



OHDSI APAC State of Community 2022

Mui Van Zandt

VP/GM, Real World Data & Technology, IQVIA

OHDSI APAC Leader



Journey of OHDSI Korea



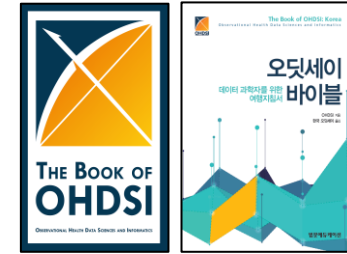
1st OHDSI Korea International Symposium

2017



OHDSI Korea Datathon

2019



Translation of 'The Book of OHDSI'

2019

2014

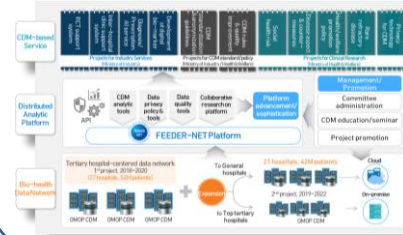
Korea joins OHDSI



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

2018

Launch of FEEDER-NET project



2019

OHDSI Korean Tutorial

구분	시간	주요 내용	강사	
등록	08:00 - 09:00			
등록	09:00 - 09:30	OHDSI Korea 안내	유지환/김정호/김주	
1부	09:30 - 10:00	Part 1-1 Use Case How to Build an OHDSI Node	김민서/김주	
	10:00 - 10:25	Use Case 1 Single-Site Instance Generation and Evaluation in a Network of Databases (SDONIS)	유지환/김주	
	10:25 - 10:50	Use Case 2 Comparison of First-Line Dual Combination Treatments in Ovarian Cancer: The Clinical Benefit of Targeted Compared to Chemotherapy	유지환/김주	
	10:50 - 11:15	Break Time		
	11:15 - 11:35	Use Case 3 An Journey Toward Real World Evidence	유지환/김주	
	11:35 - 12:00	Use Case 4 (중환자실) 환자 정보의 가치와 활용 방안 연구	유지환/김주	
	12:00 - 12:25	Use Case 5 (JITAI) 7차 임상 시험의 가치와 활용 방안 연구	유지환/김주	
			Launch	
	2부	13:00 - 13:30	중환자실	김민서/김주
		13:30 - 13:50	Break Time	
13:50 - 13:50		중환자실	김민서/김주	

2019

OHDSI Korea International Symposium 2019





Journey of OHDSI China



China Symposium

- Hangzhou
- 200 participants



Oct

China Symposium

- Guangzhou
- 180 participants



June

Beijing Hackathon

- Beijing
- 50 participants



Dec

China Symposium

- Shanghai
- 200 participants



June

Tutorial

- Guangzhou
- 60 Participants



Oct

2017

2018

2019

May

Oct

June

Aug

First Hackathon

- Shanghai
- 85 participants



Zhi Jiang University

- Hangzhou
- 30 participants

Hackathon

- Xi'an
- 80 participants

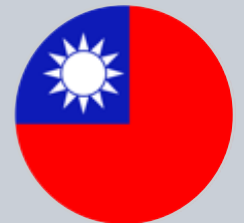


Fudan Study-a-thon

- Shanghai
- 80 participants



OHDSI APAC Formation



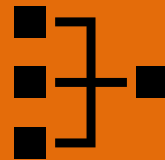
Our journey begins

1st APAC Symposium



110+
Attendees

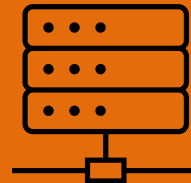
1st APAC Tutorial



CDM & Vocabulary



Data Quality



OMOP Ecosystem

2 x APAC Studies

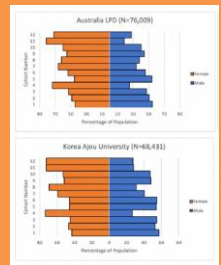
CORAZON study

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



LEGEND study

Comparative effectiveness and safety of second-line antihypertensive agents

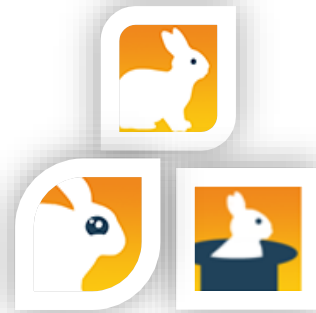


Training Technical Expertise

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



Mapping to Standard Concept #2

Step 1. Lookup the Source Concept

```
SELECT * FROM ohdsi.concept WHERE concept_code = '67544050474';
```

