

Perkembangan Diagnosis dan Tatalaksana Gagal Jantung di Indonesia 2025

Memorial Lecture dr Nani Hersunarti

Bambang Budi Siswanto MD, PhD, Prof, FAsCC, FAPSC, FESC, FACC
Board of World Heart Failure Society

Fellow of International Society Heart Research Australasian Section

Fellow of Victor Chang's Heart Institute St Vincents Hospital UNSW Sydney

Fellow of Japanese Council for Medical Training Toranomon Hospital Tokyo Metropolitan



Pendidikan Kardiologi di RSCM 1975

IHEFCARD 2025

DEPARTEMEN KARDIOLOGI FKUI



IHEI CARD 2025

Harapan Kita National Cardiac Center 9 November 1985



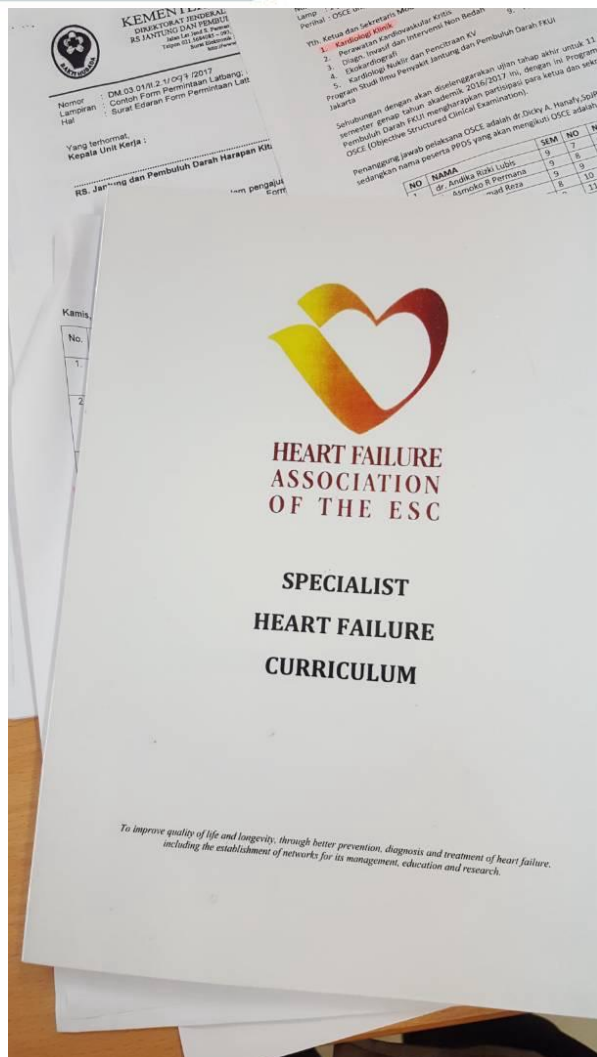
The commencing of CARDIOLOGY in Indonesia

HARAPAN KITA

National Cardiac Center in 9th Nov 1985

- Dept Cardiology
 - Clinical cardiology
 - Non-invasive
 - Diagnostic and Intervention Cardiology
 - Intensive Care Unit
 - Cardiac Rehabilitation
- Cardio-thoracic surgery

Cita-cita almh. Dr. Nani Hersunarti mengembangkan spesialis Advanced Heart Failure



Almh. Prof. Lily Ismudiati Rilantono bersama Alm. Prof Michael O. Rourke yang berjasa mencari beasiswa Victor Chang Heart Institute



Formal training in Advanced Heart Failure started in January 1996 at St Vincent's Hospital Sydney

Supervisor: Prof Michael O'Rourke, Phillips Spraata, Anne Keogh, Peter Mac Donald, Michael Fennely, Andrew Sindone, Christ Hyward.



*The University of New South Wales
at St Vincent's Hospital
Sydney, Australia*

Director
Phillip Spratt

Cardiac Surgeons
Phillip Spratt
Julie Mundy
Alan Farnsworth

Cardiologists
Anne Keogh
Peter Macdonald

Thoracic Physician
Allan Gnanville

Clinical Nurse
Consultant
Annemarie Kaan

Pathologists
Steve Rainer
Vince Munro

Data Coordinators
Cate McCosker
Liz Young

Outpatient & Donor
Coordination
Anne Harvison
Sue Campbell
Gabrielle Lord
Annabel Fay

Social Worker
Frances Taylor

This Certifies that

Bambang Budi Siswanto M.D.

*has satisfactorily completed
training in the field of*

**Hypertension, Heart Failure
and Cardiac Transplantation**

at St Vincent's Hospital from January 5th, 1996

to December 23th, 1996

Phillip Spratt M.D.
Director

Victoria Street, Darlinghurst, NSW, Australia 2010
Phone: 61 2 339 1111 Fax: 61 2 332 4267 Results Fax: 61 2 361 2505

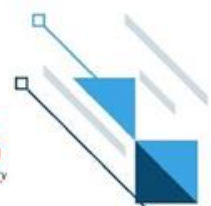




Heart Failure Clinic Services at NCVC-HK Started in 1999 (after learn from Suita, Sydney, Curitiba, Tokyo)

Dr Bambang Budi Siswanto MD
Fax: 62 21 475 9636

30 August 1999



Dear Bambang,

Re **HEART FAILURE SERVICE**
Rumah Sakit Harapan Kita

Thankyou so much for your email of 23 July. I am sorry I have not replied before now, but you know how frantically busy it can get at St Vincent's!!

Firstly, I unfortunately did very little good for Dr Sukma Merati who I saw only occasionally, but your thanks are well received!

Regarding a heart failure program at Harapan Kita, I think it is a great idea. To get this into place, I suspect it would be easier to have 2 people (one of course should be yourself) committed to the idea. With 2 physicians you have much more strength and the capacity to always offer continuous clinical cover, even when someone is away or ill or on conference learning new treatments (the same as Prof Peter Macdonald and I).

I am personally interested in helping you set up such a program which would be very important for Indonesia. Once you have formalised such a program and have a good number of patients, you could join in the clinical trials of new agents and therapies which are supported by international drug companies very often.

Having said I would like to help, I am in the situation in the next 18 months of being unable to commit time to this, since I have taken up the position of President of the International Society for Heart and Lung Transplantation, and this will take up much time. I have already had to resign from several Boards and Councils to free up time, and have employed another cardiologist to help with my work for this period.

But I am supportive of your initiative, and would ask that you try to find a colleague with great interest or better still a passion for heart failure, who can help you build such a service. It would be more credible, if this person, as you did, also travels overseas to Australia, America or Europe to train specifically in the field.

It is quite possible that Pfizer may help somewhat with funding, and I would be happy to try to negotiate this on your behalf.

My best regards to you and your wife and child.

