OHDSI APAC State of Community 2022

Mui Van Zandt

VP/GM, Real World Data & Technology, IQVIA

OHDSI APAC Leader

Journey of OHDSI Korea

2014

Korea joins OHDSI

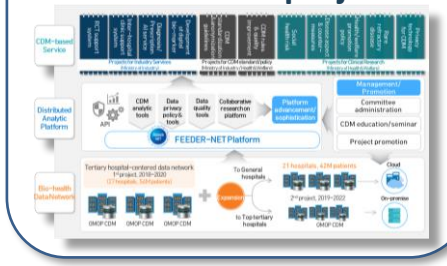
Prof Park (Ajou Uni.) showed the first public Achilles webpage at the 1st OHDSI Face-to-Face meeting

2017

1st OHDSI Korea International Symposium

2018

Launch of FEEDER-NET project



2019

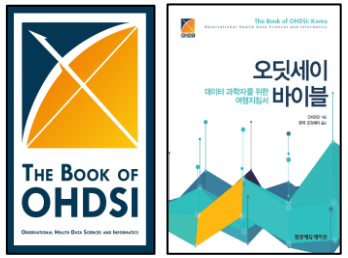
OHDSI Korea Datathon

2019

OHDSI Korean Tutorial

2019

Translation of 'The Book of OHDSI'



