2016
ESTRO SCHOOL
LIVE COURSE

BIOLOGICAL BASIS OF PERSONALISED RADIATION ONCOLOGY

17 - 20 October 2016 | Montpellier, France

BIOLOGY

WHO?

COURSE DIRECTORS
Kevin Harrington (UK)
Martin Pruschy (CH)

TEACHERS
Jan Alsner (DK)
Conchita Vens (NL)
Marie-Catherine Vozenin (CH)
Daniel Zips (DE)

LOCAL ORGANISER
David Azria

PROJECT MANAGER
Luis Teixeira

TARGET GROUP

The course is aimed at radiation oncologists in training (compulsory in several centres), radiation oncologists in practice, first year PhD students, and any other individuals (physicists, statisticians, radiation therapists (RTTs) interested in obtaining a basic understanding of the link between the 5 Rs of radiation oncology and the hallmarks of cancer. Lectures and tutorials are constructed in such a way that relatively little or no background knowledge of molecular biology is necessary. A background in classical radiobiology is a plus, as is attendance at the ESTRO course on basic clinical radiobiology, but neither of these is an absolute requirement.

COURSE AIM

The purpose of this course is to provide an appreciation for the biological basis of the 5 Rs of radiation oncology and their relationships to the so-called hallmarks of cancer. A combination of lectures and tutorial sessions with question/answer sessions and literature discussions are used throughout the course. Following completion, participants should have sufficient knowledge to read and appreciate the literature, to understand the concepts of personalised radiation oncology from the biological point of view, follow new developments in applied radiation biology and radiation oncology, and begin to collaborate with their local research groups in this field.

LEARNING OUTCOMES

By the end of this course participants should be able to:

- Interpret the 5 Rs of radiation oncology in the context of the hallmarks of cancer
- Understand the biological basis of tumour repopulation
- Describe the molecular basis of the DNA damage response
- Appreciate the biological processes involved in tumour hypoxia and reoxygenation
- Explain cell cycle control, its abnormalities and their effects on tumour radiation responses
- Understand factors which underpin the differing radiosensitivities of different tumours
- Collate this knowledge into a clearer understanding of how to deliver personalised radiation treatment alone and as part of a combined treatment modality with targeted agents.

COURSE CONTENT

- The hallmarks of cancer
- The 5 Rs of radiation oncology, primarily from the biological point of view
- Cell signalling pathways that influence tumour cell growth and survival and their responses to radiation
- Mechanisms of DNA repair and how they influence sensitivity to radiation
- The ways in which cancer (and normal) cells die following therapeutic irradiation
- The importance of tumour metabolism in determining the response to radiation
- The physiological response to radiation at the cellular and tumour level and how this impacts on tumour and normal tissue behavior
- The biological rationales for developing new targeted therapies
- Rational strategies for combined treatment modalities with targeted agents as a means of delivering personalised medicine
- Mechanisms of harnessing the immune system to increase anti-tumour responses following radiotherapy.

PREREQUISITES

Before commencing this course participants should:

- Ensure their knowledge of basic biology is at least high-school level, including some basic knowledge of cancer
- Familiarise yourself with access to the journals covering radiobiology related to radiotherapy.

TEACHING METHODS

- 12 hours of lectures
- 6 hours of tutorials
- 2 hours of revision courses/discussions.

METHODS OF ASSESSMENT

- MCQ
- Evaluation form.

KEY WORDS

Radiobiology, radiation biology, radiation oncology, personalised treatment, cancer biology, hallmarks of cancer.

WORKING SCHEDULE

The course starts on Sunday 17 October 2016 at 9:00 and ends on Wednesday 16 March 2016 at 13:00.

RADIATION ONCOLOGIST | MEDICAL PHYSICIST | RADIOBIOLOGIST | RADIATION THERAPIST | OTHER SPECIALIST

LANGUAGE

The course is conducted in English.
No simultaneous translation will be provided.

PRACTICAL ORGANISATION

Course organisation

For any further information please contact ESTRO:
Luis Teixeira
E-mail: lfteixeira@estro.org
Tel : +32 2 775 93 37
Fax : +32 2 779 54 94

Course venue

Amphithéâtre IRCM
Rue des apothicaires
Institut du cancer de Montpellier
34298 Montpellier cedex 05

Local organiser

David Azria
Radiation Oncologist
Montpellier University
Montpellier, France

Technical exhibition

Companies interested in exhibition opportunities during this teaching course should contact ESTRO:
Luis Teixeira
E-mail: lfteixeira@estro.org
Tel : +32 2 775 93 37
Fax : +32 2 779 54 94

Accommodation

To book you room, please download the accommodation form from the ESTRO website: www.estro.org/school

PARTICIPANTS SHOULD REGISTER ONLINE AT: WWW.ESTRO.ORG/SCHOOL

These pages offer the guarantee of secured online payments.
The system will seamlessly redirect you to the secured website of OGONE (see www.ogone.be for more details) to settle your registration fee.

If online registration is not possible please contact us:
ESTRO OFFICE
Rue Martin V, 40 • B-1200 Brussels
Tel.: +32 2 775 93 39 • Fax: +32 2 779 54 94
E-mail: education@estro.org

REGISTRATION FEES

Please check the early deadline date on our website

	EARLY FEE	LATE FEE
In-training members*	450 €	625 €
Members	600 €	725 €
Non members	750 €	850 €

*Radiation Therapist (RTT) members are eligible for the in-training fee

The fee includes the course material, coffees, lunches, and the social event.

Reduced fees are available for ESTRO members working in economically less competitive countries. Check the eligible countries and the selection criteria on the website of the ESTRO School.

ESTRO goes green: Please note that the course material will be available online. No course book will be provided during the courses.

ADVANCE REGISTRATION AND PAYMENT ARE REQUIRED. ON-SITE REGISTRATION WILL NOT BE AVAILABLE.

Since the number of participants is limited, late registrants are advised to contact the ESTRO office before payment, to inquire about availability of places. Access to homework and/or course material will become available upon receipt of full payment.

INSURANCE AND CANCELLATION

The organiser does not accept liability for individual medical, travel or personal insurance. Participants are strongly advised to take out their own personal insurance policies.

In case an unforeseen event would force ESTRO to cancel the meeting, the Society will reimburse the full registration fees to the participants, ESTRO ESTRO will not be responsible for the refund of travel and accommodation costs.

In case of cancellation, full refund of the registration fee minus 15% for administrative costs may be obtained up to three months before the course and 50% of the fee up to one month before the course. No refund will be made if the cancellation request is postmarked less than one month before the start of the course.