

### Program

*This seminar will be delivered by a combination of a 6-week self-paced learning package followed by a live one-day seminar*

#### Self-paced learning package: available from Friday 19 April 2024

The self-paced learning package comprises approximately 8 hours of learning materials. The self-paced learning package materials must be completed prior to attending the live virtual seminar.

Topic	Learning Objectives
How does a healthy heart work?	<ul style="list-style-type: none"> <li>• Compare the function of the right and left side of the heart.</li> <li>• Predict how the healthy heart responds to excess or insufficient circulating volume.</li> <li>• Explain the role of the natriuretic peptide system, the sympathetic nervous system and the renin-angiotensin-aldosterone system in the healthy heart.</li> <li>• Describe how cardiac output is influenced by heart rate, preload, contractility and afterload.</li> <li>• Outline the roles of each of the heart valves</li> </ul>
What happens when the heart doesn't work?	<ul style="list-style-type: none"> <li>• Describe what can impair the function of the heart.</li> <li>• Explain how the body reacts to an impaired heart.</li> <li>• Differentiate the signs and symptoms of right and left sided heart failure.</li> <li>• Explain the signs and symptoms of congestion and impaired perfusion.</li> <li>• Distinguish between which therapies influence preload, afterload and contractility.</li> <li>• Explain how the natriuretic peptide system, the sympathetic nervous system and the renin-angiotensin-aldosterone system react in a failing heart.</li> </ul>
ECG or etcetera? What kind of investigations do my patients get?	<ul style="list-style-type: none"> <li>• List cardiac investigations and laboratory tests for a patient presenting with the following; <ul style="list-style-type: none"> <li>○ Acute Coronary Syndromes</li> <li>○ Atrial Fibrillation</li> <li>○ Decompensated heart failure</li> </ul> </li> <li>• Discuss strengths and limitations of the following cardiac imaging techniques; <ul style="list-style-type: none"> <li>○ Angiography</li> <li>○ Stress test and stress echo</li> <li>○ Cardiac MRI</li> <li>○ CT Coronary Angiogram</li> <li>○ Trans-thoracic and trans-oesophageal echo</li> </ul> </li> <li>• Identify common arrhythmia patterns on a 12-lead ECG <ul style="list-style-type: none"> <li>○ Atrial fibrillation/flutter</li> <li>○ Heart block</li> <li>○ Ventricular Tachycardia</li> </ul> </li> <li>• Predict how medications may affect an ECG</li> <li>• Interpret an echocardiogram report</li> <li>• Describe potential implications of echocardiogram reports on medication therapy</li> </ul>
Managing Acute Coronary Syndrome. Difference between our city and country counterparts	<ul style="list-style-type: none"> <li>• Identify investigations involved in a diagnosis of an acute coronary syndrome (ACS)</li> <li>• Differentiate between thrombolysis and primary percutaneous intervention (PCI) and appropriate patients for each</li> <li>• Describe the pharmacological management of ACS in the acute phase</li> <li>• Differentiate between management options for ACS in a metropolitan and rural or regional setting</li> <li>• Evaluate evidence for use of beta blockers, ACE inhibitors, statins and mineral corticosteroids in ACS</li> <li>• Provide appropriate antiplatelet regimen following different management pathways of an ACS</li> <li>• Explain pharmacological therapies involved in ACS secondary prevention</li> </ul>

