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 board-certified 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

2 years
JRS
Diagnostic Radiology

3 years
JRS
General radiology

2 years
Junior Residents

JASTRO + JRS
Radiation Oncology
Number of patients treated by RT

JASTRO DB survey

Total pts

New pts

198,000
218,000
243,000
251,000
162,000
181,000
204,000
211,000
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

Change from society-based certification to JMS-board certification system.

Japanese Medical Specialty Board
Number of certified RT Specialists in 2014

- RT Technologists: 1294
- Medical Physicists: 769
- Radiotherapy Quality Manager: 1001
- Radiation Oncologists: 1029
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.