

# Postgraduate Certificate

## Advances in Antivirals



## Postgraduate Certificate Advances in Antivirals

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

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

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

---

*p. 30*

01

# Introduction

HIV is perhaps the best known viral infection with a high impact on the population. Since the first cases in the U.S., an estimated 78 million people have been affected. Since then, drugs have been developed to help fight this infection and, although it cannot be cured, attempts are being made to mitigate its side effects on the body. For all these reasons, it is important that pharmacists continue their academic training to develop new antivirals for this and other respiratory infections. Thus, this program will provide them with the appropriate tools to achieve this purpose.





“

*Antivirals help to mitigate the symptoms caused by viruses in the human body”.*

This Postgraduate Certificate will address, from an empirical perspective, the general elements of antivirals and the latest advances in this area. To this end, we will begin by presenting their classification and the main indications to be considered for their consumption. On the other hand, it is important for students to know the mechanism of action of these drugs, since they are not intended to cure a disease, but to help the body mitigate the effects of viruses in the body.

We will then proceed to evaluate, one by one, the usefulness and recommendations of antivirals for various infections, including hepatitis, respiratory infections, herpes and HIV. The latter has had a major impact on the world's population, affecting an estimated 70 million people since the early years of infection.

On the other hand, the current criteria for the use of interferons, glycoproteins with high antiviral activity that are produced by the body and help in the defense against viruses, will be taken into account. In summary, this program is designed to enhance students' empirical knowledge and help them access new career opportunities in the field of antivirals.

This **Postgraduate Certificate in Advances in Antivirals** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ The development of case studies presented by experts focused on advances in antibiotic therapy and antibiotic resistance.
- ♦ 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.
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Access to content from any fixed or portable device with an Internet connection.



*Enroll now in the program and contribute to the development of new antivirals for the treatment of HIV".*

“

*Much research has demonstrated the efficacy of antivirals in fighting viruses. Be part of one of them by completing this program".*

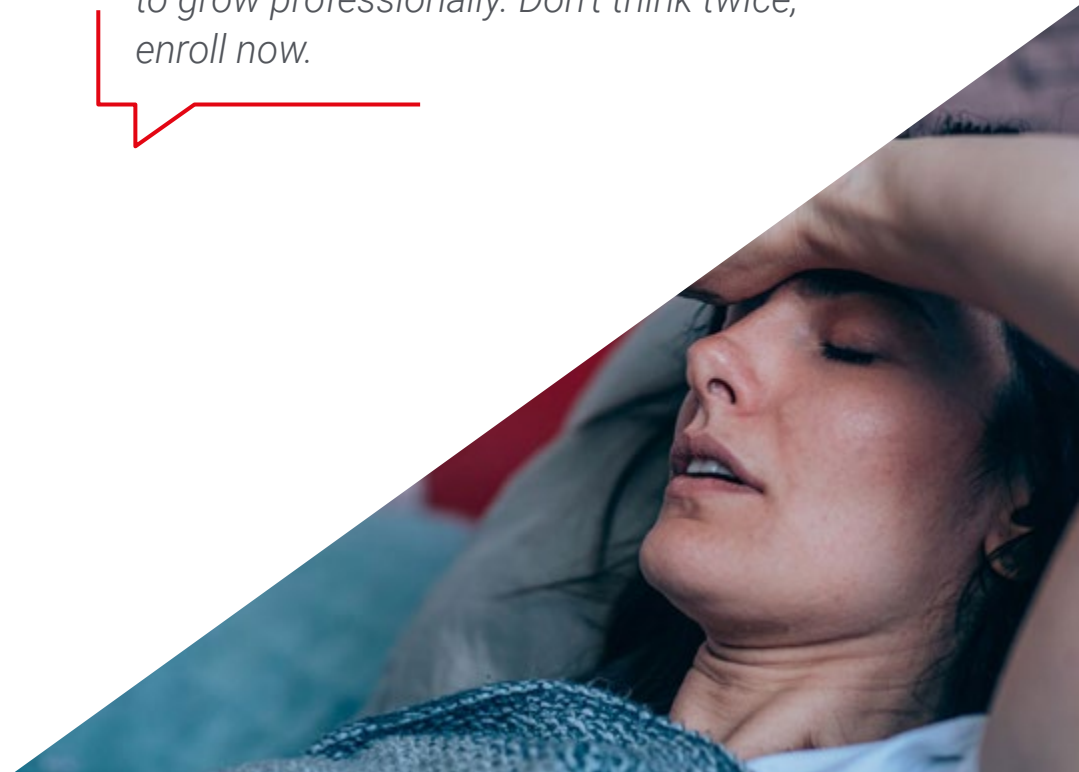
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 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 year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Specialize in the development of antivirals and get that international opportunity you have been waiting for.*

