Preventive Medication: Role of Different Vaccination in Chronic Heart Disease Patients

[台北場]

時間:14:00-17:30, 2025/01/11 (Saturday)

地點:張榮發基金會 703 室(台北市中正區中山南路 11 號)

Time	Topic	Speaker	Chair	
14:00-14:10	Opening Remarks		李貽恒	
14:10-14:40	Consideration of Influenza Vaccination among CHD Patients	林姝含	葉宏一	
14:40-15:10	After Pandemic: How to Prevent Critical Case of COVID-19 among CHD Patients	沈靜芬	黄立民	
15:10-15:40	New Era of Pneumococcal Vaccines After a Decade of Vaccination	林鴻儒	吳彥雯	
15:40-15:55	Panel Discussion	All	李貽恒	
15:55-16:05	Healthy Break			
16:05-16:35	Prevention of Pain: Vaccines Against Reactivation of Herpes Zoster Virus	邱昱偉	陳文鍾	
16:35-17:05	Respiratory Syncytial Virus: Emerging Star in Vaccinology	紀鑫	張峰義	
17:05-17:20	0 Panel Discussion		謝宜璋	
17:20-17:30	.7:30 Closing Remarks		1璋	

Curriculum Vitae

Personal Information

Name: Donna Shu-Han Lin Date of Birth: 1990/06/27

Current Position

2023 ~ present	Attending physician, Division of Cardiology, Department of Internal		
	Medicine, Shin Kong Wu Ho-Su Memorial Hospital		
2023 ~ present	Lecturer designated by the Ministry of Education		
2022 ~ present	Member of the Young Cardiologist Working Group of the Taiwan		
	Society of Cardiology		
2022 ~ present	Member of the International and Cross-Strait Affairs Committee of		
	the Taiwan Society of Cardiology		
2023 ~ present	Member of the Scientific and Educational Committee of the Taiwan		
	Society of Peripheral Interventions		
2023 ~ present	Member of the Editorial and Research Committee of the Taiwan		
	Society of Peripheral Interventions		
2024 ~ present	Member of the International Affairs Committee of the Taiwan		
	Myocardial Infarction Society		
2024 ~ present	Member of the Young Cardiologist Working Group of the Taiwan		
	Society of Cardiovascular Interventions		

Education

2008 ~ 2015 M.D., Department of Medicine, College of Medicine, National Yang-Ming University

Working Experience

2023 ~ present	Attending physician, Division of Cardiology, Department of Internal				
	Medicine, Shin Kong Wu Ho-Su Memorial Hospital				
2022 ~ 2023	Instructor, Department of Internal Medicine, National Taiwan				
	University College of Medicine				
2021 ~ 2023	Attending physician, Division of Cardiology, Department of Internal				
	Medicine, National Taiwan University Hospital Hsin-chu branch				
2019 ~ 2021	Fellow, Division of Cardiology, Department of Internal Medicine,				
	National Taiwan University Hospital				
2016 ~ 2019	Resident, Department of Internal Medicine, National Taiwan				
	University Hospital				

2015 ~ 2016 Post-graduate year resident, Taipei Veterans General Hospital

Licensures & Certificates

2023 ~ present	Certificate of Critical Care Medicine
2022 ~ present	Certificate of Interventional Cardiologist
2021 ~ present	Certificate of Cardiologist
2020 ~ present	Certificate of Completion, Hemodialysis Training Course
2019 ~ present	Certificate of Internist
2016 ~ present	The United States Educational Commission for Foreign Medical
	Graduates (ECFMG) Certification
2015 ~ present	Certificate of Physician

Memberships in Professional Organizations

2024 ~ present	Taiwan Society of Lipids and Atherosclerosis
2024 ~ present	Taiwan Myocardial Infarction Society
2023 ~ present	Taiwan Society of Peripheral Interventions
2022 ~ present	Taiwan Society of Cardiovascular Interventions
2020 ~ present	Taiwan Society of Nephrology
2020 ~ present	Taiwan Society of Cardiology
2019 ~ present	Taiwan Society of Internal Medicine

