

REF. NO.	C –VC 3
TITLE:	CARDIOVASCULAR THERAPEUTICS
VALUE:	10 CREDITS
NOTIONAL STUDY HOURS:	100

GENERAL GUIDANCE NOTES

The following applies to all C modules.

Before embarking on this, or other modules, candidates must fulfil the following criteria:

- a) Be a member of RCVS
- b) Have at least one year's postgraduate experience working as a veterinary surgeon
- c) Be enrolled with RCVS if intending to take the Certificate in Advanced Veterinary Practice (enrolment will be valid for 10 years)
- d) It is also recommended that candidates will have already declared themselves competent in their 'Year One Competencies', by completing the Professional Development Phase (PDP) before enrolling for any modules.
- e) To attain the Certificate in Advanced Veterinary Practice (Cardiology) the candidate must also complete modules C-VC1 and CVC-2

LEARNING OBJECTIVES

The module is focused on therapeutics and management of cardiovascular disease using the appropriate techniques. It is not concerned with the diagnosis with cardiovascular disease as this is the concern of modules C-VC2.

The module is aimed at veterinary surgeons in private practice, or at a veterinary school with a substantial case load of small or large animals, or a mixture, of which a significant number have primary cardiovascular disease, or require **thorough** examinations of their cardiovascular system for investigation of other systemic illnesses, or injury. At least 200 of these should be examined and assessed primarily by the candidate.

The module may be taken from a large animal or a small animal perspective, or a mixture of the two. It is suggested that candidates intending to proceed to a Certificate in Advanced Veterinary Practice (Cardiology) via modules C-VC 1 and C-VC 2, will present a C-VC 1 made up of a balanced distribution of species with at least 2 being represented. Alternatively, if candidates are intending to proceed to the Certificate in Advanced Veterinary Practice (Cardiology) with a large animal/equine bias using the Equine module C-E.2, the case diary should be made up of 90% large animals. Candidates not wishing to use the module to attain the Certificate in Advanced Veterinary Practice (Cardiology) can present case books made up exclusively from small or large animal cases.

Module C-CV3 is **mandatory** for those aiming to achieve the CertAVP (Cardiology).

ASSESSMENT STRATEGY FOR THIS MODULE

It is suggested that this module could be assessed by the following methods:

- A **case log**, which documents at least 200 cases seen by the candidate over the period that the module is being completed. Any animal requiring therapeutics and/or management may be included. An example of the appropriate information to be included in the case log is attached as Annex A and examples are appended.
- A **spot test** focusing on therapeutics.
- An **essay** on a topic chosen by the candidate from a list of topics set by the examiners. Such essay topics should endeavour to demonstrate the depth and breadth of the candidate's knowledge of cardiovascular therapeutics (e.g. Compare and contrast the mechanisms of action of ACE inhibitors and Inodilators, with reference to their use in dogs with congestive heart failure due to acquired myxomatous mitral valve disease).

MODULE CONTENT

At the end of the module, candidates should have a sound understanding of cardiovascular therapeutics. Candidates should be able to select appropriate therapeutic and management options for small or large animal patients based on results of the diagnostic tests performed. Candidates are also expected to demonstrate the knowledge of when to refer.

On successfully completing this module, candidates would be expected to have knowledge of the following:

- Drug therapy (candidates should understand the basic mechanism of action and clinical utility of the following classes of drugs)
 1. Diuretics
 2. ACE inhibitors and other vasodilators
 3. Positive inotropes
 4. Negative inotropes
 5. Bronchodilators
 6. Anti-dysrhythmic agents typically used in veterinary medicine for treating supraventricular and ventricular arrhythmias in small and large animals.
- Non-pharmacological therapy
 1. nutraceuticals
 2. diet
 3. exercise
 4. other managemental or therapeutic tools (e.g oxygen supplementation).

- Surgical options for treatment / management of cardiovascular defects (congenital and acquired disease)
 1. Candidates should be aware of, but not necessarily have an in depth knowledge of, interventional minimally invasive catheter based procedures
 2. Candidates should be aware of, but not necessarily have an in depth knowledge of, thoracotomy for closed heart vs. open heart surgery options
 3. Candidates should be aware of, but not necessarily have an in depth knowledge of, the role of cardiac pacemakers for the treatment of cardiac rhythm disturbances
 4. Candidates should be aware of how and why to perform pericardiocentesis.
- Effect of fluid therapy, anaesthetics and other systemic agents on the cardiovascular system.
- Cardiopulmonary resuscitation.
- Other cardiovascular therapies, for example:
 1. treatment of bacterial endocarditis
 2. treatment of septic pericarditis
 3. treatment of aortic thromboembolism
 4. treatment of systemic hypertension etc.