<b>Guided case study: Heart failure</b>	<ul style="list-style-type: none"> <li>• Discuss investigations used to diagnose heart failure</li> <li>• Outline the role of diuresis in heart failure</li> <li>• Describe the use of anti-failure therapies in heart failure management</li> <li>• Describe the role of iron supplementation in heart failure patients</li> </ul>
<b>The bread and butter of heart failure</b>	<ul style="list-style-type: none"> <li>• Describe the symptoms of chronic heart failure and why they occur.</li> <li>• Outline the diagnostic criteria and classification of heart failure.</li> <li>• Define HFrEF, HFmrEF and HFpEF with regards to ejection fraction and anatomy.</li> <li>• Provide evidence-based recommendations for treatment of HFrEF.</li> <li>• Describe the treatment of HFpEF.</li> <li>• Provide recommendations for the management of co-morbidities in heart failure.</li> <li>• Describe non-pharmacological management strategies for heart failure.</li> <li>• Explain the management of acute heart failure.</li> <li>• Describe the pharmacist's role in managing patients with heart failure.</li> </ul>
<b>AF/SVT/VT/VF – what are the differences and how do these affect my patients?</b>	<ul style="list-style-type: none"> <li>• Explain rhythm generation and conduction anatomy in the heart</li> <li>• Distinguish the different parts of a Lead II electrocardiogram rhythm strip and the relationship to conduction anatomy and function</li> <li>• Describe the Vaughn-Williams classification of drugs</li> <li>• Identify key guidelines and resources within Australia and Internationally for cardiac arrhythmias</li> <li>• Describe the aetiology, mechanism and prevalence of atrial fibrillation (AF) and the risk it poses to cardiovascular health</li> <li>• Distinguish between rate and rhythm control approaches to managing AF</li> <li>• Briefly describe non-pharmacological management of AF</li> <li>• Explain the rationale behind anticoagulation in AF</li> <li>• Overview other arrhythmias and their management principles, including SVT, VT and VF</li> <li>• Describe iatrogenic QT prolongation and the methods used to assess QT prolongation</li> </ul>
<b>The cath lab: what happens behind closed doors?</b>	<ul style="list-style-type: none"> <li>• Describe the roles of multidisciplinary members in a catheter lab</li> <li>• Overview procedures undertaken in a catheter lab, including diagnostics, stents and mitral clipping</li> <li>• Interpret a simple angiogram report</li> <li>• Explain common complications that can occur post percutaneous intervention (PCI)</li> <li>• Explain common medications used in the cath lab</li> </ul>
<b>CABG: A cardiology intervention or a type of vegetable? Management of pre/post CABG patient</b>	<ul style="list-style-type: none"> <li>• Outline the basic anatomy involved in conducting a coronary artery bypass graft (CABG)</li> <li>• Describe the typical presentation, including comorbidities, of a CABG patient</li> <li>• Describe pre-operative management, including medications, of a CABG patient</li> <li>• Outline the basic concepts of cardiopulmonary bypass</li> <li>• Describe common complications post CABG</li> <li>• Recommend suitable medication management options for post-operative CABG patients</li> </ul>

## Program

### Live virtual seminar

*All times listed are in AEST*

**Saturday 1 June 2024**

Time (AEST)	Session
0850-0900	Online login available
0900-0910	<p><b>Welcome, introduction, housekeeping, introduction structure of case sessions</b></p> <p><b>Adam Livori</b>, PhD, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Mebourne, Vic</p> <p><b>Judy Duong</b>, Team Leader Pharmacist in Cardiology, Cardiac Surgery and Heart Failure, Victorian Heart Hospital, Monash Health, Melbourne, Vic</p>
0910-0955	<p><b>Review of self-paced learning package content with open Q&amp;A</b></p> <p><b>Judy Duong</b>, Team Leader Pharmacist in Cardiology, Cardiac Surgery and Heart Failure, Victorian Heart Hospital, Monash Health, Melbourne, Vic</p>
0955-1130	<p><b>Case session: Managing Acute Coronary Syndrome</b></p> <p><b>Led by: Judy Duong</b>, Team Leader Pharmacist in Cardiology, Cardiac Surgery and Heart Failure, Victorian Heart Hospital, Monash Health, Melbourne, Vic</p>
1130-1150	Break
1150-1320	<p><b>Case session : Coronary artery bypass graft (CABG)</b></p> <p><b>Led by: Adam Livori</b>, PhD, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Mebourne, Vic</p>
1320-1350	Break
1350-1520	<p><b>Case session: Arrhythmias</b></p> <p><b>Led by: Adam Livori</b>, PhD, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Mebourne, Vic</p>
1520-1550	<p><b>Case discussion: review of heart failure self-guided case</b></p> <p><b>Led by: Adam Livori</b>, PhD, Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Mebourne, Vic</p>
1550-1605	Break
1605-1635	Open Q&A
1635	Close of live virtual seminar

*Please note: presentation recordings from the live virtual seminar will not be available.*