**Postgraduate Certificate** Neoplastic and Paraneoplastic Pathology in Rheumatology



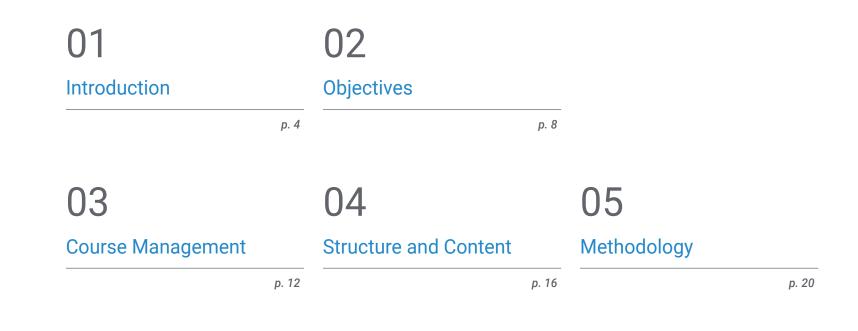


## **Postgraduate Certificate** Neoplastic and Paraneoplastic Pathology in Rheumatology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/neoplastic-paraneoplastic-pathology-rheumatology

## Index



р. 28

06

Certificate

# 01 Introduction

The diagnosis and treatment of diseases related to cancer and its manifestations in the musculoskeletal system is an area of medicine that requires specialized training, due to the increase in the incidence of cancer in the population and the complexity in the management of these pathologies. For this reason, TECH offers a unique opportunity for health professionals interested in deepening their knowledge in this field. A degree has been created that addresses topics such as the assessment and management of geriatric cancer patients, paraneoplastic syndromes and the rheumatic manifestation of chemotherapy treatments, among others. The program is 100% online and uses a Relearning pedagogical methodology, which focuses on active learning and collaboration among students.



Learn multidisciplinary management of joint and bone tumors, paraneoplastic syndromes, side effects of chemotherapy treatments and much more. Sign up now and take your career to the next level!"

## tech 06 | Introduction

Neoplastic and Paraneoplastic Pathology in Rheumatology is a field of medicine that has gained importance in recent years due to the increase in life expectancy of the population and the increase in the incidence of oncological diseases. This area deals with the diagnosis and treatment of tumor-related rheumatic diseases and the management of paraneoplastic syndromes.

It is essential for healthcare professionals to have up-to-date knowledge on advances in this sector, and for this reason TECH has developed a Postgraduate Certificate on the subject. Professionals working in oncology and rheumatology may face patients with tumors and related rheumatologic problems, and it is important that they have the appropriate skills and knowledge to provide comprehensive care.

The Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology covers a variety of topics, from the clinical evaluation of geriatric oncology patients to the management of pathologic bone fractures in oncology patients. The management of the different paraneoplastic syndromes and the rheumatic manifestations of chemotherapy and immunotherapy treatments are also addressed. The program offers a comprehensive and updated training in the management of Neoplastic and Paraneoplastic Pathology in Rheumatology.

The Postgraduate Certificate is taught entirely online, which provides flexibility in organizing academic resources and adapting to the individual needs of students. Relearning's pedagogical methodology, based on experiential learning, reflection and collaboration, allows for deep and meaningful learning. Students have access to a team of highly trained and experienced professionals in the field of Neoplastic and Paraneoplastic Pathology in Rheumatology, who will guide the learning process.

This **Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by health experts focused on Neoplastic and Paraneoplastic Pathology in Rheumatology
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- 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



Are you interested in learning about the latest trends in the treatment of paraneoplastic syndromes? Then don't miss the opportunity to take this Postgraduate Certificate"

### Introduction | 07 tech



This degree gives you the opportunity to learn from the best specialists in Neoplastic and Paraneoplastic Pathology, and acquire the necessary knowledge to excel in your career. Sign up today and take the first step to success!"

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

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts. Become an expert in Neoplastic and Paraneoplastic Pathology in Rheumatology and offer your patients the best possible care.

