# Postgraduate Diploma
## Complementary Tests in Clinical Cardiology of Small Animals

tech global university

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# Postgraduate Diploma
## Complementary Tests in Clinical Cardiology of Small Animals

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-complementary-tests-clinical-cardiology-small-animals

# Index

01

# Introduction

This program in Complementary Tests in Clinical Cardiology of Small Animals is governed by the criteria of Statistical Scientific Medicine (called by the Anglo-Saxons Evidence Based Medicine) where rigorous and scientific knowledge derived from biomedical, clinical and epidemiological research is transferred to the patients we see on a daily basis in the daily practice, taking into account the benefits, costs of diagnostic tests, treatment guidelines, prognosis and the circumstances of each patient with their possible concomitant diseases and personal and cultural preferences of the owner.

The teachers contribute their specialized and advanced knowledge based on experience and rigorous scientific criteria. All the modules are accompanied by abundant iconography, with photos and videos by the authors, which are intended to illustrate, in a very practical, rigorous and useful way, the handling of the different complementary tests for diagnosing cardiovascular diseases in small animals.

*This training is the best option you can find to specialize in veterinary cardiology and make more accurate diagnoses"*

Cardiology of Small Animals is a subspecialty of Internal Medicine with a great development in the last decades. The teachers of this Postgraduate Diploma are at the forefront of the latest diagnostic techniques and treatment of cardiovascular diseases in small animals. Thanks to their specialized training, they have developed a useful, practical program adapted to the current reality, a reality that is becoming more and more demanding.

This comprehensive program compiles the different cardiovascular diseases affecting small animals. It starts with a solid development of the basics of cardiovascular physiology, pathophysiology and pharmacology, so often forgotten and so important and useful in daily clinical practice, followed by the optimization of clinical examination and diagnostic tests, and ending with the latest therapeutic protocols and patient monitoring procedures.

This training specializes the general practitioner in an area that is increasingly in demand, partly because of its frequency, partly because of the need for specialization that this area demands.

In all the modules, a gradual exposition of knowledge at the physiological and pathophysiological level has been established, a development of the protocols for approaching patients with cardiovascular diseases with diagnostic and treatment algorithms, as well as the monitoring that should be done in these patients, since many of these diseases are chronic. It compiles the author's experience, without forgetting scientific rigor and the most important updates based on evidence. Develops the diseases, the action protocols and takes into account the patient's integral approach, considering the disease, the patient and the owner in the line of evidence-based medicine.

All topics incorporate numerous multimedia material: photos, videos and diagrams, so important in a specialty where imaging techniques are of great importance. Finally, as it is an online Postgraduate Diploma, the students are not conditioned by fixed schedules, nor do they need to move to another physical location. All of the content can be accessed at any time of the day, so you can balance your working or personal life with your academic life.

This **Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals** contains the most complete and up-to-date educational program on the market. The most important features of the program include:

- The development of case studies presented by experts in Complementary Tests in Clinical Cardiology of Small Animals.
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- New Developments in Complementary Tests in Clinical Cardiology of Small Animals.
- Practical exercises where the self-assessment process can be carried out to improve learning
- Special emphasis on innovative methodologies in Complementary Tests in Clinical Cardiology of Small Animals.
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- Content that is accessible from any fixed or portable device with an Internet connection

*Don't miss the opportunity to take this program with TECH. It's the perfect opportunity to advance your career and stand out in an industry with high demand for professionals"*

*This Postgraduate Diploma is the best investment you can make in selecting a refresher program to update your veterinary knowledge in cardiology"*

*This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*This 100% online Specialist Diploma will allow you to combine your studies with your professional work while increasing your knowledge in this field.*

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic program. For this purpose, the professional will be assisted by an innovative interactive video system developed by renowned and experienced experts in Complementary Tests in Clinical Cardiology of Small Animals.

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# Objectives

The Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals is aimed at facilitating the performance of the professional dedicated to Veterinary Medicine with the latest advances and newest treatments in the sector.

*Learn about the latest advances in the field from the comfort of your home, thanks to the online mode on which this program is based"*

## General Objectives

- Establish the physical basis of radiology in a clear, precise and applicable manner.
- Determine the radiographic technique to be used for the performance of correct thoracic radiographs.
- Analyze the radiological findings of a normal thoracic radiograph.
- Examine the radiological signs of the main diseases affecting the thoracic cavity.
- Analyze sonographic signs in non-cardiac diseases affecting the thoracic cavity.
- Develop and systematize a routine for the acquisition of high-quality electrocardiographic tracings.
- Firmly consolidate knowledge of the characteristics of physiological electrical activity and identify those variations that are in the range of normality.
- Delve into the electrophysiological mechanisms that cause arrhythmias.
- Identify patients requiring therapeutic intervention.
- Analyze the physical principles of ultrasound, which are the basis of imaging in echocardiography.
- Establish the protocol for performing echocardiography and analyze in detail all the parameters that can be obtained through echocardiography.
- Examine in depth the information provided by echocardiography in the hemodynamic assessment of patients.
- Present advanced echocardiographic techniques and new advances in the field of echocardiography.