Honors, Awards and Speaking Engagements

Honors, Awaru	s and Speaking Engagements
TCT, 2020	Successful recanalization of RCA CTO via retrograde approach through ipsilateral epicardial collaterals
TTT, 2021	Hold on! – When Filters are a Must But Deployment a Must Not
TCTAP, 2021	Interwoven self-expanding nitinol stent with drug-coated balloon angioplasty for the treatment of severely calcified superficial femoral artery lesions: Two-year outcomes
TSOC, 2021	The efficacy and safety of novel classes of anti-diabetic drugs in terms of cardiovascular outcomes — a trial-level network meta-analysis including 170,930 individuals
TAVAH, 2022	Venous thrombectomy case sharing
TSCI, 2022	Choice of drug coating balloon or stent in PAD
TSOC, 2022	Prevalence and impact of PAD in CAD and DM patients
TSCI, 2022	Make Way for a Better Stent – Managing the calcified iliac artery
TTT, 2023	Rebuilding After the Fall
TAVAH, 2023	IVUS case sharing
TSOC, 2023	When Complex Conditions Coexist: Atrial Fibrillation and Diabetic Patients

TCTAP, 2023	Rebuilding After the Fall – A Case with Traumatic Subclavian Artery Occlusion
TSLA, 2023	Optimizing medical treatment for patients with dyslipidemia – From 2022 lipid guidelines to 2023 CCS guidelines
TSCI, 2023	EVT in CLTI: is balloon angioplasty good enough?
TSPI, 2023	BASIL-2 and BEST-CLI, conflictive or collaborative?
TSCCM, 2023	Prevention and management of thromboembolism in critical COVID and sepsis patients
TCT, 2023	Optical coherence tomography predicts major adverse limb events in patients with femoropopliteal artery disease
TSN, 2023	Management of CAD in Patients with CKD
TSLA, 2024	Statin intolerance "A to Z": Guidelines on statin intolerance
SCC, 2024	Strategies and controversies in the management of CLTI

Area of Research Interests

- 1. Lower extremity arterial disease
- 2. Venous thromboembolism
- 3. Coronary artery disease
- 4. Antidiabetic therapy and cardiovascular disease
- 5. Cardiovascular diseases in chronic kidney disease
- 6. Heart failure
- 7. Hypertension

Research Experience

Study title	Role	Study date	Grants	Study status
Relationship of vessel morphology under optical coherence tomography with lower limb adverse events	PI	,	NTUH Hsinchu branch	Completed
The relationship between skin temperatures in the feet of patients with end-stage renal disease and cardiovascular disease	PI	Ī	NTUH Hsinchu branch	Ongoing
The safety and efficacy of empagliflozin in patients with end-stage renal disease and heart failure with reduced ejection fraction – a randomized controlled trial	PI	· ·	NTUH Hsinchu branch	Ongoing
The safety and efficacy of empagliflozin in patients with end-stage renal disease and heart failure with preserved ejection fraction – a randomized controlled trial	Co-PI	-	NTUH Hsinchu branch	Ongoing

Correlation of plantar arch resting full-cycle	PI	2024/01 to	Abbott	Ongoing
ratio (RFR) and fractional flow reserve (FFR) with lower limb outcomes in patients with		present		
chronic limb-threatening ischemia				
Effects of enhanced external counterpulsation in peripheral arterial occlusive disease	Co-PI	2024/01 to present	Shin Kong Hospital	Ongoing
The effects of irisin in lower extremity arterial	PI	2024/01 to	Taiwan National	Ongoing
disease – from bench to bedside		present	Science and	
			Technology Council	

Referred Papers

- <u>Donna Shu-Han Lin</u>, Tzung-Dau Wang, Peera Buranakitjaroen, Chen-Huan Chen, Hao-Min Cheng, Yook Chin Chia, Apichard Sukonthasarn, Jam Chin Tay, Boon Wee Teo, Yuda Turana, Ji-Guang Wang, and Kazuomi Kario, on behalf of the HOPE Asia Network. Angiotensin receptor neprilysin inhibitor as a novel antihypertensive drug: Evidence from Asia and around the globe. Journal of Clinical Hypertension 2021 MAR;23(3):556-567.
- 2. <u>Donna Shu-Han Lin</u>, Yu-Sheng Lin, Cho-Kai Wu, Heng-Hsu Lin, Jen-Kuang Lee. Midterm prognosis of patients with pulmonary embolism receiving catheter-directed thrombolysis or systemic thrombolysis: A nationwide population-based study. Journal of the American Heart Association 2021 APR 6;10(7):e019296.
- Donna Shu-Han Lin, Jen-Kuang Lee. Mobile Health-Based Thermometer for Monitoring Wound Healing After Endovascular Therapy in Patients With Chronic Foot Ulcer: Prospective Cohort Study. JMIR mHealth and uHealth 2021 MAY 7;9(5):e26468.
- 4. <u>Donna Shu-Han Lin</u>, Jen-Kuang Lee, Wen-Jone Chen. Clinical Adverse Events Associated with Sodium-Glucose Cotransporter 2 Inhibitors: A Meta-Analysis Involving 10 Randomized Clinical Trials and 71,553 Individuals. JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM 2021 JUN 16;106(7):2133-2145.
- Chih-Kuo Lee, Tzung-Dau Wang, Hsiao-Ting Juang, Shu-Chen Chang, Heng-Yu Pan, <u>Donna Shu-Han Lin</u>, Chee-Jen Chang. Efficacy and safety of ticagrelor versus clopidogrel in patients with non-ST-elevation myocardial infarction in Taiwan. Scientific Reports 2021 JUL 8;11(1):14150.
- 6. <u>Donna Shu-Han Lin</u>, Jen-Kuang Lee, Wen-Jone Chen. Major adverse cardiovascular and limb events in patients with diabetes treated with glucagon-like peptide-1 receptor agonists versus dipeptidyl peptidase-4 inhibitors. DIABETOLOGIA 2021 SEP 64(9):1949-1962.

