Education, Professional Training and Certification of Radiation Oncologists in Japan

President of JASTRO; Yasumasa Nishimura, MD PhD

Society background of JASTRO

- Japanese population is 128 million
- Japan has approx. 700 radiotherapy facilities

Annual number of new patients who receive RT is 240 thousands

(2013)



- JASTRO was founded in 1988.
- 2055 active members, 1540 associate members, and 1029 boardcertified radiation oncologists.

Official journal of JASTRO

- Journal of Radiation Research
- 6 issues/year
- IF: 1.691



Guidelines on TRP and brachytherapy by JASTRO





Educational activities in JASTRO

- Educational lectures at JASTRO annual meeting
 - 6-10 lectures, 400-600 participants
- Summer seminar on radiation oncology (1999-, once a year)
 - 2 days course, 14-17 lectures, 300 participants
- Seminars for medical students and residents
 - 1 day course, lectures, RTP practice (1995-,twice a year)
- Seminars for RO nurse (2006-, twice a year)
 - 1 day course, 8 lectures, 300 participants
- Radiation biology seminar (2010-, once a year)
 - 1 day course, 8 lectures, 160 participants
- Radiation physics seminar (2011, every two years)
 - 1 day course, 8 lectures, 200 participants
- NEW: ESTRO school in Japan (2014-)

Annual Summer Seminar on RO



To brush up knowledge of JASTRO members. Since 1999-

Two days course in summer season. 200-300 participants/seminar



Summer Seminar for Medical Students and Residents



Since Aug. 1995





Recruitment of Junior Residents for Radiation Oncology since 2007



The 1st ESTRO School in Japan May 16-18, 2014

Weekend 3-day course
No. of participants: 120
Japan 100, Korea 10,
Others countries 10







TARGET VOLUME DETERMINATION - FROM IMAGING TO MARGINS

16-18 May, 2014 Tokyo, Japan

This course is tailored specifically to the Japanese Society of Therapeutic Radiation Oncology's (JASTRO) needs and demands. The course is primarily targeting the Japanese Radiation Oncology society and provides specific solutions to Japanese issues. Additionally the Japanese course is a shortened version of the original European version. Should you wish to attend the full version of the course please see the details of the Target Volume Determination course held in Vienna, Austria in November 2014.

Faculty Course Director Vincent Khoo, Clinical Oncologist, Royal Marsden Hospital, London (GB)

JASTRO; Collaboration with ESTRO

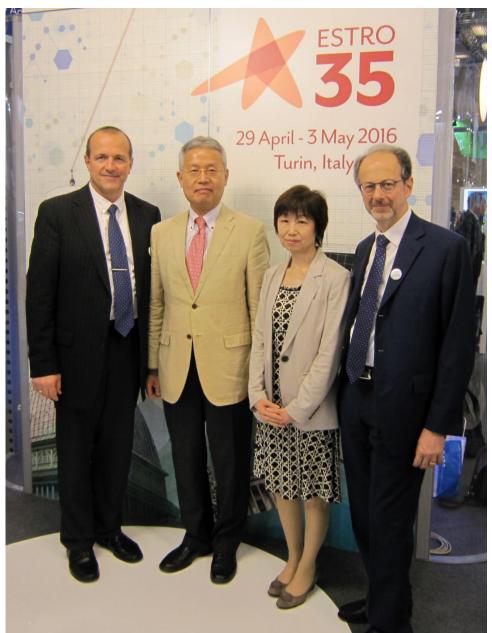
- ESTRO School in Japan
 - 2014 May 16th 18th, in Tokyo; on target contouring 120 participants (100 from Japan, 10 Korea, 10 ESTRO)
 - 2015 May in Korea; on personalized radiation oncology
 - 2016 May 20th 22th in Tokyo; on breast cancer.
- JASTRO/ESTRO joint symposium, workshop etc.
 - •2012; workshop at JASTRO; Drs Bourhis, Hollywood, Valentini
 - •2013; symposium on esophageal cancer at 2nd ESTRO forum; Drs Nishimura, Nemoto
 - •2013; lecture at JASTRO; Dr Poortmans
 - •2014; symposium on breast cancer at JASTRO. Dr Poortmans
 - •2015; symposium on particle therapy at 3rd ESTRO forum; Drs Shirato, Kamada
- MoU between JASTRO and ESTRO
 - Membership, ESTRO school, and joint symposium