## Specific Objectives

### Module 1. Complementary Tests Diagnostic Imaging

- Develop the physical fundamentals of Radiology
- Determine the radiographic technique for the assessment of the thoracic cavity
- Analyze the normal radiological findings of the thoracic cavity of small animals
- Establish the main errors in the radiological technique and their implication in the diagnosis
- Determine the radiological findings in thoracic diseases affecting extrathoracic structures, mediastinum, esophagus and trachea
- Generate specialized knowledge about normal ultrasound findings and non-cardiac diseases of the thoracic cavity

### Module 2. Complementary Tests Electrocardiogram

- Generate specialized knowledge on tools for the unambiguous identification of P-waves
- Develop a systematic method for understanding the electrical activity illustrated by the ECG tracing
- Establish the characteristics that allow discerning the etiology of the arrhythmia
- Establish criteria to define the anatomical origin of the arrhythmia
- Specify the criteria defining the malignancy of an arrhythmia
- Clearly define patients who require a Holter study
- Develop advanced techniques in the range of therapeutic possibilities

### Module 3. Complementary Tests Echocardiography

- Establish the basic principles of image formation in echocardiography
- Identify the main artifacts that may appear during the echocardiographic technique
- Determine patient preparation and positioning guidelines for echocardiography
- Determine the common echocardiographic slices and develop the information that can be obtained from them in the M-mode and two-dimensional modes
- Review Doppler measurements and assessment and highlight its importance in hemodynamic assessment
- Develop in depth hemodynamic assessment in terms of systolic, diastolic, spectral and color Doppler function
- Determine the use of thoracic ultrasound in other diseases that may be a consequence of cardiac disease
- Develop expertise in the performance and assessment of echocardiography in small mammals

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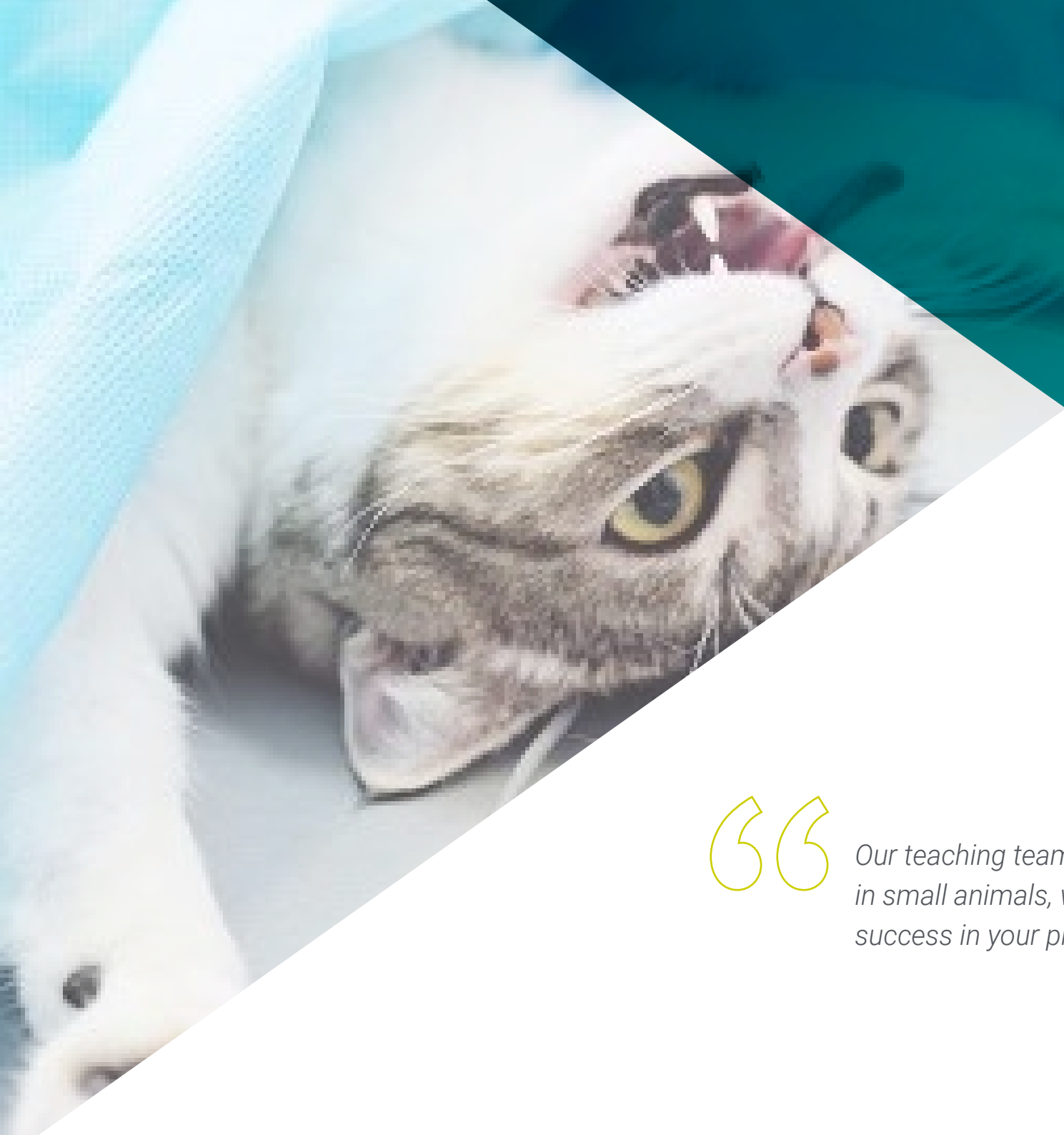
# Course Management

The program includes in its teaching staff leading experts in Complementary Tests in Clinical Cardiology of Small Animals who bring to this training the experience of their work. They are world-renowned veterinarians from different countries with proven theoretical and practical professional experience.