2019

OHDSI Korea International Symposium 2019

Journey of OHDSI China

China Symposium
- Hangzhou
- 200 participants

Oct 2017

China Symposium
- Guangzhou
- 180 participants

June 2018

First Hackathon
- Shanghai
- 85 participants

May 2018

Zhi Jiang University
- Hangzhou
- 30 participants

Oct 2018

Bejing Hackathon
- Beijing
- 50 participants

Dec 2018

Hackathon
- Xi'an
- 80 participants

June 2019

China Symposium
- Shanghai
- 200 participants

June 2019

Fudan Study-a-thon
- Shanghai
- 80 participants

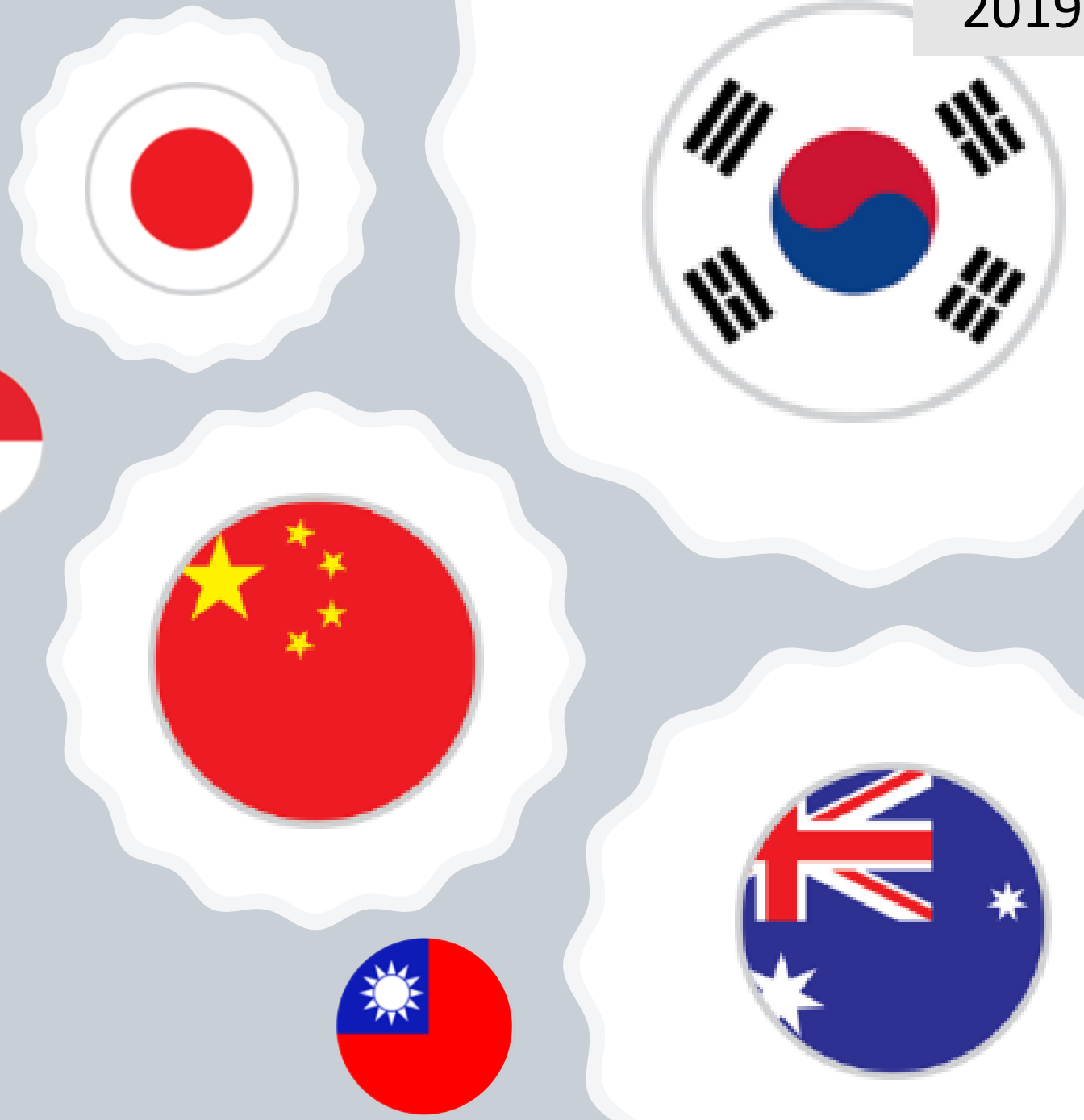
Aug 2019

Tutorial
- Guanghzou
- 60 Participants

Oct 2019

2019

OHDSI APAC Formation



2020

Our journey begins

1st APAC Symposium

110+
Attendees

1st APAC Tutorial

- CDM & Vocabulary
- Data Quality
- OMOP Ecosystem

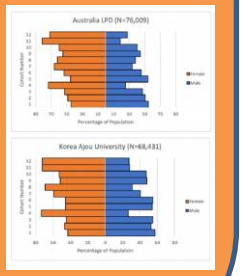
2 x APAC Studies

CORAZON study

Comparative effectiveness and safety of direct oral anticoagulants in patients with atrial fibrillation.

LEGEND study

Comparative effectiveness and safety of second-line antihypertensive agents



https://www.ohdsi.org/events/2020-apac-ohdsi-symposium/?_ga=2.253239753.1500976604.1667796417-337476248.1642645249

2021

Training Technical Expertise

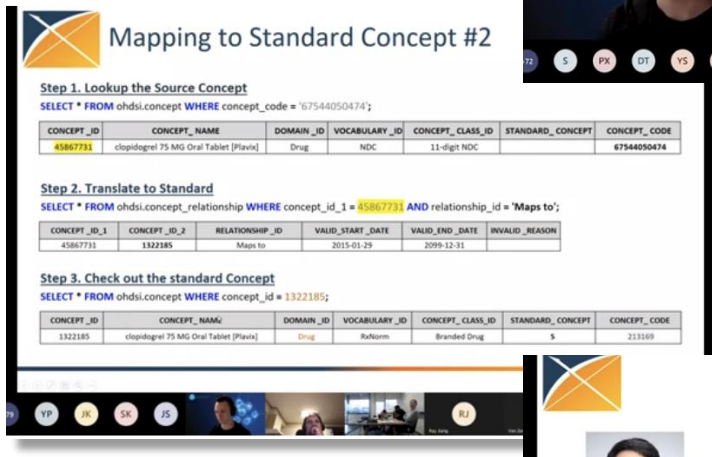
1st APAC ETL Workshop

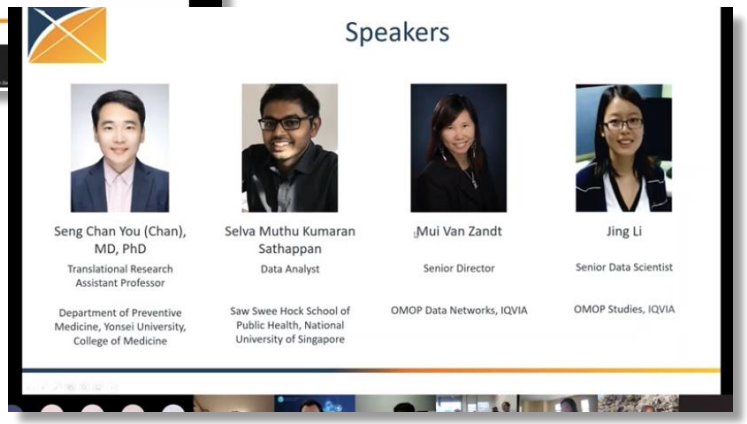
Day 1 (Aug 12)