- 7. <u>Donna Shu-Han Lin</u>, Yu-Sheng Lin, Jen-Kuang Lee, Wen-Jone Chen. Short- and Long-Term Outcomes of Catheter-Directed Thrombolysis versus Pulmonary Artery Embolectomy in Pulmonary Embolism: A National Population-Based Study. J Endovasc Ther 2021 OCT 27;15266028211054763.
- 8. <u>Donna Shu-Han Lin</u>, Jen-Kuang Lee, Chi-Sheng Hung, Wen-Jone Chen. The efficacy and safety of novel classes of anti-diabetic drugs for cardiovascular outcomes: A network meta-analysis of randomized clinical trials. DIABETOLOGIA 2021 DEC 64(12):2676-2686.
- 9. <u>Donna Shu-Han Lin</u>, Hao-Yun Lo, An-Li Yu, Jen-Kuang Lee, Wei-Shiung Yang, Juey-Jen Hwang. A Dose–Response Association Between Body Mass Index and Mortality in Patients with Peripheral Artery Disease: A Meta-Analysis Including 5 729 272 Individuals. Eur J Vasc Endovasc Surg 2022 JAN 10;S1078-5884(21)00903-5.
- 10. **Donna Shu-Han Lin**, Hao-Yun Lo, An-Li Yu, Jen-Kuang Lee, Kuo-Liong Chien. Mortality risk in patients with underweight or obesity with peripheral artery disease: a meta-analysis including 5,735,578 individuals. Int J Obes (Lond). 2022 May 16. doi: 10.1038/s41366-022-01143-x.
- 11. <u>Donna Shu-Han Lin</u>, Yu-Sheng Lin, Jen-Kuang Lee, Hsien-Li Kao. Sex differences following percutaneous coronary intervention or coronary artery bypass surgery for acute myocardial infarction. Biol Sex Differ. 2022 Apr 27;13(1):18.
- 12. Hao-Yun Lo, Yu-Sheng Lin, <u>Donna Shu-Han Lin</u>, Jen-Kuang Lee, Wen-Jone Chen. The effects of statins on major adverse cardiovascular and limb events in patients under permanent dialysis with peripheral artery disease. JAMA Network Open. 2022 Sep 1;5(9):e2229706.
- 13. <u>Donna Shu-Han Lin</u>, An-Li Yu, Hao-Yun Lo, Cheng-Wei Lien, Jen-Kuang Lee, Wen-Jone Chen. Major adverse cardiovascular and limb events in people with diabetes treated with GLP-1 receptor agonists vs SGLT2 inhibitors. Diabetologia. 2022 Dec;65(12):2032-2043.
- 14. **Donna Shu-Han Lin**, Fang-Ju Lin, Yu-Sheng Lin, Jen-Kuang Lee, Yen-Hung Lin. The effects of mineralocorticoid receptor antagonists on cardiovascular outcomes in patients with end-stage renal disease and heart failure. Eur J Heart Fail. 2023 Jan;25(1):98-107.
- 15. <u>Donna Shu-Han Lin</u>, An-Li Yu, Hao-Yun Lo, Cheng-Wei Lien, Jen-Kuang Lee, Fu-Tien Chiang, Yu-Kang Tu. Differential Effects of Sodium-Glucose Cotransporter 2 Inhibitors on Cardiovascular and Renal Outcomes According to Renal Function: A Dose–Response Meta-Analysis Involving 10 Randomized Clinical Trials and 71,553 Individuals. Eur J Endocrinol. 2023 Jul 20;Ivad078.