*Our teaching team, experts in cardiology in small animals, will help you achieve success in your profession"*

## Management

### Dr. Martínez Delgado, Rubén

- Since 2017, he has headed the Cardiology service at the Estoril Veterinary Hospital, Móstoles.
- Collaborates with the Veterinary Hospital of the UCM developing the part of minimally invasive interventional cardiology.
- From 2010 to the present, he has been working as an ambulatory Cardiologist in many centers in Madrid and surrounding areas.
- Graduated in Veterinary Medicine in 2008 from the Complutense University of Madrid (UCM).
- Internships in Surgery (2006) and in Cardiology (2007-2008) at UCM.
- 2008 collaboration project in minimally invasive interventional cardiology in the cardiology service of the UCM.
- From 2009 to 2010 he completed the Intership of the official internship of the European College of Internal Medicine (ECVIM) at the Gran Sasso Veterinary Clinic in Milan (a reference center in cardiology and ultrasound diagnosis and a center specialized in interventional cardiology).
- He is a member of AVEPA and GECAR and a regular attendee of congresses in the specialty of Cardiology and Diagnostic Imaging. He has also presented several lectures on electrocardiography and echocardiography.

## Professors

### Dr. Cortés Sánchez, Pablo M

- Externship in Cardiology at the University of Glasgow, as a result of which he began a Master's Degree in Veterinary Medicine (MVM), which he is currently pursuing.
- Head of the Cardiology service and co-director of the Intensive Care Unit (ICU) of the Estoril Veterinary Hospital, Móstoles, Madrid (2007 to 2017).
- Head of Cardiology service and part of the ICU team at Braid Vets, Edinburgh UK (January 2018 to July 2019).
- Graduated in veterinary medicine from the Complutense University of Madrid (UCM) in 2007, including a year of scholarship studies at the University of Southern Indiana (USA).
- Internships in Internal Medicine (2006) and Cardiology at UCM (2007).
- Master's Degree in Cardiology for generalists by ISVPS (International School of Veterinary Postgraduate Studies) in 2011.
- Master's Degree in Veterinary Medicine (MVM) at present
- Internship in Cardiology at the University of Liverpool (2017), with completion of a research project in mitral disease pending publication.
- Speaker in cardiology, radiology, intensive care and anesthesia, sponsored by prestigious firms, both in Spain and in the UK
- Member of GECAR (Cardiology and Respiratory System Specialists Group), and certified in echocardiography by this institution, for which he is currently developing the official echocardiographic screening guidelines for congenital heart disease.
- Registered member of the Royal College of Veterinary Surgeons (RCVS), UK, which has certified him as an Advanced Veterinary Practitioner.

### Dr. Gómez Trujillo, Blanca

- Head of the Cardiology Service of the Madrid Este Veterinary Hospital.
- Veterinarian, member of the Cardiology and Echocardiography Service of the VETSIA Veterinary Hospital.
- Veterinary Degree. Complutense University of Madrid
- General Certificate in Small Animal Medicine. ISVPS
- Postgraduate course in Small Animal Internal Medicine. Improve International. Madrid
- Small Animal Cardiology Course. FORVET. Madrid
- Course of Echocardiography in Small Animals. FORVET. Madrid

### Dr. Ortiz Díez, Gustavo

- PhD and Undergraduate Degree in Veterinary Medicine from the UCM
- Master's Degree in Research Methodology in Health Sciences from the UAB
- Specialist in Traumatology and Orthopedic Surgery in Companion Animals by the UCM. Degree in Small Animal Cardiology from the UCM
- Member of the scientific committee and current president of GECIRA (AVEPA's Soft Tissue Surgery Specialty Group)
- Associate Professor, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, Complutense University of Madrid.
- Head of Small Animal Unit at Complutense Clinical Veterinary Hospital.

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# Structure and Content

The structure of the content has been designed by the best professionals in the Complementary Tests in Clinical Cardiology of Small Animals sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary medicine.

