

# Postgraduate Certificate

## Advances in Antivirals





## Postgraduate Certificate Advances in Antivirals

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 5 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/advances-antivirals](http://www.techtute.com/us/medicine/postgraduate-certificate/advances-antivirals)

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# 01 Introduction

Virtually everyone has been affected, at least once in their lives, by a virus, since it is one of the agents that cause the most infections around the world. For this reason, it is important for the healthcare professional to be in constant training in order to improve his or her knowledge in this area. In this Postgraduate Certificate in Advances in Antivirals, the specialist will be able to learn about the latest developments to combat the main viruses that affect humans.





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*Don't miss this opportunity to catch up on advances in the treatment of infections caused by viruses to incorporate them into your daily medical practice"*

The transmission of the different types of viruses can take place through different causes: from physical contact, mosquito bites or sexual intercourse, for example. Therefore, it is necessary to take precautions to avoid any contagion. Even so, viruses affect practically the entire population, so it is necessary to take measures for both prevention and treatment of the diseases that may originate and which are especially virulent in countries with fewer university resources.

Among the viruses that most affect humans are respiratory viruses, varicella zoster, hepatitis, herpes and the HIV virus.

In order to control or eradicate the effects of the different viruses, it is necessary to know the main advances in antivirals. Therefore, after completing this Postgraduate Certificate, the student will have advanced knowledge in the field that will help him/her to treat his/her patients.

In this way, the training program focuses on the main treatments for the viruses that are currently most widespread throughout the world. The official statistics show the need for further research in this area. Thus, according to the World Health Organization (WHO), only in the case of sexually transmitted infections, one million people are infected every day worldwide; while it is estimated that more than 500 million people are carriers of the virus that causes genital herpes type 2.

These data invite medical professionals to continue increasing their knowledge through training courses such as this one, which are given by leading professionals in the field and who contribute their knowledge to continue improving the quality of healthcare.

This **Postgraduate Certificate in Advances in Antivirals** contains the most complete and up-to-date scientific program on the market. The most outstanding features of the University Course are:

- ♦ The development of more than 75 case studies presented by experts in Advances in Antivirals. 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.
- ♦ The latest news on Advances in Antivirals.
- ♦ The content of practical exercises where the self-evaluation process can be carried out to improve learning.
- ♦ Special emphasis is placed on innovative methodologies in Advances in Antivirals.
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- ♦ Content that is accessible from any fixed or portable device with an Internet connection.



*A unique, key, and decisive training experience to boost your professional development”*

“

*Train with the most updated methodology and content on the market and increase your capabilities to excel in the development of your profession”*

Its teaching staff includes professionals belonging to the field of antivirals, who bring to this training the experience of their work, in addition to recognized specialists belonging to reference societies and prestigious universities. 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 program to train in real situations. The design of this program is based on problem-based learning, by means of which the professional must try to solve the different professional practice situations that arise throughout the course. For this purpose, the professional will be assisted by an innovative interactive video system developed by recognized experts in the field of Antivirals Advances and with great experience.

*Increase your visibility, excellence and professional development by updating your knowledge through this Postgraduate Certificate*

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



# 02 Objectives

The main goal of the Postgraduate Certificate is to improve health professionals, based on the acquisition of the most updated and innovative scientific knowledge in the field of Antivirals Advances that will allow them to develop skills for the correct and rational use of these drugs, making their daily clinical practice a bastion of the standards of the best scientific evidence available, with a critical, innovative, multidisciplinary and integrative sense.



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*This refresher program will provide you with the skills to act safely in the performance of medical practice, which will help you grow personally and professionally"*



## General Objective

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- Guarantee the professional improvement, through the currentness, novelty and depth of the best scientific evidence on Antivirals for the correct use of these drugs and the adequate treatment of infectious diseases with a multidisciplinary and integrative approach that facilitates the control of these pathologies.

*Update your knowledge  
through the Advances  
in Antivirals program.*





## Specific Objectives

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- Provide students with advanced, in-depth, up-to-date, and multidisciplinary information that allows them to comprehensively approach the health-infectious disease process, the use of antibiotics, and antibiotic resistance.
- Assess and interpret the epidemiological sanitary characteristics and conditions of countries that are conducive to the emergence and development of antibiotic resistance.
- Explain the complex interrelationships between the host, the microorganism, and the antibiotic to be used.
- Address the most important elements among the resistance mechanisms of superbugs and other germs in a general sense.
- Emphasize the role of immunity and new alternatives for the treatment of infections.
- Delve into the treatment of the most significant infectious diseases with the latest advances in scientific medical knowledge.
- Emphasize the development of future antibiotics and other therapeutic modalities for infectious diseases.
- Emphasize the future challenges of infectious diseases in decreasing infectious diseases morbidity and mortality and antimicrobial treatment.

