

Postgraduate Certificate Blood Saving Strategies in the Preoperative Setting





Postgraduate Certificate Blood Saving Strategies in the Preoperative Setting

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/blood-saving-strategies-preoperative-setting

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01

Introduction

One of the independent risk causes of morbidity and mortality for the surgical patient is preoperative anemia, which is why it is necessary to implement adequate hospital circuits for its early detection prior to the scheduling of the operation and thus improve the erythrocyte mass without generating unnecessary delays in the scheduling of surgery, in addition to identifying other factors that may favor bleeding complications, such as anticoagulation and antiplatelet therapy. Therefore, this TECH program addresses strategies for preoperative blood saving, proceeding to good medical practice.



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Master Blood Saving Strategies in the Preoperative Setting with this TECH Postgraduate Certificate and boost your career opportunities”

Preoperative anemia is a known independent risk factor for morbidity and mortality in surgical patients. Therefore, it is necessary to implement hospital circuits for the early detection of anemia prior to the scheduling of surgery and thus apply early strategies to improve red blood cell mass without generating unnecessary delays in the scheduling of surgery, in addition to being able to identify other factors that may provoke bleeding complications, such as anticoagulation and antiplatelet therapy.

Thus, this Postgraduate Certificate in Blood Saving Strategies in the Preoperative Setting aims for the student to deepen in the recommended evaluation in the preoperative setting of the patient, in terms of treatments and pathologies of the patient that can increase bleeding complications in surgery.

Similarly, the program delves into strategies for increasing red blood cell mass, especially in patients who will undergo surgeries with a high risk of hemorrhage.

In addition, it is a 100% online Postgraduate Certificate, so the student has the ease of being able to take it comfortably, wherever and whenever he/she wants. All you need is a device with internet access to take your career one step further. A modality in line with the current times with all the guarantees to position the medical professional in a highly demanded field.

This **Postgraduate Certificate in Blood Saving Strategies in the Preoperative Setting** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ The development of case studies presented by experts in Transfusion Medicine
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ With a special emphasis on evidence-based medicine and research methodologies in the field of transfusion medicine
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any device with an Internet connection



In this program you will deepen in the evaluation of the patient prior to the operation to avoid hemorrhagic complications in surgery"

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You will learn to identify factors that may favor hemorrhagic complications in an intervention, such as anticoagulation and antiplatelet therapy”

TECH offers you the opportunity to specialize at your own pace and in your own way, thanks to the 100% online mode of this Postgraduate Certificate.

You will contribute to the prevention preoperative anemia in the operating room, one of the causes of morbidity and mortality risk for the surgical patient.

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 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 throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

The purpose of this Postgraduate Certificate is that the student achieves the proposed objectives, in order to expand their knowledge in Transfusion Medicine, specifically in the preoperative field. Implementing a strategy to save blood and avoid anemia in the patient before the intervention is key, an objective that the student will achieve by learning quality content and an innovative methodology. To this end, a team of medical professionals has poured its knowledge and experience in the development of the points of this curriculum, which will drive the professional from a current approach, with full training for the achievement of their professional goal. Thus, the student is well on his way to excellence in his daily medical work in this field of Transfusion Medicine.





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Achieve your goal of specializing in this field of Transfusion Medicine through quality content developed by experts”

