ESTRO Vision
ESTRO MEMBERSHIP NOVEMBER 2015

MEMBERS
TOTAL: 6,640 (NOV 2015)

- Individual members: 4,564 (69%)
  - Full: 2,726 (41%)
  - Active: 1,001 (17%)
  - Supporting Ambassador: 36 (1%)
  - Associate: 1,838 (28%)
  - Affiliate: 715 (11%)
  - In training: 169 (3%)
  - Honorary: 11 (1%)

- Dual members: 1,025 (15%)
  - Dual: CARO-JASTRO-KOSRO (13%)
  - Dual Young: AIRO GIOVANI-YRROG (2%)

- Institutional members: 869 (13%)
  - 31 institutes

- Corporate members: 182 (3%)
  - 24 companies:
    - 9 Gold members
    - 15 regular members

EVOLUTION MEMBERSHIP
5,604 IN 2013
5,827 IN 2014
6,640 IN NOV 2015

INSTITUTIONAL MEMBERSHIP
868 institutional members from 31 institutes - 9 new institutes

- Active: 65%
- In training: 24%
- Affiliate: 9%
- Supporting Ambassador: 3%

YOUNG MEMBERS
659 Young members
- 345 Individual in training
- 195 Institutional in training
- 119 Dual young

PARTICIPANTS TO COURSES AND EVENTS THAT ARE MEMBERS

- 2015 ESTRO courses: 72%
- 2015 Forum: 50%
- 2015 ICHINO: 14%

GREEN JOURNAL
Paper subscription: 1,142
Electronic subscription: 5,498

SPECIALTY DISTRIBUTION
- 54% Radiation oncologist
- 24% Medical physicist
- 11% RTT
- 6% Clinical oncologist
- 2% Radiobiologist
- 2% Industry Representatives
- 2% Other

GEOGRAPHICAL DISTRIBUTION
- 71% Europe
- 9% Asia
- 6% Oceania
- 2% Africa and Middle East
- 11% North America
- 1% South America

RETENTION RATE
59% MEMBERS 2012 RENEWED IN 2013
66% MEMBERS 2013 RENEWED IN 2014
67% MEMBERS 2014 RENEWED IN 2015 (NOV)

SOLIDITY FUND
94 supporting ambassador members financed
- 15 affiliate memberships
- 9 in training memberships
- 9 course registrations
- 9 forum registrations
ESTRO SCHOOL NOVEMBER 2015

LIVE COURSES 2015

OVERVIEW 2015
34 live courses in 2015
• Geographical breakdown of live courses in 2015:
  - In Europe: 28 courses
  - Outside Europe: 6 courses
• 3 new courses in 2015

CUMULATED OVERVIEW 2015
(From January 2015 till October 2015)
• Participants to live courses 2015:
  - In Europe: 1,775 participants
  - Outside Europe: 500 participants
    (Manila: 120 - Seoul: 80 - Moscow: 100 - Beijing: 200)
• Reduced fees: 186
• Sponsored by solidarity fund: 13

EVOLUTION

LIVE COURSES IN 2014
2,561 participants in 2014
• Growth in the number of courses over the years:
  - 1,138 in 2004
  - 1,434 in 2005
  - 1,826 in 2006
  - 1,976 in 2007
  - 2,611 in 2008
  - 2,745 in 2009
  - 2,855 in 2010
  - 2,843 in 2011
  - 3,015 in 2012
  - 2,838 in 2013
  - 2,561 in 2014
• Evolution of the geographic breakdown of course participants in 2014:
  - Europe: 1,921 in 2013
  - Outside Europe: 937 in 2013
  - Europe: 1,600 in 2014
  - Outside Europe: 761 in 2014
• Top 10 countries in 2014:
  - The Netherlands: 282
  - India: 150
  - Russia: 136
  - China: 120
  - Poland: 114
  - Japan: 110
  - Spain: 108
  - United Kingdom: 97
  - Belgium: 83
  - Germany: 78

MOBILITY GRANTS IN 2014
58 proposals
30 funded
52% funded

UPDATE 2015

NOVEMBER
• Number of participants at November courses: 174
• Number of courses in November: 4

3RD ESTRO FORUM
• Pre-meeting courses: after the annual congress:
  • Number of participants: 519
  • Number of pre-meeting courses: 5

FACULTY FOR 2015
• Number of teachers in the faculty: 192
• Number of course directors: 50

FALCON WORKSHOPS
• Online workshops:
  • Workshops in 2015: 7
  • Participants to date: 105
• At live courses:
  • Live courses using FALCON in 2015: 12
  • Participants to date: 754
• At the 3rd ESTRO Forum:
  • Contouring sessions: 8
  • Participants: 174