CONCEPT_ID	CONCEPT_NAME	DOMAIN_ID	VOCABULARY_ID	CONCEPT_CLASS_ID	STANDARD_CONCEPT	CONCEPT_CODE
45867731	clopidogrel 75 MG Oral Tablet [Plavix]	Drug	NDC	11-digit NDC		67544050474

Step 2. Translate to Standard

```
SELECT * FROM ohdsi.concept_relationship WHERE concept_id_1 = 45867731 AND relationship_id = 'Maps to';
```

CONCEPT_ID_1	CONCEPT_ID_2	RELATIONSHIP_ID	VALID_START_DATE	VALID_END_DATE	INVALID_REASON
45867731	1322185	Maps to	2015-01-29	2099-12-31	





Step 3. Check out the standard Concept

```
SELECT * FROM ohdsi.concept WHERE concept_id = 1322185;
```

CONCEPT_ID	CONCEPT_NAME	DOMAIN_ID	VOCABULARY_ID	CONCEPT_CLASS_ID	STANDARD_CONCEPT	CONCEPT_CODE
1322185	clopidogrel 75 MG Oral Tablet [Plavix]	Drug	RxNorm	Branded Drug	S	213169



Speakers

			
Seng Chan You (Chan), MD, PhD Translational Research Assistant Professor Department of Preventive Medicine, Yonsei University, College of Medicine	Selva Muthu Kumaran Sathappan Data Analyst Saw Swee Hock School of Public Health, National University of Singapore	Mui Van Zandt Senior Director OMOP Data Networks, IQVIA	Jing Li Senior Data Scientist OMOP Studies, IQVIA

Bridging the gap across APAC

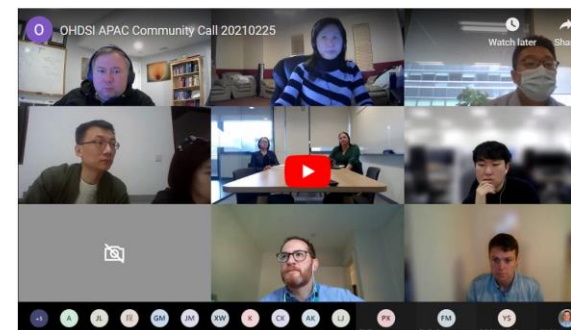


Bi-weekly

APAC Community Calls



- + 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 Oncology 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



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



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; Xiaolin Wang, MS; Yong Chen, PhD; Zhengfeng Chen, MBBS, MMed; Jaehyeong Cho, PhD; Sreemaneesha Raaj Dorajoo, PhD; Mengling Feng, PhD; Min-Huel 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



Welcome!



2014

South Korea



2016

China



2019

Japan



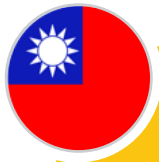
2019

Australia



2020

Singapore



2020

Taiwan



1st In-person APAC Symposium



詳情請上 OHDSI-TAIWAN 官網查詢
OHDSI-TAIWAN.COM/

2022 OHDSI APAC 亞太年會在北醫

2021 台灣正式成為 OHDSI 亞洲第六國分部
並爭取到 2022 亞洲年會在台北的主辦權
讓我們一起用健康資料軟實力在世界舞台發光發熱！



2022 OHDSI 亞太年會大會主席
臺北醫學大學 徐之昇 副教授



2022 OHDSI
OHDSI APAC
SYMPOSIUM

11.12 - 13
17:00
Zheng-Pu Conference Hall
Xing-Chun Building



現正熱烈報名中!!!