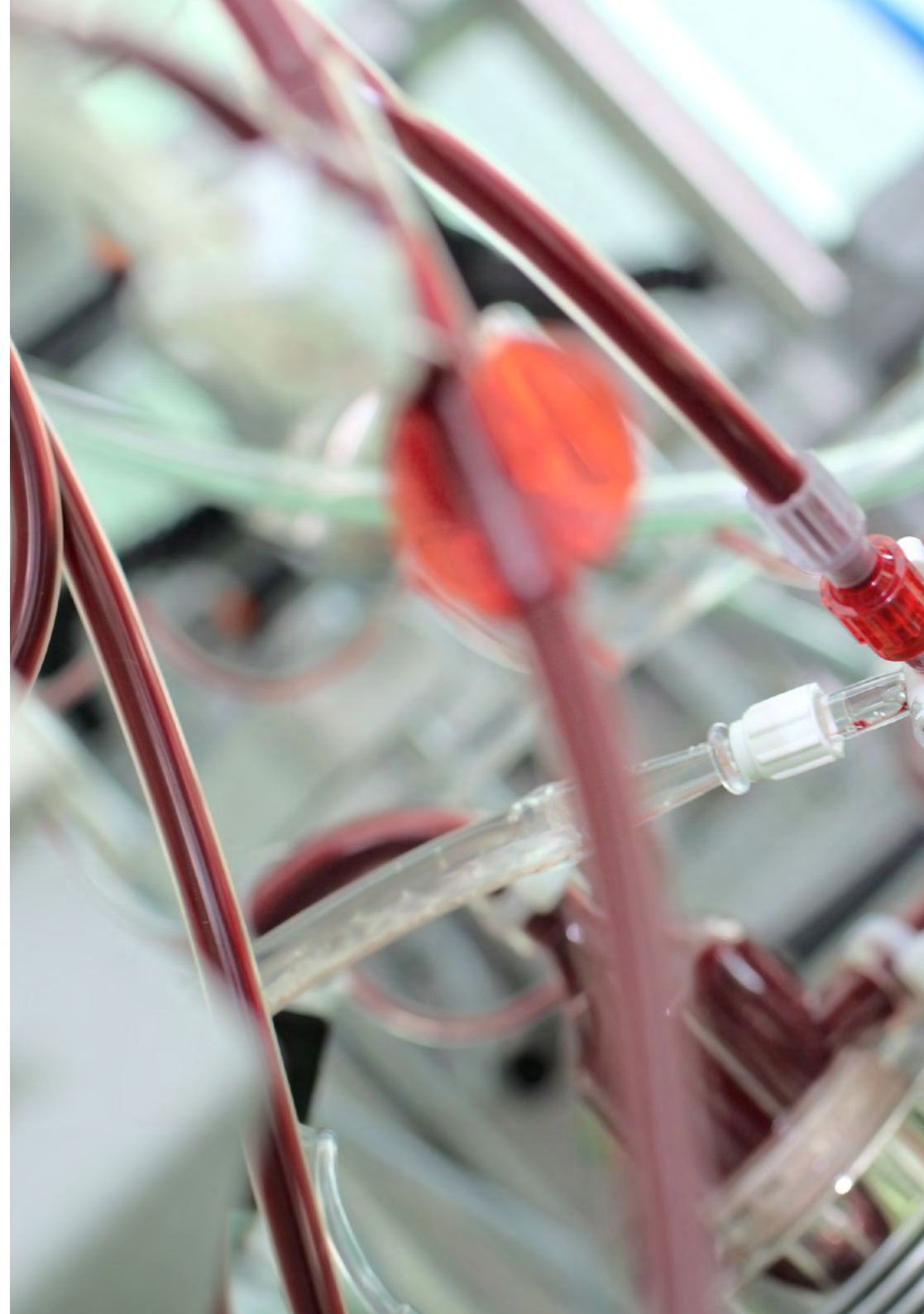


General Objectives

- ◆ Know everything about the process of blood donation and blood components
- ◆ Understand hemovigilance as a transversal process involving the entire transfusion chain, from donor to patient

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You will monitor strategies for increasing red cell mass in patients undergoing high bleeding risk surgeries”





Specific Objectives

- ◆ Acquire in-depth knowledge of the recommended preoperative evaluation of the patient, in terms of the patient's treatments and pathologies that may increase bleeding complications in surgery
- ◆ Explore strategies for increasing red blood cell mass, especially in patients who will undergo surgery with a high bleeding risk

03

Course Management

TECH has prestigious experts in the medical field of hematology so that the student acquires a solid knowledge in the specialty of Transfusion Medicine in the Preoperative Setting. Therefore, this Postgraduate Certificate has a highly qualified teaching staff, whose extensive experience in this medical field brings quality to the program, thus providing students with the best tools for the development of their skills during the course. In this way, the future professional has the guarantees he/she demands to specialize with the best and boost his/her academic career in a specialized sector that contributes to saving an essential and scarce resource, blood.





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By opting for this Postgraduate Certificate, you are betting on the development of your capabilities at the highest level with the best”

International Guest Director

Dr. Aaron Tobian is one of the great international references in the area of blood transfusion, being director of Transfusion Medicine at the Johns Hopkins Hospital. He is also Associate Director of Medical Affairs in the Pathology Area of the same clinical center.

In the academic field, Dr. Tobian has published more than 250 scientific articles related to Transfusion Medicine in the most prestigious journals, as a result of his global studies on diseases such as HIV.

In this sense, he also develops an important work as a member of several editorial boards. In addition, he is associate editor of the Journal of Clinical Apheresis, as well as being the editor-in-chief and founder of the Transfusion News portal, a reference in the dissemination of news on Transfusion Medicine.

All this, together with his teaching work, which he develops in prestigious centers, being professor of Pathology, Oncology and Epidemiology at the Johns Hopkins University School of Medicine and the Bloomberg School of Public Health.