Concluded MoU

• ESTRO 2015 in Balcelona





Department of Radiation Oncology

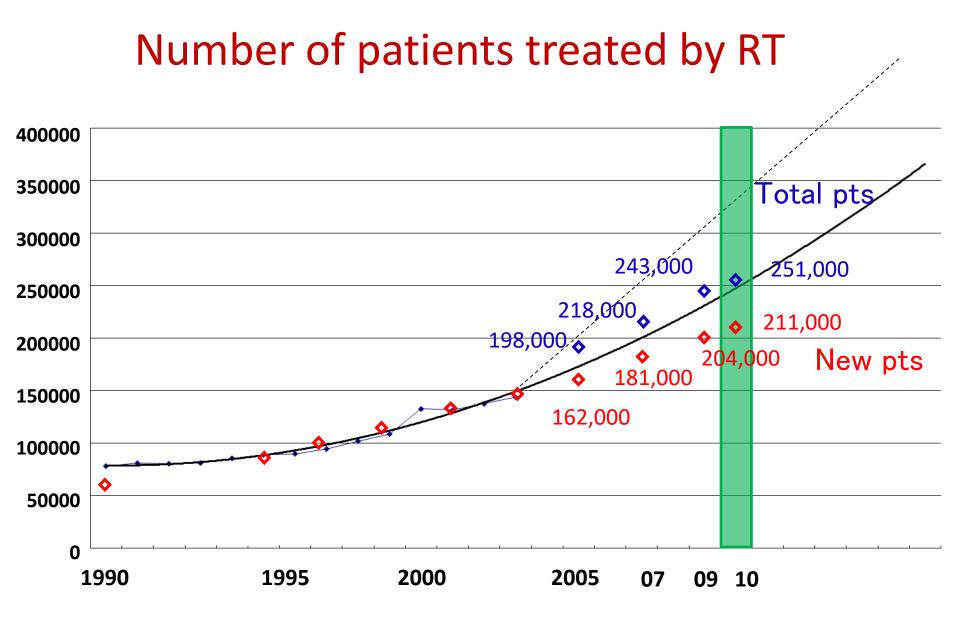
- In 2006, a basic law against cancer was enacted in Japan. It stimulated the increase of cancer professionals including radiation oncologists.
- A basic structure for training system for radiation oncologists is an independent department of radiation oncology in a medical school.
- In 2005, only 12 (15%) of all 80 medical schools in Japan had a department of radiation oncology.
- The recent survey revealed 33 (41%) medical schools have department of radiation oncology.

History of Board-certified Radiation Oncologists in Japan

- 1971: The first examination for board-certified radiologist was performed by Japan Radiological Society (JRS).
- 1988: JASTRO was founded.
- 1999: JASTRO started a new system of JASTRO-certified radiation oncologists.
- 2008: JASTRO and JRS agreed to draw the two systems together.
 - residents study both radiation oncology and radiology for the first three years, and take an examination of JRS-certified radiologist.
 - After two more years of training on radiation oncology, residents take an examination of JASTRO and JRS-certified radiation oncologists.
- 2011: The first examination for JASTRO and JRS-certified radiation oncologist was done.
- 2015: There are 1029 JASTRO and JRS-certified radiation oncologists.

Present system for Certification of Radiation Oncologists in Japan

JRS JASTRO +JRS 2 years **Diagnostic Radiology Radiation Oncology JRS** 3 years **General radiology Junior Residents** 2 years



JASTRO DB survey

Demand of Radiation Oncologists

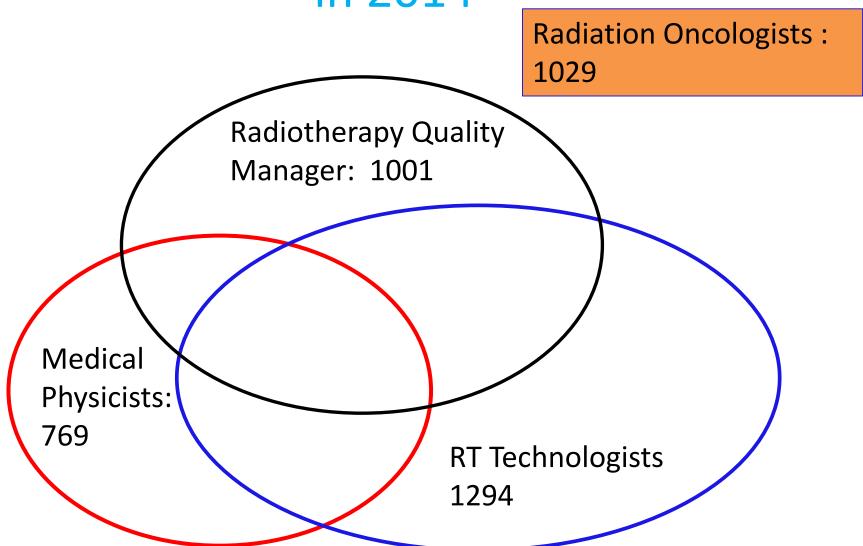
- After 2011, approximately 50 radiation oncologists passed the examination.
- In 2015, there are 1029 JASTRO and JRS-certified radiation oncologists.
- The number of patients treated by RT is estimated approximately 300,000.
- If one radiation oncologists treat 200 patients per year, at least 1500 full-time radiation oncologists are necessary.
- We need more than 500 new radiation oncologists now.

A new certification system for medical specialists in Japan

基本領域とサブスペシャルティ領域一覧表

Japanese Medical Specialty Board リウマチ専門医 消化器病専門医 循環器専門医 育椎脊髄外科専門医(未) 2-3 years 児血液・がん専門医(未) 心臟血管外科専門医 呼吸器外科専門医 婦人科腫瘍専門医 小児循環器専門医 頭頸部がん専門医 小児外科専門医 生殖医療専門医 小児神経専門医 腎臓専門医 肝臓専門医 感染症専門医 脳神経外 総合内科 形成外 救急科 麻酔科 皮膚科 精神科 3 years 眼科 病理事 Change from society-based certification to JMS-board certification system.

Number of certified RT Specialists in 2014



Summary

- JASTRO's activities on education and professional training were presented.
- Changes of certification system for radiation oncologists in Japan were also presented.
- In spite of our efforts, the shortage of radiation oncologists in Japan is apparent.