



Advances in the Diagnosis, Treatment and Monitoring of Urothelial Carcinoma

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 24 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-advances-diagnosis-treatment-monitoring-cancer

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06 Certificate







# tech 06 | Introduction

The evolution of scientific knowledge in the field of oncology in general, and urological oncology in particular, allows us to offer systemic treatments directed at the same time to specific therapeutic targets. This reality is, if possible, even more evident in the field of Uro-Oncology. As a result of this current situation, the specialties of Urology and Oncology have been coming together such that there are many fields in which the boundaries between the two are not defined, mainly because they no longer exist.

Modern medicine leads its professionals to an ever-increasing and demanding super-specialization, which translates into the well-known oncology or multidisciplinary committees. We are convinced that the present challenges and those in the immediate future in the field of Uro-Oncology require a specific specialization that is only partially covered by the separate specializations, requiring an Expert of these characteristics to cover a real and growing need in modern Medicine.

The existence now of new molecules in the treatment of prostate cancer opens up a completely new scenario for our patients. Any professional who wants to treat these patients properly, urgently needs to acquire new knowledge in an easy and effective way, as the advent of so much new information will unequivocally overwhelm us. Only those physicians adequately specialized in uro-oncology will have the capacity to properly care for their patients, thus enabling them to continue aboard this already unstoppable train.

The Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring of Urothelial Carcinoma contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical cases presented by experts in the different specialties. 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
- News on the Diagnosis, Treatment and Monitoring of Urothelial Carcinoma
- Algorithm-based interactive learning system for decision-making in the presented clinical situations
- With special emphasis on evidence-based medicine and research methodologies in Urologic Oncology
- All of this will be complemented by 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



Don't miss the opportunity to update your knowledge of the advances in the diagnosis and treatment of urothelial carcinoma to improve patient care"

# Introduction | 07 tech



This Postgraduate Diploma may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge of the diagnosis and treatment of urothelial carcinoma, you will obtain a Postgraduate Diploma from TECH Global University"

Forming part of the teaching staff is a group of professionals in the world of Urologic Oncology, who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

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.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of uro-oncology who also have extensive teaching experience.

Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring of Urothelial Carcinoma.

This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.









# tech 10 | Objectives



## **General objective**

- Provide students with the necessary tools to lead multidisciplinary uro-oncology groups.
- Explain the molecular basis of oncogenesis to be able to incorporate new molecules
  directed to specific targets already available, as well as to be able to collaborate on
  research projects and in clinical trials of new molecules that are about to arrive in the
  short and medium term.
- Describe current lines of research in urothelial carcinoma.
- Disseminate the most recent results (even if only partially published at the time) of the findings of clinical trials of new molecules to be presented in the near future.
- Explain the new diagnostic and therapeutic techniques in urothelial carcinoma.







### **Specific objectives**

- Describe the molecular biology of cancer in urologic oncology and specifically in the different urological tumors.
- Explain the prognostic factors related to the occurrence of urologic cancer.
- Explain the use of different tumor markers and their diagnostic implications in urooncology. Acquire in-depth knowledge of the future of tumor markers in urology.
- Describe the different paraneoplastic syndromes related to urologic oncologic pathology.
- Describe the basic principles of tumor genetics in urologic oncology.
- Describe the main oncologic emergencies in Urology and their possible management.
- List oncological principles in urology such as etiology, susceptibility, epidemiology, etc.
- · Describe the principles of oncologic surgery in urology.
- Explain the relationship and importance of the clinical trial in the urological oncology patient.
- Describe the supportive care of the oncologic patient in urology.
- Identify the functional genitourinary sequelae of oncological treatments in Urology: andrological and reconstructive surgery.
- Describe the application of Nuclear Medicine and Molecular Imaging in oncologic tumor pathology.
- Acquire a thorough understanding of the histology of urothelial carcinoma.
- Adequately stratify patients by risk groups.
- Acquire a broad knowledge of the most appropriate adjuvant treatment according to risk group.
- Describe indications and radical therapeutic options in non-musculoinvasive bladder tumors.
- Explain the proper methods for a correct staging of urothelial tumors.
- Define the role of the different therapeutic options depending on tumor stage.