03

# Course Management

Renowned and recognized medical specialists with numerous publications, teaching experience, and professional experience in many countries, where many of the diseases studied have a high morbimortality, participate in the teaching program. The teaching staff is made up of a multidisciplinary team from various medical specialties, as internal medicine, pediatrics, general surgery, gynecology and obstetrics, microbiology, pathological anatomy and pharmacology, among others.





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*Learn about , the latest advances  
in Antibiotic Therapy and Antibiotic  
Resistance from leading professionals”*

## Management



### Dr. Quintero Casanova, Jesús

- ♦ Degree in Medicine and Surgery from the Medical University of Havana. Cuba.
- ♦ Specialist in Internal Medicine. "Héroes del Baire" Hospital.
- ♦ Professional Master's Degree in Tropical Diseases and Clinical Infectious Diseases from the Pedro Kuori Institute, Havana. Cuba.
- ♦ Head of the Department of Infectious Diseases of the Héroes del Baire Hospital.
- ♦ Member of the Cuban Society of Internal Medicine.
- ♦ Member of the Cuban Society of Teachers.
- ♦ Medical specialist in Africa (Chad) and Venezuela in (2009, 2013-15).
- ♦ Professor on the Medicine Degree and Internal Medicine Specialty at the Faculty of Medical Sciences of Isla de la Juventud.
- ♦ Professor in the Master's Degree in Infectious Diseases Professional Master's Degree at the Faculty of Medical Sciences of Isla de la Juventud.
- ♦ Member of state examining boards for the medicine degree and internal medicine.
- ♦ National Research Award in Cuba, 2002.
- ♦ Medical Science Teaching Award. Cuba.

## Professors

### Dr. Valle Vargas, Mariano

- ◆ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ◆ Specialist in Internal Medicine. "Héroes del Baire" Hospital.
- ◆ Master's Degree in Health Biostatistics.
- ◆ Diploma in Epidemiology.
- ◆ Head of the Internal Medicine Department of the Héroes del Baire Hospital.
- ◆ Member of the Cuban Society of Internal Medicine.
- ◆ Member of the Cuban Society of Teachers.
- ◆ Medical specialist in Venezuela in 2009, 2007-10.
- ◆ Professor on the Medicine Degree and Internal Medicine Specialty at the Faculty of Medical Sciences of Isla de la Juventud.
- ◆ Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud.
- ◆ Member of state examining boards for the medicine degree and internal medicine.
- ◆ Member of tribunals for national scientific events. Cuba
- ◆ Medical Science Teaching Award. Cuba.

### Dr. Dranguet Bouly, José Ismael

- ◆ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ◆ Specialist in Internal Medicine and Intensive Therapy. "Héroes del Baire" Hospital.
- ◆ Master's Degree in Infectious Diseases from the Pedro Kouri Institute of Cuba.
- ◆ Head of the Internal Medicine Department of the Héroes del Baire Hospital.
- ◆ Member of the Cuban Society of Internal medicine and the Cuban Society of Intensive Therapy.
- ◆ Member of the Cuban Society of Teachers.
- ◆ Medical specialist in Mozambique, 2008-10.
- ◆ Professor on the Medicine Degree and Internal Medicine Specialty at the Faculty of Medical Sciences of Isla de la Juventud.
- ◆ Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud.
- ◆ Member of state examining boards for the medicine degree and internal medicine.
- ◆ Member of tribunals for national scientific events. Cuba
- ◆ Medical Science Teaching Award. Cuba.
- ◆ Professor at the Catholic University of Santiago de Guayaquil Ecuador, 2018.

**Dr. Cantalapiedra Torres, Alejandro**

- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ♦ Pediatrician. "Héroes del Baire" Hospital.
- ♦ Master's Degree in Infectious Diseases.
- ♦ Diploma in Medical Teaching.
- ♦ Diploma in Health Management.
- ♦ Member of the Cuban Society of Pediatrics.
- ♦ Professor in the Medicine Degree and Pediatrics Specialty in the Faculty of Medical Sciences in Isla de la Juventud.
- ♦ Member of tribunals for national scientific events. Cuba.
- ♦ Medical Specialist in Haiti in 2000-01
- ♦ Medical Specialist in Antigua and Barbuda in 2008.