Kindest regards

Anne Keogh
MBBS MD FRACP
Cardiologist

Prof Peter Macdonald

HOME > OUR SERVICES > OUR SPECIALISTS > PROF PETER MACDONALD



Qualifications

MBBS FRACP PHD MD FCSANZ

Specialty

Cardiology

Department

Cardiology





Prof David Muller dari St Vincent's Hospital Sydney membantu jadi proctor pemasangan Mitral Clips di Indonesia

Lim E.	Medical Oncology	80
Mallat M.G.	Anaesthetics / Pain Management	80
McCarty J. R.	Anaesthesia	80
McLean G.S.	Psychiatry	80
Muller D.W.M.	Cardiology	80
McGuinness J.J.	Anaesthesia	80
McKell M.	Anaesthesia	80
O'Hare E.E.	Anaesthesia	80
O'Rourke M.F.	Cardiovascular Hypertension	810
Plit M.	Respiratory Physician	806
Roby H.	Anaesthesia	808
Rimmer S.J.	Thoracic Medicine	806
Roy D.A.	Cardiology	803
Roy P.R.	Cardiology	803
Scarf M.G.	Anaesthesia	808
Smith B. C.	Anaesthesia	808

Cardiovascular hypertension Prof Michael O Rourke datang membantu Prof Victor Chang operasi pertama CABG di Indonesia

Usulan pendidikan Fellowship Advanced HF sudah sejak 2015 diusulkan



*The University of New South Wales
at St Vincent's Hospital
Sydney, Australia*

This Certifies that

Bambang Budi Siswanto M.D.

*has satisfactorily completed
training in the field of*

**Hypertension, Heart Failure
and Cardiac Transplantation**

at St Vincent's Hospital from January 5th, 1996

to December 23th, 1996

Phillip Spratt M.D.

Director

Director
Phillip Spratt

Cardiac Surgeons
Phillip Spratt
Julie Mundy
Alan Farnsworth

Cardiologists
Anne Keogh
Peter Macdonald

Thoracic Physician
Allan Glanville

Clinical Nurse
Consultant
Annemarie Kaan

Pathologists
Steve Rainer
Vince Munro

Data Coordinators
Cate McCosker
Liz Young

Outpatient & Donor
Coordination
Anne Harvison
Sue Campbell
Gabrielle Lord
Annabel Fay

Social Worker
Frances Taylor

Tabloid Protes

ISSN : 0853-8344

KARDIOVASKULER

211-KHUSUS/Thn. XXI/Nopember 2015 e-mail: kardiovk@yahoo.co.id / tabloidkardiovaskular@gmail.com; f kardiovk; @kardio_vaskuler; tpkindonesia.blogspot.com

Usulan: Kurikulum Pendidikan Fellow Gagal Jantung

POKJA: GJ-PH-CARMET

Pendahuluan

Jumlah kasus gagal jantung mengalami peningkatan dalam masyarakat khususnya di Indonesia. Hal ini disebabkan oleh: 1. peningkatan usia harapan hidup penduduk Indonesia dimana di usia tua akan mulai ada penyakit degenerative termasuk jantung. 2. Keberhasilan penanganan infark miokard akut mencegah kematian namun gagal jantung. 3. Masih banyaknya penyakit infeksi kuman maupun virus yang bermacam-macam dapat menyebabkan gagal jantung. 4. Meningkatnya penyakit metabolik endokrin seperti Diabetes Melitus yang dapat menyebabkan penyakit jantung dan pembuluh darah. Penanganan kasus gagal jantung yang lebih baik, akan menyebabkan penurunan mortalitas dan morbiditas kan sehingga meningkatkan produktivitas manusia Indonesia dan menekan biaya perawatan. Gagal jantung dapat muncul secara akut dan kronik. Sering kali penanganannya membutuhkan rawat inap berulang sehingga menjadi beban ekonomi pada sistem kesehatan. Dalam beban ekonomi pada sistem kesehatan. Dalam 10 sampai 15 tahun terakhir, terjadi peningkatan jumlah penderita gagal jantung di luar negeri terdapat kemajuan sedangkan di luar negeri terdapat kemajuan sedangkan di luar negeri terdapat kemajuan

jantung merupakan akibat dari seluruh penyakit kardiovaskular. Seluruh pasien gagal jantung membutuhkan diagnosis penyebab dari gagal jantung dan penyakit penyerta. Sehingga pasien membutuhkan terapi bagi penyakit yang mendasari dan juga gagal jantung. Terapi gagal jantung berkembang secara pesat dan meliputi farmakologi, penggunaan alat dan terapi bedah. Semua harus disampaikan sebagai bagian dari strategi manajemen multi disiplin yang menjembatani perawatan kesehatan primer, sekunder dan tersier.

Diketahui bahwa perawatan menyeluruh dari pasien gagal jantung, termasuk penanganan oleh spesialis kardiologi, dapat meningkatkan kondisi pasien. Sehingga badan pelatihan nasional di berbagai Negara (UK dan USA) telah memasukkan kurikulum subspecialisasi gagal jantung dalam kurikulum pelatihan kardiologi. Kurikulum subspecialisasi ESC juga meliputi kardiologi intervensi dan manajemen irama jantung. Tujuan dari dibuatnya kurikulum gagal jantung adalah sebagai kerangka kerja yang dapat digunakan sebagai pedoman pelatihan di seluruh Eropa. Pedoman ini sesuai dengan kurikulum ESC lainnya. Setiap bagian terdiri dari tiga komponen, yaitu: pengetahuan yang dibutuhkan, keterampilan yang diperlukan, dan sikap yang diperlukan.

spesifik (seperti implantasi alat, pencitraan dan transplantasi jantung/bantuan mekanis) mungkin di pusat pusat gagal jantung yang akan bekerja sama dengan PERKI.

Tujuan Kurikulum

1. Untuk menjabarkan pengetahuan lebih mendalam di bidang gagal jantung, yang meliputi: penyebab, pemeriksaan, investigasi dan terapi yang dibutuhkan oleh subspecialis gagal jantung.
2. Untuk mengetahui keterampilan yang diperlukan dalam memberikan terapi gagal jantung yang optimal.
3. Menjabarkan keterampilan yang diperlukan oleh subspecialis gagal jantung, fungsi dan peran sertanya pada tim medis multi disiplin, dalam memberikan terapi gagal jantung yang tepat.
4. Menentukan pelatihan khusus yang diperlukan oleh subspecialis gagal jantung dalam rangka peningkatan keterampilan di bidang:
 - a. Pencitraan
 - b. Implantasi alat pengatur irama jantung
 - c. Transplantasi jantung dan bantuan mekanis.

transthoracic dan transesophageal echography dan CMR melalui penugasan di terkait (pelatihan praktis dalam peninjauan keterampilan).

Pelatihan keterampilan dalam terapan alat dan Cardio Pulmonary Exercise Mechanical Circulatory Support pada tertentu dapat dilakukan pada pusat kesehatan bila memungkinkan. Atau di di pusat kesehatan tersier dengan pasien yang lebih besar, selama 3 bulan.