Chair 2022 OHDSI APAC SYMPOSIUM



Session 1.
Envisioning of
OHDSI Global & EU

Yu-Chuan (Jack) Li
Distinguished Professor
Graduate Institute of Biomedical
Informatics, Taipei Medical University,
Taiwan

Kickoff 2022 OHDSI APAC SYMPOSIUM



Session 2.
The Challenges
of Research in
OHDSI APAC

Min-Huei Hsu
Professor & Dean
Office Data Science,
Taipei Medical University

Keynote
Speaker 2022 OHDSI APAC SYMPOSIUM
Session 1. Envisioning of OHDSI Global & EU



OHDSI Global
Presentation

Patrick Ryan
Vice president
Observational Health Data Analytics,
Janssen Research and Development

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - APAC Regional adaptation to standardization



Korea



Seng Chan You
Research Assistant Professor
Ajou University

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - APAC Regional adaptation to standardization



China



Hua Xu
Professor
University of Texas Health Science
Center at Houston

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - APAC Regional adaptation to standardization



Japan



Tatsuo Hiramatsu
Professor
International University of Health
and Welfare (IUHW), Japan

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - APAC Regional adaptation to standardization



Singapore



Mengling 'Mornin' Feng
Assistant Professor
OHDSI Institute for Data Science, National
University of Singapore

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - APAC Regional adaptation to standardization



Australia



Nicole Pratt
Deputy Director
Quality Use of Medicines and Pharmacy
Research Centre, University of South
Australia

Speaker 2022 OHDSI APAC SYMPOSIUM
Session 3. The Implication Experiences in OHDSI Region
Panel - Standardization & common data models



FHIR



Adam Choe
Chief
Smart Health Leadership
Centre, NUS



Atlas Localization

- ATLAS Localization
 - Available in Korean and Chinese since 2020

ATLAS	
홈	홈
데이터 소스	ATLAS에 오신 것을 환영합니다.
검색	ATLAS는 환자 수준의 데이터 및 분석에 통합된 인터페이스를 제공하기 위해 OHDSI의 일부로 개발된 오픈 소스 응용 프로그램입니다.
컨셉 세트	문서
코호트 정의	ATLAS 사용 설명서는 여기에서 찾을 수 있습니다.
특성	시작하기
코호트 경로	새로운 코호트 정의 연구하려는 사람들의 그룹을 정의하여 연구를 시작하십시오
발생률	어휘(Vocabulary) 검색 환자 수준 데이터를 설명하는 데 사용되는 전 세계의 다양한 온톨로지를 검색하십시오.
프로필	배포 노트
추정	ATLAS Version 2.12.0 DEV Release Notes
예측	WebAPI Version 2.12.0 DEV Release Notes
Reusables	이 최신 릴리스에는 24 가지 기능 향상 및 문제 해결이 포함되어 있습니다.
실행내역	Cannot pick up a concept from vocabulary for some cohort attributes
환경설정	Cannot find a concept by its id or code
피드백	Admin cannot assign protected tag to entity
	JobServiceIT test fails
	Hydra v0.3 update
	Azure Synapse Analytics Dedicated dialect support
	Snowflake dialect support
	Refresh user names during scheduled user import
	PHOEBE 2.0 implementation for WebAPI
	Add description fields for all study asset types
	Support storage of mass description fields

ATLAS	
首页	首页
数据来源	欢迎使用ATLAS。
搜索	ATLAS作为OHDSI的开发的开源应用程序，旨在为患者水平的数据和分析提供集成界面。
概念集	参考文档
队列定义	可在此处找到《ATLAS用户指南》。
特征描述	由此开始
队列路径	定义新队列 通过定义要研究的人群来开始研究
发病率	词汇检索 搜索世界各地用于描述患者水平数据的各种本体
数据概要	部署说明
估计	ATLAS Version 2.12.0 DEV Release Notes
预测	WebAPI Version 2.12.0 DEV Release Notes
Reusables	最新版本包括24项增强功能和故障排除:
执行历史	Cannot pick up a concept from vocabulary for some cohort attributes
环境设定	Cannot find a concept by its id or code
意见反馈	Admin cannot assign protected tag to entity
	JobServiceIT test fails
	Hydra v0.3 update
	Azure Synapse Analytics Dedicated dialect support
	Snowflake dialect support
	Refresh user names during scheduled user import
	PHOEBE 2.0 implementation for WebAPI
	Add description fields for all study asset types
	Support storage of mass description fields



The Journey Continues...

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





Thank you!