MOBILITY GRANTS
(From January 2015 till November 2015)
• Number of applications funded: 40
# ESTRO Conferences November 2015

## 3rd ESTRO Forum
- **Participants:**
  - 4,033 Participants
  - 1,657 Company delegates
- **Geographic Overview:**
  - From Europe: 77.5%
  - From outside Europe: 22%
- **Top 10 Countries:**
  1. The Netherlands: 441
  2. UK: 299
  3. Spain: 269
  4. Germany: 222
  5. France: 190
  6. United States: 183
  7. Belgium: 176
  8. Poland: 165
  9. Italy: 161
  10. Denmark: 145
- **Evolution of the ESTRO Annual Conference (from 2011 till date)**
  - **Participants:**
    - 1st ESTRO Forum: 4,888
    - ESTRO 31: 5,095
    - 2nd ESTRO Forum: 3,647
    - ESTRO 33: 5,030
    - 3rd ESTRO Forum: 4,933
  - **Abstracts Submitted:**
    - 1st ESTRO Forum: 1,428
    - ESTRO 31: 1,458
    - 2nd ESTRO Forum: 1,115
    - ESTRO 33: 1,737
    - 3rd ESTRO Forum: 1,557
  - **Participants to Pre-Meeting Courses:**
    - 1st ESTRO Forum: 695
    - ESTRO 31: 513
    - 2nd ESTRO Forum: 438
    - ESTRO 33: 615
    - 3rd ESTRO Forum: 519
  - **Exhibitors:**
    - 1st ESTRO Forum: 96
    - ESTRO 31: 88
    - 2nd ESTRO Forum: 88
    - ESTRO 33: 103
    - 3rd ESTRO Forum: 89
  - **Sqm Sold:**
    - 1st ESTRO Forum: 3,343
    - ESTRO 31: 3,524
    - 2nd ESTRO Forum: 3,464
    - ESTRO 33: 3,646
    - 3rd ESTRO Forum: 3,815

## ICHNO
- **Participants:**
  - 3rd ICHNO: 599
  - 4th ICHNO: 558
  - 5th ICHNO: 639
- **Abstracts Submitted:**
  - 3rd ICHNO: 105
  - 4th ICHNO: 113
  - 5th ICHNO: 139

## Focus on 5th ICHNO
- **Top 10 Countries:**
  - France: 81
  - UK: 44
  - Spain: 41
  - Belgium: 40
  - The Netherlands: 35
  - Germany: 31
  - Switzerland: 31
  - Austria: 30
  - Denmark: 27
  - Italy: 20

## GEC-ESTRO Workshop
- **Participants:**
  - GEC-ESTRO Workshop 1: 130
  - GEC-ESTRO Workshop 2: 206
  - GEC-ESTRO Workshop 3: 164
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’s traditional Stakeholders

- Radiation oncologist
- Radiobiologist
- Physicist
- RTT

National societies (NS)
WILL HAVE “CRITICAL MASS” TO TALK/INFLUENCE

THIS WILL ALLOW TO HAVE EQUAL PARTNERSHIPS WITH
Approach

**patient-centric** and **strongly multidisciplinary**

increasing the proportion of patients who actually receive radiation oncology as a proportion of those who should receive it, because this is in nearly none of the European countries the case today.
ESTRO’s Vision

measurable in a patient centered key performance indicator (kpi)

\[ kpi = \frac{\text{patients receiving RT}}{\text{patients should receive RT}} \]
ESTRO’s Vision

Measurable in a patient centered key performance indicator (kpi)

\[ kpi = \frac{\text{patients receiving RT}}{\text{patients should receive RT}} \]