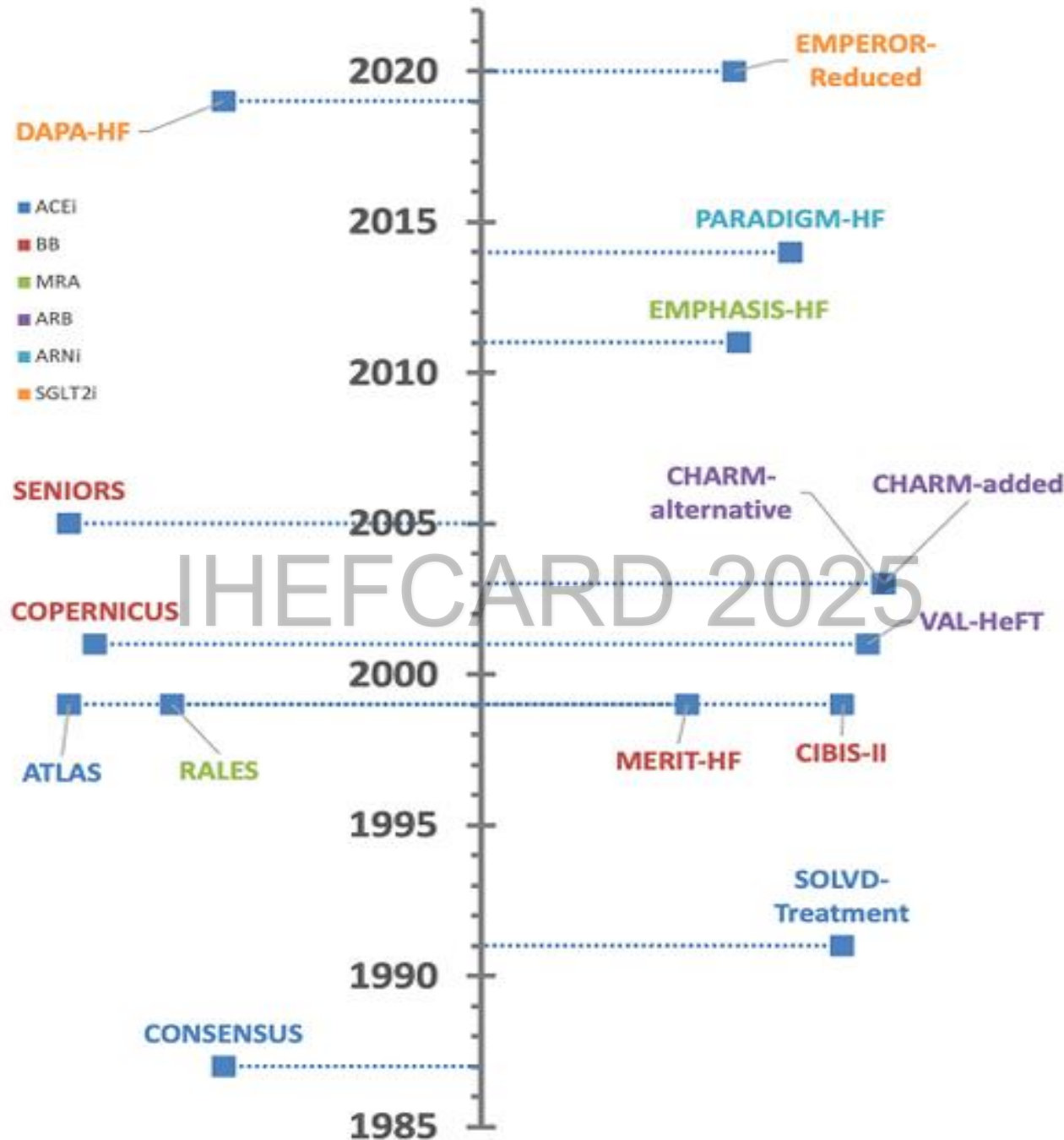
Peserta diwajibkan untuk bergalangan POKJA GAGAL JANTUNG PHFA dari ESC serta mengikuti sy yang sesuai dengan kurikulum. Di itu juga, peserta diharuskan untuk pertemuan tahunan Asosiasi Am European heart failure.

Peserta melakukan dua audit tahun terhadap penanganan ga Penelitian terutama di bidang jantung ataupun pengalaman pengetahuan dasar gagal jantung tuhan.

Metode penilaian

Penilaian pada pengetahuan dan keterampilan

History of GDMT



CONSENSUS TRIAL (1987)

Enalapril vs placebo
253 patients with HF (NYHA IV)

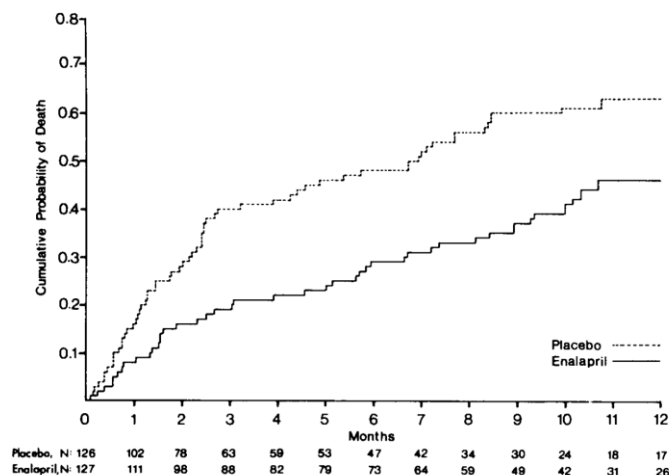
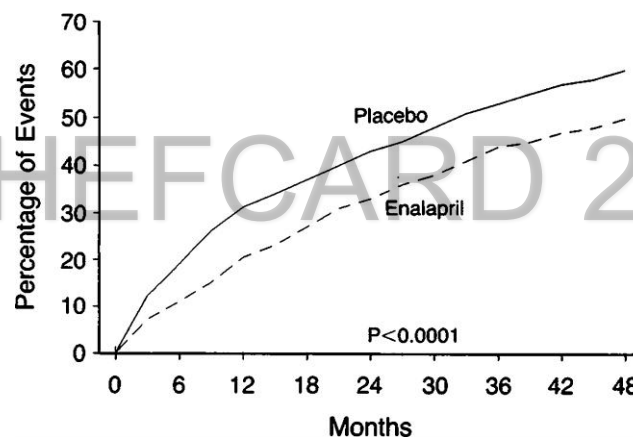


Figure 1. Cumulative Probability of Death in the Placebo and Enalapril Groups.