**Lic. Laurence Carmenaty, Arelis**

- ♦ Lic. In Microbiology from the University of Havana.
- ♦ Master's Degree in Infectious Diseases.
- ♦ Professor on the Medicine Degree in the Faculty of Medical Sciences in Isla de la Juventud
- ♦ Member of the Cuban Society of Microbiology.
- ♦ Member of the Associations of Teachers.
- ♦ Worked in Caracas, Venezuela from 2012 to 2014
- ♦ Participated in national and international Microbiology events in Cuba and Venezuela.

**Dr. Dávila, Henry Luis**

- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ♦ Specialist in Gynecology and Obstetrics at Héroes del Baire Hospital. Cuba.
- ♦ Professional Master's Degree in Comprehensive Care for Women.
- ♦ Head of the Neck Pathology Service at Héroes del Baire Hospital.
- ♦ Member of the Cuban Society of Gynecology and Obstetrics.
- ♦ Member of the Cuban Society of Teachers.
- ♦ Medical specialist in Guatemala, 2010-12.
- ♦ Professor on the Medicine Degree in the Faculty of Medical Sciences in Isla de la Juventud.
- ♦ Member of state examining boards medicine.
- ♦ Member of tribunals for national scientific events. Cuba
- ♦ National research award. Cuba
- ♦ Medical Science Teaching Award. Cuba.

**Dr. Jiménez Valdés, Erlivan**

- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ♦ Pediatrician. "Héroes del Baire" Hospital.
- ♦ Master's Degree in comprehensive childcare.
- ♦ Member of the Cuban Society of Pediatrics.
- ♦ Professor in the Medicine Degree and Pediatrics Specialty in the Faculty of Medical Sciences in Isla de la Juventud.
- ♦ Member of tribunals for national scientific events. Cuba.
- ♦ Medical specialist in Venezuela in 2017.





**Dr. Batista Valladares, Adrián**

- ◆ Degree in Medicine and Surgery from the University of Havana. Cuba.
- ◆ Specialist in Family and Community Medicine.
- ◆ Master's Degree in Clinical Infectology.
- ◆ Diploma in Diagnostic Ultrasound.
- ◆ Diploma in Healthcare Management.
- ◆ Head of Senior Citizen Services in Isla de la Juventud. Cuba.
- ◆ Member of the Cuban Society of Family Medicine.
- ◆ Professor of the medicine and family medicine degrees at the Faculty of Medical Sciences in Isla de la Juventud.
- ◆ Professor of the Professional Master's Degree in Infectious Diseases in the Faculty of Medical Sciences in Isla de la Juventud.
- ◆ Member of state examining boards for the medicine degree and family medicine.
- ◆ Member of tribunals for national scientific events. Cuba

**Lic. González Fiallo, Sayli**

- ◆ Degree in Hygiene and Epidemiology
- ◆ Master's Degree in Epidemiology
- ◆ Professor of the Faculty of Medical Sciences in Isla de la Juventud
- ◆ Director of the Health Analysis, Biostatistics, and Surveillance Unit of the Municipal Health Directorate. Isla de la Juventud.

04

# Structure and Content

The teaching program has been designed by a group of professors and medical professionals from various medical specialties, with extensive medical, research and teaching experience in several countries in Europe, Africa, Central and South America, interested in integrating the latest and most current scientific knowledge of antivirals to ensure training and professional development to improve the daily clinical practice of professionals who care for patients or populations with infectious diseases.



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*Improve yourself professionally  
with this program developed by  
leading professionals in the field"*