沈靜芬

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林鴻儒醫師

學歷

1992-1999 台灣大學醫學系畢業

2009-2011 台灣大學生醫電子與資訊學研究所碩士

2011-2020 台灣大學流行病學與預防醫學研究所博士

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2006-迄今 臺大醫院內科部主治醫師

2018-2020 台灣高血壓學會秘書長

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2022-2023 中華民國心臟學會副秘書長

2022-迄今 中華民國心臟學會跨領域合作委員會委員

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研究著作

- 1. **Lin HJ**, Wang J, Tseng PY, Fu LC, Lee YC, Wu MS, Yang WS, Chiu HM. Lower-than-normal glycemic levels to achieve optimal reduction of diabetes risk among individuals with prediabetes: A prospective cohort study. *Diabetes Res Clin Pract*. 2023;197:110567. doi: 10.1016/j.diabres.2023.110567
- 2. **Lin HJ**, Pan HY, Chen CH, Cheng HM, Chia YC, Sogunuru GP, Tay JC, Turana Y, Verma N, Kario K, et al. Standardized home blood pressure monitoring: Rationale behind the 722 protocol. *J Clin Hypertens (Greenwich)*. 2022;24:1161-1173. doi: 10.1111/jch.14549
- 3. **Lin HJ**, Yu SL, Su TC, Hsu HC, Chen MF, Lee YT, Chien KL, Lu TP. Statin-induced microRNAome alterations modulating inflammation pathways of peripheral blood mononuclear cells in patients with hypercholesterolemia. *Biosci Rep.* 2020;40. doi: 10.1042/bsr20201885
- 4. **Lin HJ**, Wang TD, Yu-Chih Chen M, Hsu CY, Wang KL, Huang CC, Hsieh MJ, Chiu YW, Chiang LT, Chuang WP, et al. 2020 Consensus Statement of the Taiwan Hypertension Society and the Taiwan Society of Cardiology on Home Blood Pressure Monitoring for the Management of Arterial Hypertension. *Acta Cardiol Sin*. 2020;36:537-561. doi: 10.6515/acs.202011 36(6).20201106a
- 6. **Lin HJ**, Pan HY, Chen WJ, Wang TD. Variation in Blood Pressure Classification

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	教育部部定教授				
	台灣兒科醫學會理事				
	台灣感染症醫學會理事				
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學歷:	國立台灣大學臨床醫學研究所博士		2008.08~2014.06		
	國立臺灣大學公	共衛生學院	完健康政策與管理研	2021.08~2024.02	
	究所碩士			2021.00 -2024.02	
	台北醫學院醫學系學士			1990.08~1997.06	
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	馬偕紀念醫院小兒科感染科總醫師				
	馬偕紀念醫院小	兒科住院醫	备師		
	台灣感染管制醫	學會監事			

個人簡介 Biography:

Dr. Hsin Chi is a pediatrician, he is attending physician of Department of Pediatrics since 2002. He specializes infectious diseases and has expertise in vaccination. His research interests include: The association study of genetic susceptibility and pediatric infectious disease such as Kawasaki disease and invasive pneumococcal disease, and the epidemiology and molecular study of Respiratory Syncytial Virus in pediatric patients. He has been published more than 50 research papers in scientific journal.

Consideration of Influenza Vaccination among CHD Patients

林姝含

The relationship between influenza virus infection and cardiovascular disease has been demonstrated. Patients with viral respiratory infections are prone to cardiovascular disease. On the other hand, underlying cardiovascular disease is also associated with an increased risk of viral respiratory infections and its complications. According to Taiwan Ministry of Health and Welfare, Advisory Committee on Immunization Practices (ACIP) recommend that children over aged 6 months and adults receive a flu vaccine before each flu season. Especially those aged 6 months to 18 years old, the elderly over 65 years old, those with underlying diseases, pregnant women, care recipients in nursing homes and long-term care institutions, medical and health and epidemic prevention personnel. Not only in the general population, but also in hospitalized heart disease patients, as well as in end-patients with heart disease, attention should be paid to adequate vaccination protection, especially in the early stages of the winter epidemic. Increasing vaccination rates may help reduce the risk of a first acute cardiovascular event in those already eligible for seasonal influenza vaccine. Common side effects include pain, redness and swelling at the injection site. A few people will have systemic mild reactions, such as fever, headache, muscle aches, nausea, itchy skin, urticaria or rash, etc., which usually occur 1-2 days after the injection. Natural recovery occurs within days; however, the chance of serious side effects is very low.