At 1 year, mortality remained lower in the enalapril group (36% vs 52%), a 31% relative risk reduction (P=0.001)

SOLVD (1991)

Enalapril vs placebo
2569 patients with HF (NYHA II/III)



Enalapril significantly reduced all-cause mortality and hospitalisation due to heart failure

MERIT-HF (1999)

Metoprolol CR/XL vs placebo
3991 patients with HF (NYHA II-IV), EF<40%

Table 2. Effect of Metoprolol CR/XL and Placebo on Combined End Points*

Combined End Points	Metoprolol CR/XL Group, No. of Patients (n = 1990)	Placebo Group, No. of Patients (n = 2001)	Total	Risk Reduction, % (95% Confidence Interval)
Total mortality or all-cause hospitalization	641	767	1408	19 (10-27)
Total mortality or hospitalization due to worsening heart failure	311	439	750	31 (20-40)
Death or heart transplantation	150	218	368	32 (16-45)
Cardiac death or nonfatal acute myocardial infarction	139	225	364	39 (25-51)
Total mortality or hospitalization or emergency department visit due to worsening heart failure	318	455	773	32 (21-41)

*Only the first end point that occurred in each patient was counted. P<.001 for all comparisons. CR/XL indicates controlled release/extended release.

19% Risk reduction of total mortality or all-cause hospitalizations

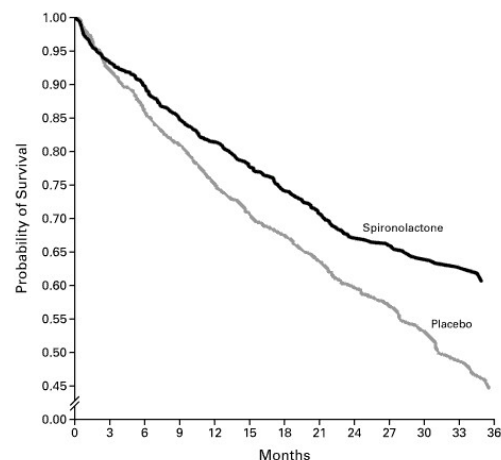
31% Risk reduction of total mortality and hospitalization due to worsening heart failure



RALES (1999)

Spironolactone vs placebo

1663 patients with HF EF<35% (were being treated with ACEi, loop diuretic, or digoxin)



30% reduction in the risk of death (relative risk of death among the patients in the spironolactone group, 0.70 by a Cox proportional-hazards model; 95 percent confidence interval, 0.60 to 0.82; P<0.001)

VALHeFT (2001)

Valsartan vs placebo

5010 patients with HF (NYHA II-IV)

EVENT	VALSARTAN GROUP (N=2511) no. with event (%)	PLACEBO GROUP (N=2499) no. with event (%)	RELATIVE RISK (CI)*	P VALUE†
Death from any cause (during entire trial)	495 (19.7)	484 (19.4)	1.02 (0.88–1.18)	0.80
Combined end point	723 (28.8)	801 (32.1)	0.87 (0.77–0.97)	0.009
Death from any cause (as first event)	356 (14.2)	315 (12.6)		
Hospitalization for heart failure	346 (13.8)	455 (18.2)		
Cardiac arrest with resuscitation	16 (0.6)	26 (1.0)		
Intravenous therapy	5 (0.2)	5 (0.2)		

*The 98 percent confidence interval (CI) was calculated for the mortality end point (death from any cause), and the 97.5 percent confidence interval was calculated for the combined mortality-morbidity end point.

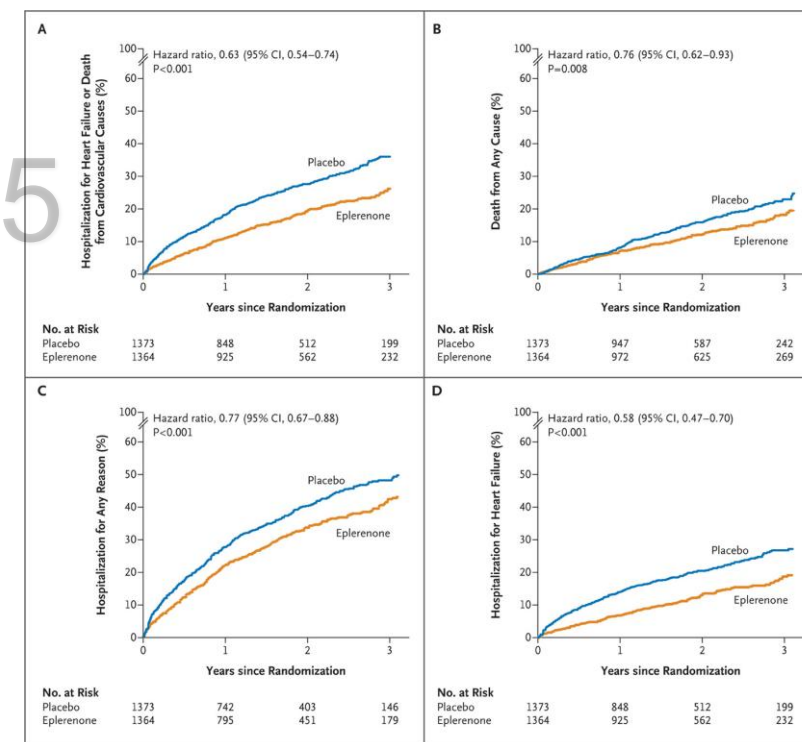
†P values were calculated by the log-rank test from time to first event.

The combined end point of mortality and morbidity was significantly reduced among patients receiving valsartan as compared with those receiving placebo (P=0.009)

EMPHASIS-HF (2011)

Eplerenone vs placebo

2737 patients with HF (NYHA II), EF<35%

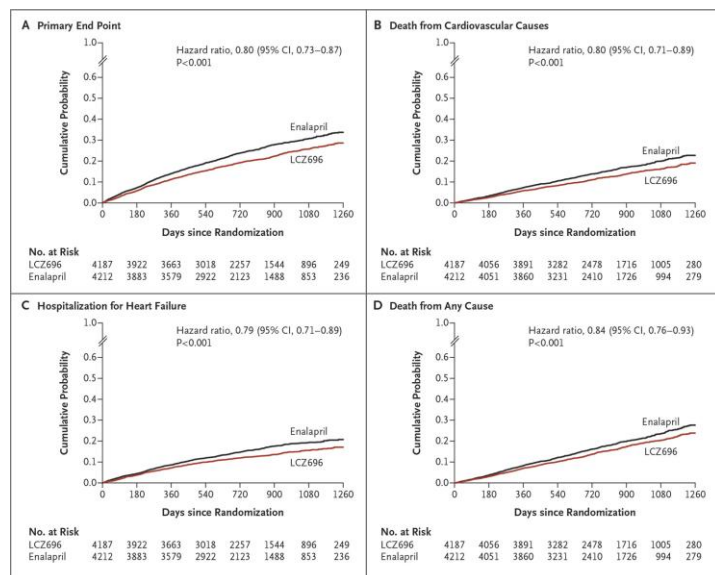




PARADIGM-HF (2014)

