“Every cancer patient in Europe will have access to state of the art radiation therapy as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances”

- ESTRO Vision 2020 -
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## THE ESTRO CANCER FOUNDATION

## FINANCIAL REPORT

## ANNEX
What an excellent year 2016 was for ESTRO! As you will see in the pages of this Annual Report, which underscores some of our most notable achievements, the Society has continued expanding and improving its portfolio of activities. I hope that you enjoy reading it.

One indication that we are producing high-quality offerings that are sought after by professionals in radiation oncology is that our membership continues to increase. The appeal of different categories of membership tailored to different needs has also helped us to grow. Significantly, the dual membership offered to European young societies in radiation oncology has led to a growth in the number of young people joining ESTRO. 2016 also marked the 2nd Agora meeting at which the young ESTRO committee, together with other selected young members, met with ESTRO’s leadership. These meetings are important for integrating young members and for fostering the future leadership of the Society.

It is a delight to see that ESTRO’s annual conference is the premier platform for covering state-of-the-art developments and breaking news in radiation oncology. ESTRO 35, held in Turin, Italy, broke several Society records: for the number of participants, for the number of abstracts submitted and for the size of the exhibition space. Apart from the annual conference, ESTRO also collaborated with other oncology societies in organising scientific meetings, including EMUC, ICTR-PHE, EBCC, ELCC and WCB (see Annex, page 104 for a list of abbreviations). Meetings such as these highlight the inter- and multidisciplinary approaches being taken to improve cancer care.

ESTRO always strives to disseminate effectively high-quality science through its core programmes, such as the annual conference, ESTRO School courses, publications and collaborative events. Last year also saw the launch of the three new open-access journals: Clinical and Translational Radiation Oncology (ctRO), Physics and Imaging for Radiation Oncology (phiRO), and Technical Innovations and Patient Support in Radiation Oncology (tipsRO). All three journals have now published their first set of papers.

In December 2016, the Society’s flagship journal, Radiotherapy & Oncology, saw Jens Overgaard retire as Editor-in-Chief after more than 25 years of distinguished leadership. Michael Baumann is now at the helm. ESTRO thanks Jens for his dedication to the journal and for establishing its reputation as one of the leading journals in the field, known for the dissemination of high-quality, rigorous scientific research that is designed to advance the care of patients with cancer.
The ESTRO School’s portfolio of courses is improved continuously to safeguard their quality and to stay abreast of developments, ensuring that the Society is able to deliver on its vision and mission. This is reflected in the School’s live, blended and e-learning courses. The ESTRO School is now under the leadership of Jesper Grau Eriksen, who has taken over from Richard Pötter. The Society is grateful for all the years of tremendous commitment that Richard has put into the School, establishing it as an internationally recognised provider of high-quality education in radiotherapy and oncology.

ESTRO continues to forge ahead with its public affairs activities, ensuring that a range of stakeholders are empowered with the necessary information to advocate for radiation oncology at European level. To support this work, we have developed a public affairs toolkit, which is guided by the central message: ‘radiation therapy cures cancer safely today’. The toolkit is for the benefit of the whole ESTRO community, and is particularly relevant to the oncopolicy work of national societies.

The ESTRO Cancer Foundation (ECF) places a high priority on raising awareness of the benefits of radiation oncology with the general public and decision-makers. As part of this work, Accuray, Elekta and Varian Medical Systems have signed partnership agreements with the ECF, to provide financial support for forthcoming projects.

The immense progress achieved in ESTRO’s work each year is made possible thanks to the tremendous and generous support by you, the Society’s members, the Board, ESTRO’s governance, our sponsors and the ESTRO office. Hats off to you all! We look forward to continued growth and exciting new developments in 2017.

Best wishes,
Yolande Lievens
ESTRO President
The mission of ESTRO, a non-profit, scientific organisation, shall be to foster, in all its aspects, radiotherapy (also known as radiation oncology), clinical oncology and related subjects, including physics as applied to radiotherapy, radiation technology and radiobiology.

To fulfill its mission ESTRO will:

- Develop and promote standards of education in radiotherapy and clinical oncology
- Promote standards of practice in radiotherapy, clinical oncology and related subjects
- Stimulate the exchange of scientific knowledge in all related fields
- Strengthen the clinical specialty of radiotherapy and clinical oncology in relation to other specialties and professions involved in cancer management
- Encourage co-operation with international, regional and national societies and bodies representing radiotherapy, clinical oncology and related subjects
- Facilitate research and development in radiotherapy, clinical oncology and related subjects.
VISION

Every cancer patient in Europe will have access to state-of-the-art radiation therapy as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances.

In 2012 ESTRO’s leadership took an important step and established ESTRO’s new vision, which is centred on high-quality patient care.

Subsequently, ESTRO put into motion several key priorities that can be summarised via the six thematic areas below. These focal points have formed the basis of all further achievements listed in this annual report.

In order to support the care model of optimal individualised patient care, ESTRO is to provide enhanced information resources to its members whereby their roles and expected responsibilities within the framework of an interdisciplinary radiation oncology team are stressed.

ESTRO is to identify specific areas where it believes the “science and art” of radiation oncology will merge within the setting of the multidisciplinary cancer care of patients.

ESTRO is to advocate and promote strongly the need for all radiation oncology professionals to maintain standards of competency through continued medical education (CME) and continued professional and personal development (CPPD).

ESTRO is to be a key player within the expanding range of organisations that also support and advocate advanced multi-disciplinary patient care. ESTRO is to strengthen its existing collaborations, as well as developing new partnerships with industrial and corporate groups, non-governmental organisations (NGOs), lobby and patient advocacy groups.

ESTRO is to make numerous tangible changes to its modus-operandi: it must manifestly boost clinical and translational research, and it must articulate the benefits of radiotherapy as a central part of modern multidisciplinary cancer care in order to help secure funding, resources and overall support.

ESTRO is to upgrade several service areas such as its membership models and communication channels; it is to significantly involve the younger generation.
In all its activities, ESTRO is dedicated to one main goal: to promote radiation oncology in the oncology arena and beyond for the benefit of all cancer patients. This is made possible thanks to a strong and influential global and multidisciplinary community of more than 6,700 members, who drive the Society forward with their efforts and commitment throughout the year.
MEMBERSHIP
MAIN BENEFITS: TO STRENGTHEN CAREER AND PROFESSIONAL DEVELOPMENT

ESTRO contributes to the day-to-day practice and career advancement of oncology professionals through the dissemination of the latest research findings and knowledge, crucial to understanding the rapidly evolving field of radiation oncology.

ESTRO offers several levels of membership, with benefits tailored to the needs of each member and their level of involvement within the Society.

The full range of ESTRO membership benefits include:

- Being part of a community of more than 6,700 radiation oncology professionals
- Online subscription to Radiotherapy & Oncology, the Society’s journal
- Reduced fees for attending ESTRO teaching courses, conferences and joint events
- Online access to scientific and educational material, including event webcasts through the e-library (DOVE)
- Eligibility for grants, awards, faculties and governance positions
- Discount fee for publishing articles in ctRO, phiRO and tipsRO* (ESTRO open access journals).

➤ *See abbreviations list in Annex page 104.
STRUCTURED AND DIVERSIFIED MEMBERSHIP CATEGORIES

The ESTRO membership year runs from 1 January to 31 December and full members have the option to become members for two consecutive years.

1. Individual membership

Full membership

Active
€95 for one year and €170 for two consecutive years.
This category of membership gives access to all the services ESTRO has on offer: subscription to *Radiotherapy & Oncology* (electronic and printed upon request), reduced fees for attending ESTRO and joint conferences and teaching courses, publications and scientific information through our e-library (DOVE), eligibility for grants, awards, working groups, governance positions, voting rights and much more.

Supporting ambassador
€250 for one year and €450 for two consecutive years
This category is for those who also wish to express their commitment to the aims of the Society by contributing to ESTRO’s Ambassador Solidarity Fund*. You will have all the benefits of an Active member, plus access to educational materials produced by the ESTRO School, immediate access to the ESTRO events webcasts, as well as a dedicated registration lane and use of the VIP lounge at the ESTRO annual congress.

► *See details on the Supporting Ambassador Fund on page 16.

Affiliate
€55
This category is suitable for members who do not require full involvement in the Society, but who still wish to enjoy some of the basic benefits on offer, including electronic access to *Radiotherapy & Oncology* and one reduced fee per year for an ESTRO event or teaching course.

Associate membership

In training
€75
In-training members can benefit from a large range of services and specific reduced fees for attending ESTRO conferences, teaching courses and joint events. To be eligible, members should be under the age of 40, have a relevant university diploma awarded less than ten years ago and currently be in training or enrolled in a full time PhD programme in a European institute.

Corporate representative
€55
This category is reserved for individual members working for a company and offers them electronic access to *Radiotherapy & Oncology* and one reduced fee per year for an ESTRO event or teaching course.

MEMBERSHIP

11
2. Institutional membership

ESTRO offers European institutes the opportunity to pay a single collective membership fee on behalf of their employees, who will enjoy all the usual benefits of individual membership. This is the most cost-effective option for institutes, and also provides access to a host of other benefits. It is a great opportunity for the institute to involve their department within ESTRO in an interdisciplinary way, as several disciplines need to be represented in each institutional membership.

3. Dual membership

This category can be granted to individual members who benefit from a joint membership agreement, signed on a case-by-case basis between ESTRO and a non-European national society or a European young national society active in the field of radiation oncology.

Societies that signed in 2016 are:

- Israeli Society of Clinical Oncology and Radiotherapy (ISCORT)
- Belgian Association of Oncological Radiotherapy (BVRO/ABRO)
- Spanish Association of Radiotherapy and Oncology (SEOR).

For a list of all dual membership agreements with European young national societies and non-European national / regional societies, see the Annex on page 93.

4. Corporate membership

Companies can opt for either ESTRO’s regular or gold corporate membership. Gold membership gives the right to a seat on the ESTRO Corporate Council, which works to facilitate collaboration and coordination between industry’s research and development activities, and the academic and scientific developments within ESTRO.

5. Honorary membership

Honorary members are professionals who have made a significant and noteworthy contribution towards ESTRO’s mission and achievements. They are selected by the Nominating Council of ESTRO.
6,742 members in 2016

- 4,432 individual members
- 1,004 dual members
- 1,131 institutional members
- 175 corporate members
- 10 national societies
- 40 institutes
- 27 companies

28% ASSOCIATE MEMBERSHIP
1% HONORARY
5% IN TRAINING

37% ACTIVE
1% SUPPORTING AMBASSADOR
38% FULL MEMBERSHIP
22% AFFILIATE
5% IN TRAINING
1% HONORARY
28% ASSOCIATE MEMBERSHIP
15% DUAL
17% INSTITUTIONAL
2% CORPORATE
MEMBERSHIP CATEGORIES
UNDER THE SPOTLIGHT

1. Institutional membership

The institutional membership category is designed to assist European hospitals, clinics or other institutions providing radiotherapy and cancer treatment to develop and support their in-house radiotherapy and oncology professionals. In 2016, ESTRO welcomed nine new institutional members, bringing the total to 40 institute members who subscribe to membership on behalf of 1,131 of their employees (see list of institutes in the Annex, page 94).

This category allows institutes to pay a single fee for individual membership on behalf of their employees (with a minimum of five employee members) in an efficient way, while at the same time receiving a cost benefit. Several membership packages are available. However, in order to foster interdisciplinarity, a minimum of three disciplines must be represented within the institutional membership package. While their employees can enjoy all the usual advantages of individual membership, the institutions themselves receive a range of benefits, including:

- a dedicated institutional Corner in the newsletter, with the possibility of regularly covering developments at the institution
- a dedicated institutional webpage on the ESTRO website
- free online job postings
- a monthly ESTRO Public Affairs newsletter sent exclusively to all institutional members
- an ESTRO institutional member logo, which can be used by the institute on their website, and in scientific presentations alongside their own logo
- in 2016, a free booth in the ESTRO 35 Cancer Centres Pavilion in Turin.

The ESTRO 35 Cancer Centres Pavilion brought together 11 institutional members from all over Europe. Located in the exhibition hall, the ESTRO Cancer Centres Pavilion worked as a platform, fostering exchanges between institutes and congress participants, and enabling discussion of science, projects, job opportunities and mutual collaborations.
BREAKDOWN OF THE INSTITUTIONAL MEMBERSHIP

1,131 INSTITUTIONAL MEMBERS FROM 40 INSTITUTES

- 62% ACTIVE
- 22% IN TRAINING
- 13% AFFILIATE
- 3% SUPPORTING AMBASSADOR

NEW INSTITUTIONAL MEMBERS IN 2016

AUSTRIA
Medical University of Vienna

BELGIUM
- AZ Turnhout
- Institut Jules Bordet

THE NETHERLANDS
- Radboud University Medical Centre
- Radiotherapiegroup (Deventer)

ESTONIA
North-Estonian Regional Hospital Cancer Centre

POLAND
Greater Poland Cancer Centre

▶ Read in the Annex the full list of institutional members in 2016, page 94.
2. Supporting-ambassador members

This category is reserved for professionals in the field of radiation oncology who are strongly committed to the Society and who want to take an extra step to help ESTRO develop further by paying a higher membership fee. The additional income generated goes towards the Ambassador Solidarity Fund (see next page). In 2016, 89 individuals signed up as supporting ambassadors.

Ambassador Solidarity Fund
The Ambassador Solidarity Fund is generously financed by supporting-ambassador members.

