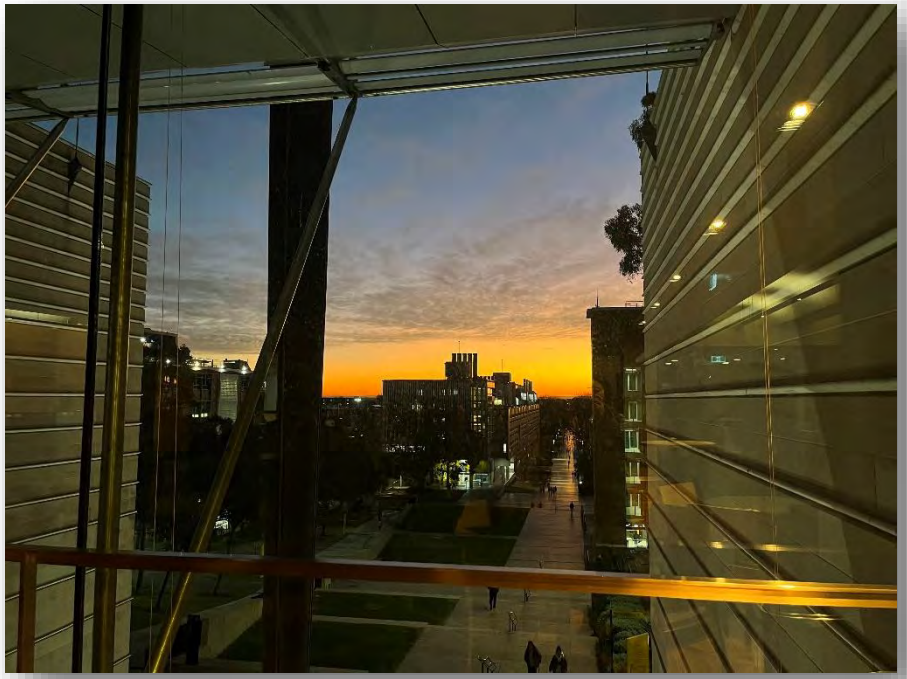
Day 2 Tutorials

2023
OHDSI
APAC
SYMPOSIUM

2023
OHDSI
APAC
SYMPOSIUM
SYDNEY, AUSTRALIA
OHDSI
WWW.OHDSI.ORG/

Fabulous lunch

Beautiful campus



Korean hearts!

See you next time in Singapore!

OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

Thank you!