

# IMMUNOTHERAPY OF CANCER AND IMMUNE-BASED DISEASES

## Degree in Medicine

CURSO 2019-20

**Code:** 805028

**Módulo 6:** Complementary Teaching

**Content:** Immunotherapy

**Status:** Optative

**Target students:** Medicine degree 2º to 6º

**Department:** Immunology, Ophthalmology and ENT

**Crédits:** 3 ECTS

**Prerequisites:** Immunology subject.

**Semester:** Second

**Calendar:** February to May

**Time:** 1 day per week (3:30-5:00 h. pm)

**Site:** School of Medicine

**Number of students:** 20

**Group:** unique

## PROFESSORS

### Responsible Professors

*Carbone Campoverde, Javier, M.D. (Ph.D.)*

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Immunology, Ophthalmology and ENT Department

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Immunology, Ophthalmology and ENT Department

School of Medicine. Pabellón V, 4ª planta

### Professors

Carbone Campoverde, Javier

Cubero, Francisco Javier

Gil, Juana

Martínez Quiles, Narcisa

Marques, Ivan

Nevzorova, Yulia A

Paz, Estela

Regueiro González-Barros, José Ramón.

Rodríguez-Sainz, Carmen

Sánchez Mateos, Paloma

Sánchez Ramón, Silvia

Sarmiento Marchese Elizabeth

## OBJECTIVES

To teach the students basic concepts and skills allowing to:

- Know and understand the bases of immunotherapy of Cancer and Immune-Based Diseases.
- Know and understand the most important modalities of Immunotherapy in Cance

- Know how to indicate and monitor immunotherapies in selected immune based diseases.

## COMPETENCES

Those related with the acquisition of skills.

**General Competences:** CG.01 to CG.37.

**Specific Competences:** CEM6.01, 6.02, 6.03, 6.04 y 6.05.

## METHODOLOGY

**THEORY.** Presentation of information to understand the basic concepts in immunotherapy. Discussion. See programme below.

**PRACTICE.** Discussion of practical clinical cases of application of selected immunotherapies. The resolution of cases will target students seeking general, analyze and synthesize information. Preparation of oral presentation and written report. Type: Autonomous Interpretation of data from a scientific publication or from a clinical case.

## PROGRAMME

Cells, cellular receptors and other targets.  
Basis of immunotherapy of cancer.  
*Check-points* inhibition in cancer immunotherapy.  
Biomarkers in cancer immunotherapy.  
Immunotherapy and immunodeficiency.  
Immunotherapy of Autoinflammatory Diseases  
Gene therapy in immunodeficiency.  
Immunotherapy in transplantation.  
Immunotherapy in autoimmune diseases.  
Immunotherapy in infectious disease.  
Immunotherapy in Human Reproduction.  
Immunogenetics and immunotherapy of cancer.  
Immunotherapy in cancer.  
New advances in immunotherapy in cancer.  
Advanced and precision immunotherapy.  
The clinical trial: How to evaluate immunotherapeutic protocols.

## EVALUATION

The academic efficiency and final score of the course will be computed according to the following percentages: Active participation and critical ability of the student during classes: 50%. Written assessment: 25%. Clinical Case: Students will present a work, which will be selected among the different topics imparted during lessons. The work, clarity of the presentation and answers to questions by the professor and other students will be evaluated: 25%.

**Measures to apply in the event of breaking examination regulations, whether the nature of these be deliberate or accidental:**

Violation of these regulations result in failure to evaluate exam, an oral exam can be accepted as proof of knowledge on the subject. If evidence shows intent of misconduct under exam conditions, this will be treated as a severe examination behavior and special measures will be taken.

## BIBLIOGRAPHY

### Books

- **Abbas, Abul K.** Cellular and Molecular Immunology 8th Edition. Saunders 2015. ISBN: 9780323316149.
- **Carbone, Javier.** Inmunoterapia de Enfermedades de Base Inmunológica, 1ª edición, Ed. Elsevier España, 2018. ISBN-10: 8490228868. ISBN-13: 978-8490228869.
- **Prendergast G, Jaffee E.** Cancer Immunotherapy. 2ª ed. eBook ISBN: 9780123946331. Editorial Academic Press, 2013.
- **Regueiro, Jose Ramón:** "Inmunología. Biología y Patología del Sistema Inmunitario", 4ª edición, Ed. Médica Panamericana, 2011.
- **Rich, Robert R.** Clinical Immunology, Principles and Practice. 5th Edition. 2018. Elsevier Title. ISBN: 978-0-7020-6896-6.
- **Manel, Juan.** Inmunoterapia del Cáncer. Realidades y perspectivas. Editorial S.A. Elsevier ESPAÑA. 2016 ISBN: 9788490228876
- **Sánchez Ramón, Silvia.** Inmunodeficiencias Congénitas y adquiridas. Marbán. ISBN: 9788471019271.
- **Spickett, Gavin.** Oxford Handbook of Clinical Immunology and Allergy (Oxford Medical Handbooks 2013. ISBN-10: 0199603243. ISBN-13: 978-0199603244.

### Other Resources

- Bibliography about the topics will be provided in the Virtual classroom.
- International Society for Heart and Lung Transplantation. [www.ishlt.org](http://www.ishlt.org).
- ESID. European Society for Immunodeficiencies. <http://esid.org>.
- National Cancer Institute (USA): [www.cancer.gov/research/areas/treatment/immunotherapy-using-immune-system#1](http://www.cancer.gov/research/areas/treatment/immunotherapy-using-immune-system#1).
- European Academy of Allergy and Clinical Immunology (EAACI): [www.eaaci.org](http://www.eaaci.org)
- Online Mendelian Inheritance in Man (OMIM) [www.omim.org](http://www.omim.org)