The Fund enables sponsorship of educational grants, individual membership and registrations to ESTRO courses or events to help radiation oncology professionals from European countries facing more difficult economic situations. Some selection criteria apply (see below).

WHO BENEFITS FROM THE FUND?

Participants at ESTRO conferences: At ESTRO 35, 14 applicants received a free registration as well as free in-training membership for 2016. To receive this grant, the applicants had to be under 40, currently in training and from one of the eligible countries.

Selection criteria:
• This fund is aimed at individuals from European countries facing economic difficulties. The eligible countries are: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Turkey and Ukraine
• Candidates should be active in the field of radiotherapy, radiobiology, radiation physics, or radiation technology
• Candidates should submit a curriculum vitae and a recommendation letter from their department head stating that financial support is essential for the applicant to enable her / him to register for membership and / or benefit from a sponsored registration to an ESTRO course or event.

Participants in the ESTRO School - Educational grants:
Local organisers of teaching courses taking place in the eligible countries with poor local participation due to the difficult economic situation of the country may select two applicants to be sponsored for a course registration and an affiliate membership. These grants were awarded to two ESTRO teaching course participants in 2016.

In addition, 10 ESTRO educational grants were also financed via the Solidarity Fund in order to support participants from eligible countries to attend an ESTRO course.

These ambassadors enjoy the same benefits as an active member, plus access to educational material as authorised by the corresponding faculties. They have immediate access to the ESTRO events webcasts on the e-library (DOVE), and also enjoy a VIP registration desk and a VIP lounge during the ESTRO annual congresses.
The younger generation is the Society’s future and therefore it is essential for ESTRO to involve our young members in all of the Society’s activities, from the more basic to the strategic.

ESTRO sees it as a priority to invest in and involve its young members in order to safeguard the future of the Society and to ensure a healthy continuation of its leadership.

The young members are relied upon to help bring new ideas to the Society so that ESTRO can adapt its policies and portfolio of services according to their needs. They are asked to discuss key challenges in the field and within the Society, to actively partake in the Society’s mission and activities, and to help develop dedicated professional and educational opportunities.

In June 2016, the young committee and the Board organised the second Agora meeting, gathering 21 young radiation oncology professionals from across Europe to discuss the future of ESTRO and radiation oncology. This meeting was held in Barcelona, Spain, after the first Agora meeting that took place in 2012 in Taormina, Sicily, Italy.

ESTRO also continues to extend and reinforce its collaboration with European societies representing young members to encourage more young radiation oncology professionals to join the Society. We also offer a dual membership tailored to these societies with a range of benefits.

In 2016, ESTRO welcomed the young members of:
- The Israeli Society of Clinical Oncology and Radiotherapy (ISCORT)
- The Belgian Association of Oncological Radiotherapy (BVRO / ABRO)
- The Spanish Association of Radiotherapy and Oncology (SEOR)
through this young dual membership agreement.

3. In-training members and young scientists

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- The Spanish Association of Radiotherapy and Oncology (SEOR)
through this young dual membership agreement.
EXAMPLES OF THE RESPONSIBILITIES OF YOUNG ESTRO MEMBERS

THE YOUNG CORNER
in the ESTRO newsletter. Each issue contains a specific section, coordinated by two young editors and presents testimonies of young national societies, young members sharing their experience through meetings or travel grants, reports etc.

THE YOUNG FACEBOOK PAGE
With more than 1,300 'likes', the dedicated Young Facebook page focuses on topics of interest to young radiation oncology professionals.

THE YOUNG COMMITTEE
is an ESTRO standing committee with a strategic mandate composed of 11 members from all radiation oncology disciplines that are appointed by the Board and is involved at governance level. Three new members, among whom two were Agora participants, joined the Young Committee in 2016. They were a clinician, a physicist and a radiobiologist.

THE YOUNG TRACK
is an all-day session held during ESTRO’s annual scientific meeting, which focuses specifically on topics of interest to young professionals.
4. Corporate members

ESTRO has a membership programme for companies to join and support the Society. They can opt for either regular or gold membership with distinctive benefits. In 2016, ESTRO had 27 corporate members: 18 regular members and nine gold members.

Corporate members can benefit from a range of advantages, including:

- Discount on advertising and sponsoring in ESTRO publications
- At ESTRO conferences: priority for booking exhibition space, sponsoring / advertising opportunities, satellite symposia, complimentary full access exhibitor badges, corporate member acknowledgement in the programme book
- Preferential fee for company delegates during teaching courses
- Visibility in corporate member’s directory on the ESTRO website.

In addition to these, gold membership gives the right to a seat on the ESTRO Corporate Council that serves to facilitate the collaboration and coordination between industry’s research and development activities, and academic and scientific development within ESTRO.
The ESTRO membership is drawn from all five continents, and 111 countries in total. However, the large majority of our members (74%) are based in European countries. Two non-European countries – Australia and Canada – are represented in the top 10 member countries.

All the main disciplines of radiation oncology are represented in the ESTRO membership: radiation oncologists, clinical oncologists, medical physicists, radiobiologists, radiation therapists (RTTs), dosimetrists, radiotherapy nurses. However, the ESTRO community extends far beyond these professional disciplines including a wide range of other professions in the medical (surgeons, radiologists, medical oncologists, gynaecologists, urologists, etc.) and the non-medical fields (public affairs specialists, etc.).
The young committee and the Board held the Agora meeting in Barcelona, Spain, from 10 to 12 June 2016, gathering 21 young radiation oncology professionals from across Europe to discuss the future of ESTRO and radiation oncology. This meeting was a follow-up to the first Agora meeting that took place in 2012 in Taormina, Sicily, Italy.

The main aims of the Agora were:

- To foster connections between ESTRO and young radiotherapy scientists working primarily in Europe
- To discuss the needs of young radiotherapy scientists, how ESTRO can serve these needs and how this will benefit ESTRO in the future
- To introduce and develop possible areas of engagement for young radiotherapy professionals within ESTRO
- To develop leadership skills in promising young individuals, in line with ESTRO’s mission and values.

Participants were selected through a call for applications made using the ESTRO mailing list, the ESTRO newsletter and the young committee Facebook page (facebook.com/youngestro). More than 40 applications were received and each application was scored according to scientific experience (publications), leadership, pedagogical and ESTRO experience, and the applicant’s vision regarding ESTRO and young members. Ten participants were selected by the young Committee and the ESTRO Board selected another twelve participants. In the end, 21 young people from 11 countries participated.

The following deliverables and aims were defined before the meeting. To:

- Develop a vision for the long-term role of ESTRO (up to 2030)
- Identify young new leaders of ESTRO and active members
- Stimulate involvement and networking, identifying what young professionals want from ESTRO and what they can do for ESTRO
- Implement strategies for the next three years.

The 2nd Agora meeting was a very busy two days. A wide range of ideas were expressed and exchanged to create a vision and strategy for the next twenty years of ESTRO. The young committee is now working with the Board to prioritise and implement the short-term strategies from the Agora. Overall, the meeting provided a great platform to get to know the young European radiation oncology professionals and their priorities. We expect that some of these very motivated individuals will become key figures in the future of the Society, and two have already joined the young committee.
ESTRO will, in addition, facilitate and enhance the dissemination of science through an expanded portfolio of meetings and educational courses, including congresses, focusing on integrated interdisciplinary / multidisciplinary approaches.

- ESTRO Vision 2020, 1.3 (b) -
A total of 5,300 members and oncology professionals took part in the 35th congress of the Society in April 2016, held at the famous Lingotto Fiere conference centre in Turin, Italy.

The 2016 congress produced a record number of participants and of abstracts received, and an exhibition that was larger than any previous year, confirming the position of the congress as the largest scientific platform for radiation oncology in Europe.

State-of-the-art in radiation oncology

ESTRO 35 focused on the latest developments in radiation oncology treatment, as well as on-going research that soon will be translated into daily practice.

The scientific programme was designed to incorporate the ESTRO Vision. This translated into a session on accessing radiation oncology, including educational and scientific symposia that focused on state-of-the-art radiation therapy and aspects related to health economics. The programme covered all aspects of radiation oncology, including clinical, medical physics, radiobiology, brachytherapy and radiation therapists’ presentations.

Strong assets

The success of the ESTRO annual congress is based on:

Cutting-edge science

ESTRO 35 featured clinical trials and new research results in the disciplines mentioned above, presented at proffered and posters sessions by top scientists from all over the world.
**Education**
The educational programme included pre-meeting courses, teaching lectures, tumour board and contouring sessions. The details of the congress educational programme are provided in the School section of this report.

**Technical exhibition with an area of 10,000m²**
All the leaders in the radiation oncology field were present in the exhibition area to present the latest technological advances.

**Young programme**
A whole day was dedicated to ESTRO’s young audience, which included a teaching lecture, symposia, and ‘moving’ poster sessions.

A wide array of collaborations with other societies
AAPM, ASTRO, EFOMP, ESR, IAEA, ILROG and PTCOG*.

▶ *See abbreviations list in Annex page 104.

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5,284 PARTICIPANTS
including 1,219 company delegates
originating from
85 COUNTRIES
with 75.6% coming from Europe
### Key Statistics

- **2,198** abstracts received, of which **267** were selected for oral presentations.
- **400** abstracts were selected for posters, **89** for poster viewings during **12** sessions, and **1,095** for e-posters.
- **559** participants attended the **5** pre-conference courses.
- **102** exhibiting companies.
- **207** participants attended the **8** contouring workshops.
- **13** commercial satellite symposia were hosted.
- **14** people benefited from a free registration financed by the ESTRO solidarity fund.
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### Other Highlights

- **249** invited speakers.
- **102** exhibiting companies.
- **14** people benefited from a free registration financed by the ESTRO solidarity fund.
- **559** participants attended the **5** pre-conference courses.
- **207** participants attended the **8** contouring workshops.
- **13** commercial satellite symposia were hosted.
- **14** people benefited from a free registration financed by the ESTRO solidarity fund.

### Awards

- **249** invited speakers.
- **102** exhibiting companies.
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- **559** participants attended the **5** pre-conference courses.
- **207** participants attended the **8** contouring workshops.
- **13** commercial satellite symposia were hosted.
- **14** people benefited from a free registration financed by the ESTRO solidarity fund.

### Interesting Facts

- **73%** of attendees surveyed felt they had learned about the latest improvements in radiation oncology.
- **69%** of attendees surveyed really appreciated the interdisciplinary sessions.
- **64%** of attendees surveyed felt they had learned about innovative high-precision technologies for imaging cancer patients.
- **49%** of attendees surveyed felt they were introduced to new areas of research.

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**SCIENCE DISSEMINATION**
**ABSTRACTS**

**DISCIPLINARY BREAKDOWN**

- **CLINICAL TRACK:** 878
- **PHYSICS TRACK:** 904
- **RTT TRACK:** 143
- **BRACHYTHERAPY TRACK:** 151
- **RADIOBIOLOGY TRACK:** 122

**EVOLUTION OF NUMBER OF ABSTRACTS SUBMITTED**

- **ESTRO 33:** 1,737
- **3RD ESTRO FORUM:** 1,637
- **ESTRO 35:** 2,198

**PARTICIPATION**

**EVOLUTION OF THE NUMBER OF PARTICIPANTS**

- **1ST ESTRO FORUM:** 4,888
  - 2,807 participants and visitors
  - 2,081 company delegates
- **ESTRO 31:** 5,056
  - 3,285 participants and visitors
  - 1,771 company delegates
- **2ND ESTRO FORUM:** 3,647
  - 2,614 participants and visitors
  - 1,033 company delegates
- **ESTRO 33:** 5,030
  - 3,727 participants and visitors
  - 1,303 company delegates
- **3RD ESTRO FORUM:** 4,933
  - 3,496 participants and visitors
  - 1,457 company delegates
- **ESTRO 35:** 5,284
  - 4,085 participants and visitors
  - 1,279 company delegates
GEOGRAPHIC BREAKDOWN OF THE PARTICIPANTS

- **EUROPE**: 75.6%
- **ASIA AND OCEANIA**: 12.9%
- **NORTH AMERICA**: 5.6%
- **MIDDLE EAST AND NORTH AFRICA**: 4.4%
- **SOUTH AMERICA**: 1%
- **AFRICA (EXCEPT NORTH AFRICA)**: 0.5%

TOP 10 COUNTRIES

1. **ITALY**: 409
2. **THE NETHERLANDS**: 353
3. **UK**: 257
4. **GERMANY**: 198
5. **FRANCE**: 179
6. **SPAIN**: 175
7. **DENMARK**: 124
8. **BELGIUM**: 123
9. **USA**: 114
10. **SWITZERLAND**: 101

DISCIPLINARY BREAKDOWN OF PARTICIPANTS

- 36% RADIATION ONCOLOGISTS
- 20.7% MEDICAL PHYSICIANTS
- 7% RTTS (RADIATION THERAPISTS)
- 2.6% OTHER MEDICAL SPECIALTIES
- 1% RADIOBIOLOGISTS
- 32.7% NOT SPECIFIED
## EXHIBITION

### Evolution of the Number of Square Metres Sold in the Exhibition

<table>
<thead>
<tr>
<th>Exhibition</th>
<th>Square Metres Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st ESTRO Forum</td>
<td>3,343</td>
</tr>
<tr>
<td>ESTRO 31</td>
<td>3,524</td>
</tr>
<tr>
<td>2nd ESTRO Forum</td>
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<td>3rd ESTRO Forum</td>
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### Evolution of the Number of Exhibiting Companies

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<tr>
<td>ESTRO 31</td>
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<tr>
<td>2nd ESTRO Forum</td>
<td>88</td>
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<td>ESTRO 33</td>
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<tr>
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<tr>
<td>ESTRO 35</td>
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</table>
2. Topical / organ-based conferences

2.1 ESTRO and joint events

EMUC - European Multidisciplinary Meeting on Urological Cancers
Consolidating multidisciplinary strategies
24-27 November 2016 | Milan, Italy
Joint ESTRO, ESMO and EAU meeting

The European Meeting on Urological Cancers (EMUC) is an international multidisciplinary conference for uro-oncology experts where insights, best practices and prospects are discussed and examined in a comprehensive and critical manner by opinion leaders.