*This Postgraduate Diploma contains the most complete and up-to-date scientific program on the market"*

## **Module 1.** Complementary Tests Diagnostic Imaging

1.1. Principles of Radiology
- 1.1.1. Physical Fundamentals of X-ray Production
- 1.1.2. X-ray Machine
- 1.1.3. Selection of mAs and KV
- 1.1.4. Types of Radiology

1.2. Radiographic Technique in Thoracic Radiology
- 1.2.1. Radiographic Technique
- 1.2.2. Positioning

1.3. Thoracic Radiography I
- 1.3.1. Assessment of a Thoracic Radiography
- 1.3.2. Diseases of Extrathoracic Structures

1.4. Thoracic Radiology II
- 1.4.1. Tracheal Diseases
- 1.4.2. Mediastinal Diseases

1.5. Thoracic Radiology III
- 1.5.1. Diseases of the Pleura
- 1.5.2. Diseases of the Esophagus

1.6. Cardiac Silhouette I
- 1.6.1. Assessment of Normal Cardiac Silhouette
- 1.6.2. Size
- 1.6.3. Topography

1.7. Cardiac Silhouette II
- 1.7.1. Diseases Affecting the Heart
- 1.7.2. Imported

1.8. Pulmonary Parenchyma I
- 1.8.1. Assessment of Normal Lung Parenchyma
- 1.8.2. Pulmonary Patterns I

1.9. Pulmonary Parenchyma II
- 1.9.1. Pulmonary Patterns II
- 1.9.2. Radiologic Findings in Pulmonary Parenchymal Diseases

1.10. Other Tests
- 1.10.1. Pulmonary Ultrasound
- 1.10.2. Bubble Study

## **Module 2.** Complementary Tests Electrocardiogram

2.1. Anatomy of the Conduction System and Action Potentials
- 2.1.1. Sinus Node and Supraventricular Conduction Pathways
- 2.1.2. Atrioventricular Node and Ventricular Conduction Pathways
- 2.1.3. Action Potential
  - 2.1.3.1. Pacemaker Cells
  - 2.1.3.2. Contractile Cells

2.2. Obtaining a High-Quality Electrocardiographic Tracing
- 2.2.1. Limb Led System
- 2.2.2. Precordial Lead System
- 2.2.2. Artifact Reduction

2.3. Sinus Rhythm
- 2.3.1. Typical Electrocardiographic Characteristics of Sinus Rhythm
- 2.3.2. Respiratory Sinus Arrhythmia
- 2.3.3. Non-respiratory Sinus Arrhythmia
- 2.3.4. Wandering Pacemaker
- 2.3.5. Sinus Tachycardia
- 2.3.6. Sinus Bradycardia
- 2.3.7. Intraventricular Conduction Blocks

2.4. Electrophysiological Mechanisms Causing Arrhythmias
- 2.4.1. Stimulus Formation Disorders
  - 2.4.1.1. Altered Normal Automatism
  - 2.4.1.2. Abnormal Automatism
  - 2.4.1.3. Triggered Activity: Late Postpotentials
  - 2.4.1.4. Triggered Activity: Early Postpotentials
- 2.4.2. Impulse Conduction Disorders
  - 2.4.2.1. Anatomical Re-entry
  - 2.4.2.2. Functional Re-entry

2.5. Supraventricular Arrhythmias I
- 2.5.1. Atrial Premature Complexes
- 2.5.2. Paroxysmal Supraventricular Tachycardia
- 2.5.3. Atrioventricular Junctional Tachycardia
- 2.5.4. Accessory Conduction Routes

2.6. Supraventricular Arrhythmias II: Atrial Fibrillation
- 2.6.1. Anatomical and Functional Substrate
- 2.6.2. Hemodynamic Consequences
- 2.6.3. Treatment for Frequency Control
- 2.6.4. Treatment for Rythm Control

2.7. Ventricular Arrhythmias
- 2.7.1. Ventricular Premature Complexes
- 2.7.2. Monomorphic Ventricular Tachycardia
- 2.7.3. Polymorphic Ventricular Tachycardia
- 2.7.4. Idioventricular Rhythm

2.8. Bradyarrhythmias
- 2.8.1. Sick Sinus Disease
- 2.8.2. Atrioventricular Block
- 2.8.3. Atrial Silence

2.9. Holter
- 2.9.1. Holter Monitoring Indications
- 2.9.2. Equipment
- 2.9.3. Interpretation

2.10. Advanced Treatment Techniques
- 2.10.1. Pacemaker Implantation
- 2.10.2. Radiofrequency Ablation

## **Module 3.** Complementary Tests Echocardiography

3.1. Introduction Ultrasound and Equipment
- 3.1.1. Ultrasound Physics
- 3.1.2. Equipment and Transducers
- 3.1.3. Doppler
- 3.1.4. Artefacts

3.2. Echocardiographic Examination
- 3.2.1. Patient Preparation and Positioning
- 3.2.2. 2D Two-dimensional Echocardiography
  - 3.2.2.1. Echocardiographic Slicing
  - 3.2.2.2. Two-dimensional Image Controls
- 3.2.3. M-Mode
- 3.2.4. Spectral Doppler
- 3.2.5. Color Doppler
- 3.2.6. Tissue Doppler

3.3. Measurements and Assessment of 2D and M-mode Images
- 3.3.1. General aspects
- 3.3.2. Left Ventricle and Mitral Valve
- 3.3.3. Left Atrium
- 3.3.4. Aorta
- 3.3.5. Right Ventricle and Tricuspid Valve
- 3.3.6. Right Atrium and Vena Cavas
- 3.3.7. Pulmonary Trunk and Arteries
- 3.3.8. Pericardium

