



29 Japan-Korea
Urological Congress
in Kagoshima, Japan

The 29th Japan-Korea Urological Congress

Program & Abstracts

Date

September 14[Fri]–15[Sat], 2012

Venue

[Friday, September 14]

Castle Park Hotel

[Saturday, September 15]

**Kagoshima Prefectural Citizens
Exchange Center**

Kagoshima, Japan

President

Masayuki Nakagawa, M.D., Ph.D.

Professor, Department of Urology

Kagoshima University, Kagoshima, Japan



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Message from the congress president



Dear Colleagues:

It is my great honor to host the 29th Japan-Korea Urological Congress in Kagoshima, Japan. I cordially invite all of urologists and co-medical staffs in both countries to the congress held in September 14 to 15, 2012.

The main topics of this year's congress are oncology, endourology, overactive bladder and basic research. We warmly welcome many papers in these fields. In the congress, we will have lectures and seminars focusing on current situation and controversy of urological diseases in both countries. I hope that urologists from each country can discuss the current topics and controversial issues fruitfully and share the latest information on urologic disease. Furthermore, I hope to extend our mutual friendship through the congress, especially in young urologists.

Kagoshima city is the capital of Kagoshima Prefecture, located at the southern-most tip of Kyushu. It is the largest city in southern Kyushu with a population of 600,000 and has been blessed with a mild climate and an abundance of hot springs. The majestic view of Mt Sakurajima, one of the world's most active volcanoes, dominates the city's landscape, towering over the beautiful Kinko Bay. There are many magnificent sightseeing spots in Kagoshima Prefecture. For example, Yakushima is an island surrounded by cobalt blue ocean and covered with ancient Yakusugi cedar trees. Yakushima's magnificent natural beauty has gained it the title of "World Heritage". Ibusuki is also famous for its natural sand hot springs.

The congress venue is Castle park hotel and Kagoshima Prefectural Citizens Exchange Center which are located in the center of Kagoshima city.

I hope that you will enjoy the scientific program and take full advantage of our sightseeing spots, nature, luxurious hot springs and good mouth-watering cuisine in Kagoshima.

A handwritten signature in black ink, appearing to read "Masayuki Nakagawa". The signature is fluid and cursive.

Masayuki Nakagawa, M.D., Ph.D.
President of the 29th Japan-Korea Urological Congress

Congress History

					President
1st	Kobe	Urolithiasis	Dec. 15	1984	Joji Ishigami
2nd	Seoul	Bladder Cancer	Oct. 4	1985	Young Kyoon Kim
3rd	Tokyo	Prostate Tumor	Nov. 28	1986	Toyohei Machida
4th	Jeju	Pediatric Urology	Nov. 20	1987	Young Kyoon Kim
5th	Kyoto	STD, Urolithiasis, Urinary Diversion	Nov. 26	1988	Osamu Yoshida
6th	Busan	Renal Failure, RCC	Oct. 14	1989	Jong Byung Yoon
7th	Fukuoka	UTI, Urinary Incontinence	Sep. 1	1990	Joichi Kumazawa
8th	Yuseong	Nonvesical Urothelial Tumor, Impotence	Sep. 14	1991	Sung Kun Koh
9th	Tokyo	BPH, Adrenal Disorder	Sep. 12	1992	Yoshio Aso
10th	Seoul	Superficial Bladder Tumor, Male Infertility	Sep. 11	1993	Soo Eung Chai
11th	Nara	Invasive Bladder Tumor Endourology Including ESWL	Sep. 10	1994	Eigoro Okajima
12th	Gwangju	Prostate Cancer, Pediatric Urology	Sep. 16	1995	Byung Kap Min
13th	Osaka	RCC, Voiding Dysfunction Including Incontinence	Sep. 14	1996	Toshihiko Kotake
14th	Daegu	Prostatic Diseases, Endourology Including Laparoscopic Surgery	Jun. 21	1997	Sae Kook Chang
15th	Tokyo	Advanced Prostate Cancer, Testicular Tumor, Impotence	Sep. 12	1998	Makoto Miki
16th	Jeju	Bladder Cancer, Prostate Cancer, BPH, UTI	Sep. 11	1999	Moo Sang Lee
17th	Tokyo	Prostate Cancer, Erectile Dysfunction	Sep. 22-23	2000	Hideyuki Akaza
18th	Seoul	Urolithiasis, Urologic Cancer	Sep. 14-15	2001	Sung Won Kwon
19th	Fukuoka	Urologic Cancer, Infectious Diseases	Sep. 27-28	2002	Seiji Naito
20th	Busan	Prostate Cancer & BPH, Laparoscopy, Female Urology	Oct. 3-4	2003	Jin Han Yoon
21st	Sapporo	Urologic Oncology Voiding Dysfunction, Reconstructive Urology	Aug. 27-28	2004	Taiji Tsukamoto
22nd	Jeonju	Urologic Oncology, Voiding Dysfunction & Urinary Incontinence, Men's Health, Urolithiasis	Sep. 9-10	2005	Young Kyung Park
23rd	Nara	Uro-oncology, Urodynamics, Endourology	Sep. 22-23	2006	Yoshihiko Hirao
24th	Cheongju	Uro-oncology, Voiding Dysfunction Erectile Dysfunction Pediatric Urology	Oct. 5-6	2007	Wun-Jae Kim
25th	Okayama	Urogynecology, Endourology, Oncology, Molecular Urology	Sep. 26-27	2008	Hiroki Kumon
26th	Seoul	Oncology, Endourology and Laparoscopic surgery, Pediatric Urology, Voiding Dysfunction	Sep. 18-19	2009	Hwang Choi
27th	Kyoto	Urological Oncology, Endourology/Laparoscopy, Voiding Dysfunction	Sep.10-11	2010	Osamu Ogawa
28th	Suwon	Oncology, Andrology, Endourology, Voiding Dysfunction	Sep 16-17	2011	Sae Chul Kim
29th	Kagoshima	Oncology, Endourology, Overactive Bladder, Basic Research	Sep 14-15	2012	Masayuki Nakagawa