The last EMUC meeting focused on controversial diagnostic issues and treatment strategies, with the organisers harnessing the synergies of the European Society for Medical Oncology (ESMO), the European Association of Urology (EAU) and ESTRO to offer a scientific programme that addressed core topics and emerging trends in urological malignancies.

The collaboration of partners and affiliated organisations, including the European School of Urology (ESU), the EAU Section of Urological Imaging (ESUI), EAU Young Academic Urologists Meeting (YAU) and the EAU Section of Uropathology (ESUP), has enabled the EMUC to establish itself over the last eight years as a reliable and dynamic platform for radiation oncologists, medical oncologists, pathologists and urologists to share knowledge and expertise.

In the framework of the meeting, ESTRO held a contouring workshop on ‘Salvage intraprostatic relapses’, that attracted 24 participants.
1,188 delegates originating from 72 countries

- 96 invited speakers
- 1 ESTRO contouring workshop attracting 24 participants
- 206 abstracts submitted, of which 170 were selected, of which 6 were selected for oral presentations

Geographic Breakdown of the Participants:

- 77% Europe
- 10.3% Asia
- 7% Africa
- 2.4% South America
- 2.3% North America
- 1% Oceania/Australia
The workshop provided an opportunity to discuss a combination of issues from daily clinical routine, and to gain an overview of state-of-the-art technologies, the latest scientific results and clinical studies, and the implications for patient treatment. As expected, it also proved to be an excellent platform for networking within the GEC-ESTRO community, and has become a regular feature in the GEC-ESTRO calendar.

122 PARTICIPANTS

TOP 10 COUNTRIES

1. POLAND: 38
2. GERMANY: 12
3. UK: 11
4. THE NETHERLANDS: 10
5. AUSTRIA: 6
6. DENMARK: 5
7. SWEDEN: 5
8. FRANCE: 4
9. SPAIN: 4
10. ITALY: 4

DISCIPLINARY BREAKDOWN OF THE PARTICIPANTS

- 48.4% RADIATION ONCOLOGISTS
- 35.2% MEDICAL PHYSICISTS
- 6.6% CLINICAL ONCOLOGISTS
- 0.8% RTTS (RADIATION THERAPISTS)
- 0.8% DOSIMETRISTS
- 8.2% OTHER
2.2 Events in scientific collaboration with ESTRO

International Conference on Translational Research in Radio-Oncology, Physics for Health in Europe (ICTR-PHE)
15-19 February 2016 | Geneva, Switzerland

ICTR-PHE was a unique opportunity to gather together all the scientific communities involved in research programmes aimed at optimising cancer treatment: radio-chemists, nuclear-medicine physicians, biologists, software developers, accelerator experts, oncologists, and detector physicists. The 400 participants were asked to ‘think outside the box’ and make innovative proposals to boost further the comprehensive approach to cancer management. An ESTRO representative (Claudio Fiorino, Italy) was appointed to collaborate on the scientific programme and another one to present a lecture (Eric Deutsch, France).

ESTRO workshop on ‘Accelerated partial breast irradiation: current status and perspectives’ at the European Breast Cancer Conference (EBCC)
9 March 2016 | Amsterdam, The Netherlands

The European Breast Cancer Conference (EBCC) is a multidisciplinary meeting organised by the European CanCer Organisation (ECCO) providing new data and developments in breast cancer. ESTRO participated in the conference by holding a workshop on ‘Accelerated partial breast irradiation (APBI): current status and perspectives’, which attracted 95 participants.

This workshop gathered together specialists dedicated to this treatment. Radiation oncology speakers outlined the new developments in the use of partial breast radiotherapy, exploring both the potential benefits and challenges.

ELCC - 6th European Lung Cancer Conference
13-16 April 2016 | Geneva, Switzerland

The European Lung Cancer Conference (ELCC) was organised in cooperation with the most important societies representing thoracic oncology specialists: ESMO and IASLC as conference organisers, and partners ESTRO, ESTS, and ETOP*. This collaborative approach ensured a truly multidisciplinary programme, providing the 2,247 participants with exposure to practice-changing science and state-of-the-art education, and reinforcing the practice of lung cancer treatment and research across Europe and beyond.

▶ * See abbreviations list in Annex page 104.
Cancer stem cells: impact on treatment conference
7-11 December 2016 | Obergurgl, Austria

The conference was devoted to the problem of primary and acquired therapy resistance associated with disease progression and poor clinical outcomes in cancer patients. The meeting attracted 50 participants from 18 different countries. ESTRO was represented by the chair of the radiobiology committee (Rob Coppes, The Netherlands), who gave a presentation on oesophageal cancer stem cells.

World Congress of Brachytherapy
27-29 June 2016 | San Francisco, USA

The World Congress of Brachytherapy (WCB) is an international event held every four years and hosted alternately between ESTRO and the American Brachytherapy Society (ABS). The 2016 edition was organised by ABS, in San Francisco, 27-29 June 2016. The scientific programme was prepared by ABS, GEC-ESTRO, ALATRO, CBG-CARO, JASTRO, AROI, IBS & ABG* and the theme for the event was ‘Driving global partnerships and possibilities’.

The meeting succeeded in bringing together 880 participants from all over the world including 107 Europeans to discuss new developments in the field of brachytherapy. All the main areas of brachytherapy were incorporated in several sessions for prostate, breast, gynaecology, head and neck, skin, gastro-intestinal, thoracic, eye, and physics.

* See abbreviations list in Annex page 104.
2.3 Supported meetings

In addition to the meetings listed in the previous pages, in which ESTRO joined or participated in the scientific organisation, the Society also supports meetings who request some visibility through ESTRO channels. In 2016, ESTRO supported 26 meetings.

Organised by other societies, institutes or partners in the oncology community, all these meetings, once their application was validated by the ESTRO Board, benefitted from a relevant promotional package: visibility on the ESTRO website and newsletter.

RECOMMENDED MEETINGS:

<p>| 5-7 February | ASSISI, ITALY | Think Tank Meeting on Research Challenges in Breast Cancer |
| 21-23 March | GHENT, BELGIUM | 3rd Symposium on Small Animal Radiotherapy |
| 6-7 May | SANTIAGO, CHILE | 1st International E-cancer Symposium on Radiotherapy |
| 18-20 May | DRESDEN, GERMANY | Biomarkers for Radiation Oncology |
| 3 June | BARCELONA, SPAIN | Integration of New Technologies in the Clinical Practice of Radiation Oncology |
| 13-17 June | BUCHAREST, ROMANIA | Updated Oncology 2016 State of the Art News and Challenging Topics |
| 22-24 June | ST PETERSBURG, RUSSIAN FEDERATION | Oncological Forum White Nights-2016 |
| 24-25 June | NOVARA, ITALY | 9th ISIORT Conference |
| 30 September - 2 October | RIMINI, ITALY | AIRO-AIRB-AIRO Giovani National Congress |
| 1 October | BRUSSELS, BELGIUM | BRAVO Symposium 2016: Radiation Oncology in the Fight Against Cancer |
| 3-5 October | GLASGOW, UK | International Cancer Imaging Society Meeting &amp; 16th Annual Teaching Course |
| 5-7 October | MAASTRICHT, THE NETHERLANDS | Monte Carlo Methods in Radiation Therapy |
| 17-19 October | ROME, ITALY | 26th Residential Course on Multidisciplinary Oncology and Imaging |
| 23-24 October | BERLIN, GERMANY | Cancer and Nutrition Workshop |
| 25-27 October | AUCKLAND, NEW ZEALAND | ANZHNCS Annual Scientific Meeting and the IFHNOS 2016 World Tour |</p>
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Location</th>
<th>Event Name</th>
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<tr>
<td>24 November</td>
<td>POZNAN, POLAND</td>
<td>Young Scientists’ Forum 2016</td>
</tr>
<tr>
<td>3-4 December</td>
<td>SHANGHAI, CHINA</td>
<td>World Precision Medicine Summit</td>
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**ENDORSED MEETINGS:**

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Location</th>
<th>Event Name</th>
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</thead>
<tbody>
<tr>
<td>20 May</td>
<td>DUBLIN, IRELAND</td>
<td>4th Beacon Hospital International Stereotactic Radiosurgery and Stereotactic Ablative Radiotherapy Symposium</td>
</tr>
<tr>
<td>18-19 June</td>
<td>ANN ARBOR, USA</td>
<td>4th MR in Radiotherapy</td>
</tr>
<tr>
<td>15-17 September</td>
<td>LUGANO, SWITZERLAND</td>
<td>ESO-EANO Masterclass in Neuro-oncology, Challenges in Radiotherapy for Patients with Brain Glioma</td>
</tr>
<tr>
<td>20-21 September</td>
<td>LONDON, UK</td>
<td>Proton Therapy Congress</td>
</tr>
<tr>
<td>22-24 September</td>
<td>PARIS, FRANCE</td>
<td>International Conference on Immunotherapy-Radiotherapy Combinations</td>
</tr>
<tr>
<td>29 September - 1 October</td>
<td>PADUA, ITALY</td>
<td>12th Meet The Professor Advanced International Breast Cancer Course (AIBCC)</td>
</tr>
<tr>
<td>6-7 October</td>
<td>ROME, ITALY</td>
<td>4th World Rectal Congress on Organ Preserving Perspectives</td>
</tr>
<tr>
<td>13-14 October</td>
<td>ROME, ITALY</td>
<td>4th Annual UPMC International Symposium on SRS / SBRT</td>
</tr>
<tr>
<td>11-13 December</td>
<td>AMSTERDAM, THE NETHERLANDS</td>
<td>Colorectal Cancer Congress (EMCCC)</td>
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The Conference on Experimental Research in Radiation Oncology (CERRO), also popularly known as the "Ski meeting", was held as per tradition in Les Ménuires, Trois Vallées, France, from 16-23 January 2016. This was the 31st series and was attended by 51 delegates from different disciplines in radiation oncology. Participation in the meeting is strictly by invitation. Presentations on work in progress are the focus of the event, in order to stimulate discussions on innovative research. The meeting is also a platform for promoting collaboration and networks between members and for integrating young members into the Society.
1. Radiotherapy & Oncology

ESTRO’s scientific journal, Radiotherapy & Oncology, also known as the “Green Journal”, is the flagship publication in ESTRO’s family of journals, which together play a pivotal role in fulfilling one of the Society’s main objectives: the promotion of research and dissemination of outcomes.

Since 1983, Radiotherapy & Oncology has published original research articles and review articles on all aspects of radiation oncology. It is a monthly publication available online and in hard-copy format to ESTRO members. The journal is peer-reviewed by an internationally-recognised team of editors and editorial board members*.

*List of editorial board members in the Annex, page 95.

Geographical distribution of manuscript submissions in 2016

Radiotherapy & Oncology has an international base of authors and in 2016 manuscripts were received from all major regions of the world.

Article transfer service to ctRO, phiRO and tipsRO

As described later in this report, ESTRO has recently launched three open access journals that foster the dissemination of research in areas of importance to the Society’s membership. Authors of manuscripts submitted to Radiotherapy & Oncology that were not withheld for publication may be offered the opportunity to have their manuscript transferred to ctRO, phiRO or tipsRO. The decision on whether or not to go ahead with this transfer rests with the author of the article.

Impact factor

The current impact factor for Radiotherapy & Oncology, which measures citations made in 2015 to articles published in 2014 and 2013, is 4.817. Once again, the journal is the leading publication in radiation oncology.

Online usage

Online usage of Radiotherapy & Oncology continued to grow in 2016, with more than 800,000 articles downloaded for the first time in the journal’s history.

Number of articles downloaded in 2016: 803,997.

More information

To learn more about Radiotherapy & Oncology or to submit a manuscript, visit: www.thegreenjournal.com.
In 2016, a total of 1,326 manuscripts were submitted to *Radiotherapy & Oncology*.

The rejection rate was 74.6%.
GEOGRAPHICAL DISTRIBUTION OF MANUSCRIPT SUBMISSIONS IN 2016

- **521** Europe
- **451** Australasia
- **292** USA / Canada
- **45** Middle East
- **12** Central / South America
- **7** Africa

**IMPACT FACTOR:** 4.817

**IMPACT FACTOR TREND (2010-2015)**

- 2010: 4.337
- 2011: 5.580
- 2012: 4.520
- 2013: 4.857
- 2014: 4.363
- 2015: 4.817

2016 IMPACT FACTOR NOT KNOWN YET.
The three most downloaded articles from Radiotherapy & Oncology in 2016 were:

1. **Radiation-induced neuropathy in cancer survivors**
   Delanian S, Lefaix JL, Pradat PF

2. **Meta-analysis of chemotherapy in head and neck cancer (MACH-NC): An update on 93 randomised trials and 17,346 patients**
   Pignon JP, le Maitre A, Maillard E, Bourhis J, on behalf of the MACH-NC Collaborative Group

3. **Recommendation for a contouring method and atlas of organs at risk in nasopharyngeal carcinoma patients receiving intensity-modulated radiotherapy**
Jens Overgaard: 25 years of dedication to the Green Journal

December 2016 will mark the end of an era for Radiotherapy & Oncology. After more than 25 years at the helm, Professor Jens Overgaard will retire as Editor-in-Chief.