*This degree is what you were looking for to grow professionally. Don't think twice, enroll now.*

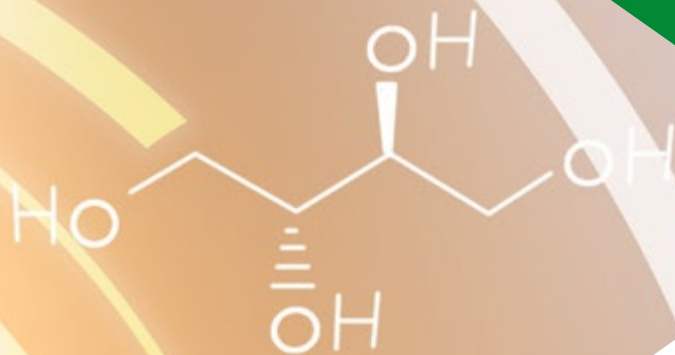


# 02 Objectives

The main goal of this Postgraduate Certificate is to provide students with the opportunity to learn about the general elements of antivirals, starting with their classification and mechanisms of action. In this way, they will learn about the use of these drugs in patients with hepatitis, respiratory infections and HIV, one of the most known infections worldwide. Therefore, they will be able to participate in the research of new drugs.







“

*You can achieve your goals by enrolling in this Postgraduate Certificate”.*



## General Objectives

---

- ♦ Guarantee professional improvement by constantly delving deeper and updating what we know.
- ♦ Know the scientific evidence on antibiotic therapy and antimicrobial resistance.
- ♦ Establish the correct use of drugs and the proper treatment of infectious diseases.
- ♦ Use a multidisciplinary and integrative approach to facilitate the control of these pathologies.





## Specific Objectives

---

- ♦ Identify the general elements of antivirals, classifying them for study
- ♦ Know the antivirals used for liver diseases, recommendations and future projections in research
- ♦ Analyze treatments using antivirals for respiratory infections
- ♦ Review future challenges and controversies in the use of antiretrovirals for HIV

“

*Changes the course of research and develops new, more effective antivirals with low antibiotic resistance ”*

03

# Course Management

Due to the importance of the development of new antivirals for the scientific community, the following program has a specialized faculty in this field. All have worked and played an important role in organizations dedicated to researching viral diseases in various countries. Therefore, his knowledge and experience are valuable to pharmacists interested in this field.





“

*The teaching team of this Postgraduate Certificate is qualified to boost your career”.*

## 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 Infectious Diseases Department of the Héroes del Baire Hospital
- ♦ Member of the Cuban Society of Internal Medicine
- ♦ Member of the Cuban Society of Paediatricians
- ♦ Medical specialist in Africa (TChad) and Venezuela
- ♦ Professor on the Medicine Degree and Internal Medicine Speciality at the Faculty of Medical Sciences of Isla de la Juventud
- ♦ Main professor of the Professional Master's Degree in infectious diseases of the Faculty of Medical Sciences of the Isle of Youth.
- ♦ Member of state examining boards for the medicine degree and internal medicine
- ♦ National Research Award in Cuba
- ♦ Medical Science Teaching Award. Cuba

## Professors

### Dr. Valle Vargas, Mariano

- ♦ 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 Paediatricians
- ♦ Medical specialist in Venezuela
- ♦ Professor on the Medicine Degree and Internal Medicine Speciality 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
- ♦ 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
- ♦ Medical Science Teaching Award. Cuba

### Dr. Cantalapiedra Torres, Alejandro

- ♦ 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
- ♦ Medical specialist in Antigua and Barbuda year 2008
- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba
- ♦ Pediatrician. "Héroes del Baire" Hospital
- ♦ Master's Degree in infectious diseases
- ♦ Certificate in Medical Teaching
- ♦ Certificate in Health Management

### Dr. Laurence Garmenaty, Araelis

- ♦ 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 Association of Pedagogues
- ♦ Degree in Microbiology University of Havana
- ♦ Master's Degree in infectious diseases
- ♦ She has participated in national and international microbiology events in Cuba and Venezuela.