3.4. Doppler Measurements and Assessment
- 3.4.1. General aspects
  - 3.4.1.1. Alignment
  - 3.4.1.2. Laminar and Turbulent Flow
  - 3.4.1.3. Hemodynamic Information
- 3.4.2. Spectral Doppler: Aortic and Pulmonary Flow
- 3.4.3. Spectral Doppler: Mitral and Tricuspid Flow
- 3.4.4. Spectral Doppler: Flow of the Pulmonary and Left Atrial Veins
- 3.4.5. Colour Doppler Assessment
- 3.4.6. Tissue Doppler Measurement and Assessment

3.5. Advanced Echocardiography
- 3.5.1. Tissue Doppler-Derived Techniques
- 3.5.2. Transesophageal Echocardiogram
- 3.5.3. 3D Echocardiography

3.6. Hemodynamic Assessment I
- 3.6.1. Left Ventricular Systolic Function
  - 3.6.1.1. M-Mode Analysis
  - 3.6.1.2. Two-Dimensional Analysis
  - 3.6.1.3. Spectral Doppler Analysis
  - 3.6.1.4. Tissue Doppler Analysis

3.7. Hemodynamic Assessment II
- 3.7.1. Left Ventricular Diastolic Function
  - 3.7.1.1. Types of Diastolic Dysfunction
- 3.7.2. Left Ventricular Filling Pressures
- 3.7.3. Right Ventricular Function
  - 3.7.3.1. Radial Systolic Function
  - 3.7.3.2. Longitudinal Systolic Function
  - 3.7.3.3. Tissue Doppler

3.8. Hemodynamic Assessment III
- 3.8.1. Spectral Doppler
  - 3.8.1.1. Pressure Gradients
  - 3.8.1.2. *Pressure Half Time*
  - 3.8.1.3. Regurgitation Volume and Fraction
  - 3.8.1.4. *Shunt* Quota
- 3.8.2. M-Mode
  - 3.9.2.1. Aorta
  - 3.9.2.2. Mitral
  - 3.9.2.3. Septum
  - 3.9.2.4. Left Ventricular Free Wall

3.9. Hemodynamic Assessment IV
- 3.9.1. Color Doppler
  - 3.9.1.1. Jet Size
  - 3.9.1.2. PISA
  - 3.9.1.3. Contracted Vein
- 3.9.2. Assessment of Mitral Regurgitation
- 3.9.3. Assessment of Tricuspid Regurgitation
- 3.9.4. Assessment of Aortic Regurgitation
- 3.9.5. Assessment of Pulmonary Regurgitation

3.10. Thoracic Ultrasound Scan
- 3.10.1. Thoracic Ultrasound Scan
  - 3.10.1.1. Spills
  - 3.10.1.2. Masses
  - 3.10.1.3. Pulmonary Parenchyma
- 3.10.2. Echocardiography in Exotic Animals
  - 3.10.2.1. Rabbits
  - 3.10.2.2. Ferrets
  - 3.10.2.3. Rodents
- 3.10.3. Others

*Achieve professional success with this high-level training provided by prestigious professionals with extensive experience in the sector"*

05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

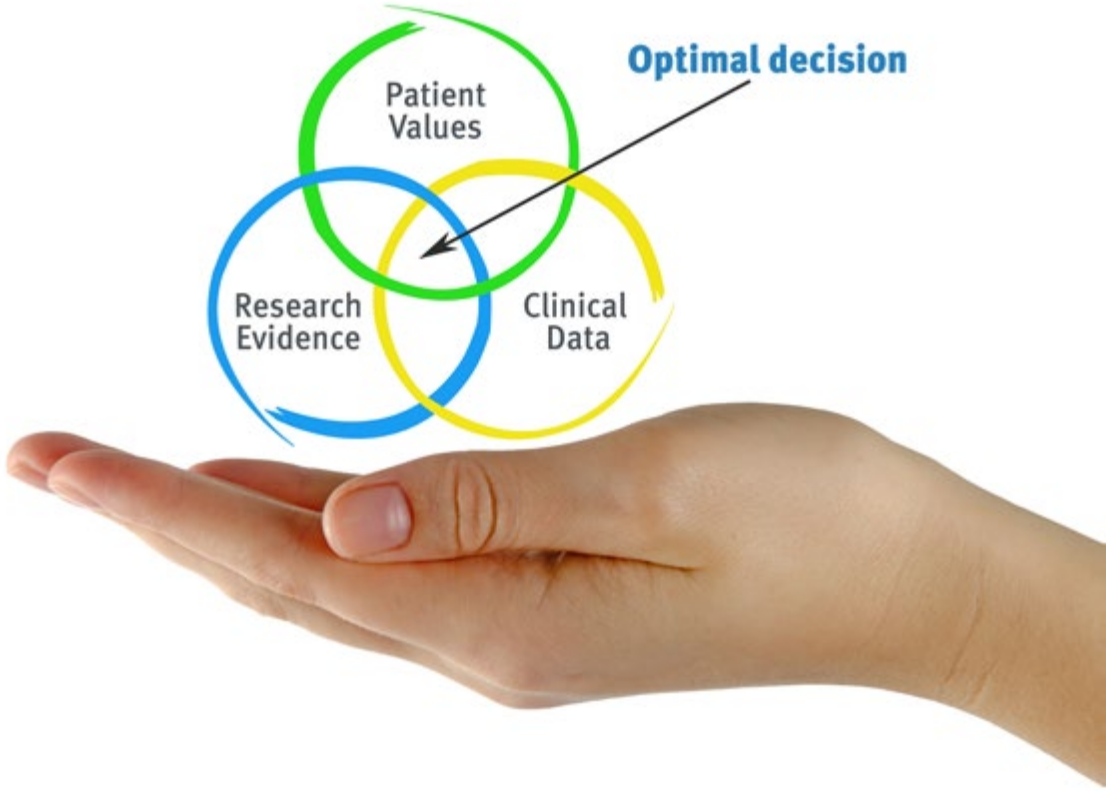
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.*