- Introduction to ETL
- Agile methodology
- Source Data Analysis
- Vocabulary Mapping
- ETL Specification Writing

Day 2 (Aug 13)

- Common issues in ETL Conversion
- OMOP ETL Development
- Data Quality Checks





2021

Bridging the gap across APAC

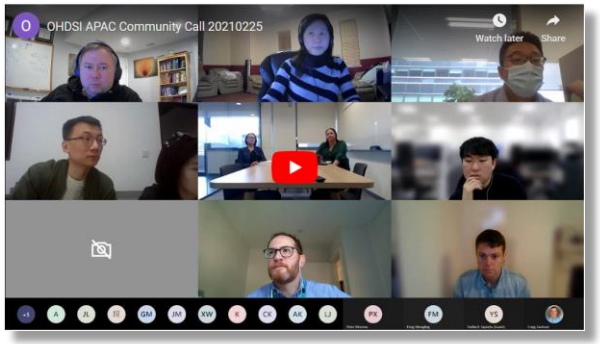
Bi-weekly

APAC Community Calls

45

Meetings

- Sept. 23, 2021 - Introducing The OHDSI Center at the Roux Institute
- Sept. 9, 2021 - Workgroup Updates (Oncology, Psychiatry, UK Biobank/Registry, EHR)
- August 26, 2021 - Network Studies
- August 12, 2021 - Global Symposium Preview
- July 29, 2021 - EUMAEUS (Evaluating Use of Methods for Adverse Event Under Surveillance)
- July 15, 2021 - Introduction to the OMOP Oncolody Module / How To Do A Network Study
- July 1, 2021 - Regional Updates / Mid-Year Review
- June 17, 2021 - OMOP Project: Applying the OMOP CDM to Hepatobiliary Clinical Research Database at Zhongshan
- June 3, 2021 - APAC Network Research
- May 22, 2021 - 10-Minute Tutorials
- May 8, 2021 - Collaborator Presentations
- Apr. 22, 2021 - Regional Updates
- Apr. 8, 2021 - OMOP Projects (Presentations by Yuan Lu and Namki Hong)
- Mar. 25, 2021 - OHDSI APAC Network Research (Presentation by Lei Feng)
- Mar. 11, 2021 - Collaborator Showcase (Presentations by Ty Stanford and Jason Hsu)
- Feb. 25, 2021 - Welcome To The Journey (Helping Our OHDSI Newcomers Get Started)
- Jan. 28, 2021 - APAC Community Kickoff Call



2022

Research Initiatives

Seng Chan You

Characterization of Health by OHDSI AP chapter to identify Temporal Effect of the Pandemic (CHAPTER)

Celine Chui and team

Comparison of mortality, morbidities & healthcare resources utilisation between patients with and without a diagnosis of COVID-19

