Useful investigations for diagnosing and managing heart disease

Assessing and Managing Cardiovascular Disease Risk

(Australian guideline and calculator) See cvdcheck.org.au

Factors in risk assessment:

- Age, sex
- Smoking status
- Systolic blood pressure (BP)
- Total cholesterol to high-density lipoprotein (HDL) cholesterol ratio (TC:HDL-C ratio)
- Diabetes status
- Cardiovascular disease (CVD) medicines
- History of atrial fibrillation (AF)

If diabetic, include:

- HbA1c
- Time since diagnosis of diabetes
- Urine albumin-creatinine ratio (uACR)
- Estimated glomerular filtration rate (eGFR)
- Body mass index (BMI)
- Insulin treatment

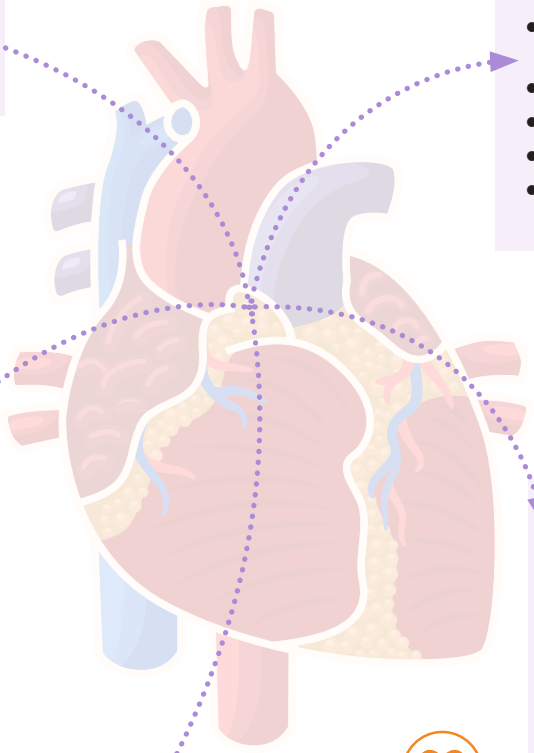
Chest Pain

- ECG
- Troponin

Preferable in an Emergency Department setting

Hypertension

- Ambulatory blood pressure (BP) monitoring
- Renin-aldosterone ratio (ARR)
- Urine catecholamines or metabolites
- Cortisol
- Urea and electrolytes (U&E)
- Liver function tests (LFT)
- Thyroid function tests (TFT)



Arrhythmias and Palpitations

- ECG
- Holter monitoring
- Urea and electrolytes (U&E), calcium, magnesium
- Thyroid function tests (TFT)
- Digoxin levels

Heart Failure

- B-type natriuretic peptides (BNP) or N-terminal pro B-type natriuretic peptide (NT-proBNP)
- ECG
- Imaging and echocardiogram

Atherosclerosis

- Serum lipids
  - Cholesterol
  - Triglycerides
  - HDL (high-density lipoprotein) cholesterol
  - LDL (low-density lipoprotein) cholesterol
  - Non-HDL cholesterol
- Apolipoprotein (a)
- High-sensitivity C-Reactive Protein (hs-CRP)

This figure was created by Dr David Deam, Clinical Labs Chemical Pathologist.