Do you want to differentiate yourself as a healthcare professional in the field of Neoplastic and Paraneoplastic Pathology in Rheumatology? Achieve your goal thanks to this academic program.

# 02 **Objectives**

The main objective of the Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology is to provide health care professionals with complete and updated training in the diagnosis and treatment of geriatric patients with cancer and rheumatic diseases. This program is delivered online, which allows students to access information from anywhere and at any time. During the degree, the peculiarities of the different oncological treatments, the management of paraneoplastic syndromes and the rheumatic manifestations of chemotherapy drugs and immunotherapy are studied in depth. Furthermore, the aim is to reinforce competencies to perform a clinical evaluation in Oncogeriatrics and to investigate the most frequent pathological fractures in oncogeriatric patients.

With this degree you will learn to manage the different rheumatic manifestations of chemotherapy drugs and immunotherapy"

## tech 10 | Objectives



### **General Objectives**

- Deepen in the processes of aging, its clinical, diagnostic and prognostic implications
- Investigate the specific biological and physiological determinants of geriatric patients
- Delve into the reasons why pathologies manifest themselves differently in geriatric patients, as well as the pharmacological characteristics that condition their treatments
- Update knowledge of the biopsychosocial determinants related to the aging process
- Promote comprehensive and holistic care in geriatric patients with rheumatic pathologies, whether measured by the immune system, bone metabolism, paraneoplastic or degenerative manifestations



## Objectives | 11 tech



### Specific objectives

- \* Reinforce competencies to perform a clinical assessment Oncogeriatrics
- Study in depth the peculiarities of the different oncological treatments in geriatric patients, as well as the optimal times of application
- Learn in depth and manage the different types of immunotherapeutic treatments available and under development, as well as their applications and indications in the geriatric population
- Deepen the management of different paraneoplastic syndromes
- Manage the different rheumatic manifestations of chemotherapeutic drugs and immunotherapy
- Investigate the most frequent pathological fractures in oncogeriatric patients



Update your knowledge in Neoplastic and Paraneoplastic Pathology in Rheumatology with this Postgraduate Certificate, taught by experts in the field"

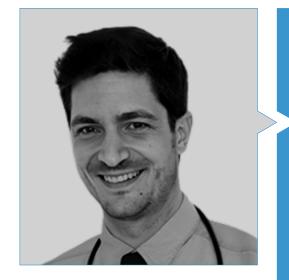
# 03 Course Management

In its commitment to provide high quality education, TECH's management in the Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology focuses on offering a comprehensive and updated training to students. For this purpose, a team of expert teachers in the field of oncology and rheumatology has been carefully selected to share their experience and knowledge with the students. In addition, it seeks to promote a multidisciplinary vision in the management of neoplastic and paraneoplastic pathology, including clinical, therapeutic and rehabilitation aspects.

TECH is thus committed to offering quality and rigorous training to train highly qualified professionals in this field of Neoplastic and Paraneoplastic Pathology in Rheumatology"

## tech 14 | Course Management

#### Management



#### Dr. Garcia Martir, Alvaro

- Rheumatology Specialist at the Tajo University Hospital
- Physician specializing in Rheumatology at the University Hospital 12 de Octubre
- Associate Professor of Rheumatology at the University Alfonso X, El Sabio
- Research Sufficiency by the Complutense University of Madrid
- Degree in Medicine from the Cantabria University
- Master's Degree in Rheumatic Diseases mediated by the Immune System, Rey Juan Carlos University and the Spanish Society of Rheumatology
- EFSUMB Certification: Musculoskeletal Ultrasound level 1
- Levels A and B of Musculoskeletal Ultrasound of the Spanish Society of Sports Medicine Levels A and B of Musculoskeletal Ultrasound of the Spanish Society of Sports Medicine

### Professors

#### Dr. Muñoz Sánchez-Miguel, César Gregorio

- Oncologist at the HM Sanchinarro University Hospital
- Physician at Tajo University Hospital
- Researcher in clinical trials of Advanced Gastric and Gastroesophageal cancer
- Specialist in Oncological Medicine at the 12 de Octubre University Hospital of Madrid
- Associate Professor of Medicine, San Pablo CEU University
- Degree in Medicine from the Autonomous University Madrid