Publisher’s Note
Under Jens’s leadership, Radiotherapy & Oncology has emerged as the premier journal in its field, serving a global audience of radiation oncologists, researchers, physicists and therapists. Manuscript submissions have increased to more than 1,300 per year, online usage continues to rise steadily and 800,000 articles will be downloaded by the end of the year, and the journal’s Impact Factor, the most well-known measure of quality and relevance, is 4.817.

But beyond the figures, Jens’s tenure as Editor-in-Chief is marked by his dedication to the dissemination of high-quality, rigorous research which advances the care of patients with cancer. Jens consistently challenged all of us to publish the best journal that we could for the benefit of the worldwide radiation oncology community and the esteem in which the journal is held across the world is a testament to the dedication, hard work and leadership of Jens. Within Elsevier, Jens is held in both the greatest respect but also the greatest warmth and affection by those he has worked with over the course of 25 years. He has served the journal with distinction and with a commitment to authors and readers alike.

Professor Michael Baumann has been appointed as Editor-in-Chief of Radiotherapy & Oncology, commencing his tenure in January 2017. Michael is Chairman and Scientific Director of the German Cancer Research Centre (DKFZ). He was previously Director for Radiation Therapy at the University Hospital Carl Gustav Carus, the Institute for Radiation Oncology at the Helmholtz Centre in Dresden – Rossendorf and the OncoRay Centre. As a former Editor of Radiotherapy & Oncology and Co-Editor-in-Chief for the last three years, Michael is uniquely placed to lead the journal into its next era. He will be supported by a team of Editors who will assist him with the daily management of Radiotherapy & Oncology.

We would like to thank Jens for his extraordinary dedication and service to Radiotherapy & Oncology and to welcome Michael as our Editor-in-Chief.

Sarah Jenkins
Executive Publisher, Radiotherapy & Oncology
Oxford, UK
ESTRO will promote and publish journal(s) and, where appropriate, additional supplementary information of the highest scientific quality and through this approach set the existing and future standards for the speciality.

2. Open access journals

ESTRO and Elsevier have now launched three new open access journals in order to extend the publication of high-quality research in the radiation oncology field. They are:

- Clinical and Translational Radiation Oncology - ctRO
- Physics and Imaging for Radiation Oncology - phiRO
- Technical Innovations and Patient Support in Radiation Oncology - tipsRO

Open access and readership

ctRO, phiRO and tipsRO are open access journals. Upon acceptance of a paper, the authors will be asked to meet the cost of publication through an article publication fee. All members of ESTRO are eligible for a discounted fee and the fees vary depending on the category of the manuscript: full-length original research article, short-format case report, technical note or short communication. All correspondence commenting on previously published work is published free of charge.

As an open access journal, ctRO, phiRO and tipsRO are accessible to everyone. This will be beneficial for the journals as they become established and we look forward to reporting online usage and citations to ESTRO’s membership in future years.

Abstracting and indexing services

One of the first goals that the editorial teams of ctRO, phiRO and tipsRO has set is to have the journals covered by PubMed Central, the National Library of Medicine’s index of open access articles. All papers covered by PubMed Central are searchable from PubMed, providing authors with further visibility for their work. In addition, Elsevier will register the three publications with the Directory of Open Access Journals (DOAJ), an internationally recognised index of open access journals which meet criteria for high-quality peer-review following publication of the journal’s first issue.
Clinical & Translational Radiation Oncology (ctRO)

Clinical & Translational Radiation Oncology, ctRO, was launched in June 2016 as a member of ESTRO’s family of journals.

The open access journal, ctRO, publishes research on all aspects of clinical and translational radiation oncology, particularly new developments in radio-biology, clinical interventions and treatments, data sciences, epidemiology and oncopolicy.

The Editors-in-Chief, Pierre Blanchard (Villejuif, France) and Daniel Zips (Tübingen, Germany), are supported by an editorial board of experts drawn from across the world.

Publication of volume 1
ctRO hit its first milestone in December 2016 with the publication of volume 1. The volume, which includes the inaugural editorial from Pierre Blanchard and Daniel Zips setting out their vision for the journal, is available at www.cto.science and www.sciencedirect.com/science/journal/24056308.

More information
To learn more about ctRO or to submit a manuscript, visit www.ctro.science.

Physics & Imaging in Radiation Oncology (phiRO)

Physics & Imaging in Radiation Oncology, phiRO, was launched in June 2016.

phiRO publishes original research articles, reviews, case series, case reports, technical notes, short communications and correspondence on all areas of medical physics and imaging and related areas.

The Editors-in-Chief of phiRO, Lorenzo Bonomo (Rome, Italy) and Ludvig Muren (Aarhus, Denmark), are supported by an internationally respected editorial board.

Published papers
The first paper was published in phiRO in January 2017. Readers may view all published papers at www.phiro.science and via ScienceDirect.

More information
To learn more about phiRO or to submit a manuscript, visit www.phiro.science.
Technical Innovations & Patient Support in Radiation Oncology, tipsRO, was launched in June 2016 as part of ESTRO’s family of journals.

tipsRO offers radiation therapists, nurses, and supportive care specialists a forum for the publication of original research, case reports, practice development and health-evaluation articles, reviews, short communications, technical notes and correspondence on topics which include treatment planning and workflows, treatment delivery and verification, supportive care, psycho-oncology, education and training.

The Editors-in-Chief, Sara Faithfull (Guildford, UK) and Michelle Leech (Dublin, Ireland), are assisted by an editorial board of internationally respected experts.

Published papers
The first paper was published in tipsRO in January 2017. Readers may view all published papers at www.tipsro.science and via ScienceDirect.

More information
To learn more about tipsRO or to submit a manuscript, visit www.tipsro.science.
3. ESTRO’s e-newsletter

The newsletter covers a wide range of topics, and highlights – typically per discipline – latest advances, interviews with key opinion leaders, conference findings, research information, editors’ picks, “Read it before your patients” columns, etc.

This allows the radiation oncology community to keep pace with the activities of the Society and with the latest developments in the radiation oncology field.

The newsletter welcomes contributions from members and relies on a dedicated group of editors, selected from amongst the membership, to be responsible for a particular Corner. The Newsletter is published every two months and is accessible to everyone via tablet, smartphone and the ESTRO website.

The newsletter app was launched in 2013. In its first two years, the readership has doubled each year, suggesting that the challenge of delivering a digital newsletter has been worth it.

THE NEWSLETTER IS ACCESSIBLE TO EVERYONE VIA THE FOLLOWING MEANS:

ON TABLET VIA THE ESTRO NEWS APP
from the App Store for iPads or from the Google Playstore for Android tablets

ON SMARTPHONES VIA THE ESTRO NEWS APP
Android only

ON WWW.ESTRO.ORG/ABOUT:
Online and offline (by downloading the PDF format)

TOP FIVE MOST READ CORNERS IN 2016
From the ESTRO News app and online version at www.estro.org

1. READ IT BEFORE YOUR PATIENTS
2. ESTRO CONFERENCES
3. ESTRO SCHOOL
4. PHYSICS
5. BRACHYTHERAPY
4. DOVE: ESTRO’s e-library

ESTRO will develop and enhance its web-based portfolio of resources for the benefit of all members, taking full account of the future strategic potential of new developments in information and communication technology.

- ESTRO Vision 2020, 1.5 (f) -

Over the past years, ESTRO has gathered a wealth of educational and scientific information in its official journal Radiotherapy & Oncology, in abstracts, posters and webcasts from conferences, guidelines, contouring exercises and other educational publications. DOVE (Dynamic Oncology Virtual ESTRO) is an e-library service provided by ESTRO in order to make these data accessible online to all oncology professionals.

DOVE is an unrivalled, dedicated resource for training and education in radiation oncology that will continue to grow in size and importance over the years. Directly reachable from the homepage of estro.org and through a single log-on, the platform offers access to peer-reviewed ESTRO resources, such as congress webcasts, abstracts and posters, educational materials and videos, Radiotherapy & Oncology articles, ESTRO guidelines and publications and, in the future, non-ESTRO resources as well.

Slides and presentations used during ESTRO teaching courses have been added to DOVE using a ‘flip book’ format.

This service is more than just an internet library or database. In addition to providing users with high-level learning material, in the future it will offer possibilities and tools for interactive learning.

THE PLATFORM OFFERS ACCESS TO PEER-REVIEWED ESTRO RESOURCES

- CONGRESS WEBCASTS
- ABSTRACTS AND POSTERS
- EDUCATIONAL MATERIALS AND VIDEOS
- FALCON DELINATION CASES
- RADIOTHERAPY & ONCOLOGY ARTICLES
- ESTRO GUIDELINES AND PUBLICATIONS
ESTRO is a scientific society that promotes research to improve radiation oncology in all its aspects. Research supported, endorsed or initiated by ESTRO is in line with ESTRO’s ‘Vision for radiation oncology’ for 2020 and is of relevance to its members. The scope of ESTRO’s involvement varies with the research topic, the type of research activity, and the level of support requested.

Over 20 years, ESTRO has supported more than 40 EU projects, including ERASMUS, SOCRATES, TEMPUS, Europe Against Cancer, Copernicus, COST, Quality of Life and GENEPI-Entb, GENEPI-Entb2, GENEPI-LowRt, ALLEGRO, MEDRAPET, ACCIRAD, ULICE, and ANDANTE. The Society organises topical educational events for innovations generated within research consortiums that are not accommodated in its existing radiotherapy training programmes.

As an international member society responsible for organising a wide range of courses and meetings annually, ESTRO has developed a very broad network of contacts over the years, including most international, regional and national societies, professional bodies and industry partners in the field of radiation oncology. Therefore, it has at its disposal a wide range of methods and tools to ensure the promulgation of the results of a project to a very broad audience.
In 2016 ESTRO participated as a partner in the dissemination of results on one European Commission-funded research project: ARTFORCE.

Aim
The aim of the project is the improvement of quality and therapeutic ratio in head and neck and lung cancer treatment in randomised phase II trials.

Achievements
• Work package 3 (biological adaptive treatment planning in the presence of advanced techniques) has shown that in the second week of treatment it is already possible to estimate radiosensitivity using functional imaging, thus predicting the required radiation dose. Patients can be stratified as responders versus non-responders.
• Work package 5 (biomarkers for response prediction) now presents interesting new data on the exploration of the prognostic / predictive value of radiomics in head and neck squamous cell cancer (HNSCC) patients treated with chemoradiotherapy (CRT-cisplatin) or bioradiotherapy (BRT-cetuximab) indicating that prognostic radiomics features and p16 could be complementary variables for predicting survival.
• Work packages 7 and 8: though both clinical trials were delayed initially, the recruitment of patients has now picked up due to more hospitals participating in the trials. The toxicity data have been monitored.
• Work packages 1 and 9: published an extensive report on the above results in the November-December 2016 issue of the ESTRO newsletter.

For more information, see www.cancerartforce.eu
EPTN
European Particle Therapy Network

Particle therapy is only one part of radiation oncology, and needs to be well aligned with other techniques in radiotherapy, as well as with general developments in cancer research and care. However, this particular environment offers fascinating opportunities for providing excellence in cancer care, and also to perform excellent clinical research in the framework of a European network.

The European Particle Therapy Network (EPTN) met for the second time on 18 May 2016, at the ESTRO office in Brussels. The meeting brought together 27 centres including the European Organisation for Research and Treatment of Cancer (EORTC) and the European Organisation for Nuclear Research (CERN). The purpose of the meeting was to discuss what had been achieved so far and to plan for the future.

Achievements of work parties (WPs)

WP1
Scoring of normal tissue reactions and tumour response particle / photon radiotherapy
With the aim of homogenising scoring of normal tissue toxicity, a proposal for a minimum requirement on normal tissue scoring has been set up for prostate cancer that includes standard acute and late toxicity scores and patient quality of life.

It was decided that to avoid duplication, this WP will fuse with the clinical trials group, WP3.

WP2
Dose assessment, quality assurance, dummy runs, technology inventory
Twelve centres from eight European countries confirmed their interest in contributing to this WP, with a total of 15 participants.

The following six areas of interest have been identified for further work:
- Quality assurance (QA) / equipment survey (as a first priority)
- absolute dosimetry
- dosimetry audits
- end-to-end tests
- dosimetry tools
- web-based platform for teaching activities.

Participants will be assigned to selected topics.

WP3
Towards joint clinical trials
Some of the areas this WP recommends for clinical trials are:
- performance of high-quality trials with properly selected candidates using relevant, validated clinical endpoints
- performance of trials involving state-of-the-art photon radiotherapy, for particle therapy to be seen as an integral component of radiation oncology.
• importance of developing a European QA platform for particle therapy trials.

**WP4**

*Image guidance in particle therapy*

Nineteen European particle therapy centres (PTCs) confirmed their participation in this WP. They completed a survey on the current status and future perspective of image-guided particle therapy (IGPT). Results of the survey are being analysed and will be communicated later. This will lead to the creation of specific goals for subgroups within the WP. The major aim of the WP is to understand and investigate the merits and caveats of the use of IGPT.

**WP5**

*Treatment Planning System (TPS) in particle therapy*

So far, this WP has 19 participants from 14 European centres. The group met on 17 May and based on discussions, created seven task groups with defined coordinators to start discussions on each of the following points:

- Collective technical product specifications (TPS)
- Planning standards and case solutions
- The role of automated planning
- TPS commissioning and validation
- CT calibration
- The role of robust optimisation / evaluation.