Nicole Pratt

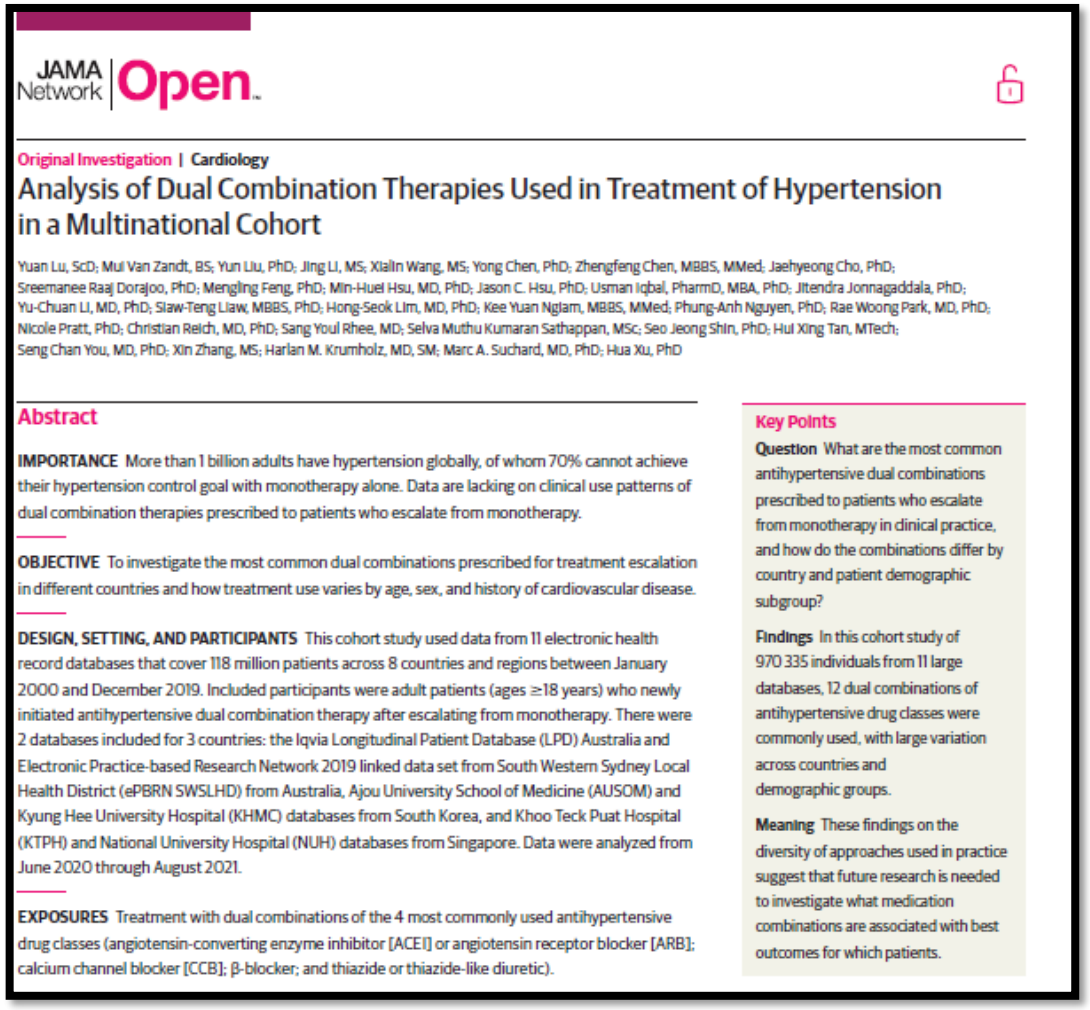
Treatment, utilisation and safety of medicines for Multiple Sclerosis (TELEMUS)

Chungsoo Kim

Data quality of OHDSI APAC: CDM Inspection study

APAC Multi-center Publications

2022



JAMA Network Open

Original Investigation | Cardiology

Analysis of Dual Combination Therapies Used in Treatment of Hypertension in a Multinational Cohort

Yuan Lu, ScD; Mui Van Zandt, BS; Yun Liu, PhD; Jing Li, MS; Xialin Wang, MS; Yong Chen, PhD; Zhengfeng Chen, MBBS, MMed; Jaehyeong Cho, PhD; Sreemanee Raaj Dorajoo, PhD; Mengling Feng, PhD; Min-Huei Hsu, MD, PhD; Jason C. Hsu, PhD; Usman Iqbal, PharmD, MBA, PhD; Jitendra Jonnagaddala, PhD; Yu-Chuan Li, MD, PhD; Siaw-Teng Liaw, MBBS, PhD; Hong-Seok Lim, MD, PhD; Kee Yuan Ngiam, MBBS, MMed; Phung-Anh Nguyen, PhD; Rae Woong Park, MD, PhD; Nicole Pratt, PhD; Christian Reich, MD, PhD; Sang Youl Rhee, MD; Selva Muthu Kumaran Sathappan, MSc; Seo Jeong Shin, PhD; Hui Xing Tan, MTech; Seng Chan You, MD, PhD; Xin Zhang, MS; Harlan M. Krumholz, MD, SM; Marc A. Suchard, MD, PhD; Hua Xu, PhD

Abstract

IMPORTANCE More than 1 billion adults have hypertension globally, of whom 70% cannot achieve their hypertension control goal with monotherapy alone. Data are lacking on clinical use patterns of dual combination therapies prescribed to patients who escalate from monotherapy.