According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"*

**The effectiveness of the method is justified by four fundamental achievements:**

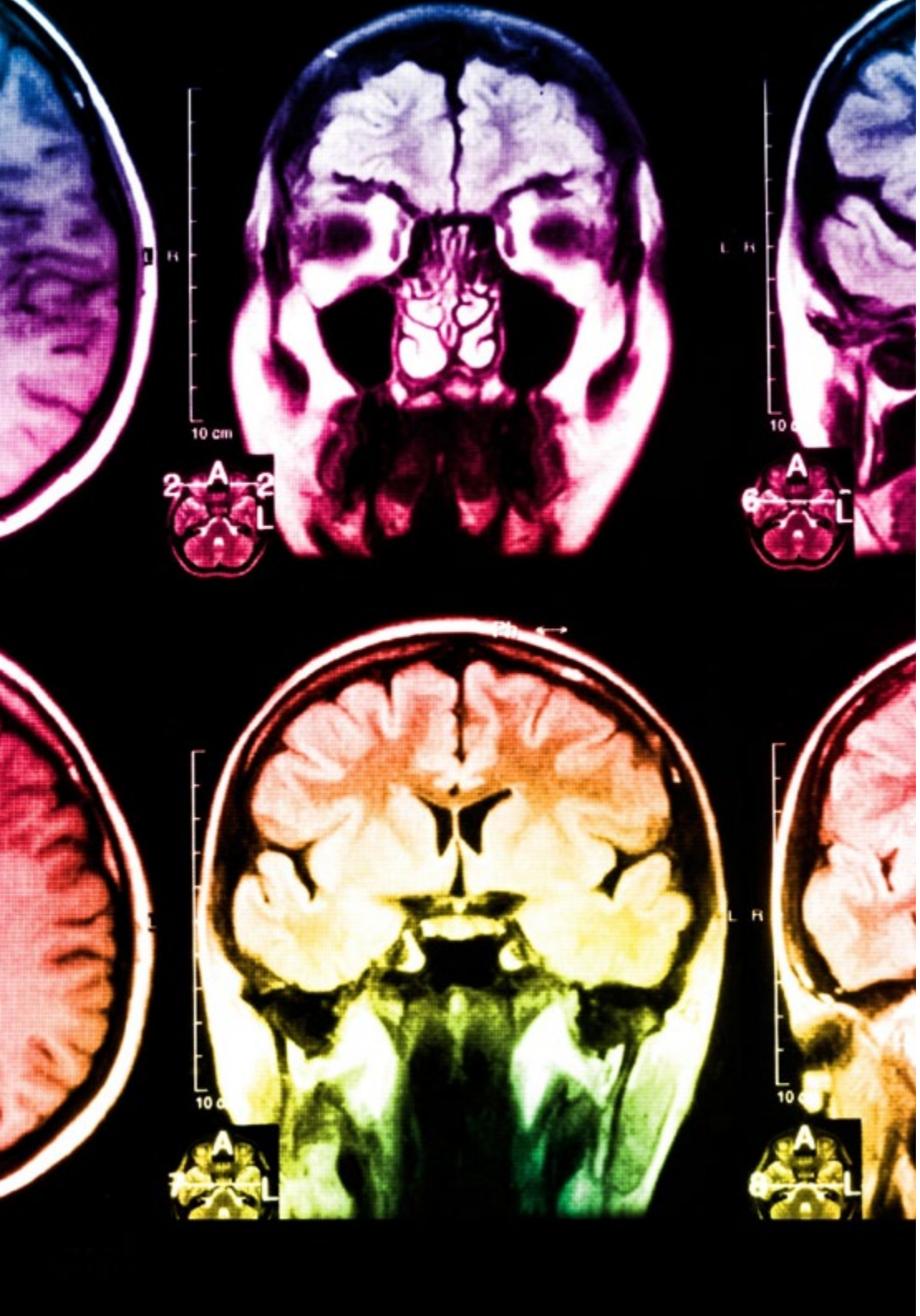
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

*Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

**This program offers the best educational material, prepared with professionals in mind:**

### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

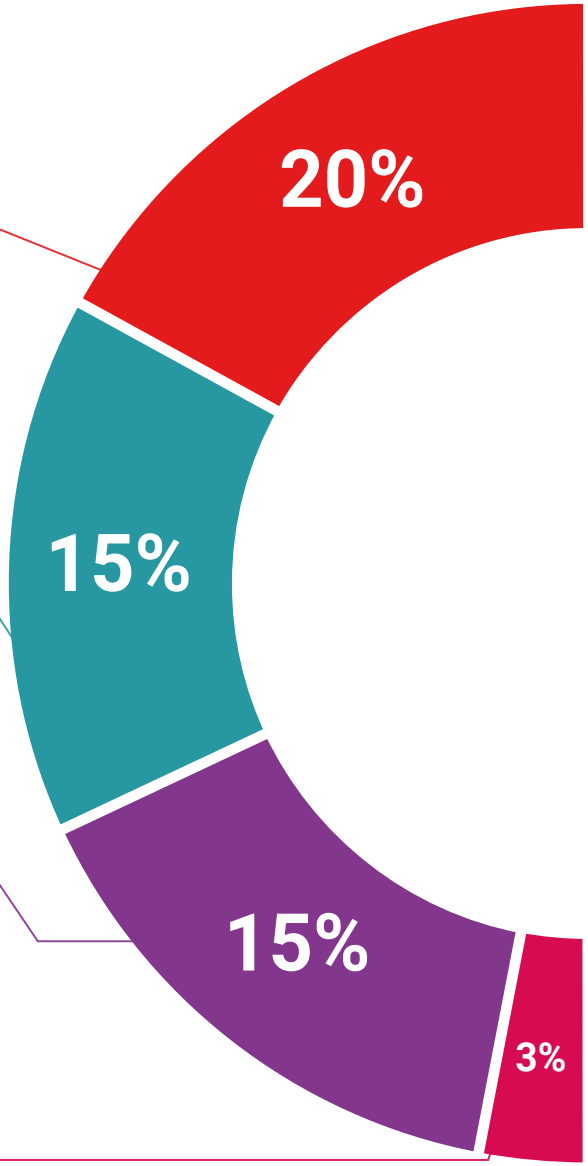
### Interactive Summaries

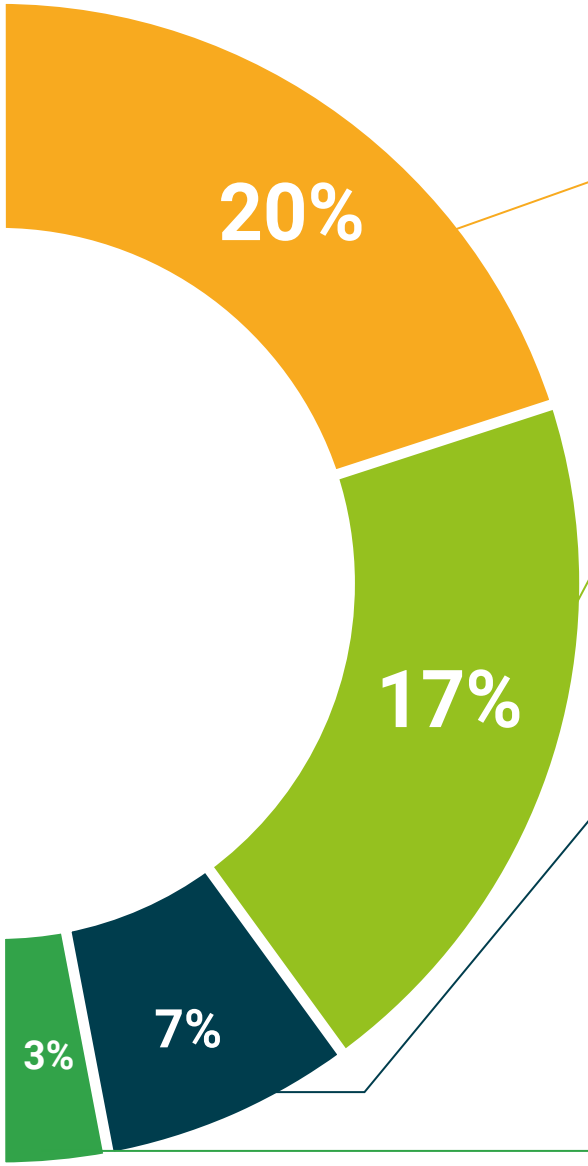
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.






### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

06

# Certificate

The Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"*

This program will allow you to obtain your **Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

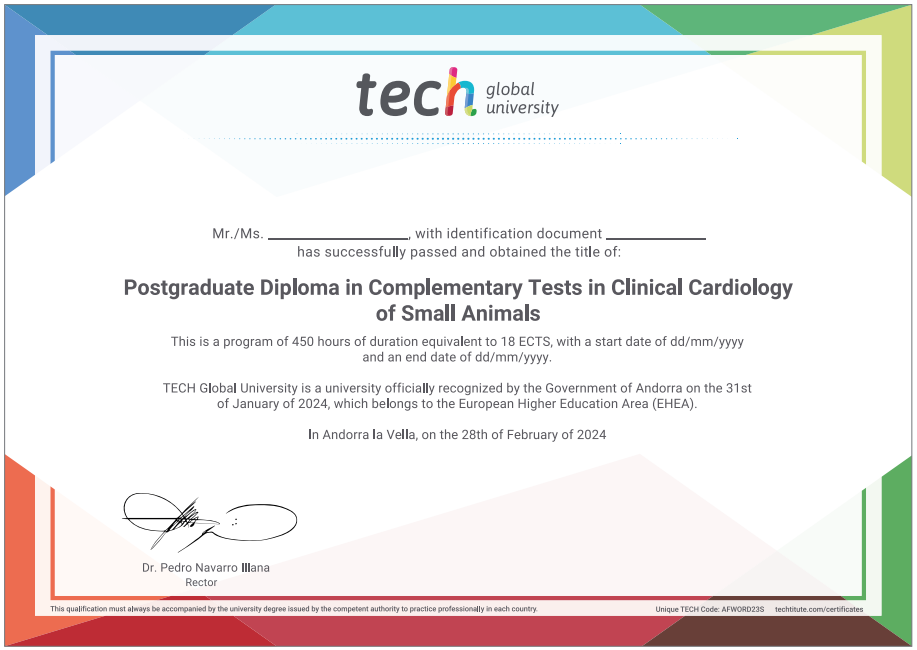
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