## Module 1. Antivirals

- 1.1. General Features of Antivirals
  - 1.1.1. Classification
  - 1.1.2. Main Indications of Antivirals
- 1.2. Mechanisms of action
  - 1.2.1. Mechanisms of Action of Antivirals
- 1.3. Antivirals for Hepatitis: New Recommendations and Future Research Projections
  - 1.3.1. Specific Viral Hepatitis
  - 1.3.2. Hepatitis B Treatment
  - 1.3.3. Hepatitis C Treatment
- 1.4. Antivirals for Respiratory Infections: Current Scientific Evidence
  - 1.4.1. Main Respiratory Viruses
  - 1.4.2. Influenza Treatment
  - 1.4.3. Other Respiratory System Virus Treatments
- 1.5. Antivirals for Herpes Viruses: Recent Changes in Management
  - 1.5.1. Main Herpes Virus Infections
  - 1.5.2. Herpes Simplex Infection Treatment
  - 1.5.3. Treatment of Varicella Zoster Virus Infections
- 1.6. Antiretrovirals for HIV: Certainties and Controversies. Future Challenges
  - 1.6.1. Classification of Antiretrovirals
  - 1.6.2. Mechanisms of Action of Antiretrovirals
  - 1.6.3. Antiretroviral Treatment of HIV Infection
  - 1.6.4. Adverse Reactions
  - 1.6.5. Antiretroviral Treatment Failure





- 1.7. Topical Antivirals
  - 1.7.1. Main Viral Infections of the Skin and Mucous Membranes
  - 1.7.2. Topical Antivirals
- 1.8. Update on Interferons: Their Use in Viral and Non-Infectious Diseases.
  - 1.8.1. Classification and Action of Interferons
  - 1.8.2. Uses of Interferons
  - 1.8.3. Adverse Reactions of Interferons
- 1.9. New Areas of Antiviral Development
  - 1.9.1. Antibiotics in Viral Hemorrhagic Diseases
  - 1.9.2. Future Prospects for Antiviral Chemotherapy

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*A unique, key, and decisive training experience to boost your professional development”*

# 05 Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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.



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*Discover Re-learning, 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

In a given situation, what would you do? 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 abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in professional medical practice.



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*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. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on 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. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.



*The physician will learn through real cases and by solving 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

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

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



In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Latest Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### Interactive Summaries

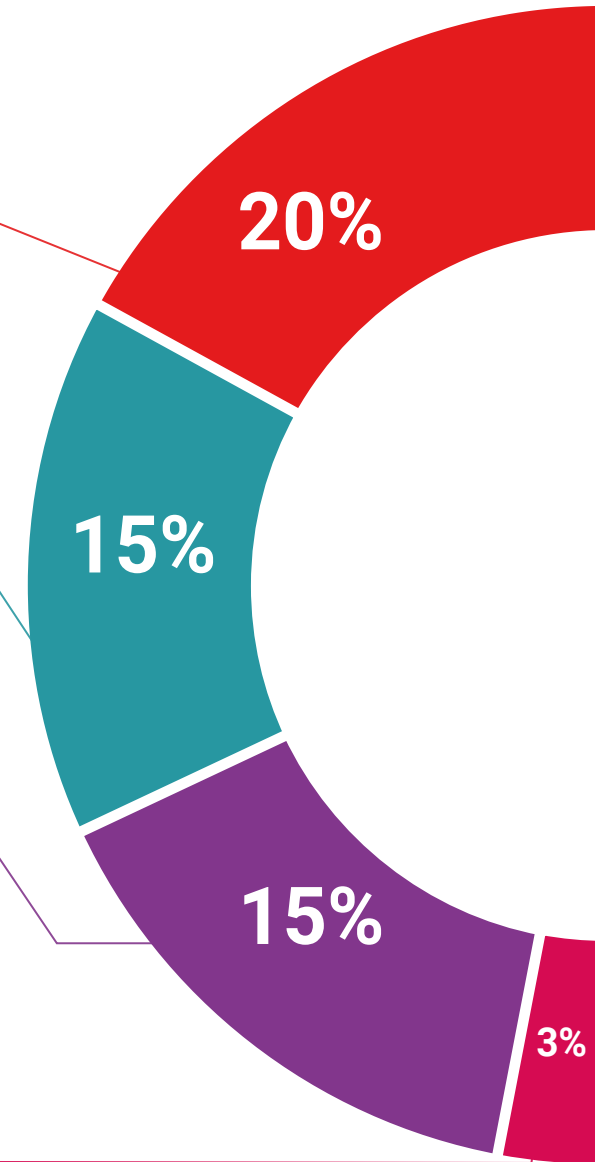
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