OBJECTIVE To investigate the most common dual combinations prescribed for treatment escalation in different countries and how treatment use varies by age, sex, and history of cardiovascular disease.

DESIGN, SETTING, AND PARTICIPANTS This cohort study used data from 11 electronic health record databases that cover 118 million patients across 8 countries and regions between January 2000 and December 2019. Included participants were adult patients (ages ≥18 years) who newly initiated antihypertensive dual combination therapy after escalating from monotherapy. There were 2 databases included for 3 countries: the Iqvia Longitudinal Patient Database (LPD) Australia and Electronic Practice-based Research Network 2019 linked data set from South Western Sydney Local Health District (ePBRN SWSLHD) from Australia, Ajou University School of Medicine (AUSOM) and Kyung Hee University Hospital (KHMC) databases from South Korea, and Khoo Teck Puat Hospital (KTPH) and National University Hospital (NUH) databases from Singapore. Data were analyzed from June 2020 through August 2021.

EXPOSURES Treatment with dual combinations of the 4 most commonly used antihypertensive drug classes (angiotensin-converting enzyme inhibitor [ACEI] or angiotensin receptor blocker [ARB]; calcium channel blocker [CCB]; β-blocker; and thiazide or thiazide-like diuretic).

Key Points

Question What are the most common antihypertensive dual combinations prescribed to patients who escalate from monotherapy in clinical practice, and how do the combinations differ by country and patient demographic subgroup?

Findings In this cohort study of 970 335 individuals from 11 large databases, 12 dual combinations of antihypertensive drug classes were commonly used, with large variation across countries and demographic groups.

Meaning These findings on the diversity of approaches used in practice suggest that future research is needed to investigate what medication combinations are associated with best outcomes for which patients.

Annals of Internal Medicine

ORIGINAL RESEARCH

Comparative Effectiveness and Safety Between Apixaban, Dabigatran, Edoxaban, and Rivaroxaban Among Patients With Atrial Fibrillation

A Multinational Population-Based Cohort Study

Wallis C.Y. Lau, PhD*; Carmen Olga Torre, MSc*; Kenneth K.C. Man, PhD; Henry Morgan Stewart, PhD; Sarah Seager, BA; Mui Van Zandt, BSc; Christian Reich, MD; Jing Li, MS; Jack Brewster, PhD; Gregory Y.H. Lip, MD; Aroon D. Hingorani, PhD; Li Wei, PhD; and Ian C.K. Wong, PhD

Background: Current guidelines recommend using direct oral anticoagulants (DOACs) over warfarin in patients with atrial fibrillation (AF), but head-to-head trial data do not exist to guide the choice of DOAC.

Objective: To do a large-scale comparison between all DOACs (apixaban, dabigatran, edoxaban, and rivaroxaban) in routine clinical practice.

Design: Multinational population-based cohort study.

Setting: Five standardized electronic health care databases, which covered 221 million people in France, Germany, the United Kingdom, and the United States.

Participants: Patients who were newly diagnosed with AF from 2010 through 2019 and received a new DOAC prescription.

Measurements: Database-specific hazard ratios (HRs) of ischemic stroke or systemic embolism, intracranial hemorrhage (ICH), gastrointestinal bleeding (GIB), and all-cause mortality between DOACs were estimated using a Cox regression model stratified by propensity score and pooled using a random-effects model.