ARNI vs enalapril

8442 patients with HF EF<45%

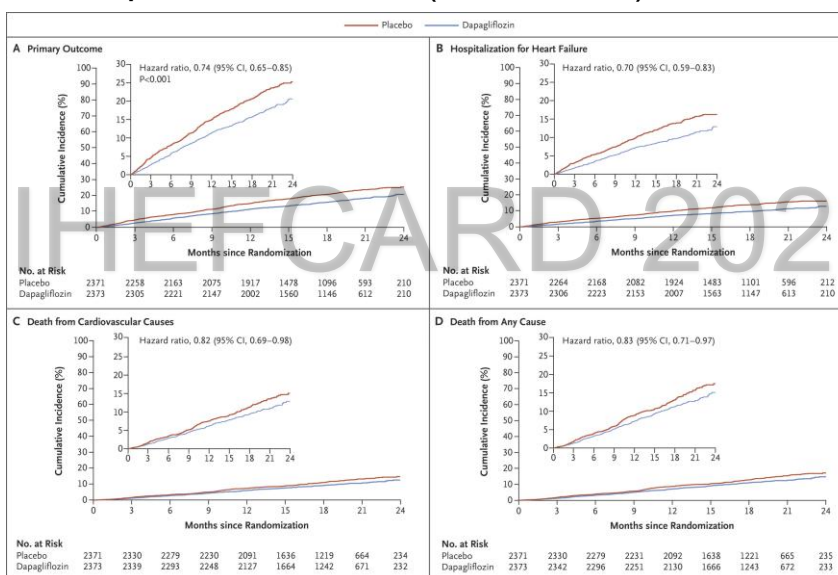


sacubitril/valsartan significantly reduces the risk of the primary endpoint, cardiovascular death, hospitalization for heart failure, and death from any cause compared to enalapril, with hazard ratios ranging from 0.79 to 0.84 (all **P < 0.001**).

DAPA-HF (2019)

Dapagliflozin vs placebo

4744 patients with HF (NYHA II-IV), EF<40%

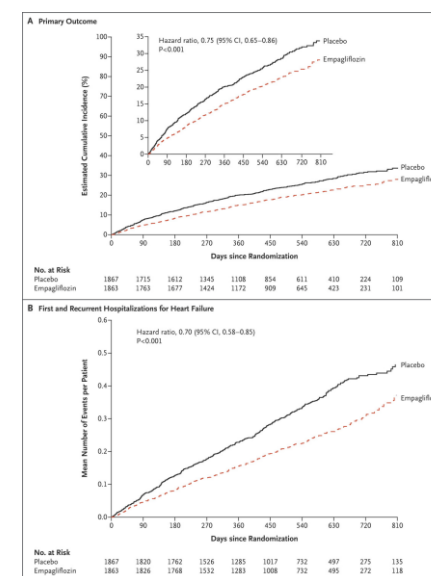


reduced the risk of the primary composite outcome to placebo in heart failure patients, with hazard ratios ranging from 0.70 to 0.83 (all statistically significant).

EMPEROR-REDUCED (2020)

Empagliflozin vs placebo

3,730 patients with HF (NYHA II), EF<35%



reduced the risk of the primary outcome (HR 0.75; 95% CI, 0.65–0.86) and total (first and recurrent) hospitalizations for heart failure (HR 0.70; 95% CI, 0.59–0.83) compared to placebo in patients with heart failure.

Training NTproBNP bagi cardiolog di Asia oleh Prof. James Januzy, Jr



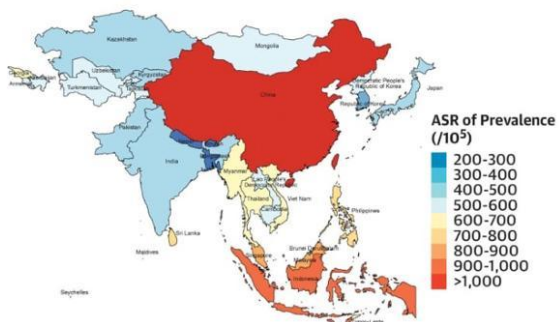
NT pro BNP mulai dipakai di Indonesia dibawa oleh **Prof Mark Arthur Richards**



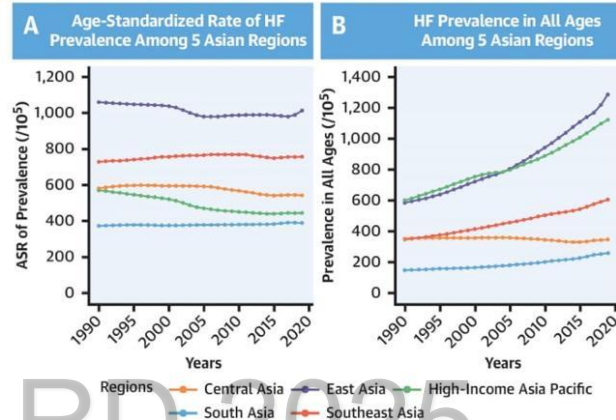
Indonesia tertinggi dalam crude mortality

CENTRAL ILLUSTRATION: Epidemiology and Burden of Heart Failure in Asia

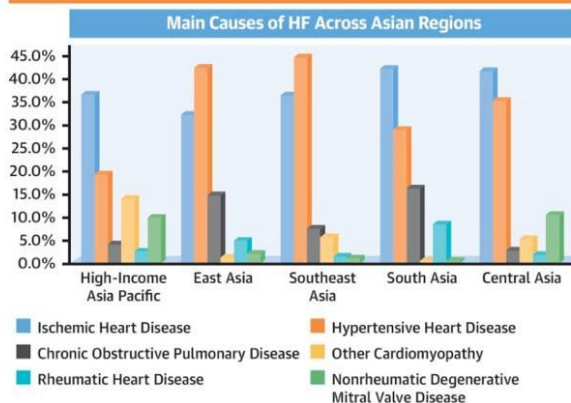
The Prevalence of HF in Asia is High:
China, Indonesia, and Malaysia Are the 3 Highest
Nations in Terms of Age-Standardized Prevalence



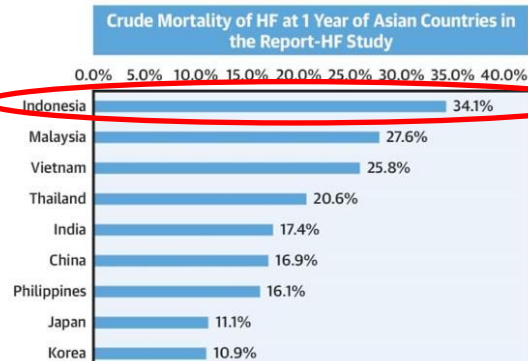
The Absolute Numbers of HF Prevalence Increased in Asia:
The Age-Standardized Prevalence of HF Were Only
Increased in Southeast Asia and South Asia



