

Supplement

Asia-Pacific real-world evolocumab use, LDL-C reduction, physician goals, and patient perceptions: HALES observational study

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Supplemental Table S1. Approval of Evolocumab at the Time of HALES Enrollment

Country/region	Dose	Date of approval	Indications
Australia	140 mg every 2 weeks* 420 mg once monthly*# 420 mg every 2 weeks#	December 4, 2015	Primary hypercholesterolemia, HoFH
		August 2, 2018	Prevention of cardiovascular events
Hong Kong	140 mg every 2 weeks* 420 mg once monthly*# 420 mg every 2 weeks#	May 16, 2016	Primary hypercholesterolemia and mixed dyslipidemia, HoFH
		January 31, 2019	Established ASCVD
Taiwan	140 mg every 2 weeks* 420 mg once monthly*#	December 2, 2016	Primary hyperlipidemia, including HeFH
		January 25, 2017	HoFH
		January 24, 2019	Prevention of cardiovascular events
		March 11, 2019	Established ASCVD
South Korea	140 mg every 2 weeks* 420 mg once monthly*#	April 13, 2017	HoFH
		August 31, 2018	Hypercholesterolemia and mixed dyslipidemia, established ASCVD
Singapore	140 mg every 2 weeks* 420 mg once monthly*# 420 mg every 2 weeks#	April 24, 2017	Primary hyperlipidemia, including HeFH and HoFH
		December 17, 2018	Prevention of cardiovascular events
Thailand	140 mg every 2 weeks* 420 mg once monthly*# 420 mg every 2 weeks#	August 25, 2017	Hypercholesterolemia and mixed dyslipidemia, HoFH
		March 15, 2019	Established ASCVD

*For hyperlipidemia/hypercholesterolemia/mixed dyslipidemia indications and/or established ASCVD/prevention of cardiovascular events/risk reduction of cardiovascular events.

#For HoFH indication.

ASCVD, atherosclerotic cardiovascular disease; HeFH, heterozygous familial hypercholesterolemia; HoFH, homozygous familial hypercholesterolemia.

Supplemental Table S2. List of Principal Investigators, Sites, and IRBs

Country/region	PI	Site	IRB/REC/EC (Reference Number)
Australia	Kostner, Karam	Dr Heart Pty Ltd	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Morton, Jamie	Adelaide Cardiology - St Andrew's Medical Centre Clinic	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Cross, David	Heart Care Partners Pty Ltd.	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Colquhoun, David	Core Research Group	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Morton, Alison	GC Bunbury, WA	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Safaa, Ali	GC Berwick, VIC	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Eccleston, David	GenesisCare Heidelberg	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Australia	Hamilton, Andrew	Heart & Vascular Institute	Bellberry (central IRB, 2021-02-097-AF-FR-1)
Hong Kong	Tse, Hung Fat	The University of Hong Kong	IRB of the University of Hong Kong/Hospital Authority Hong Kong West Cluster (UW 21-300)
Hong Kong	Fung, Raymond	Princess Margaret Hospital	Kowloon West Cluster Clinical REC (KW/EX-21-070[158-13])
Hong Kong	Yan, Bryan Ping Yen	The Chinese University of Hong Kong	Joint Chinese University of Hong Kong-New Territories East Cluster Clinical REC (CRE-2021.181)
Hong Kong	Cheng, Yuet Wong	Queen Elizabeth Hospital	REC of Kowloon Central/Kowloon East (KC/KE-21-0152/ER-2)
South Korea	Lee, Hyun Jong	Hyewon Medical Foundation SeJong General Hospital	IRB of Hyewon Medical Foundation SeJong General Hospital (BSH202012059010)
South Korea	Kim, Jung-Sun	Severance Hospital, Yonsei University	IRB of Severance Hospital, Yonsei University Health System (2020-3406-016)
South Korea	Kim, Min Chul	Chonnam National University Hospital	IRB of Chonnam National University Hospital (CNUH-2021-002)
South Korea	Lee, Jong-Young	Kangbuk Samsung Hospital	IRB of Kangbuk Samsung Hospital (KBSMC202101004016)
South Korea	Cho, Yong Rak	Dong-A University Hospital	IRB of Dong-A University Medical Center (DAUHIRB-21-035)
South Korea	Park, Gyung Min	Ulsan University Hospital	IRB of Ulsan University Hospital (UUH202103006013)
South Korea	Lee, Wonjae	Seoul National University Bundang Hospital	Seoul National University Bundang Hospital (B-2104-676-303)
Singapore	Tan, Ru San	National Heart Centre	SingHealth Centralised IRB (2021/2270)
Singapore	Yeo, Colin	Changi General Hospital- Parent	SingHealth Centralised IRB (2021/2270)
Singapore	Poh, Kian Keong	National University Hospital	SingHealth Centralised IRB (2021/2270)