After Pandemic: How to Prevent Critical Case of COVID-19 among CHD Patients

沈靜芬

The COVID-19 pandemic has significantly impacted the world since 2020. Regarding individuals with chronic heart disease (CHD), they were in higher risk of COVID-19 critical case, highlighting the need for effective prevention strategies to mitigate severe outcomes. In addition to higher critical case risk, prognosis of CHD patients after pneumonia infection would become worse. Overall CV events rate may elevate in short term, and reduced long term survival rate has been demonstrated in some specific CV diseases as well. In Taiwan, although the general case number had dropped significantly compared to 2021 peak, but residual critical cases were still observed in community, especially among patients with chronic medical conditions and without proper vaccination. Taiwan government has introduced JN.1 COVID-19 vaccine for public-funded vaccination. In post-pandemic era, we should focus on methods to prevent critical cases of COVID-19 among CHD patients. Key areas of discussion include the importance of early detection, vaccination, and personalized medical care tailored to the unique needs of CHD patients. We should explore the role of healthcare providers in continuous monitoring and management, as well as the implementation of preventive measures such as regular health check-ups and patient education. By adopting a proactive and comprehensive approach, we aim to enhance the resilience of CHD patients against future outbreaks and improve their overall health outcomes.

New Era of Pneumococcal Vaccines After a Decade of Vaccination 林鴻儒

Streptococcus pneumoniae is an important pathogen which can cause deadly infection disease, known as pneumococcal disease, which is more common among children, elderly and those with chronic underlying diseases. Streptococcus pneumoniae is encapsulated with polysaccharide, which can contribute to serotype determination and vaccine antigen designation.

After PCV13 get implemented into National Immunization Program (NIP) for child since 2015, overall invasive pneumococcal disease burden had decreased significantly, and the herd immunity was observed in adult population as well. But the serotype replacement was observed after NIP implementation, non-PCV13 related serotypes started to be main source of infection, including 15A, 35B, 15B, etc., and some of the them could covered by PCV20.

Current recommendation of US ACIP recommended one dose of PCV20, or PCV15 followed by one dose of PPSV23 for adult. One dose vaccination schedule should be more convenient for clinical implementation, and higher vaccination compliance could be expected. In Taiwan, in order to protect the elderly population, government announced the extension of public-funded pneumococcal vaccination program for elderly population. Everyone over 65-year-old can receive one PCV13 and one PPV23 with one year interval. Contribution of this NIP among old age population to reduce IPD disease burden and vaccines-related serotype incidence can be expected in the future.

Vaccines Against Reactivation of Herpes Zoster Virus 邱昱偉

摘要

Shingles results from the reactivation of the varicella-zoster virus, often leading to painful rashes and complications such as postherpetic neuralgia (PHN). Vaccines against HZV, particularly recombinant zoster vaccine (RZV), are highly effective in preventing shingles and its associated chronic pain. Emerging evidence also suggests a potential link between shingles and cardiovascular (CV) events, such as stroke and myocardial infarction, possibly due to the inflammatory response triggered during viral reactivation. By preventing HZV reactivation, these vaccines may also reduce the associated CV risk, highlighting their broader role in public health beyond pain prevention.

Topic: Respiratory Syncytial Virus: Emerging Star in Vaccinology

紀鑫

Abstract:

RSV is the most important respiratory tract pathogen of early childhood and elderly. The most common manifestations are bronchiolitis and pneumonia. RSV is very contagious. Each year in the United States, RSV leads to approximately 58,000–80,000 hospitalizations among children younger than 5 years old and 100,000–160,000 hospitalizations among adults 60 years and older.

There are some products that have been shown to prevent RSV disease for the elderly. There's now an approved vaccine that can be given during pregnancy to prevent RSV disease in infants. RSVpreF (Abrysvo)vaccine is a vaccine for pregnant people to protect their infants from RSV. Antibodies developed by the mother are transferred to the fetus, to help protect the baby once they are born.

In adults, Current FDA-approved 3 RSV vaccines such as RSVPreF3 (Arexvy), RSVpreF (Abrysvo) and mRNA-1345 vaccine (mRESVIA) to prevent RSV disease for those 60 years of age and older are approved. In 2024, FDA also approved Arexvy for prevention of LRTD caused by RSV in adults aged 50–59 years who are at increased risk for LRTD caused by RSV and also approved Abrysvo for prevention of LRTD caused by RSV in adults aged 18–59 years who are at increased risk for LRTD caused by RSV. ACIP recommends all adults aged ≥75 years and adults aged 60–74 years who are at increased risk of severe RSV disease receive a single dose of RSV vaccine, such as adults with chronic heart or lung disease as well as weakened immune systems and adults living in nursing homes or long-term care facilities. Eligible adults are currently recommended to receive a single dose of RSV vaccine; adults who have already received RSV vaccination should not receive another dose. Additional surveillance and evaluation activities are ongoing to determine whether adults might benefit from receiving additional RSV vaccine doses in the future.