The Leading Causes of HF Worldwide and in Asia Are
Ischemic Heart Disease and Hypertensive Heart Disease



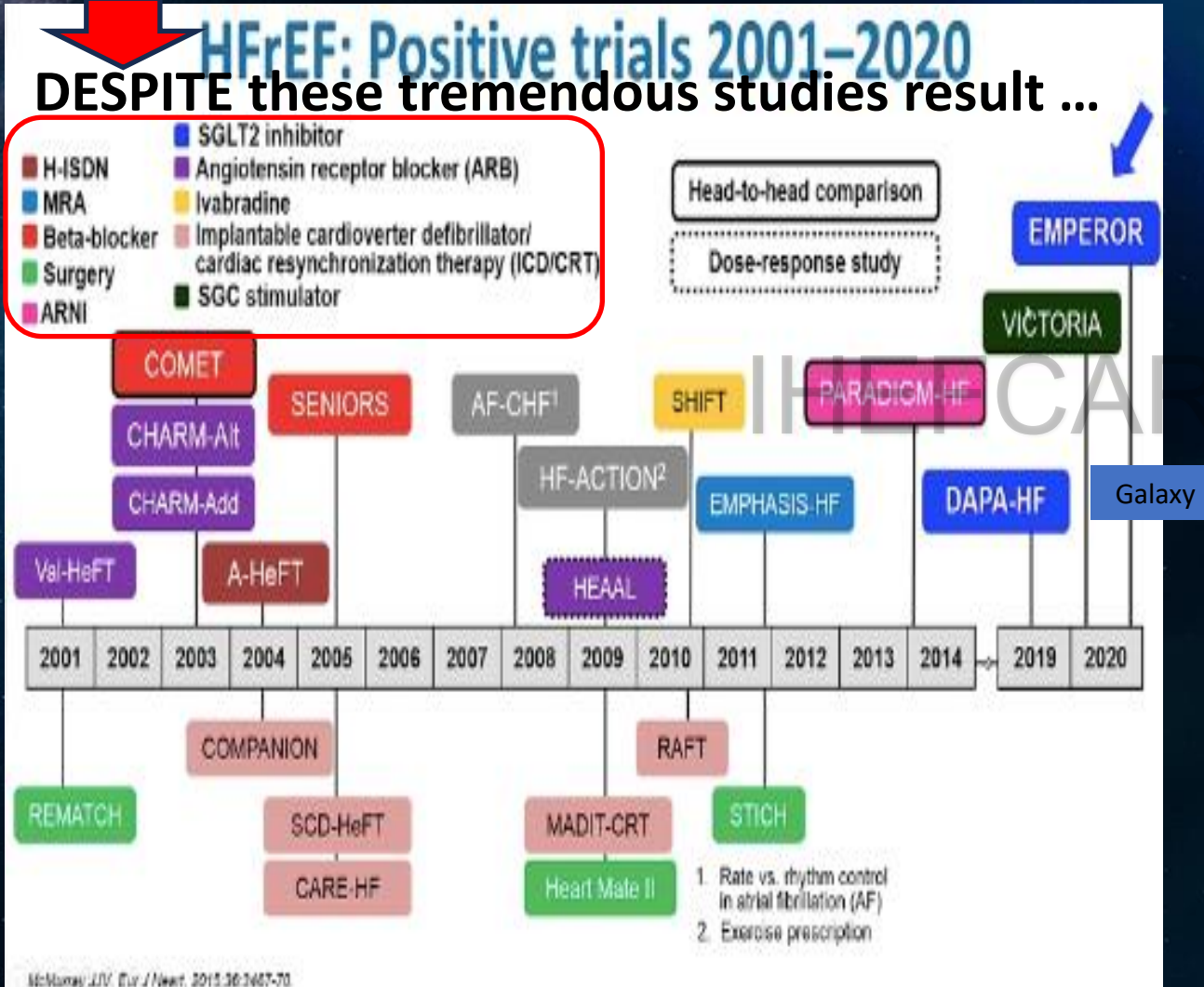
The 1-Year Mortality of Asian HF Patients Is Still High,
Especially in Southeast and South Asia:
CV Death is the Primary Cause of Death for HF



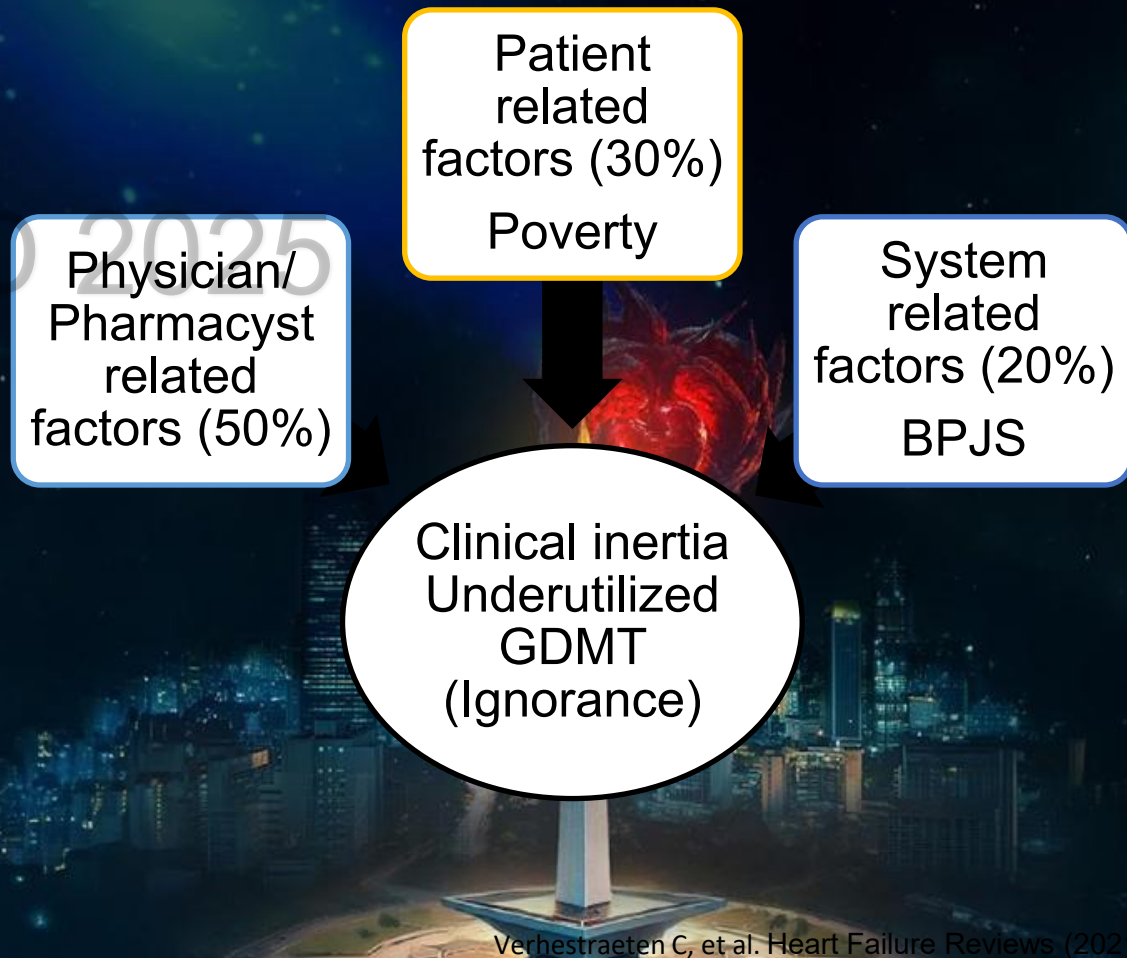
Feng J, et al. JACC: Asia. 2024;4(4):249-264.