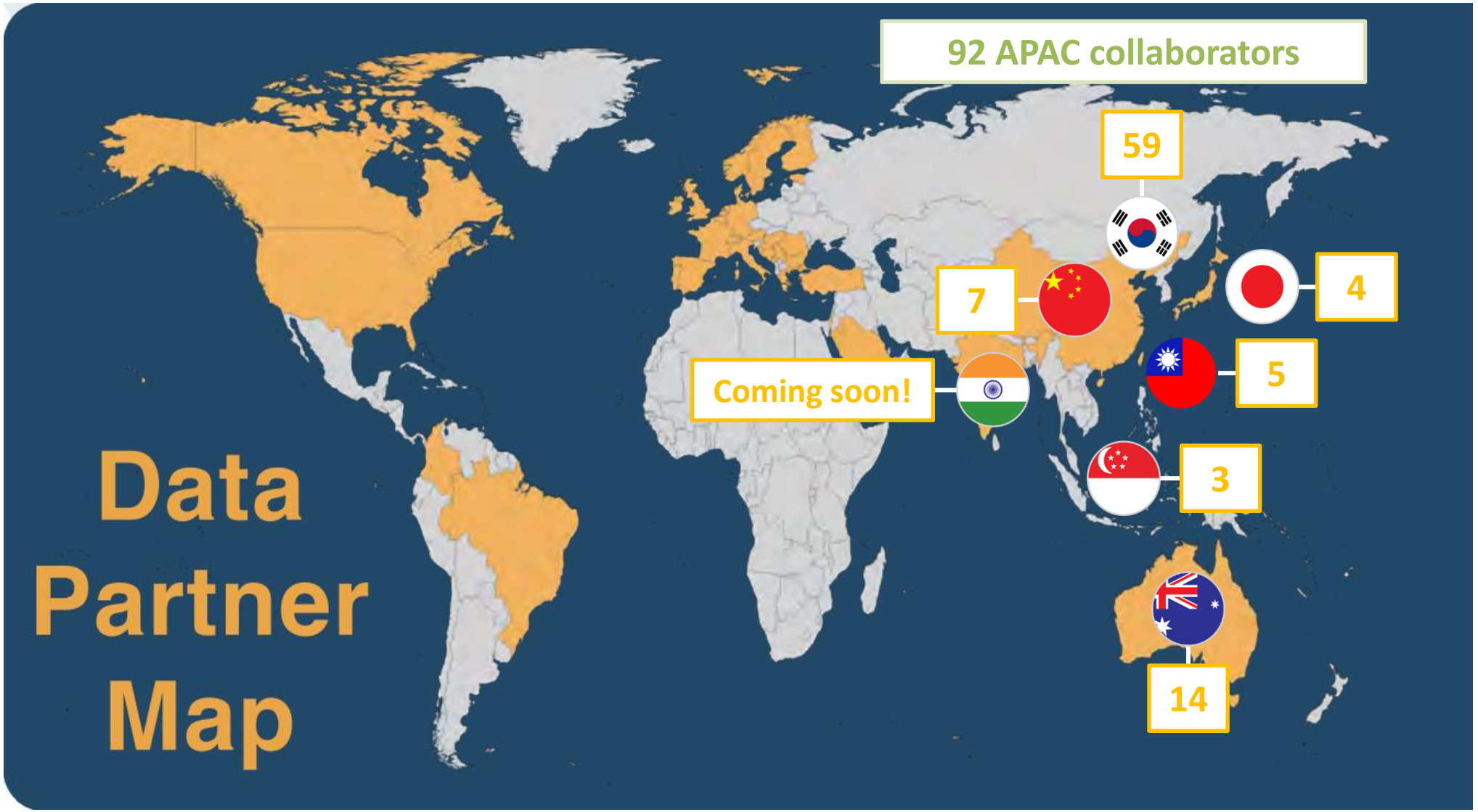
(HR, 0.81 [95% CI, 0.70 to 0.94]), edoxaban (HR, 0.77 [CI, 0.66 to 0.91]), or rivaroxaban (HR, 0.72 [CI, 0.66 to 0.79]). No substantial differences were observed for other outcomes or DOAC–DOAC comparisons. The results were consistent for patients aged 80 years or older. Consistent associations between lower GIB risk and apixaban versus rivaroxaban were observed among patients receiving the standard dose (HR, 0.72 [CI, 0.64 to 0.82]), those receiving a reduced dose (HR, 0.68 [CI, 0.61 to 0.77]), and those with chronic kidney disease (HR, 0.68 [CI, 0.59 to 0.77]).

Limitation: Residual confounding is possible.

Conclusion: Among patients with AF, apixaban use was associated with lower risk for GIB and similar rates of ischemic stroke or systemic embolism, ICH, and all-cause mortality compared with dabigatran, edoxaban, and rivaroxaban. This finding was consistent for patients aged 80 years or older and those with chronic kidney disease, who are often underrepresented in clinical trials.