Congress Committee

President:

Masayuki Nakagawa, M.D., Ph.D.

Professor and Chairman, Department of Urology, Graduate School of Medical and Dental Sciences, Kagoshima University

Organizing Committee

• Honorary Members (Institution at the retirement)

Yoshio Aso (*The University of Tokyo*)

Soo Eung Chai (*Sungkyunkwan University*)

Hwang Choi (*Seoul National University*)

Sadao Kamidono (*Kobe University*)

Kazuki Kawabe (*The University of Tokyo*)

Young Kyoon Kim (*Seoul National University*)

Sung Kun Koh (*Korea University*)

Toshihiko Kotake (*Osaka Medical Center for Cancer & Cardiovascular Diseases*)

Joichi Kumazawa (*Kyushu University*)

Takashi Kurita (*Kinki University*)

Sung Won Kwon (*Ewha Womans University*)

Chong Wook Lee (*Seoul National University*)

Moo Sang Lee (*Yonsei University*)

Toyohei Machida (*Jikei University*)

Makoto Miki (*Tokyo Medical University*)

Masaru Murai (*Keio University*)

Tadao Nijima (*The University of Tokyo*)

Eigoro Okajima (*Nara Medical University*)

Tong Choon Park (*Yeungnam University*)

Yang Il Park (*Chonnam National University*)

Young Kyung Park (*Chonbuk National University*)

Michiyuki Usami (*Osaka Medical Center for Cancer & Cardiovascular Diseases*)

Osamu Yoshida (*Kyoto University*)

Sae Chul Kim (*Chung-Ang University Medical Center*)

• Japanese Members

Hideyuki Akaza (*Research Center for Advanced Science and Technology, The University of Tokyo*)

Shin Egawa (*Jikei University*)

Yoshihiko Hirao (*Osaka Gyomeikan Hospital*)

Yoshiyuki Kakehi (*Kagawa University*)

Hiromi Kumon (*Okayama University*)

Seiji Naito (*Kyushu University*)

Masayuki Nakagawa (*Kagoshima University*)

Osamu Ogawa (*Kyoto University*)

Taiji Tsukamoto (*Sapporo Medical University*)

• Korean Members

Han Yong Choi (*Sungkyunkwan University*)

Tae Kon Hwang (*Seoul St. Mary's Hospital*)

Wun-Jae Kim (*Chungbuk National University*)

Joung Sik Rim (*Wonkwang University*)

Soo Bang Ryu (*Chonnam National University*)

Jae Mann Song (*Yonsei University Wonju Christian Hospital*)

Jin Han Yoon (*Dong-A University*)

Jae-Seung Paick (*Seoul National University*)

Kyung Do Kim (*Chung-Ang University*)

Chun IL Kim (*Dongsan Medical Center, Keimyung University*)

Congress Information

Date: September 14-15, 2012

Place: September 14: Castle Park Hotel

41-1 Shinshoin-cho Kagoshima 890-8586, Japan

September 15: Kagoshima Prefectural Citizens Exchange Center

14-50 Yamashita-cho Kagoshima 892-0816, Japan

President: Masayuki Nakagawa, M.D., Ph.D.

