

IMRT/VMAT and other highly conformal techniques in clinical practice

04 June – 08 June 2023 | Torino, Italy

Find out how to implement or improve IMRT/VMAT and other highly conformal techniques in clinical practice, taking account well-known clinical and technical issues, as well as the latest developments in this field.

Target group

The course is aimed at radiation oncologists, medical physicists and radiation therapists/dosimetrists involved in the implementation and clinical use of advanced techniques in their departments. Basic knowledge of radiation oncology and medical physics is a prerequisite, experience in CT-based treatment planning is beneficial. The registrants will preferably be 'graduates' of the ESTRO course on Physics for Modern Radiotherapy or an equivalent training in radiotherapy. Simultaneous participation of a physicist and/or a clinician and/or a radiation therapist/dosimetrist from the same institute is highly encouraged.

Course aim

To present and discuss:

- The scientific basis of IMRT/VMAT and highly conformal radiation techniques
- The technical aspects of treatment preparation and treatment delivery
- Dose calculation and the quality assurance process
- Inverse planning optimisation and its practical implementation
- The latest developments in IMRT/VMAT irradiation modalities
- The clinical aspects of IMRT/VMAT, including clinical outcomes, site-specific issues, normal tissue tolerance and emerging indications
- The relationship between IMRT/VMAT and other advanced radiotherapy techniques (e.g., IGRT, SBRT and adaptive radiotherapy).

Learning outcomes

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

- Describe, at least in qualitative terms, the inverse treatment planning process and potential issues with all elements involved

- List specific contouring requirements for IMRT/VMAT and, in particular for a clinician, assess the extent to which these requirements are fulfilled in their clinical practice
- Judge/revise the appropriateness of the dose-volume-constraints used in their clinical practice with respect to the current state-of-the-art
- Analyse/judge treatment plans with regard to applicability, safety and efficacy
- Evaluate their dosimetry practice with respect to the current standard of practice (specifically for physicists)
- Reassess their procedure in producing highly conformal treatment plans (specifically for a dosimetrists)
- Summarise the overall clinical outcomes and remaining open issues with highly conformal techniques across disease types.

Course content

- Rationale of IMRT/VMAT
- Delivery modalities
- Dosimetry and commissioning
- Quality assurance
- Imaging and contouring
- Treatment plan optimisation
- Automated treatment planning
- Normal tissue tolerance, dose-volume constraints
- Impact of motion and geometrical uncertainties on IMRT/VMAT
- Clinical case discussions
- IGRT, SBRT and adaptive radiotherapy
- Discussion of IMRT/VMAT-specific clinical issues for Head and Neck, Breast, Lung, Gastrointestinal, Prostate, Lymphoma and Gynaecological cancer

Practical demonstrations will take place on-site in close collaboration with the local staff. Three clinical cases, prepared by the participants, will be discussed in small groups with the teaching staff. Vendors of treatment planning systems will demonstrate their treatment planning solution for clinical cases in a dedicated session.

ROADMAP

- ◆ RADIOTHERAPY TREATMENT PLANNING AND DELIVERY
- RADIATION ONCOLOGIST, MEDICAL PHYSICIST, RADIATION THERAPIST, OTHER SPECIALIST

COURSE DIRECTORS

Mischa Hoogeman (NL)
Carmen Rubio (ES)

TEACHERS

Sofie Ceberg (SE)
Lone Hoffmann (DK)
Arjen van der Schaaf (NL)
Valentina Vanoni (IT)
Maja Vestmø Maraldo (DK)

LOCAL ORGANISERS

Umberto Ricardi (IT) & Mario Levis (IT)

WORKING SCHEDULE

The course starts on Sunday, 4 June at 09:00 and ends on Thursday, 8 June 2023 at 12:45.

LANGUAGE

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

COURSE ORGANISATION

For any further information, contact ESTRO Office (BE): Agnès Delmas, Project Manager, adelmas@estro.org, M +32 470 300 448

COURSE VENUE

ON 04 JUNE 2023

Institute of Radiation Oncology, University of Turin, Via Genova 3, 10126 Turin, Italy

ON 05 JUNE-08 JUNE 2023

NH TORINO CENTRO, Corso Vittorio Emanuele II 104, 10121 Turin, Italy

ACCOMMODATION

Booking link <https://www.nh-hotels.com/event/imrt-vmat-practice-course->

For more information, please contact ESTRO Office (BE): Agnès Delmas, Project Manager, adelmas@estro.org, M +32 470 300 448

TECHNICAL EXHIBITION

Companies interested in exhibition opportunities during this teaching course should contact Agnès Delmas, adelmas@estro.org, M +32 470300448



Prerequisites

Before commencing this course, participants should:

As a clinician:

- Be familiar with clinical indications for conformal radiotherapy
- Have a general understanding of the treatment planning process.

As a physicist:

- Be familiar with quality assurance measurements for conventional therapy
- Have a general knowledge of CT-based treatment planning.

The participants will be asked to prepare a 'homework' based on three clinical cases sent by ESTRO. The results will be discussed in small groups during the course.

Teaching methods

- 17 hours of lectures
- 3 hours of practical demonstrations in a clinical department
- 2 hours of software demonstration
- 3 hours of case discussions

Methods of assessment

- MCQ
- Clinical case discussion
- Evaluation form
- Practical demonstrations

PARTICIPANTS SHOULD REGISTER ONLINE [HERE](#)

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: education@estro.org

Registration fees

Please check the early deadline date on our website.

	EARLY FEE	LATE FEE
In-training members *	€ 500	€ 675
Members	€ 650	€ 775
Non-members	€ 800	€ 900

*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 [HERE](#)

ESTRO GOES GREEN Please note that the course material will be available online. No printed 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 participants fully the registration fees. 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.

WWW.ESTRO.ORG/COURSES

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