Dr. Tobian, Aaron

- Director of Transfusion Medicine at The Johns Hopkins Hospital
- Associate Director of Clinical Affairs, Pathology Area, Johns Hopkins Hospital
- M.D. from Case Western Reserve University
- M.D., Case Western Reserve University
- Professor of Pathology, Medicine, Oncology and Epidemiology at The Johns Hopkins University School of Medicine
- Associate Editor of the Journal of Clinical Apheresis
- Editor-in-Chief and founding member of the website Transfusion News
- Editorial member of the journal Transfusion

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

Management



Dr. Alcaraz Rubio, Jesús

- ♦ Head of the Hematology Department at the 12 de Octubre Hospital (Madrid)
- ♦ Head of the Hematology Department at Mesa del Castillo Hospital, in Murcia
- ♦ Head of the Oncohematological Day Unit Hospital Viamed in Alcantarilla, Murcia
- ♦ Emergency Specialist at the Rafael Méndez Hospital, in Lorca, Murcia
- ♦ Head of the Hematology Department at the Hospital Virgen de la Caridad in Cartagena
- ♦ Member of Sermo's Medical Advisory Board
- ♦ Associate Professor of Emergency and Clinical Simulation at the Universidad Católica San Antonio in Murcia
- ♦ Degree in Medicine and Surgery from the University of Murcia
- ♦ Specialty in Hematology Hemotherapy



Professors

Dr. García Zamora, Cristina

- ◆ Specialist in General and Digestive System Surgery at Hospital Universitario Rafael Méndez, in Murcia
- ◆ Specialist in General and Digestive System Surgery at the Hospital Clínico Universitario Virgen de la Arrixaca, in Murcia
- ◆ PhD from the University of Murcia
- ◆ Degree in Medicine from the University of Murcia
- ◆ Specialty in General and Digestive Surgery at the Hospital Clínico Universitario Virgen de la Arrixaca, in Murcia
- ◆ Master's Degree in Anatomy applied to the Clinic by the University of Murcia
- ◆ Master's Degree in Bioethics from the Catholic University of San Antonio, in Murcia

04

Structure and Content

The structure of the contents of this Postgraduate Certificate has been designed based on the knowledge of Transfusion Medicine focused on the patient in the preoperative field, so that the professional deepens and updates his knowledge in this field of medicine, correctly evaluating the patient and assessing the blood involved in the process. Thus, the teaching team of this program has developed a syllabus whose content offers a broad perspective of everything involved in the procedure of blood transfusion prior to surgery, avoiding preoperative anemia and assessing the preoperative recommendations in patients with congenital coagulopathies.



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You will be able to distinguish preoperative anemia from iron deficiency anemia or anemia in oncology patients and know which strategy to follow in each case"

Module 1. Strategies for Blood Saving in the Preoperative Setting

- 1.1. Preoperative Anemia
 - 1.1.1. Diagnostic Algorithm
- 1.2. Iron Deficiency Anemia
 - 1.2.1. Use of Intravenous Iron
- 1.3. Anemia in Oncology Patients
 - 1.3.1. Anemia Mechanisms
- 1.4. Erythropoietin
 - 1.4.1. Erythropoietin Indications
- 1.5. Hemorrhagic Risk Assessment
 - 1.5.1. Patient Factors
 - 1.5.2. Procedural Factors
- 1.6. Thrombotic Risk Assessment
 - 1.6.1. Patient Factors
 - 1.6.2. Procedural Factors
- 1.7. Bridge Therapy and Pre-Surgery Recommendations
 - 1.7.1. Dicoumarinics
 - 1.7.2. Direct Acting Anticoagulants
- 1.8. Preoperative Recommendations for Antiplatelet Therapy
 - 1.8.1. Low Hemorrhagic Risk Surgery
 - 1.8.2. High Hemorrhagic Risk Surgery
- 1.9. Preoperative Recommendations in Patients with Congenital Coagulopathies
 - 1.9.1. Low Hemorrhagic Risk Surgeries
 - 1.9.2. High Hemorrhagic Risk Surgeries
- 1.10. The Jehovah's Witness Patient
 - 1.10.1. Basics of Transfusion Rejection
 - 1.10.2. Conclusions





“ *TECH gives you the opportunity to get on the path to the professional future you want*”

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.





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

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, 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.

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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 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.



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.



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.



06

Certificate

The Postgraduate Certificate in Blood Saving Strategies in the Preoperative Setting guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





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

This private qualification will allow you to obtain a **Postgraduate Certificate in Blood Saving Strategies in the Preoperative Setting** 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 Certificate in Blood Saving Strategies in the Preoperative Setting**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present quality

online training

development languages

virtual classroom

tech global
university

Postgraduate Certificate

Blood Saving Strategies in
the Preoperative Setting

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

Postgraduate Certificate

Blood Saving Strategies in the Preoperative Setting