

**1.Introduction**

1 Lessons from the history of particle therapy	Hirohiko Tsujii	QST *
2 J-CROS activities	Hiroshi Tsuji	QST *
3 Cost effectiveness of CIRT	Tatsuya Ohno	Gunma University

**2.Biology**

1 Characteristics of Carbon Ion Radiotherapy in cancer therapy	Marco Durante	GSI Helmholtzzentrum für Schwerionenforschung
2 Hypoxia in Carbon Ion radiotherapy	Ryoichi Hirayama	QST *
3 Anti-tumor immunity induced by heavy-ion/photon	Tsuguhide Takeshim	QST *
4 Biological effects of fractionation	Yukari Yoshida	Gunma University
5 Precision Carbon Ion Radiotherapy	Takahiro Oike	Gunma University
6 Radiation and Risk of Cancer	Tatsuhiko Imaoka	QST *
7 Targeted Cancer Therapy using Radioisotopes	Sumitaka Hasegawa	QST *
8 Biological Aspects of FLASH Particle Therapy	Teruaki Konishi	QST *
9 Implementation of immuno-radiotherapy - from a radiation oncologist's point of view-	Noriyuki Okonogi	QST *

**3.Physics**

1 Accelerators for CIRT and Quantum Scalpel	Yoshiyuki Iwata	QST *
2 Beam delivery, QA (inc. J-CROS)	Hideyuki Mizuno	QST *
3 Biological models (inc. Multi-ion/FLASH)	Taku Inaniwa	QST *
4 Treatment planning and range uncertainty in carbon-ion radiotherapy	Nobuyuki Kanematsu	QST *
5 Motion management & IGRT with in-room CT	Makoto Sakai	Gunma University
6 Facility commissioning at Osaka-HIMAK	Masaaki Takashina	OSAKA HIMAK
7 Facility commissioning at Yamagata	Hikaru Souda	Yamagata University
8 Facility design of Yonsei Cancer Center Korea	Jin Sung Kim	Yonsei Cancer Center
9 Facility design of Mayo Clinic	Keith Furutani	Mayo Clinic
10 What Particle Therapy Can Learn from IMRT and Other High- Precision Radiotherapies	Arnold Pompos	UTSouthwestern Medical Center

**4.Clinical aspects**

1 Head & Neck Tumor	Masashi Koto	QST *
2 Eye Tumor	Masaru Wakatsuki	QST *
3 Lung Cancer	Mio Nakajima	QST *
4 Liver Cancer	Kei Shibuya	Gunma University
5 Pancreas Cancer	Makoto Shinoto	QST *
6 Bone & Soft tissue Sarcoma	Reiko Imai	QST *
7 Urological Cancer	Motohiro Murakami	QST *
8 Locally Recurrent Colorectal Cancer	Hirotohi Takiyama	QST *
9 Gynecological Cancer	Kazutoshi Murata	QST *
10 Breast Cancer	Yasumasa Mori	QST *

**5.Diagnosis**

1 Diagnostic PET imaging for CIRT	Ryuichi Nishii	QST *
2 ACR Reporting and Data System (RADS) - Essential for treatment of lung, liver and prostate cancer -	Riwa Kishimoto	QST *

**6.Topics**

1	History of particle beam therapy in Japan from the perspective of national health policy	Hideyuki Sakurai	Tsukuba University
2	Rationale and Indications for CIRT at Mayo Clinic USA	Robert L. Foote	Mayo Clinic
3	Reducing Toxicity and Lowering Cost with Particle	Robert L. Foote	Mayo Clinic
4	Overview of BNCT & Current status of Accelerated-based BNCT	Yoshihiro Takai	Southern Tohoku BNCT Research Center
5	Radiation Emergency Medicine	Hideo Tatsuzaki	QST *
6	Risk Communication: Communicating with the Public about Radiation	Tomoaki Tamaki	Fukushima Medical University

**7.Overview - Clinical aspect of facilities****- Overseas facilities**

1	The experience with studies of protons versus carbon ion radiotherapy at HIT	Juergen Debus	Heidelberg University Hospital - Germany
2	The clinical experience of hadron therapy at CNAO	Ester Orlandi	National Center for Oncological Hadrontherapy - Italy
3	The clinical experience of charged particle radiotherapy that has been done at MedAustron	Piero Fossati	EBG MedAustron GmbH - Austria

**- Domestic facilities**

1	Introduction of facilities Gunma University Heavy Ion Medical Center (GHMC)	Hidemasa kawamura	Gunma University Heavy Ion Medical Center(GHMC)
2	Clinical aspects of Hyogo Ion Beam Medical Center	Tomoaki Okimoto	Hyogo Ion Beam Medical Center
3	Clinical aspects of Carbon-ion Radiotherapy in Kanagawa Cancer Center	Hiroyuki Katoh	Kanagawa Cancer Center
4	Clinical aspects of OSAKA HIMAK	Teruki Teshima	OSAKA HIMAK
5	Clinical experience of Carbon Ion Therapy at QST	Shigeru Yamada	QST *
6	Carbon-ion Radiotherapy in Saga-HIMAT	Akira Matsunobu	Saga Heavy ion Medical Accelerator in Tosu, Saga HIMAT
7	Clinical experience of East Japan Heavy Ion Center	Kenji Nemoto	Yamagata University East Japan Heavy Ion Center

Alphabetical order

**8.Introduction of facilities**

- 1 Gunma University Heavy Ion Medical Center
- 2 Hyogo Ion Beam Medical Center
- 3 Kanagawa Cancer Center
- 4 Osaka Heavy Ion Therapy Center (OSAKA HIMAK)
- 5 QST Hospital, QST \*
- 6 Saga Heavy ion Medical Accelerator in Tosu,
- 7 Yamagata University East Japan Heavy Ion Center

Alphabetical order

**9.Vendor presentation**

- 1 Hitachi, Ltd.
  - 2 RaySearch Laboratories
  - 3 Sumitomo Heavy Industries
  - 4 Toshiba Corporation
  - 5 Alfresa Pharma Corporation
  - 6 B dot Medical Inc.
- \*) QST : National Institutes for Quantum Science and Technology