Professor and Chairman, Department of Urology, Graduate School of Medical and Dental Sciences,
Kagoshima University

Main Topics: Oncology, Endourology, Overactive bladder, Basic Research

Registration Desk / Registration Fee:

Registration Desk On September 14, 14:00-18:00, the registration desk will be open in front of Pearl Hall Tenpyo.

On September 15, 8:30-15:00, the registration desk will be open at 2nd floor of Kagoshima Prefectural Citizens Exchange Center.

Registration Fee Delegate: 10,000 yen or 100,000 won
(Lunch and Banquet fees are included)
Accompanying person: free

Social Program:

1. Mini Concert and Welcome Party (for all participants): September 14th from 18:30 to 21:30, Royal Garden (2nd Floor, Castle Park Hotel)
2. Organizing Committee Meeting (members only): September 15th from 12:00 to 13:00, Main training room (3rd Floor, Kagoshima Prefectural Citizens Exchange Center)
3. Ladies Bus Tour (subscribers only): September 15th, (pickup time) 9:30 a.m. and (pickup point) the hotel entrance.
4. Sightseeing Bus Tour (for all participants): September 15th, (pickup time) 16:00 and (pickup point) in front of Kagoshima Prefectural Citizens Exchange Center.
5. Farewell Party (for all participants): September 15th from 18:30 to 21:00, Sakurajimanoma (2nd Floor, Castle Park Hotel).

Shuttle Bus Service:

on September 15 (Saturday), shuttle buses will start at 8:20 and 8:40 from Castle Park Hotel to Kagoshima Prefectural Citizens Exchange Center.

Airport shuttle bus:

on September 16 (Sunday), a shuttle bus will start at 13:30 from Castle Park Hotel to Kagoshima International Airport.

Secretary General:

Hideki Enokida, M.D., Ph.D. and Yousuke Uchida, M.D.

Department of Urology, Graduate School of Medical and Dental Sciences
Kagoshima University

8-35-1 Sakuragaoka, Kagoshima 890-8520, Japan

Phone: +81-99-275-5395; Fax: +81-265-9727

E-mail: jkuro29@m2.kufm.kagoshima-u.ac.jp

Website: <http://jkuro29.umin.jp/>

Instruction for Chair persons & Speakers

Instruction for Chair persons

- 1) All chairpersons are asked to be in the lecture room no later than 15 minutes prior to the beginning of the session.
- 2) Chairpersons should make efforts to maintain the time schedule in cooperation with time keeper, and give warning speakers if needed.
- 3) Presentation time for one speaker of sponsored seminars (Evening Seminars, Luncheon Seminars, and Satellite Symposiums) is 30 minutes including discussion. Presentation time for other general papers is 7 minutes in total (5 min. presentation +2 min. discussion).

Instruction for Speakers

■ Preparation

- 1) All papers should be made for oral presentation. Only digital presentations will be possible during the congress, and all speakers are requested to bring CD-ROM/USB-Flash Memory for the presentation or bring their own notebook computer.
- 2) In the venue, we will prepare floor computer systems (Windows 7 and Mac OS X) for the presentations.
- 3) For Windows users, application software of the presentation data must be PowerPoint 2000/2003/2007/2010, and the operation system is limited to Windows 7.
- 4) For Macintosh users, application software of the presentation data must be PowerPoint2008/2011 and Keynote'09, and the operation system is limited to OS X.
- 5) You should save the presentation file with a filename as 'paper No._speaker's name.ppt' (ex. O-1_ Jang Geun-seok.ppt). Paper No. for each presentation had been sent by email to the speaker.
- 6) Please bring your presentation file sorely saved in CD-ROM/USB-Flash Memory. Any other files should be deleted from CD-ROM/USB-Flash Memory to avoid unexpected errors. You should make a back-up in cases of malfunctions.
- 7) When you set a log-in password on your own notebook computers, please tell the operator in the venue about that and unlock your computer before your presentation.
- 8) It is also required for speakers using their own notebook computers to bring AC adapter during the presentation. If your computer does not have D-sub 15 adapter, you must bring an interface adapter by yourself (please see below).
- 9) Please deselect screen savor function and energy-saving mode before your presentation.
- 10) Please make sure to check your CD-ROM/USB-Flash Memory by using latest anti-virus software to avoid computer virus infection to the host computer system in the venue.