is a function \( (fx) \) of

\[ fx(\text{information, infrastructure}) = \frac{fx(\text{competence, evidence})}{fx(\text{competence, evidence})} \]
Radiotherapy is a critical and inseparable component of comprehensive cancer treatment and care. For many of the most common cancers in low-income and middle-income countries, radiotherapy is essential for effective treatment. In high-income countries, radiotherapy is used in more than half of all cases of cancer to cure localised disease, palliate symptoms, and control disease in incurable cancers. Yet, in planning and building treatment capacity for cancer, radiotherapy is frequently the last resource to be considered. Consequently, worldwide access to radiotherapy is unacceptably low. We present a new body of evidence that quantifies the worldwide coverage of radiotherapy services by country. We show the shortfall in access to radiotherapy by country and globally for 2015–35 based on current and projected need, and show substantial health and economic benefits to investing in radiotherapy. The cost of scaling up radiotherapy in the nominal model in 2015–35 is US$26·6 billion in low-income countries, $62·6 billion in lower-middle-income countries, and $94·8 billion in upper-middle-income countries, which amounts to $184·0 billion across all low-income and middle-income countries. In the efficiency model the costs were lower: $14·1 billion in low-income, $33·3 billion in lower-middle-income, and $49·4 billion in upper-middle-income countries—a total of $96·8 billion. Scale-up of radiotherapy capacity in 2015–35 from current levels could lead to saving of 26·9 million life-years in low-income and middle-income countries over the lifetime of the patients who received treatment. The economic benefits of investment in radiotherapy are very substantial. Using the nominal cost model could produce a net benefit of $278·1 billion in 2015–35 ($265·2 billion in low-income countries, $38·5 billion in lower-middle-income countries, and $239·3 billion in upper-middle-income countries). Investment in the efficiency model would produce in the same period an even greater total benefit of $365·4 billion ($128·8 billion in low-income countries, $67·7 billion in lower-middle-income countries, and $284·7 billion in upper-middle-income countries). The returns, by the human-capital approach, are projected to be less with the nominal cost model, amounting to $16·9 billion in 2015–35 ($14·9 billion in low-income countries; $18·7 billion in lower-middle-income countries, and $50·5 billion in upper-middle-income countries). The returns with the efficiency model were projected to be greater, however, amounting to $104·2 billion ($2·4 billion in low-income countries, $10·7 billion in lower-middle-income countries, and $95·9 billion in upper-middle-income countries). Our results provide compelling evidence that investment in radiotherapy not only enables treatment of large numbers of cancer cases to save lives, but also brings positive economic benefits.

Introduction
In 2012, 14·1 million new cases of cancer were reported worldwide (Figure 1A), and this number is projected to reach 24·6 million by 2030.1 8·2 million cancer deaths were recorded in 2012, and this figure is projected to rise to 10·7 million by 2030. The growing burden of cancer will place increased demand on the already scarce radiotherapy services worldwide. Much has been written about the need for a comprehensive approach to population-based cancer control in low-income and middle-income countries. Access to radiotherapy for these patients is often lacking. The Lancet Oncology Commission, which was launched at the 2019 World Cancer Congress, is committed to addressing this issue. The Commission aims to ensure that radiotherapy is available to those who need it, and that it is delivered in a safe, effective, and sustainable manner.

- 40-60% of eligible patients (12M) have access to RT
- Total number of new patients per year: raising from 15 to 22 M in 2022
- An investment of 100 B U$ is expected to save 27 M years of life in the next 20 years
- The economic benefit, by the human capital approach: 240 – 365 B U$
Health Economics in Radiation Oncology

HERO was launched as a task force by ESTRO’s clinical committee in 2009

The overall aim is to:

• Build a knowledge base concerning the ‘infrastructure’ and staffing of radiation oncology in the European countries, and

• Develop a model for health economic evaluation of radiation oncology on the European level
HERO tasks

1. Availability of radiotherapy in Europe

2. Need for radiotherapy in Europe: view of the European radiation therapy needs, estimating the percentage of patients that should receive radiation therapy in Europe.

3. Cost-accounting program: development of a cost calculation model, tailored on radiation therapy. The final aim is to look at costs of radiation therapy and the use of resources, to support budget decisions and advocacy.

4. Economic evaluation models - to be planned
WP2 – need for RT

**Underutilisation**: understand the causes and act on unmet needs

Main barriers:
- Resourcing, i.e. staffing, training, equipment and associated infrastructure
- Inefficient positioning of radiation oncology in care models
- Reimbursement strategies that de-incentivise the use of radiation oncology.

Address the barriers
- Raise awareness
- Investments
- Highlight need for cancer plans
- Support development of guidelines for resources and cancer plans
WP3 – RT cost

Capture the real **cost of treatment**

- Reimbursement
- Sub-optimal use of resources

→ **sustain and expand state-of-the-art radiotherapy services**
   need for reliable data: provide accurate cost estimates
   reimbursement and radiotherapy budgets negotiations
   advocate for improvements, from education to investment to organisations of services

→ **implement innovative radiotherapy treatments and techniques**
   Budget impact analyses
   Perform cost-effectiveness analyses
   Investments
   Strengthen collaboration with NS

→ **support research**
The optimal utilization proportion of external beam radiotherapy in European countries: An ESTRO-HERO analysis

The median utilization rate is (only) 67% of the evidence-based optimum.