Unmet need for HF patients....why?



INDONESIA ? DISPARITY ? RICH vs POOR?
URBAN vs RURAL?



Launching Tolvaptan di Indonesia





Perintisan sistem Triase di UGD Harapan Kita



Meet The Expert Symposium
NEW HORIZON IN HEART FAILURE THERAPY

Sunday, July 8th 2018, Hotel Ritz Carlton, Kuningan Jakarta



Launching ARNI

EXIT

HEFCARD 2025





Launching Empagliflozin pada HUT PJN HK





**Prof Marteen J Crammer bersedia membimbing
dua dokter dari Indonesia di Utrecht**

Prof Pieter Douvendans dan Prof Marteen Crammer dari Utrecht membantu staf departemen menjadi PhD by publication





Kemenkes

PAPDI in collaboration with InaHF(PERKI)

Indonesia CVRM Summit 2024

A Multidisciplinary Approach in Optimizing
Heart Failure GDMT and Overcoming Dilemma
of Hyperkalemia in Clinical Practice



Supported by
AstraZeneca

Kemenkes

PAPDI in collaboration with InaHF(PERKI)

Indonesia CVRM Summit 2024

A Multidisciplinary Approach in Optimizing Heart Failure GDMT and
Overcoming Dilemma of Hyperkalemia in Clinical Practice



AstraZeneca

Kemenkes

PAPDI in collaboration with InaHF(PERKI)

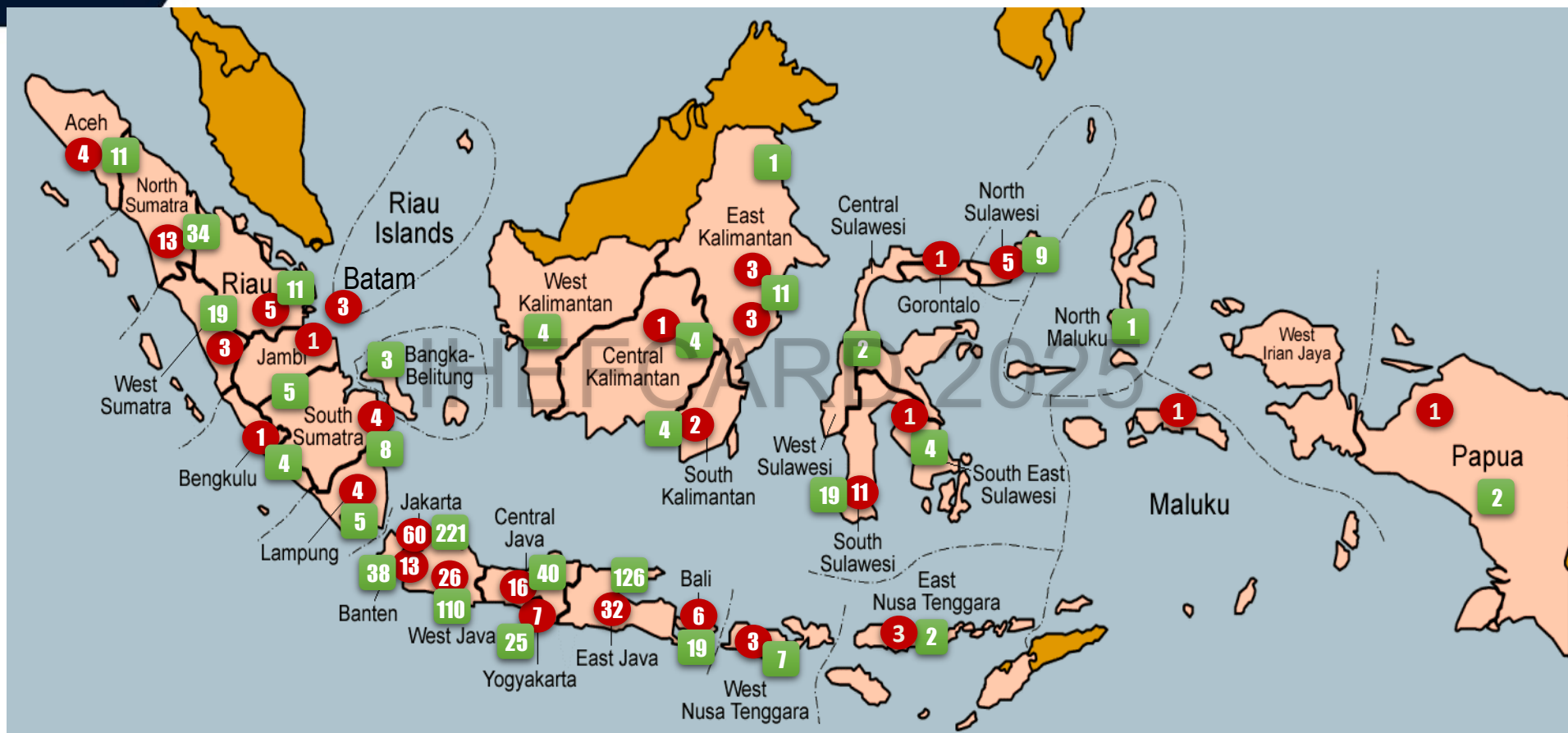
Indonesia CVRM Summit 2024

A Multidisciplinary Approach in Optimizing
Heart Failure GDMT and Overcoming Dilemma
of Hyperkalemia in Clinical Practice



Supported by
AstraZeneca

Heart Failure Clinic di Indonesia vs Cath-Lab & Interventional Cardiologist



● Number of Heart Failure Clinic Services ?
Total: 295 Cath Labs in 250 hospitals

■ Number of Cardiologist
Total: more than 1500 (2025)
Interventional Cardiologist 250 Certified Heart failure Specialist 5

Indonesia sebagai Tuan Rumah First Asia Pulmonary Hypertension Scientific Meeting



Tim Indonesia diundang training CTEPH dan BPA di NUHS



**National University
Heart Centre, Singapore**



Yayasan Hipertensi Paru Indonesia (YHPI)