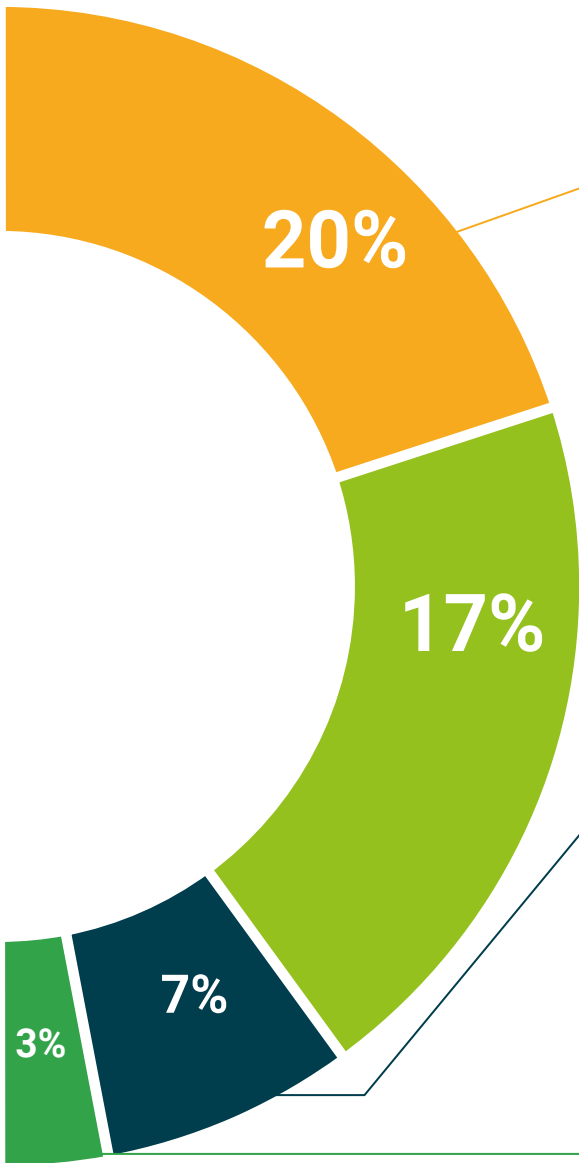
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



06

# Certificate

This Postgraduate Certificate in Advances in Antibiotic guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.





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*Successfully complete this training and receive your certificate without travel or cumbersome paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Advances in Antivirals** 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.

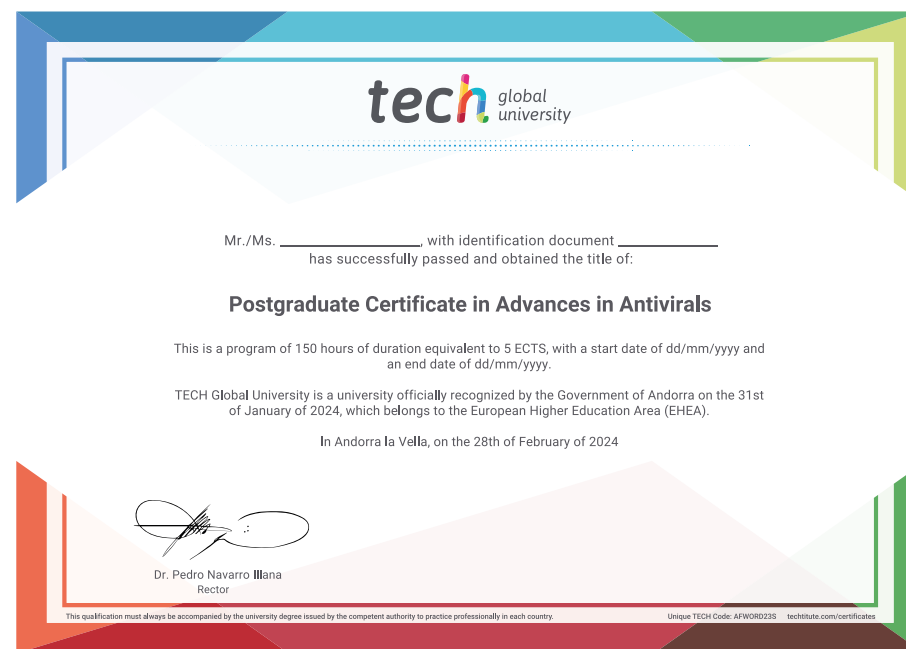
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Advances in Antivirals**

Modality: **online**

Duration: **6 weeks**

Accreditation: **5 ECTS**



\*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.



health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development languages  
virtual classroom



## Postgraduate Certificate Advances in Antivirals

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 5 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate

## Advances in Antivirals