**Postgraduate Diploma in Complementary Tests in Clinical Cardiology of Small Animals**

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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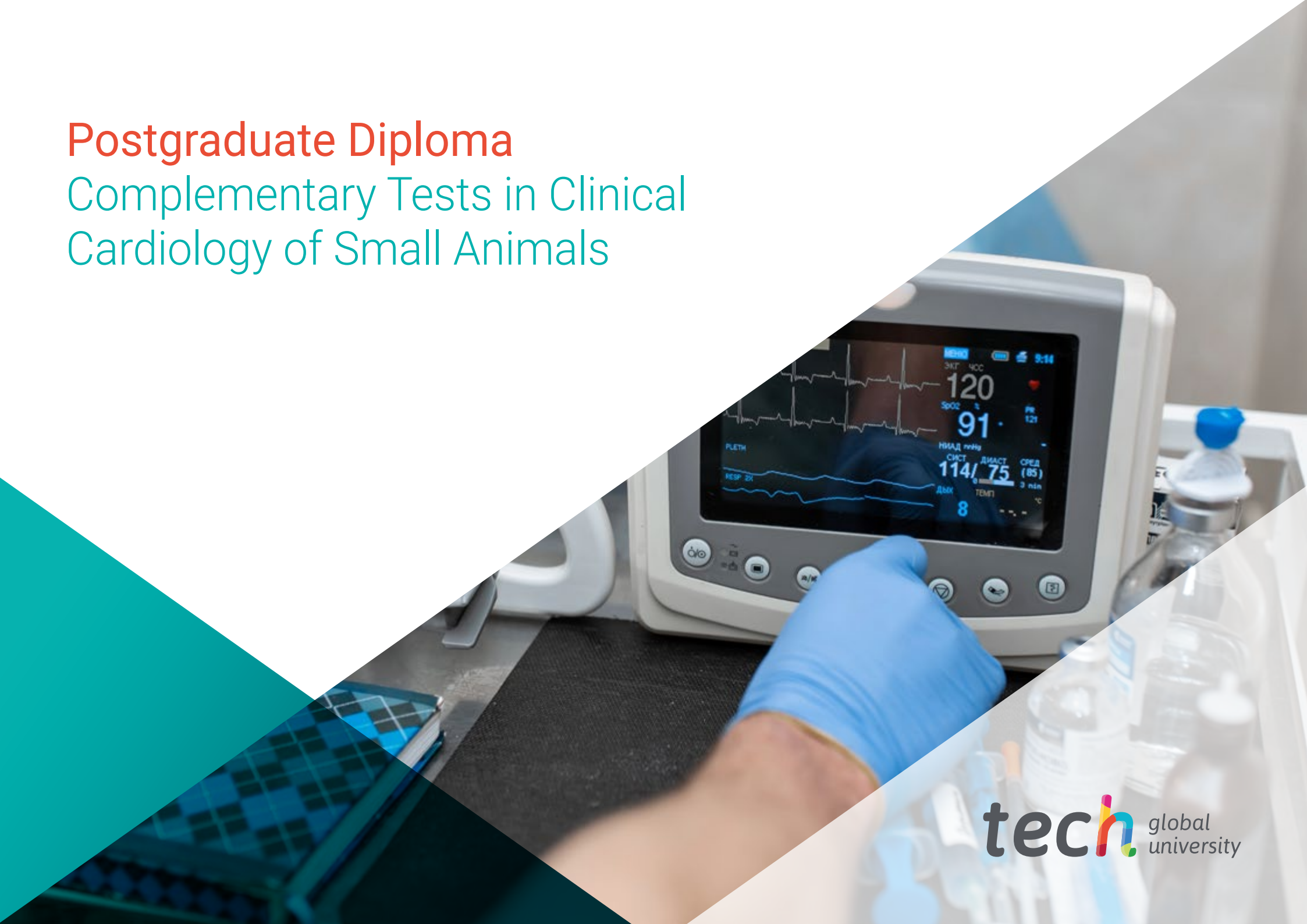
# Postgraduate Diploma
## Complementary Tests in Clinical Cardiology of Small Animals

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

# Postgraduate Diploma
## Complementary Tests in Clinical Cardiology of Small Animals

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