### **International Guest Director**

Kai Tsao, M.D., is the Medical Director of the Ruttenberg Treatment Center at the Tisch Cancer Institute at Mount Sinai Hospital. His mission in this position is to lead the multidisciplinary treatment center to provide the highest quality of patient-centered care for those affected by cancer and blood disorders.

He is an Associate Professor of Medicine, Hematology and Medical Oncology at the Icahn School of Medicine at Mount Sinai and is on staff at the Tisch Cancer Institute at Mount Sinai Hospital and the Mount Sinai Queens Infusion Center.

Dr. Tsao is board certified in Internal Medicine, Hematology and Medical Oncology. He is actively involved in research on the development of new therapies in the treatment of genitourinary cancers. He has received several merit awards from the American Society of Clinical Oncology. His main objective is to define the clinical and molecular phenotype of prostate, kidney and bladder cancers, as well as new therapies in these disease states. He is principal investigator in several ongoing clinical trials and has authored more than 40 peer-reviewed publications.



# Dr. Tsao, Kai

- Medical Director Ruttenberg Treatment Center Tisch Cancer Institute Mount Sinai Hospital Mount Sinai New York
- Medical Director of the Ruttenberg Treatment Center
- Principal investigator in several clinical trials
- Participant in research on the development of new therapies for the treatment of genitourinary cancers
- Lecturer at the Mount Sinai Icahn School of Medicine
- Author of more than 40 scientific publications
- Recipient of several merit awards given by the American Society of Clinical Oncology
- Member of: American Society of Clinical Oncology, American Association for Cancer Research, American Society of Hematology



Thanks to TECH you will be able to learn with the best professionals in the world"





## tech 18 | Structure and Content

# **Module 1.** Update Oncological Principles, Functional Sequelae and Support Treatments of Patients with Urological Tumors

- 1.1. Molecular Biology of Cancer.
- 1.2. Prognostic Factors, Tumor Markers, and Paraneoplastic Syndromes in Urologic Oncologic Pathology.
- 1.3. Tumor Genetics.
- 1.4. Oncologic Emergencies in Urology.
- 1.5. Oncological Principles: Etiology, Susceptibility, and Epidemiology.
- 1.6. Principles of Urologic Surgical Oncology.
- 1.7. Clinical Trials in Urologic Oncology Patients.
- 1.8. Supportive Care of the Oncologic Patient in Urology.
- 1.9. Genitourinary Functional Sequelae of Oncologic Treatments in Urology.
  - 1.9.1. Surgical Andrology.
  - 1.9.2. Reconstructive Surgery.
- 1.10. Nuclear Medicine and Molecular Imaging in Oncologic Tumor Pathology.
  - 1.10.1. Scientific Evidence in Uro-oncology.
  - 1.10.2. New Tracers.

# **Module 2.** Advances in the Diagnosis, Treatment and Monitoring of Non-Muscle Invasive Bladder Carcinoma

- 2.1. Epidemiology and Etiopathogenesis.
- 2.2. Pathological Anatomy:
  - 2.2.1. TNM.
  - 2.2.2. WHO.
  - 2.2.3. Biopsies/Samples.
  - 2.2.4. Risk Factors.
  - 2.2.5. Other factors: T1a-a, Lymphovascular Invasion, Variants, Markers, etc.
  - 2.2.6. 2.6 CIS.
- 2.3. Diagnosis Part I.
  - 2.3.1. Clinical Presentation.
  - 2.3.2. Imaging Tests.
  - 2.3.3. Urine Cytology.
  - 2.3.4. Molecular Markers (Clinical Applications to Date).