**WP6**

*Radiobiology, relative biological effectiveness (RBE)*

Following initial discussions at the meeting in Brussels it was decided to proceed with a questionnaire to determine the current status and detailed specification of the radiobiological studies in the existing, and planned, clinical and research particle therapy centres in Europe. This information will help to guide future collaborative research.

**WP7**

*Health economy*

This WP aims to initiate a harmonised way of data collection for both clinical and health economic performance parameters to enable translation into value dossiers. To this end, the WP launched a survey in order to produce a basic data inventory of the participating particle beam therapy centres. However, the number of survey forms returned was unsatisfactory. The team has to come up with other ways to achieve this.

**EORTC**

EORTC is interested in partnering with the European Particle Therapy Network (EPTN) to avoid the duplication of infrastructure for clinical research and network management. It has a number of solutions, which could be customised to the services of EPTN.

**General remarks**

- Education and training needs should be addressed
- Collaboration is important as particle therapy is expensive
- Map what centres are doing to be able to identify gaps for future work
- A subgroup for paediatric tumours is needed.

An update of activity by the WPs was given at the EPTN annual meeting on 5 April 2017.
ESTRO will take all reasonable measures to develop further as the pre-eminent educational and scientific society in radiotherapy and oncology.

- ESTRO Vision 2020, 1.5 -
The ESTRO School is an internationally recognised provider of high-quality education in radiotherapy and oncology. It is regarded with pride as one of ESTRO’s main services and one of the most important benefits of membership*.

The School’s activities and impact have grown over the years, while meeting at the same time the perpetual challenge of safeguarding the quality of its offerings and staying abreast of developments so that the Society is able to deliver on its vision and mission.

The ESTRO School promotes multidisciplinary education in oncology, basic science, physics and technology, imaging, interdisciplinary oncology, research and best practice, with the objective of standardising knowledge and clinical practice, whilst recognising the diversity of radiation oncology practice in different parts of the world.

The School develops a wide array of educational activities that encompass:

• Annual live teaching courses covering the basic and continuing medical educational needs of all professionals working in the field of radiation oncology
• Pre-meeting teaching courses, workshops, multidisciplinary tumour board sessions and teaching lectures during congresses
• E-learning courses and tools
• Hands-on experience through a mobility grants programme.

*ESTRO members benefit from a discount on fee registration for all the courses and e-learning activities.
1. 2016 programme at a glance

Based on the biennial plan drawn up in 2013, the annual programme for 2016 included 36 courses, and this pattern will be followed over the years to come:

- **36 COURSES** planned worldwide (33 held)
- **29 COURSES** planned in Europe (26 held)
- **7 COURSES** held outside Europe

- 6 basic courses
- 6 technology courses
- 3 imaging courses
- 1 physics course
- 2 biology courses
- 8 clinical multidisciplinary courses
- 3 brachytherapy courses
- 2 RTT courses
- 1 research course
- 1 best practice course
2. A pertinent range of topics

The topics cover the main areas of radiation oncology and multidisciplinary cancer treatment:
- Radiotherapy treatment planning and delivery: external beam and brachytherapy
- Multimodal cancer treatment, in general, and also site-specific treatment
- Imaging
- Biological aspects of radiation oncology
- Best practice
- Research.

As part of its mission, the ESTRO School aims to cover all of the different aspects of radiation oncology on a biennial basis. Some of the courses focus on more specialised and less common topics that are mainly relevant to professionals working in highly specialised areas.

The School’s courses are held at different European locations throughout the year, and certain courses are also provided outside Europe.

The courses are accredited by the European Accreditation Council for Continuing Medical Education (EACCME) and by the European Federation of Organisations for Medical Physics (EFOMP), and participants receive corresponding credits as well as certificates of attendance.

3. New courses in 2016

In order to meet the demands of a rapidly evolving scientific field and the educational needs of its members, the ESTRO School regularly develops new courses.

Three new courses were developed and introduced in 2016:
- Palliative radiation oncology
- A gastrointestinal (GI) week composed of two back-to-back courses on:
  - Upper GI (oesophagus and pancreas)
  - Lower GI (anal and rectal cancer)
- Two multidisciplinary oncology courses for medical students (offered as part of basic undergraduate medical training)
GROWTH IN THE NUMBER OF PARTICIPANTS OVER THE YEARS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Courses / Year</th>
<th>Participants / Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>14</td>
<td>1,434</td>
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<td>2,490</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
<td>2,822</td>
</tr>
</tbody>
</table>

PARTICIPANTS ON LIVE COURSES

- 2,026 PARTICIPANTS ON EU LIVE COURSES
- 796 PARTICIPANTS ON INTERNATIONAL COURSES

ESTRO SCHOOL
EVOLUTION OF THE GEOGRAPHIC BREAKDOWN OF COURSE PARTICIPANTS IN 2016

BREAKDOWN OF PARTICIPANTS FOR COURSES ORGANISED IN EUROPE IN 2017

PER CONTINENT

- 88.4% EUROPE
- 7.4% WEST PACIFIC
- 2% MIDDLE EAST / NORTH AFRICA
- 1% NORTH AMERICA
- 0.5% SOUTH EAST ASIA
- 0.5% SOUTH AND CENTRAL AMERICA
- 0.2% AFRICA
TOP 10 COUNTRIES

1. THE NETHERLANDS: 190
2. GREECE: 119
3. SPAIN: 117
4. UK: 88
5. FRANCE: 83
6. BELGIUM: 80
7. POLAND: 75
8. SWITZERLAND: 74
9. AUSTRALIA: 69
10. GERMANY: 69

PER DISCIPLINE

- 43.5% RADIATION / CLINICAL ONCOLOGISTS
- 31.5% MEDICAL PHYSICISTS
- 13.4% RTTS
- 6% UNKNOWN
- 2.7% OTHER CLINICAL SPECIALTIES
- 1.7% DOSIMETRISTS
- 1.2% RADIobiologists

BY ESTRO MEMBERSHIP

- 78% MEMBERS
- 22% NON-MEMBERS
ESTRO offers one-day teaching courses prior to its annual congress. Five pre-meeting courses were organised in Turin on 29 April at ESTRO 35:

**INTERDISCIPLINARY PRE-MEETING COURSE**
Planning and delivering high-dose lung radiotherapy in clinical practice

**CLINICAL PRE-MEETING COURSE**
Re-irradiation: background, state-of-the-art and perspectives for clinical practice

**PHYSICS PRE-MEETING COURSE**
Multi-dimensional dosimetry systems

**RADIOBIOLOGY PRE-MEETING COURSE**
Clinical application of new combinations: how to test and optimise novel biological agents in combination with radiotherapy

**RTT PRE-MEETING COURSE**
Contouring of organs at risk: theory and practice

**NUMBER OF PARTICIPANTS PER PRE-MEETING COURSE**
559 PARTICIPANTS IN TOTAL:

- INTERDISCIPLINARY: 91
- CLINICAL: 206
- PHYSICS: 151
- RADIOBIOLOGY: 47
- RTT: 64

**Multidisciplinary tumour board sessions**

The concept of the ESTRO multidisciplinary tumour board sessions is to demonstrate and discuss one or two cases comprehensively with experts from different oncology disciplines and to share their experience, their discussion process and their joint decision-making with the audience.

Three multidisciplinary tumour board sessions were organised at ESTRO 35 on:
- Breast cancer
- Rectal cancer
- Oligometastatic disease.
1. FALCON Educase, the contouring platform

Variability in anatomical contouring is an important contributor to uncertainty in radiation oncology. This is why ESTRO developed a few years ago the contouring programme FALCON* based on the Educase software, aiming to improving contouring skills and at comparing individual contours with those made by delineation experts and with the ESTRO / international guidelines.

The FALCON Educase online contouring platform is integrated into the portfolio of educational ESTRO activities such as:

• live courses
• workshops at ESTRO meetings
• online virtual workshops
• database of contouring cases, freely accessible online for ESTRO members.

*Fellowship in Anatomic deLineation and CONtouring

2. Online delineation workshops

In 2016, 8 online delineation workshops were organised attracting 70 participants
3. Delineation exercises in ESTRO live courses

15 ESTRO live courses used FALCON Educase for contouring exercises in 2016

4. Delineation workshops for third parties

FALCON Educase was also used at live workshops at events organised by third parties, including: the International Conference on Malignant Lymphoma and EMUC, IAEA, ISCO and RANZCR* conferences.

▶ * See abbreviations list in Annex page 104.

5. Workshops at the ESTRO annual congress

In addition to the pre-meeting courses, ESTRO also offer hands-on delineation workshops during the annual congress.

8 contouring workshops were organised

2 anal canal workshops, 2 OAR (organs at risk) workshops, 2 prostate cancer workshops, 2 spine stereotactic body radiation therapy (SBRT) workshops

NUMBER OF PARTICIPANTS PER CONTOURING WORKSHOP

270 PARTICIPANTS IN TOTAL:

- ANAL CANAL: 61
- OAR: 58
- PROSTATE: 72
- SBRT: 79
6. Development of guidelines

With the support from the FALCON Educase tool, one delineation guideline was developed in 2016:

International consensus guidelines on clinical target volume (CTV) delineation in rectal cancer (in collaboration with ACROP) were published.

7. Next steps

The educational platform FALCON Educase now offers a full range of services, including:

- delineation exercises for live courses that can be worked on at home, during the course, or as follow-up exercises after the course
- multiple contouring workshops offered during the ESTRO annual congresses
- several online ESTRO workshops, running over a period of three weeks and with contact sessions hosted live by experts
- delineation workshops for other societies (IAEA, national societies or other societies active in the field of oncology)
- support services for clinical trials and development of guidelines.

These services will be developed further in 2017 and integrated into the wealth of educational material available through the e-library service DOVE and also the blended learning programme of the School. This will enable us to enhance further the delineation skills and practise-based competencies of students, while collaboration with experts in education will ensure that the FALCON programme offers the best learning outcomes.
1. Mobility grants

*Every year, ESTRO dedicates a budget of €50,000 for mobility grants (Technology Transfer Grants or TTGs).*

These grants are made available to radiation oncology professionals in order that they may visit another institute to learn about or gain experience with a technique, equipment or application that is not easily available in their own institute, and which would be useful to them and their department in future studies or clinical treatments.

Applications are submitted twice a year and evaluated by a panel of five members of the education council, including two clinicians, one physicist, one radiation therapist (RTT) and one biologist.

57 proposals received in 2016

27 funded (47%)

2. Reduced fees

Reduced (subsidised) fees to attend live courses organised in Europe can be granted to ESTRO members working in countries where there may be less financial support available for education.

Eligibility is based on specific criteria and candidates must submit an application. The registration fee is reduced to €350 for successful applicants. In 2016, 237 members were granted reduced fees.
TOP 8 COUNTRIES OF SUCCESSFUL APPLICANTS FOR REDUCED FEES IN 2016

TOTAL NUMBER OF PARTICIPANTS WITH REDUCED FEE: 237

SUPPORT FOR COURSE PARTICIPANTS IN 2016

- **58% REDUCED FEES:**
  ESTRO members working in countries with a less competitive economic background can obtain a reduced participation fee of 350€ to attend live teaching courses organised in Europe.

- **36% IAEA:**
  Funding provided by the International Atomic Energy Agency for radiation oncology professionals from their Member States to participate in ESTRO courses.

- **3% SOLIDARITY FUND:**
  The ESTRO Ambassador Solidarity Fund, financed by the ESTRO Supporting Ambassador Members, enables a number of young radiation oncology professionals from European economically challenged countries to participate in ESTRO courses in Europe.

- **3% EDUCATIONAL GRANT:**
  Educational Grants: Educational grants sponsored by ESTRO Corporate Members are available for ESTRO members in training wishing to participate in ESTRO Teaching Courses.
• The ESTRO Board selected Jesper Grau Eriksen as the new Director of the ESTRO School and chair of the new ESTRO education council (see below).

• The ESTRO education and training committee (ETC) has been restructured into a new model: the education council. The council will have overview of and coordinate six dedicated educational programmes (see diagram below). With the exception of the new pedagogical programme (see next page), these programmes were previously part of the scope of activities of the ETC. However, the way in which the programmes function will now be different. The council will develop their education and training strategy, and the programme leaders, who also sit on the council, will report to the council on their progress implementing this strategy, alongside members of their programme.

• The sixth programme, the ESTRO pedagogical programme, was launched in 2016 to enhance the quality of medical education offered by the ESTRO School. It will help the ESTRO School’s faculty to develop new approaches to teaching and learning, assessment and educational management.
The ESTRO pedagogical programme was launched in 2016 and will support the ESTRO School faculty in their current educational activities and in the development of new approaches to teaching and learning methods, assessment techniques, and educational management.

The short and longer-term goals of the programme include:

- Helping teachers and faculty members to develop their skills as teachers and educators, and to mentor new faculty members
- Supporting the assessment of teaching and learning to evaluate whether course participants have learnt effectively, and to provide teachers with feedback
- Developing a toolkit for teachers to enable them to teach effectively in different contexts
- Training members of the faculty and young administrators in online learning techniques
- Involving young radiation oncology professionals in the School’s activities.
One of ESTRO’s goals is to be: “a major contributor to cancer cure, and [...] a strategic driving force in the multidisciplinary fight against cancer” (ESTRO Vision 2020). In 2016, ESTRO strengthened its multidisciplinary networking and strategic partnerships with its main stakeholders: patients, national societies, decision makers, industry, and European and international oncology societies.
Conceived in 2012, the ESTRO Vision guidance document informs ESTRO’s strategic direction. The Vision puts the patient at the centre of the whole treatment process, while stressing the importance of multidisciplinary care and access to state-of-the-art radiotherapy.