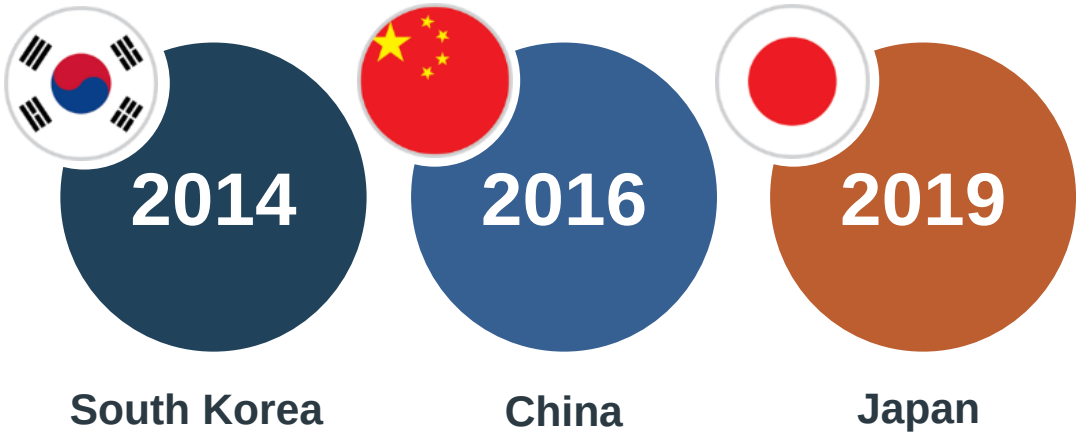
Primary Funding Source: None.

Expanding APAC Collaboration



2022

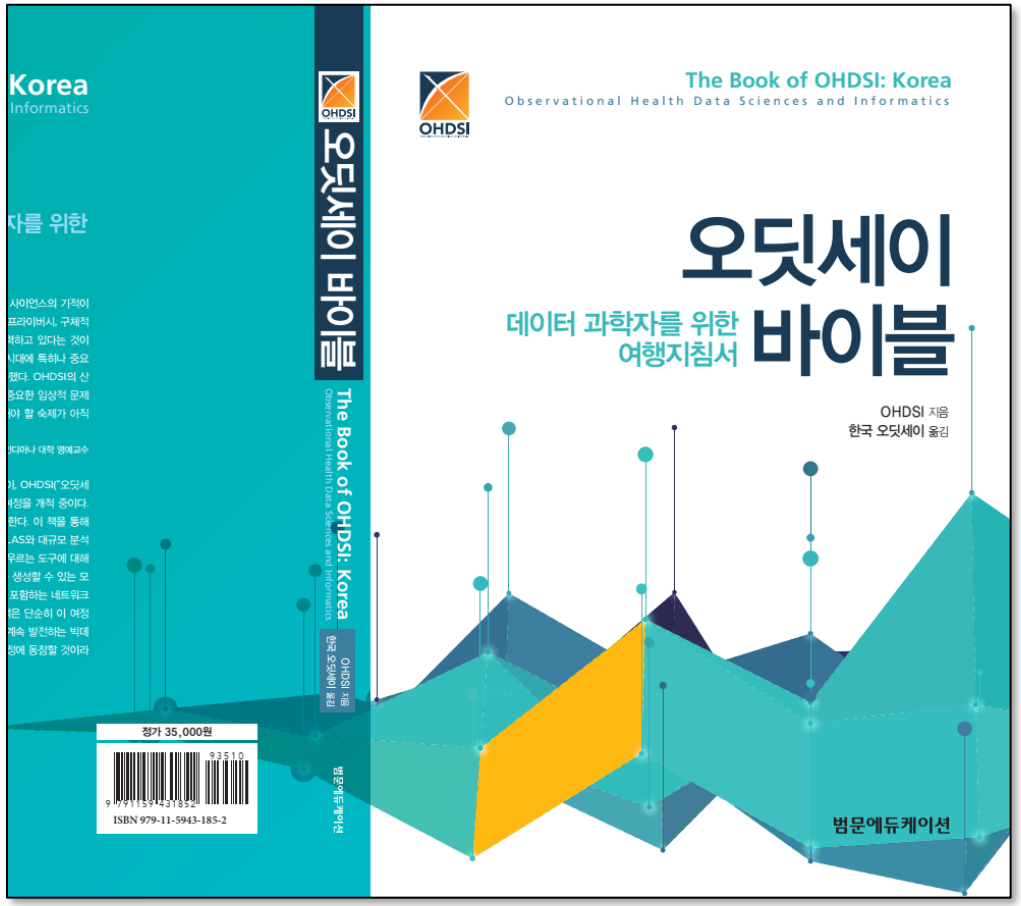
Welcome!