- 2.4. Diagnosis Part II.
  - 2.4.1. Cystoscopy.
  - 2.4.2. Photodynamic Diagnosis.
  - 2.4.3. NBI.
  - 2.4.4. Second TURP.
- 2.5. Risk Groups.
  - 2.5.1. EORTC.
  - 2.5.2. Risk and Progression Charts; CUETO.
  - 2.5.3. CIS.
- 2.6. Adjuvant Treatment with Chemotherapy.
  - 2.6.1. Single Dose Post-TURP.
  - 2.6.2. Adjuvant.
  - 2.6.3. Options to Increase Efficiency.
- 2.7. Adjuvant Treatment with Chemotherapy.
  - 2.7.1. Advantages.
  - 2.7.2. Strains.
  - 2.7.3. Toxicity and Treatment.
  - 2.7.4. Dose.
  - 2.7.5. Treatment Plans.
- 2.8. Endovesical Alternatives.
  - 2.8.1. Doxorubicin.
  - 2.8.2. Epirubicin.
  - 2.8.3. Gemcitabine.
  - 2.8.4. Oncotiotepa.
- 2.9. Adjuvant Treatment of CIS.
- 2.10. Treatment Plans in the Event of Standard Treatment Failure.
  - 2.10.1. Definition of Failure.
  - 2.10.2. After Chemotherapy.
  - 2.10.3. After BCG.
- 2.11. Radical Cystectomy in Ca. Non-muscle Invasive Bladder:
  - 2.11.1. Fundamentals.
  - 2.11.2. Immediate vs. Early.
  - 2.11.3. After BCG Failure.
  - 2.11.4. Monitoring.

# **Module 3.** Advances in the Diagnosis, Treatment and Monitoring of Muscle Invasive Bladder Carcinoma

- 3.1. Pathological Anatomy.
  - 3.1.1. Lymph Node Affectation.
  - 3.1.2. Margins.
  - 3.1.3. Histological Variants.
  - 3.1.4. Muscle Invasion Pattern.
  - 3.1.5. Markers: p53, etc.
  - 3.1.6. TNM.
- 3.2. Urethral Involvement and Concomitant Prostate Cancer.
- 3.3. Staging.
  - 3.3.1. Local: MRI and CT.
  - 3.3.2. Lymph Node: MRI; CT; PET.
  - 3.3.3. TUS: UROTAC.
  - 3.3.4. Future: FDG-PET-CT; DCE-MRI; DWI-MRI.
- 3.4. Radiotherapy.
  - 3.4.1. Neoadjuvant.
  - 3.4.2. Palliative.
  - 3.4.3. Adjuvant.
- 3.5. Neoadjuvant Chemotherapy.
- 3.6. Radical Cystectomy.
  - 3.6.1. Risk Assessment.
  - 3.6.2. Delay Time.
  - 3.6.3. Lymphadenectomy: Extent and Number.
  - 3.6.4. Urinary Diversion.
  - 3.6.5. Perioperative complications.
  - 3.6.6. Palliative Cystectomy.
  - 3.6.7. Laparoscopic vs. Robotic Surgery.
- 3.7. Bladder Preservation Programs:
  - 3.7.1. RTU\_V.
  - 3.7.2. Radiotherapy.
  - 3.7.3. Chemotherapy.
  - 3 7 4 Multimodal Treatments

- 3.8. Neoadjuvant Chemotherapy.
- 3.9. Metastatic Cancer.
  - 3.9.1. Poor Prognosis Factors.
  - 3.9.2. Prognostic Groups/Adverse Factors.
  - 3.9.3. Definition of Cisplatin "Ineligible".
  - 3.9.4. Single-Agent Chemotherapy.
  - 3.9.5. Standard Patient Treatment Cisplatin "Eligible".
  - 3.9.6. Alternative/2nd Line Treatment of Cisplatin "Eligible" Patients.
  - 3.9.7. Treating "Ineligible" Patients.
  - 3.9.8. Treating Symptomatic Patients.
- 3.10. Monitoring:
  - 3.10.1. Treatment of Bone Metastases.
  - 3.10.2. Rescue Surgery.
  - 3.10.3. Urothelial Recurrence: Urethra and TUS.
- 3.11. Role of Immunotherapy.
- 3.12. Major Ongoing Clinical Trials.
- 3.13. Particularities of Other Histologies.







# 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.



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.
- 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.





### 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.

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.

## **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 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.









# tech 30 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring Urothelial Carcinoma** 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** private qualification 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 Advances in the Diagnosis, Treatment and Monitoring Modality: online

Duration: 6 months

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Accreditation: 24 ECTS



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

# Postgraduate Diploma in Advances in the Diagnosis, Treatment and Monitoring Urothelial Carcinoma

This is a private qualification of 720 hours of duration equivalent to 24 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



<sup>\*</sup>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 people information that technology community technology

# Postgraduate Diploma

Advances in the Diagnosis, Treatment and Monitoring of Urothelial Carcinoma

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