# 04 Structure and Content

The Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology focuses on the clinical and therapeutic aspects of oncologic and paraneoplastic diseases affecting the musculoskeletal system and their complications. Students will learn through this 100% online degree, all about the initial assessment and treatment of geriatric oncology patients, diagnosis and management of paraneoplastic syndromes, joint and bone tumors, amyloidosis, side effects and immune-mediated effects of oncology treatments, oncology pain and pathological bone fractures in oncology patients. All this, based on a theoretical-practical methodology of the Relearning method.

Structure and Content | 17 tech

This degree will provide you with an effective update on the tools used to identify rheumatic manifestations of chemotherapy treatments"

## tech 18 | Structure and Content

#### Module 1. Neoplastic and Paraneoplastic Pathology

- 1.1. Oncogeriatrics
  - 1.1.1. Initial Assessment of Geriatric Oncology Patient
  - 1.1.2. Oncologic Treatments in Geriatric Patients
- 1.2. Paraneoplastic Syndromes
  - 1.2.1. Epidemiology, Etiology and Classification
  - 1.2.2. Prognosis and Differential Diagnosis of Paraneoplastic Syndromes
- 1.3. Management of Paraneoplastic Pathology
  - 1.3.1. Paraneoplastic Syndromes Treatment
  - 1.3.2. Paraneoplastic Syndromes Monitoring
- 1.4. Joint Tumors
  - 1.4.1. Epidemiology, Diagnosis and Classification
  - 1.4.2. Multidisciplinary Management
- 1.5. Primary and Metastatic Bone Tumors
  - 1.5.1. Epidemiology, Diagnosis and Classification
  - 1.5.2. Multidisciplinary Management
- 1.6. Amyloidosis
  - 1.6.1. Epidemiology and Types
  - 1.6.2. Amyloidosis AL: Treatment Management
- 1.7. Rheumatic Manifestations of Chemotherapeutic Treatments
  - 1.7.1. Dermatological Toxicities Secondary to Systemic Treatments
  - 1.7.2. Management Dermatological Toxicities Secondary to Systemic Treatments
- 1.8. Immune-Mediated Side Effects/Diseases in the Musculoskeletal System Secondary to Immunotherapy
  - 1.8.1. Side Effects to Checkpoint Inhibitors
  - 1.8.2. Cellular Immunotherapy Toxicity: Vectors, TILs, CAR-Tç Cells
- 1.9. Cancer Pain
  - 1.9.1. Incidence, Types, Classification
  - 1.9.2. Oncologic Pain Management
- 1.10. Pathologic Bone Fractures in Oncologic Patients
  - 1.10.1. Incidence, Causes
  - 1.10.2. Management of Pathologic Bone Fracture in Oncologic Patient



### Structure and Content | 19 tech



Learn how to perform a correct initial assessment of the geriatric oncology patient thanks to this 100% online degree granted by TECH"

# 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"

## tech 22 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately 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, trying to recreate the real conditions in the physician's professional practice.

66

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:

 Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.

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.
- 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.



## tech 24 | Methodology

### **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.

Professionals 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.



### Methodology | 25 tech

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 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning 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 (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.



## tech 26 | Methodology

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.

20%

15%

3%

15%

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.



#### **Surgical Techniques and Procedures on Video**

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical 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.

## Methodology | 27 tech



#### **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.

20%

7%

3%

17%



#### **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 on the usefulness of learning by observing experts. The system known as 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 Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

## tech 30 | Certificate

This **Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate,and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Neoplastic and Paraneoplastic Pathology in Rheumatology

Official Nº of hours: 150 h.



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

technological university Postgraduate Certificate Neoplastic and Paraneoplastic Pathology in Rheumatology » Modality: online » Duration: 6 weeks » Certificate: TECH Technological University » Dedication: 16h/week Schedule: at your own pace » » Exams: online

**Postgraduate Certificate** Neoplastic and Paraneoplastic Pathology in Rheumatology