1st In-person APAC Symposium

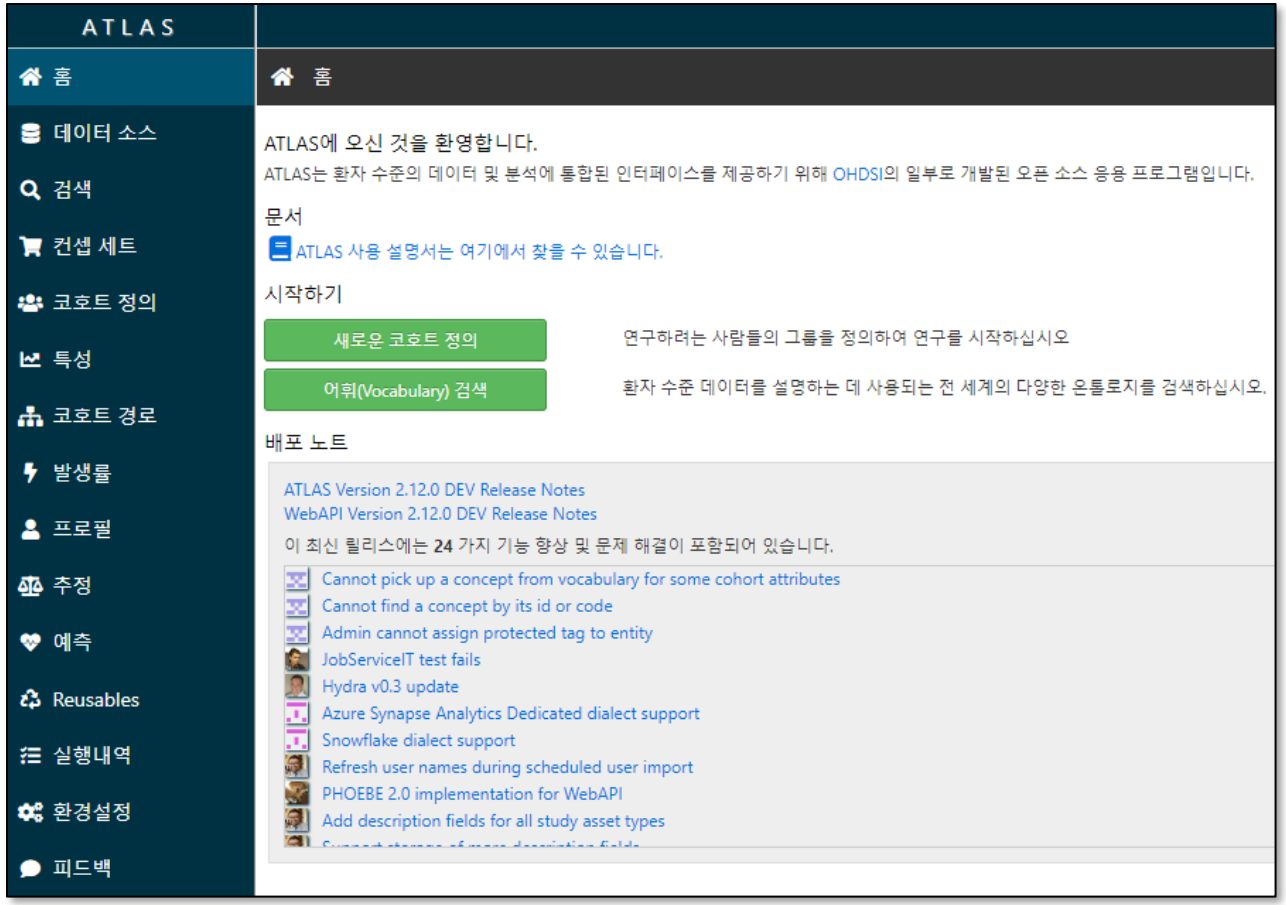
2022

OHDSI Book Localization



Atlas Localization

- ATLAS Localization
  - Available in Korean and Chinese since 2020



The Journey Continues…

- Tutorials in local languages
- Working group collaboration
  - Education working group
  - Glossary of terms localization


OHDSI
OBSERVATIONAL HEALTH DATA SCIENCES AND INFORMATICS

Thank you!