From the perspective of daily practice this means that we need to close the gap between the number of patients receiving state-of-art radiotherapy and the number who should be receiving it. As the Health Economics in Radiation Oncology (HERO) paper on ‘How many new cancer patients in Europe will require radiotherapy by 2025? An ESTRO – HERO analysis’ highlights, this situation is sub-optimal in most European countries today.

To help address this situation, ESTRO has developed a public affairs toolkit, empowering the ESTRO community with the necessary information to advocate for radiation oncology at the European level. More specifically, ESTRO has shared the toolkit with national societies, so that they can use the messages and evidence to foster radiation oncology and to lobby decision-makers in their country. In June 2016, ESTRO organised a webinar for the national societies to introduce the toolkit and its main messages.

The toolkit tries to meet the oncopolicy needs in the field of radiation oncology, and is guided by the central message: “radiation therapy cures cancer safely today”.

The toolkit will empower ESTRO with information to tackle the most important professional issues at an EU level, as well as helping national societies to advocate for radiation therapy.
Six main themes support this message:

- Radiation oncology as a curative medical discipline
- Multidisciplinary care
- Innovation
- Cost and cost-effectiveness
- Safety
- Access and sustainability

The toolkit is divided into three sections:

- Unmet needs
- Key messages
- Suggestions on how to put the advocacy messages into practice
COLLABORATION WITH EUROPEAN PARTNERS, EUROPEAN ASSOCIATIONS AND EU INSTITUTIONS

1. Contact programme

As part of our broader public affairs activities, the ESTRO leadership has been meeting with key EU Commission officials, health attachés from member states’ permanent representations and members of the European Parliament, with the overall aim of furthering their knowledge of radiation oncology at EU policy level.

So far, ESTRO has secured six meetings with stakeholders. At the meetings the ESTRO leadership have been able to:

- present ESTRO, its missions, objectives and key activities
- raise awareness on the role of radiation therapy in cancer treatment, especially raising awareness of and advocating for the recognition of radiation oncology
- communicate key messages from the ESTRO advocacy toolkit on radiation oncology
- encourage support for cancer treatment modalities research via Horizon 2020 and through the allocation of dedicated funding at national level.

The ESTRO leadership will work further on extending the contact programme in 2017.

ESTRO has also produced a public affairs flyer, summarising in one page the public affairs toolkit, to be used as ‘leave-behind messages’ for the meetings.

2. Memoranda of understanding (MoU)

Partnerships with other international oncology and radiation oncology societies are key to building an efficient and collaborative oncology environment. ESTRO signed several new MoUs with other societies in 2016 (see a list of these in the membership section). In the Annex (page 93) you can see all of ESTRO’s ongoing agreements with societies (2016 Dual Members).
3. ESTRO and COCIR will strengthen collaboration

ESTRO and the European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry (COCIR) have announced an agreement to strengthen their collaboration and signed a letter of intent during ESTRO 35 in Turin in May 2016.

The letter of intent highlights ESTRO and COCIR’s common goals, including:

• advancing the best and safe use of medical technology in the field of radiotherapy
• facilitating the appropriate implementation of new technology
• accelerating patients’ access to technology for the improvement of health care.

The collaboration aims to increase awareness of the clinical, economical and societal benefits of radiation oncology and to ensure access to state-of-the-art radiotherapy.

Integrated Care Alliance

ESTRO is a partner in the Integrated Care Alliance (ICA), initiated by COCIR. The Alliance is complementary to the European Innovation Partnership on Active & Healthy Ageing, and aims at accelerating the development, uptake and scaling-up of integrated care models in Europe. The ICA launched its initiative and call for action on 15 June 2016 at an event in the European Parliament.

4. Day of Radiology

Each year, with the European Society for Radiology (ESR), ESTRO celebrates the International Day of Radiology. To accompany the day, ESR publishes a dedicated booklet. In 2016, the focus of this booklet was on breast imaging, and an ESTRO expert contributed a chapter on radiotherapy in breast cancer.
1. National societies meeting

The annual national societies meeting took place on 29 April 2016 during ESTRO 35 in Turin. The meeting, chaired by Umberto Ricardi, chair of the ESTRO national societies committee, and Philip Poortmans, ESTRO President, gathered representatives from 26 countries, representing radiation oncologists, physicists and radiation therapists (RTTs).

The panellists and audience discussed ESTRO’s strategy, particularly in terms of our overall strategic direction, as well as our ongoing and new projects.

2. Workshop on value of radiotherapy

As part of ESTRO 35, a special session on the value of radiation oncology was organised, targeting national societies and interested individuals. The aim was to disseminate the results of the Global Task Force on Radiotherapy for Cancer Control (GTFRCC) and of the Health Economics in Radiation Oncology (HERO) project, and to raise awareness within the radiation oncology community on topics such as access to state-of-the-art radiotherapy – both at the European and international level – and the need for evidence-based planning of resources, from investment to education.

Interested participants were asked to complete a survey to map initiatives in their fields and scope the interest for a global project, building on the HERO and GTFRCC initiatives, to be started in 2017.

3. Young national societies MoUs and dual membership

ESTRO also continues to extend and reinforce its collaboration with European societies representing young members to encourage more young radiation oncology professionals to join the Society. Many MoUs have been signed over the years with young national societies. See the membership section for further updates on the agreements signed in 2016.
1. Patients’ Day

Every year at its annual congress, ESTRO holds a Patients’ Day, a special session dedicated to cancer patients. In 2016 at ESTRO 35, the Society invited the Associazione Italiana di Radioterapia Oncologica (AIRO) to join forces and organise a session called ‘Radioterapia Amica Mia’ (Radiotherapy is my friend), bringing together patients and carers. Expert speakers covered topics such as the importance of the concept of health, the organisation of cancer services, the key role of communication – both with society at large and between patients and doctors – and the central role of patients, volunteers and families. The session had great coverage in the national media and concluded with a commitment to repeat the event and replicate it around the country.

2. 2nd Super Run

The 2nd Super Run took place on 1 May 2016 during ESTRO 35, bringing together 120 teams and 500 participants on to the roof of Lingotto Fiere, the congress centre. Patients were invited to participate in the 5km relay, with the aim of spreading the message that staying physically active during and after treatment is possible. The Run was organised for the benefit of the ESTRO Cancer Foundation.
1. HERO: Health Economics in Radiation Oncology

**Cost calculation**

The costing model is being developed using the time-driven activity-based costing (TD-ABC) methodology. In 2016, the HERO group defined the components of the costing model, including the:

- resources needed
- activities performed
- time needed
- treatments offered, in order to obtain the cost of the end products.

As always, the contribution of national societies is of paramount importance, and a test version of the costing model has been shared during meetings with some volunteer national societies at the beginning of 2016. This helped the HERO project to have a better understanding of the needs of the end users – the national societies’ representatives – and to assess the difficulties in filling in the data requested by the model.

In the second part of the year, based on this initial feedback, the HERO group worked further on the model aiming at making it simpler and more accessible, ensuring accuracy of the calculations and of the outputs.

**Reimbursement**

The HERO group is also looking into the financing system for external beam radiotherapy. In 2016, the group completed the groundwork for this analysis, sending a survey on financing systems used across Europe to representatives of the national radiation oncology societies. The collection of data is almost complete. The aim now is to analyse the different financing systems used, with the ultimate aim to benchmark them against the real cost of radiotherapy – calculated using the TD-ABC model that is under development – and with a view to providing recommendations for radiotherapy financing systems that safeguard state-of-the-art, high-quality and safe radiotherapy.
2. First meeting of ESTRO’s Radiation Oncology Safety and Quality Committee (ROSQC)

The inaugural meeting of the ESTRO Radiation Oncology Safety and Quality Committee (ROSQC) took place from 5-7 October 2016 in ESTRO’s offices in Brussels. The aim of the meeting was to define the roadmap of the committee.

The main points of discussion included:
- safety in radiotherapy – an international perspective
- introduction to the new radiation oncology safety education and information system (ROESIS) database website with discussion and feedback
- how to engage with other professional bodies and which are the most relevant.

To provide an opportunity for interactive discussion, there were several thematic workshops reporting on:
- national approaches to reporting systems and how to collaborate
- experiences of other professional bodies
- the ROESIS reporting system.

The meeting resulted in a very fruitful discussion with 13 participants and observers present defining the scope and future directions of ROSQC and the most appropriate partnerships. The group listed ambitious action points for the coming months. The next meeting of the ROSQC will be held in 2017.
The ESTRO Cancer Foundation (ECF) coordinates and networks closely with ESTRO and other stakeholders to raise the profile of radiation therapy for the benefit of patients. The ECF also aims to provide patients with clear information on radiation therapy. In stressing the importance of access to radiotherapy and in fostering the dialogue between patients and health services, the ECF aims to enable patients to receive the most appropriate treatment for their specific case.
2016 was a productive year for the ECF, during which we put our collaborative stakeholder approach into action.

Using the governance structure established in 2015, all ECF partners, including patient and industry representatives, joined forces to translate the full potential of this collaborative approach into projects with clear steps and deliverable outcomes. As part of this work, three companies signed partnership agreements with the ECF, providing financial support for our projects: Accuray, Elekta and Varian Medical Systems.

A common priority for future projects: highlighting the benefits of radiotherapy to several audiences

The first two programme committee meetings were successfully held in June and September 2016 to review concepts previously developed.

All partners agreed on the high priority of raising awareness of the benefits of radiation oncology with the general public and decision-makers.

With this in mind, our priorities for 2017, include:

• Jumpstarting the advocacy efforts for radiation therapy with a media campaign organised around the central message: “Radiation therapy cures safely today”
• Translating available health service research data on access to radiation therapy into user-friendly toolkits to support advocacy activities and educational efforts with patients.

These initiatives will provide patients with better information about radiation oncology in a multidisciplinary setting, with the ultimate aim of leading to better access to optimal cancer treatment.
ESTRO Cancer Foundation Governance

ESTRO BOARD

ECF BOARD

PROGRAMME COMMITTEE
• Defines programmes and projects
• Sets-up project teams
• Regulates implementation of the initiatives

ADVISORY COMMITTEE
• Defines funding structure
• Advises and recommends on the distribution of funds

AUDIT COMMITTEE
• Certifies legal, financial and governance management
• Reviews return on funds applied
The figures presented in this report were approved at the ESTRO general assembly on 2 May 2016 at ESTRO 35.

In 2015, operating revenues rose to almost €8 million, led by registrations at meetings and courses, exhibition and membership subscriptions.

The financial incomes represented an amount of €7,000 while the financial charges, including bank charges and credit card commissions, represented €68,000.

With operating expenses of €7,5 million the net impact of income and expenditure is a net profit of €355,000.

Treasurer’s report for 2016

On the next page you can see a short summary of ESTRO’s audited figures for 2015, showing a healthy net profit of €355,000. If we now turn to 2016, the aim of the budget was again to maintain a modest positive buffer of €224,000 over a total turnover exceeding €7,300,000. The latter reflecting the philosophy that revenue is to be re-invested into the Society, creating benefits and services to our members and stakeholders.

At the time of writing, the figures for 2016 are being audited and the final results will be presented for approval at the general assembly during our annual meeting – ESTRO 36 in Vienna, Austria. Revenues and expenses at the end of 2016 are estimated at €7,241,000 and €7,163,000 respectively, yielding (including the financial and extraordinary results) a modest net profit of €27,000.

Looking back at last year, it has been confirmed again that the ESTRO meeting represents approximately 50% of the total revenue, with the technical exhibition being a major contribution. We have also seen a steady increase in institutional membership with 40 institutions in 2016 (nine more than in 2015).

The defensive profile for the management of the ESTRO reserves proved again to be beneficial in safeguarding our capital (exceeding €2,000,000) within the turbulent financial market of 2016. For 2016, this management strategy resulted in an annual return of investment of approximately 2.9%.

Please feel free to contact me any time with questions or concerns regarding ESTRO’s financial situation, and of course, I look forward to meeting you all at our annual meeting in Vienna.

Warm regards,

Dirk Verellen
ESTRO Treasurer
Statement of income and expenditure
ALL FIGURES ARE GIVEN IN THOUSANDS OF EUROS.