Country/region	PI	Site	IRB/REC/EC (Reference Number)
Taiwan	Chang, Hung - Yu	Cheng Hsin General Hospital	Cheng Hsin General Hospital IRB ([859] 110B-05)
Taiwan	Charng, Min-Ji	Taipei Veterans General Hospital	Taipei Veterans General Hospital IRB (2021-05-001CC)
Taiwan	Lin, Shu-I	Mackay Memorial Hospital, Tamsui	Mackay Memorial Hospital IRB (21CT021be)
Taiwan	Lin, Po-Lin	Hsinchu Mackay Memorial Hospital	Mackay Memorial Hospital IRB (21CT022be)
Taiwan	Lee, Jen-Kuang	National Taiwan University Hospital	National Taiwan University Hospital REC (202104052RSB)
Taiwan	Liu, Wei-Shin	Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation	Buddhist Tzu Chi General Hospital REC (IRB110-101-B)
Taiwan	Lin, Wei-Wen	Taichung Veterans General Hospital	Taichung Veterans General Hospital IRB (SE21150B)
Thailand	Hutayanon, Pisit	Thammasat University Hospital	EC, Faculty of Medicine, Thammasat University (CREC012/64BP-MED10)
Thailand	Sookananchai, Bancha	Maharat Nakhon Ratchasima Hospital	IRB, Maharat Nakhon Ratchasima Hospital (CREC012/64BP-MED10)
Thailand	Vathesatogkit, Prin	Ramathibodi Hospital	Ethical Clearance Committee on Human Rights Related to Researches Involving Human Subjects (CREC012/64BP-MED10)
Thailand	Wongcharoen, Wanwarang	Chiang Mai University Hospital	REC, Faculty of Medicine, Chiangmai University (CREC012/64BP-MED10)

EC, ethics committee, IRB, institutional review board, REC, research ethics committee.

Supplemental Table S3. Patient Disposition

Chart review assessment		Evolocumab	
Patients screened		N=736	
Patients did not meet the inclusion criteria		12 (1.6)	
Primary analysis set		N=724	
Patient disposition at end of study			
Death		0	
Lost to follow-up		5 (0.7)	
Did not meet eligibility criteria		12 (1.7)	
Reached date of data collection		548 (75.7)	
Dose discontinuation		165 (22.8)	
Other		6 (0.8)	
Physician and patient survey		Evolocumab	Non-PCSK9i
Physician survey set		N=30	N=36
Primary investigator		26 (86.7)	22 (61.1)
Sub-investigator		4 (13.3)	14 (38.9)
Patients screened		N=228	N=896
Patients did not meet inclusion criteria		0	2 (0.2)
Primary analysis set		N=228	N=894
Physician reported reason for choosing specific lipid-lowering therapy			
The efficient LDL-C-lowering effect		183 (80.3)	584 (65.3)
Proven efficacy on cardiovascular outcomes		31 (13.6)	184 (20.6)
Available lipid-lowering therapy's safety profile		3 (1.3)	36 (4.0)
Comorbid condition with increased cardiovascular risk		10 (4.4)	59 (6.6)
Other		1 (0.4)	31 (3.5)

Data are presented as n (%).

LDL-C, low-density lipoprotein cholesterol; PCSK9i, proprotein convertase subtilisin/kexin type 9 inhibitor.