LAMPIRAN KEPUTUSAN MENTERI HUKUM DAN HAK ASASI MANUSIA REPUBLIK INDONESIA
NOMOR AHU-0001747.AH.01.05.TAHUN 2021
TENTANG
PENGESAHAN PERUBAHAN BADAN HUKUM
YAYASAN HIPERTENSI PARU INDONESIA

Susunan Pendiri, Pembina, Pengurus dan Pengawas

Nama	No. KTP/Passport	Organ Yayasan	Jabatan
INDRIANI GINTO		PENDIRI	PENDIRI
H. DEWI KDMALASARI, SE		PENDIRI	PENDIRI
RIME HANDEAH, SE		PENDIRI	PENDIRI
SRI DEWI RAHAYU		PENDIRI	PENDIRI
DHAN DELIANI		PENDIRI	PENDIRI
HAYUDA NURHARUMI SAID		PENDIRI	PENDIRI
HANA NUSLIANA		PENDIRI	PENDIRI
OCTAVINA DWIPUTRANTI		PENDIRI	PENDIRI
DHAN DELIANI		PEMBINA	KETUA
INDRIANI GINTO		PEMBINA	ANGGOTA
ARNI RISMAYANTI		PENGURUS	KETUA
WENING KRISTYANI		PENGURUS	SEKRETARIS UMUM
ISLAMIYAH		PENGURUS	SEKRETARIS
ARDINI TRUPRANANTI		PENGURUS	BENDAHARA UMUM
HAMIDAH MUZAYANAH		PENGURUS	BENDAHARA
BAMBANG BUDISWANTO		PENGABAS	KETUA
LUCIA KRISDIANTI		PENGABAS	ANGGOTA

Dibuatkan di Jakarta, Tanggal 20 Desember 2021.
a.n. MENTERI HUKUM DAN HAK ASASI MANUSIA
REPUBLIK INDONESIA
DIREKTUR JENDERAL ADMINISTRASI HUKUM UMUM,

Cahyo Rahadian Muzhar, S.H., LL.M.
19690918 199403 1 001

DICETAK PADA TANGGAL 20 Desember 2021
DAFTAR YAYASAN NOMOR AHU-0040663.AH.01.12.TAHUN 2021 TANGGAL 20 Desember 2021



Prof. Hirata dan Prof. Yu Tanugichi OnSite show case BPA di cath lab Kobe Hospital



Cardiac rehabilitation for heart failure (HF) improves health-related quality of life and contributes to reduced hospitalization and is Class I / level A evidence by international (US & EU) Guidelines

Despite this, referral to cardiac rehabilitation for HF is suboptimal and currently ranges from **5% to 50%** across countries

Cardiac rehabilitation should be the 5th pillar in HF management alongside drug and medical device provision



Choice of cardiac rehabilitation delivery models (centre-based/home-based $\pm$ digitally supported) should be developed and be available to patients in the future

Rehab in Heart Failure Team



**Diagnostic HF
dengan Machine
Learning
Echocardiography
dikembangkan
dalam penelitian S3
Dr. dr. Lies Dina
Liastuti, Sp.JP**



The Great Asian Mismatch: Training Versus Care in Heart Failure

RAJA EZMAN RAJA SHARIFF, MBChB,¹ KOH HUI BENG, BM,² AND AZMEE MOHD GHAZI, MBChB²

Selangor, and Kuala Lumpur, Malaysia

ABSTRACT

The prevalence of heart failure (HF) in South-East Asia is relatively higher than in Western countries, and yet there is a lack of established fellowship programs within the region to help cultivate HF specialists. Part of this may be due to a misunderstanding that HF training and curricula require the incorporation of advanced therapies, such as ventricular assist device implantation and heart transplantation, which are rarely performed in this region. Developing a structured curriculum tailored to the needs of HF care in South-East Asia may help to provide for this subspecialty the much-needed and long-overdue recognition it deserves. Collaboration between local societies and their international counterparts is an important starting point. Customization of local and regional curricula, depending on local needs and capabilities, allows for the gap in this Great Asian Mismatch to be bridged and to ensure that equitable training is delivered for all. (*J Cardiac Fail* 2022;00:1–4)

Key Words: Heart failure, curriculum, training, cardiology.

How to Become Heart Failure Fellow expert in Indonesia?

Symposium
Cardiometabolic Disease

Congress 2025





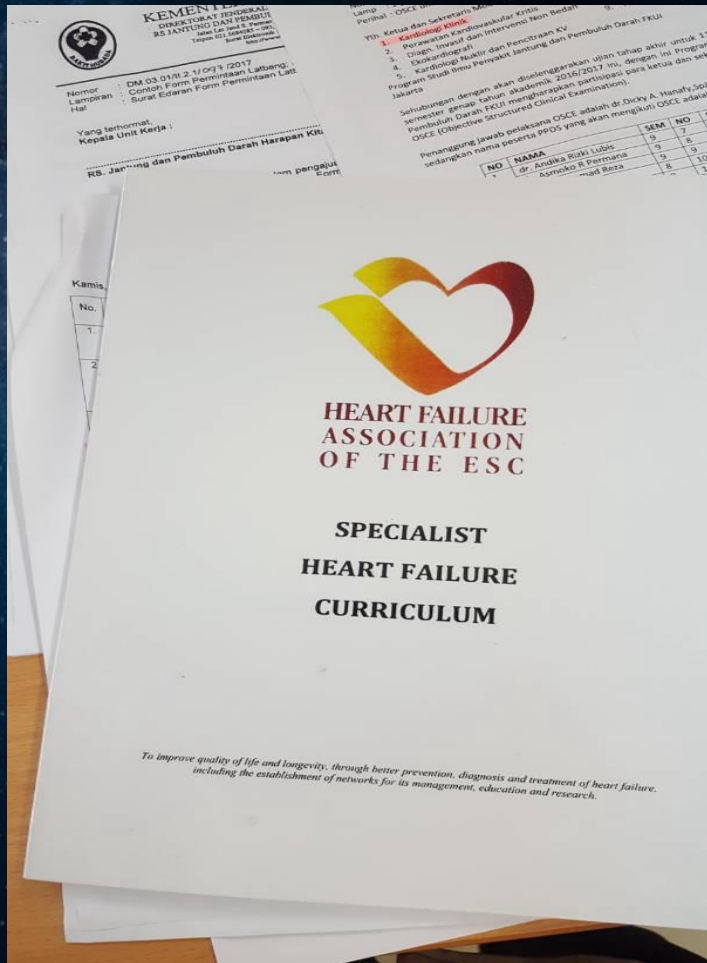
HARAPAN KITA-TOKUSHUKA
CARDIAC CENTER

HETOCARD 2025

RS JANTUNG DAN PEMBULUH
DARAH HARAPAN KITA

RS HARAPAN KITA

**“It is A Journey that we should
travel together”**



BERSAMA KITA BISA

Be the first
Be the best
Be a winner

THANK YOU