**Dr. Dranguet Bouly, José Ismael**

- ♦ 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 Paediatricians
- ♦ Medical specialist in Mozambique
- ♦ Professor on the Medicine Degree and Internal Medicine Speciality 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
- ♦ Professor at the Catholic University of Santiago de Guayaquil, Ecuador.
- ♦ 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
- ♦ Medical Science Teaching Award. Cuba

**Dr. González Fiallo, Sayli**

- ♦ 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. Isle of Youth
- ♦ Degree in Hygiene and Epidemiology
- ♦ Master's Degree in Epidemiology

**Dr. Dávila, Henry Luis**

- ♦ Member of the Cuban Society of Gynecology and Obstetrics
- ♦ Member of the Cuban Society of Paediatricians
- ♦ Medical specialist in Guatemala
- ♦ Professor on the Medicine Degree in the Faculty of Medical Sciences in Isla de la Juventud
- ♦ Member of state examination boards in the field of medicine
- ♦ Member of tribunals for national scientific events. Cuba
- ♦ National research award. Cuba
- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba
- ♦ Specialist in Gynecology and Obstetrics at Héroes del Baire Hospital. Cuba
- ♦ Master's Degree in comprehensive care for women
- ♦ Head of the Neck Pathology Service at Héroes del Baire Hospital
- ♦ Medical Science Teaching Award. Cuba

**Dr. Jiménez Valdés, Erlivan**

- ♦ 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
- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba
- ♦ Pediatrician. "Héroes del Baire" Hospital
- ♦ Master's Degree in comprehensive childcare

**Dr. Batista Valladares, Adrián**





- ♦ Head of Senior Citizen Services in Isla de la Juventud. Cuba
- ♦ Member of the Cuban Society of Family Medicine
- ♦ Professor of the career of medicine and specialty of family medicine at the Isle of Youth Faculty of Medical Sciences.
- ♦ 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 specialty of family medicine
- ♦ Member of tribunals for national scientific events. Cuba
- ♦ Degree in Medicine and Surgery from the University of Havana. Cuba
- ♦ Specialist in Family and Community Medicine
- ♦ Master's Degree in Clinical Infectology
- ♦ Certificate in Diagnostic Ultrasound
- ♦ Diploma in healthcare management

# 04

## Structure and Content

The program of the Postgraduate Certificate in Advances in Antivirals will provide a new theoretical perspective to pharmacists interested in this area. In this way, they will learn about the impact of these drugs in combating respiratory infections, herpes viruses and HIV, a disease that affects more than 30 million people worldwide. For all these reasons, it is important to have professionals trained to study and develop new antivirals.





“

*The contents of the program have been designed to make you an antiviral expert in just six weeks.”*

## 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

“*The contents of the program have been designed to make you an antiviral expert in just six weeks.*”



05

# Methodology

This training 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.





*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 clinical 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. Pharmacists learn better, more quickly 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, attempting to recreate the actual conditions in a pharmacist'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. Pharmacists who follow this method not only achieve the assimilation of concepts, but also develop their mental capacity through exercises to evaluate real situations and apply 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.

*Pharmacists 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 115,000 pharmacists with unprecedented success, in all clinical specialties. Our pedagogical methodology is developed in a highly demanding environment, with a university student body with a high socioeconomic profile and an average age of 43.5 years old.

*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 created specifically for the course by specialist pharmacists who will be teaching the course, so that the didactic development is highly specific and accurate.

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.



### Video Techniques and Procedures

We bring you closer to the latest techniques, to the newest educational advances, to the forefront of current pharmaceutical care procedures. 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 Antivirals guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.





“

*Successfully complete this training and receive your university degree without travel or laborious 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: **6 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 confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present training  
development languages  
classroom



## Postgraduate Certificate Advances in Antivirals

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

# Postgraduate Certificate Advances in Antivirals