REVENUE
- Registrations: 3,025
- Exhibition: 2,144
- Advertising / sponsorship: 341
- Membership: 489
- Corporate Membership: 135
- Elsevier Royalties / Comm.: 698
- Other Revenue: 1,162
- **TOTAL Revenue**: 7,994

EXPENDITURE
- Venue: 807
- Technical Equipment: 719
- Promotion & Communication: 225
- Catering: 671
- Scientific Educational Programme & Committees: 558
- Payroll charges: 2,406
- General & Administration: 666
- Elsevier charges: 245
- Other Expenditure: 1,281
- **TOTAL Expenditure**: 7,578

FINANCIAL RESULT
- Fixed Assets (Income): 7
- Bank & Credit card charges: -52
- Other Financial charges: -16
- **TOTAL Financial Result**: -61

**NET RESULT (NET PROFIT)**: 355
1. 2016 Who’s who

MEMBERS / GENERAL ASSEMBLY

GEC-ESTRO Committee
Radiobiology Committee
RTT Committee
Clinical Committee
Physics Committee
Young ESTRO Committee

BOARD

ESTRO Cancer Foundation

Scientific Council
Stakeholders Council
Education Council
Executive / Nominating Council
APAC Executive Committee

ACROP Committee
National Societies Committee
ESTRO School
ESTRO Office

GEC-ESTRO Committee
Radiobiology Committee
RTT Committee
Clinical Committee
Physics Committee
Young ESTRO Committee
2. Committees

**Board of directors**
Yolande Lievens (Belgium), President
Umberto Ricardi (Italy), President-Elect
Philip Poortmans (The Netherlands), Past-President
Dirk Verellen (Belgium), Treasurer
Alessandro Cortese (Belgium), ESTRO Chief Executive Officer

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Conchita Vens (The Netherlands), board member

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Michael Baumann (Germany), Co-Editor-in-Chief
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Matthias Guckenberger (Switzerland), board member
Gert Meijer (The Netherlands), board member
Marianne Nordsmark (Denmark), board member
Conchita Vens (The Netherlands), board member

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Jean-Emmanuel Bibault (France)
Ben Heijmen (The Netherlands)
Peter Hoskin (UK)
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Martijn Kamphuis (The Netherlands)
Michelle Leech (Ireland)
Richard Pötter (Austria)
Umberto Ricardi (Italy)
Sofia Rivera (France)
Viviane Van Egten (Belgium)
Christine Verfaillie (Belgium)
Marie-Catherine Vozenin (Switzerland)
Eduardo Zubizaretta (Austria)

Programme leaders
Jesper Eriksen, chair EDC, leader live programme
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HERO PUBLICATIONS

Workpackage 1: Needs
Borras JM, Lievens Y, Barton M, Corral J, Ferlay J, Bray F and Grau C.
How many new cancer patients in Europe will require radiotherapy by 2025? An ESTRO-HERO analysis.

Workpackage 3: Cost calculation
Debourny N, Dunscombe P, Perrier L, Grau C and Lievens Y.
Cost evaluations of radiotherapy: What do we know? An ESTRO-HERO analysis.

ACROP PUBLICATIONS

ESTRO-ACROP guideline “target delineation of glioblastomas”
Radiother Oncol. 2016 Jan;118(1):35-42
AWARDS GRANTED AT ESTRO 35

Lifetime achievement awards
Michael Brada (UK)
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Honorary member award lectures
Evidence-based education: radiation oncology’s forgotten foundation?
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The future of surgical oncology
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Imaging in lung cancer radiotherapy: beyond the "pictures"
Lorenzo Bonomo (Italy)

ESTRO award lectures
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Did I do it right? What was the result? Process and outcomes in radiotherapy
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Donal Hollywood Award
FLAME randomised trial: 95Gy MRI-boost vs 77Gy prostate radiotherapy: toxicity and quality of life
Marco van Vulpen (The Netherlands)

Klaas Breur Award Lecture
Whither fractionation?
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Academic award
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Moving away from binary definition of PTVs: a novel probabilistic approach to PTV definition
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Company award lectures
ESTRO-Varian Award
Perfusion SPECT can quantify radiation-induced changes in the lung after IMRT for NSCLC
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ESTRO-Accuray Award
A novel concept to tumour targeting: Inverse dose-painting or targeting the Low uptake drug volume
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ESTRO-Elekta Brachytherapy Award
Electromagnetic tracking for error detection in interstitial brachytherapy
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Adaptive cone-beam CT planning improves progression-free survival for 1-125 prostate brachytherapy
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ESTRO Vision 2012.

ESTRO 2012 Strategy Meeting: Vision for Radiation Oncology

Vincenzo Valentinì,1,2,5 Jerôme Bouthier,3,4,5 Donal Hollywood,3,4,5

European Society for Radiotherapy and Oncology (ESTRO), Brussels, Belgium

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ABSTRACT

Access to modern radiation oncology treatment programmes is now recognized as an essential component of high-quality cancer treatment and central to optimal patient care. Looking to the future, ESTRO strongly believes that further development of the discipline will be critically important to the future strategic development of multidisciplinary cancer care. On behalf of the Board and membership of ESTRO, this document outlines the Society’s Vision for the development of the discipline of Radiation and Clinical Oncology, together with the associated priority action areas that will collectively and strategically direct the Society’s activities in the forthcoming years.

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The recent celebration of ESTRO’s 40th anniversary marked a very important opportunity to acknowledge and celebrate three decades of achievement, growth, and scientific progress for the Society and the clinical discipline of Radiation and Clinical Oncology. Since the foundation of ESTRO, Radiation Oncology has fortunately seen continuous change with virtually every aspect of the basic science of our discipline and clinical treatment dramatically improving to the benefit of patient care. This progress is optimised by the numerous innovative developments in treatment equipment, new delivery technologies and associated imaging modalities, that collectively have enabled patient access to highly-optimised precision radiation therapy, together with the remarkable advances in our understanding of the biological basis of radiation effect, and most recently the emerging use of novel molecularly targeted therapies that holds the promise of further substantial improvements in tumour control and patient care.

As the Society looks forward to further advances in the discipline, it is timely for the Society and for the first time to document ESTRO’s Vision for the future of Radiation Oncology and the associated priorities that ESTRO will champion to enable this Vision in order to achieve this goal and in parallel, with the recent updating of the ESTRO Articles of Association and internal rules of procedure, the ESTRO Board assisted by representative Society Officers, and ESTRO Standing Committee members, recently completed a strategic review of the anticipated future changes in Radiation Oncology clinical practice, and importantly the strategic role of ESTRO in assisting such developments. As a direct result of this meeting, the following article describes ESTRO’s Vision for Radiation Oncology and cancer care. Within this document the Society has stated a Primary Vision that unequivocally links the development of optimal patient care to equitable patient access to state of the art radiation therapy. In addition, important priority areas (1.1–1.5) are stated that in turn specify the future priorities that will shape and influence the direction of the Society’s activities in the forthcoming years.

It is important to highlight that ESTRO will seek to champion this Vision and associated priorities as an interdisciplinary Society, and that the Society will work to achieve this objective in partnership with the wide range of existing and future organisations that are collectively assisting the development of future multidisciplinary cancer care, including where appropriate other scientific and professional societies, international agencies, national representative groups, collaborative clinical trials groups, and patient advocacy groups. In addition the Society will develop new areas of engagement with regulatory authorities including the European Union (EU), European Economic Area (EEA), and national regulatory agencies, and together with non-governmental organisations (NGOs) to assist the broader development of Radiation Oncology, as part of the evolution of different models of cancer care within individual European countries. Finally, we believe that this document will assist all Society members in collectively supporting the Society’s Vision for the future development and growth of Radiation and Clinical Oncology both within Europe and at a global level in the forthcoming decades.
ESTRO Vision for 2020

Vision

Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances.

Vision 1.1: Optimal individualised patient care will be achieved by integrating, new clinical and preclinical evidence from biology, molecular/functional and anatomic imaging, and the use of novel systemic agents together with the delivery of high-precision radiation therapy in a safety-aware environment.

Vision 1.2: The majority of patients will live cancer free with minimal side effects following therapy when used as a single curative modality of treatment or when used in combination with surgery, systemic chemotherapy and/or systemic targeted therapeutics.

Vision 1.3: Access to continuing medical education (CME) and continuing professional and personal development (CPDP) will empower both healthcare professionals and patients to fully participate in all decisions regarding treatment.

Vision 1.4: National and international policy-makers, healthcare management, industrial and corporate partners, and other professional oncology societies will recognise radiation oncology as a major contributor to cancer cure, and ESTRO as a strategic driving force in the multidisciplinary fight against cancer.

Vision 1.5: ESTRO will take all reasonable measures to further develop as the preeminent educational and scientific society in Radiotherapy and Oncology, and through this role, the Society will have a unique strategic responsibility for the future development of the clinical discipline of Radiological Oncology within Europe and at a global level.

ESTRO Vision – Radiation Oncology and Patient Care

Every cancer patient in Europe will have access to state of the art radiation therapy as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances.

In order to achieve this vision ESTRO will support the following initiatives and model of clinical care as part of the future strategic development of the Society:

1. All patients are entitled to access healthcare systems that enable the highest quality radiotherapy delivered within a safe, healthcare environment, and on completion of treatment have access to appropriate long-term follow-up, advice and support from members of the clinical radiation oncology team.

2. All patients are entitled to receive full information on the primary benefit, and where unavoidable the potential side effects associated with their proposed radiotherapy treatment programme.

3. For all patients receiving radiation therapy, the patient-doctor relationship will continue to be of central importance, and this will remain a critical requirement in the future development of the clinical discipline of radiation oncology.

4. In recognition of the multidisciplinary nature of radiation oncology, the patient will significantly benefit from the additional expertise input from other members of the radiation oncology multidisciplinary team and allied healthcare personnel.

5. Given the critical role of radiation therapy in the care of individual patients, the radiation oncologist will frequently be the lead physician responsible for the overall care of the patient, and therefore have a unique responsibility for the patients’ ongoing care and wellbeing.

In recognition of the above, ESTRO will continue to develop innovative mechanisms that enable young professionals within the Society and in radiation oncology to actively participate in the development of future clinical services for patients, in particular through the strategic development of educational and professional services coordinated by the Society.

ESTRO Vision and Priorities for the Development of Radiation Oncology

Vision 1.1

Optimal individualised patient care will be achieved by integrating, new clinical and preclinical evidence from biology, molecular/functional and anatomic imaging and the use of novel systemic agents together with the delivery of high-precision radiation therapy in a safety-aware environment.

In order to achieve this vision ESTRO will enable and support the following priorities:

(a) ESTRO will provide strategic leadership on the emerging and future approaches that will enable further improvements in the physical and biological optimisation of radiation therapy.

(b) ESTRO will support the need for a range of healthcare professionals, working as an interdisciplinary team, to be centrally involved in the delivery of all clinical, physical, technical and biological aspects of radiation therapy.

(c) ESTRO will work in addition and where appropriate support the central role of radiation and clinical oncologists in taking full clinical responsibility for the delivery, supervision and monitoring of patients receiving combined-modality treatments using radiation and either cytotoxic and/or targeted therapeutics.

(d) ESTRO will facilitate its members in creating collaborations, clinical studies and collaborative research that enable the exchange of ideas, the development of new interdisciplinary networks, and new approaches to the future individualisation of radiation oncology.

(e) In support of the above, ESTRO will establish a forum where codes of practice, guidelines, education, and professional development resources are easily accessible and tailored to the professional needs of the membership of the Society.

Vision 1.2

The majority of patients will live cancer free with minimal toxicity following the use of radical radiation therapy when used as a single curative modality of treatment or when used in combination with surgery, systemic chemotherapy and/or systemic targeted therapeutics.

In order to achieve this vision ESTRO will enable and support the following priorities:

(a) ESTRO will support new developments in radiation oncology that further improve the biological optimisation, physical delivery and safety of high-precision radiotherapy, enhancing the potential for optimal tumour control, and offering the opportunity for improved treatments with curative and organ-preserving intent.

(b) ESTRO will support the further investigation of high-precision radiotherapy used with curative intent in patients with metastatic and locally recurrent disease, with the objective of obtaining the necessary evidence base for this approach, and the further development of innovative clinical
approaches for improved treatments in this important and special patient population.

To enable the above improvements in clinical care, ESTRO will, through its congress, special meetings, educational courses and journals, support the future development of radiation oncology, emphasizing and supporting the need for the following:

- New approaches to adaptive radiotherapy integrating novel developments in biology, imaging, technology, and the assessment of tumour response and patient outcome.
- Innovative research and development on the potential future use of novel biological modifiers of tumour and normal tissue response.
- The development of validated predictive models of treatment outcome based on complex databases comprising clinical, biological, genetic, imaging, dosimetric and population data.
- The continued development of quality programmes, including clinical audit and comprehensive safety systems in Radiation and Clinical Oncology that maintain the principles of providing the highest quality of patient care and treatment in a safety-aware environment.

Vision 1.3
Access to continued medical education (CME) and continued professional and personal development (CPDP) will empower both healthcare professionals and patients to fully participate in all decisions regarding treatment.

In order to achieve this vision ESTRO will enable and support the following priorities:

(a) ESTRO will promote and publish journals(s) and where appropriate additional supplementary information of the highest scientific quality and through this approach set the existing and future standards for the speciality.
- The purpose of the Society's journal, Radiology & Oncology, will be to provide, for members of the Society and all radiation oncology professionals, access to high-level scientific information thereby enabling the accelerated development of new treatment approaches and the practice of evidence-based radiation oncology.
- In addition, the Society will create new web-based platforms to enhance the accessibility of ESTRO's related policy statements, and documentation including Society guidelines, curricula, educational publications, conference proceedings, and strategic policy statements developed by the Society or in partnership with other European professional cancer organisations.

(b) ESTRO will in addition facilitate and enhance the dissemination of science through an expanded portfolio of meetings and educational courses including:
- Congresses focusing on integrated interdisciplinary/multidisciplinary approaches.
- Organ and technical-oriented conferences, meetings and workshops.
- Discipline-oriented research conferences, meetings and workshops.
- Health economic research conferences, meetings and workshops.
- Conferences addressing new horizons and blue-sky research in radiation oncology.
- The further development of links and strategic partnerships with national radiation oncology societies.
- The further development of basic and advanced educational courses through the established ESTRO School of Radiology and Oncology.

Vision 1.4
National and international policy-makers, healthcare management, industrial & corporate partners, and other professional oncology societies will recognize radiation oncology as a major contributor to cancer care, and ESTRO as a strategic driving force in the multidisciplinary fight against cancer.

In order to achieve this vision ESTRO will enable and support the following priorities:

(a) ESTRO will take all necessary measures to promote and advance multidisciplinary networking and one-pole through a comprehensive, active and strategic partnership within EROCC.
(b) ESTRO will take a leadership role in advising the European Union (EU), European Commission (EC) and European Economic Area (EEA) on the future strategic development of all matters relating to the clinical discipline of radiation oncology within Europe.
(c) ESTRO will examine the opportunities to liaise and develop collaborative partnerships with other European and international agencies and societies, in particular with those groups that directly work in, or advise on, the field of radiation oncology, including the Union Entrepreneur des Médecins Spécialistes (UEMS) Section of Radiology and the International Atomic Energy Agency (IAEA).
(d) ESTRO will where appropriate take a similar leadership role in advising the wide range of international health agencies, intergovernmental groups and non-governmental organizations (NGOs) on the future strategic development of radiation oncology at a global level.
(e) ESTRO will take all reasonable measures to foster and extend collaborative efforts with other European professional cancer organisations.
(f) In recognition of the need to strengthen partnerships with industry, ESTRO will take an active role in shaping and guiding collaborations between radiation oncology and industry, particularly with respect to product development pathways for equipment, pharmaceutical and biotechnology sectors in the field of radiation oncology.
(g) ESTRO will take all reasonable measures to further develop as the preeminent scientific society in Radiation and Oncology, and through this role, the Society will have a unique long-term strategic responsibility for the future development of the clinical discipline of Radiation and Clinical Oncology within Europe and at a global level.

In order to achieve this vision ESTRO will enable and support the following new priorities:

(a) ESTRO will examine new models of membership that further strengthen the range of education, training and professional services available to Society members including:
- The feasibility of modified annual membership fees for young members.
- The development of new forms of multi-year membership for existing members.
- The potential for new membership models linking national radiation oncology groups and the Society.
(b) ESTRO will create a dedicated communication hub within the office, for the benefit of Society members, national societies and other professional oncology and scientific societies that will support and facilitate the wide range of issues that
of resource allocation from direct member contact, together with the related
issues arising from meetings and activities of the Professional and Membership Council, Scientific Council, Executive Council and Board of the Society.

(c) ESTRO will further support the development of innovative
health services research in radiotherapy and oncology,
including the long term analysis of changes in specialist
staffing in the discipline, the level of equipment, the appro-
priate implementation of new technology, patient access to
treatment approaches, together with the critical analy-

sis of these strategic developments using cost-benefit, cost-
utility and other means of health economic review and
health technology assessment (HTA). In the first instance
ESTRO has initiated this strategic priority through the cre-
ation of the Health Economics in Radiation Oncology (HERO)

(d) ESTRO acknowledges that whilst differences exist in the
state of development of radiotherapy and clinical oncology
in individual countries within Europe, the Society

(e) ESTRO will investigate and strengthen its relationship with
European and international cooperative clinical trials organi-

- The presentation of such research at the full range of sci-
entific meetings coordinated by ESTRO, especially the
ESTRO forum and ESTRO meeting within EECO.
- The prioritised publication of such trials in the Society
journals.
- ESTRO will develop and enhance its web-based portfolio of
resources to the benefit of all members, taking full account
of the future strategic potential of new developments in
information and communication technology.
- Recognising the strategic importance of young members to
the development and future of ESTRO and the clinical dis-
cipline of radiation oncology, the ESTRO board will continue to
prioritise initiatives to increase young member participation
in the Society including:
- Enhanced opportunities for radiation oncologists, physi-
cists, RT(T)Ps, biologists, nurses and allied health profes-
sionals training in the field of radiation oncology to become
full active members of ESTRO.
- The examination of new approaches to enable innovative
international exchange programmes for young ESTRO
members.
- The expansion and further development of the ESTRO
fellow programme.
- Further development of young membership involve-
ment in teaching courses, specialist meetings, and the
ESTRO meeting, ESTRO forum and EECO meetings.
- The strategic involvement of young members in specific
committees, task groups and special meetings organised
by the Society.
ABBREVIATIONS

AAPM ................................................................. American Association of Physicists in Medicine
ABC ........................................................................................................................... Advanced Breast Cancer
ABG ................................................................. Australasian Brachytherapy Group
ABRO-BVRO .............................................................. Belgian Society of Oncological Radiotherapy
ABS .................................................................................................................. American Brachytherapy Society
ACCRAD .............................................................. Guidelines on risk analysis of ACCidental and unintended exposures in RADiotherapy
ACROP ................................................................. Advisory Committee on Radiation Oncology Practice
AIRO GIOVANI ................................................................. Young Italian Radiation Oncology Society
ALATRO .......................................................... Asociación Latinoamericana de Terapia Radiante Oncológica
ALLEGRO .......................................................... EARly and Late health risks to normal/healthy tissues from the use of existing and emerging techniques for radiotherapy
ANDANTE ............................................................. Multidisciplinary evaluation of the cancer risk from neutrons relative to photons using stem cells and the analysis of secondary malignant neoplasms following paediatric radiation therapy
ANZHNCS .............................................................. Australian and New Zealand Head & Neck Cancer Society
AROI ........................................................................................ Association of Radiation Oncologists India
ARTFORCE ........................................................ Adaptive and innovative Radiation Treatment FOR improving Cancer patients’ treatment outcomes
ASTRO ................................................................. American Society for Radiation Oncology
BRAVO ................................................................. Belgian Radiation Oncology Awareness and Visibility Organization
BRT .................................................................................................................. Bioradiotherapy
CANCON ................................................................. Cancer Control Joint Action
CARO ........................................................................................ Canadian Association for Radiation Oncology
CBG .................................................................................................................. Canadian Brachytherapy Group
CCORE ................................................................. Collaboration for Cancer Outcomes, Research and Evaluation
CCUEMS ................................................................ Core Curriculum European Union of Medical Specialists
CERRO ................................................................. Clinical and Experimental Research in Radiation Oncology
CME ................................................................................................................... Continued Medical Education
COCIR ........................................................................................ European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry
COST ................................................................. European Cooperation in Science and technology
COSTEM ................................................................. Controversies in Stem Cell and Cellular Therapies
CPPD ........................................................................................ Continued Professional & Personal Development
CRT .................................................................................................................. Chemoradiotherapy
ctRO ................................................................. Clinical and Translational Radiation Oncology
CTV ................................................................................................................... Clinical Target Volume
DAHANCA ................................................................. Danish Head and Neck Cancer Group
DOAJ ........................................................................................ Directory of Open Access Journals
DOVE ................................................................. Dynamic Oncology Virtual ESTRO
EACCME ................................................................. European Accreditation Council for Continuing Medical Education
EACR ................................................................. European Association for Cancer Research
EACTS ................................................................. European Association for Cardio-Thoracic Surgery
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Name</th>
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<tbody>
<tr>
<td>EANM</td>
<td>European Association of Nuclear Medicine</td>
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<td>EANO</td>
<td>European Association of Neuro-Oncology</td>
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<tr>
<td>EAPM</td>
<td>European Association of Personalised Medicine</td>
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<tr>
<td>EAU</td>
<td>European Association of Urology</td>
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<td>EBCC</td>
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<td>European CanCer Organisation</td>
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<td>European Cancer Foundation</td>
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<td>ECPC</td>
<td>European Cancer Patient Coalition</td>
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<td>Education Council</td>
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<td>EFOMP</td>
<td>European Federation of Organisations in Medical Physics</td>
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<td>EGLOs</td>
<td>ESTRO Global Learning Objects</td>
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<td>EHNS</td>
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<td>EIBIR</td>
<td>European Institute for Biomedical Imaging Research</td>
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<td>ELCC</td>
<td>European Lung Cancer Conference</td>
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<td>European Multidisciplinary Colorectal Cancer Congress</td>
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<td>EMUC</td>
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<td>EONS</td>
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<tr>
<td>EORTC</td>
<td>European Organisation for Research and Treatment of Cancer</td>
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<td>EPAD</td>
<td>European Prostate Awareness Day</td>
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<td>European Particle Therapy Group</td>
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<tr>
<td>EPTN</td>
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<td>ERASMUS</td>
<td>European Region Action Scheme for the Mobility of University Students</td>
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<td>European Society for Diseases of the Esophagus</td>
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<td>ESGE</td>
<td>European Society of Gastrointestinal Endoscopy</td>
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<td>ESUI</td>
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<td>ETC</td>
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<td>ETOP</td>
<td>European Thoracic Oncology Platform</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EURATOM</td>
<td>European Atomic Energy Community</td>
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<tr>
<td>EUSP</td>
<td>EAU Section of Uro pathology</td>
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<tr>
<td>FALCON</td>
<td>Fellowship in Anatomic deLineation and CONtouring</td>
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<tr>
<td>FARO</td>
<td>Federation of Asian Organizations for Radiation Oncology</td>
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GDG ................................................................. Guidelines Development Group
GDPR ................................................................................ General Data Protection Regulation
GEC ......................................................................................... Groupe Européen de Curie-thérapie
GENEPI-Entb .................................................. GENetic pathways for the Prediction of the effects of Irradiation 1
GENEPI-Entb2 .................................................. GENetic pathways for the Prediction of the effects of Irradiation 2
GENEPI-LowRt .................................................. GENetic pathways for the Prediction of the effects of Ionising Radiation: Low dose radiosensitivity and risk to normal tissue after RadioTherapy
GTFRCC .......................................................... Global Task Force on Radiotherapy for Cancer Control
HERO .................................................................................. Health Economics in Radiation Oncology
HKNPCSG .......................................................... Hong Kong nasopharyngeal carcinoma study group
HNSCC ............................................................................. Head and Neck Squamous Cell Cancer
IAEA ........................................................................................ International Atomic Energy Agency
IASLC .............................................................. International Association for the Study of Lung Cancer
IBG ............................................................... India Brachytherapy Group
ICA ........................................................................................ Integrated Care Alliance
ICRP ........................................................................................ International Commission on Radiological Protection
ICRR ........................................................................................ International Congress of Radiation Research
IFNOS ............................................................................. International Federation of Head and Neck Oncologic Societies
ICTR-PHE ..................................................... International Conference on Translational Research in Radio-Oncology, Physics for Health in Europe
IGPT ........................................................................................ Image Guided Particle Therapy
ILROG ...................................................................................... International Lymphoma Radiation Oncology Group
ISCO ........................................................................................ Iranian society of Clinical Oncology
ISCORT .......................................................... Israeli Society for Clinical Oncology and Radiotherapy
ISIORT ............................................................................... International Society of Intraoperative Radiation Therapy
JASTRO ................................................................................... Japanese Society for Radiation Oncology
KOSRO ................................................................. The Korean Society for Radiation Oncology
MACH-NC ........................................................ Meta-analysis of chemotherapy in head and neck cancer
MEDRAPET .............................................................. Medical Exposure Directive’s Requirements on RAdiation ProtectIOn Training
MoU ........................................................................................ Memorandum of Understanding
NCIC CTG ....................................................................... National Cancer Institute of Canada Clinical Trials Group
NCRI ...................................................................................... National Cancer Research Institute
NGO ......................................................................................... Non Governmental Organisation
OAR ........................................................................................ Organs at risk
PARTRAC ................................................................. PARticle TRACKs)
phiRO ...................................................................................... Physics and Imaging for Radiation Oncology
PROS ........................................................................................ Paediatric Radiation Oncology Society
PTC .......................................................................................... Particle Therapy Centre
PTCOG ......................................................................... Particle Therapy Co-Operative Group
QASDG .............................................................................. Quality Assurance Scheme Development Group
RANZCR .............................................................. Royal Australian and New Zealand College of Radiologists
RBE ........................................................................................ Relative Biological Effectiveness
ROESIS ........................................................ Radiation Oncology Safety Education and Information System
ROSQC ........................................................ Radiation Oncology Safety and Quality Committee
RSRMO .............................................................................. Australian and New Zealand College of Radiology
RTOG ................................................................. Radiation Therapy Oncology Group
RTT ........................................................................................ Radiation Therapists
RUSSCO ................................................................. Russian Society of Clinical Oncology
SBRT .................................................................................................... Stereotactic Body Radiation Therapy
SEAROG ......................................................................................... South East Asian Radiation Oncology Group
SEOR .................................................................................................. Spanish Association of Radiotherapy and Oncology
SIOPE .............................................................................................. European Society for Paediatric Oncology
SOCRATES ................................................................................... European Community action programme in the field of education
TD ABC ............................................................................................ Time Driven Activity Based Costing methodology
TEMPUS ............................................................................................ Trans-European Mobility Program for University Studies
tipsRO ............................................................................................... Technical Innovations and Patient Support in Radiation Oncology
tpmnRO ............................................................... Technology, Patient Management and Nursing in Radiation Oncology
TPS ........................................................................................................................ Treament Planning System
TROG ................................................................................................. Trans-Tasman Radiation Oncology
TTG ........................................................................................................ Technology Transfer Grant
UEMS ............................................................................................. Union Europeenne des Medicins Specialistes
ULICE ............................................................................................... Union of Light Ion Centres in Europe
UPMC ............................................................................................... University of Pittsburgh Medical Center
WCB .................................................................................................... World Congress of Brachytherapy
WHO-IARC ...................................................................................... WHO-IARC
WP .......................................................................................................... Work Party
YAU ........................................................................................................ EAU Young Academic Urologists
yESTRO .......................................................................................... young ESTRO
YRROG ............................................................................................. Young Romanian Radiation Oncologists Group
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Innovation for Value and Access

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20-24 April 2018
Barcelona, Spain