Interface adapters

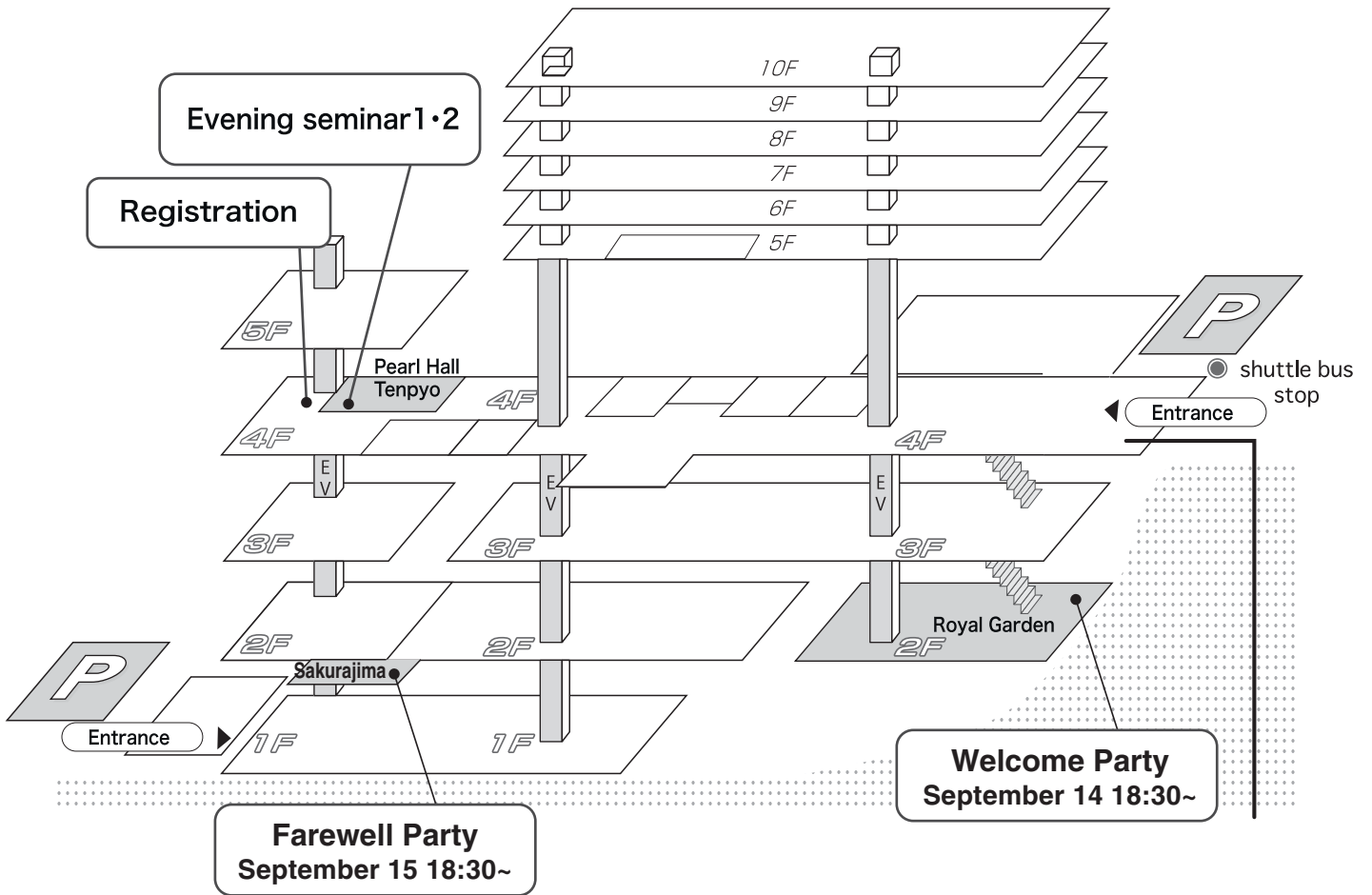


D-sub 15 adapter at back of notebook computer

■ **Preview and Presentation**

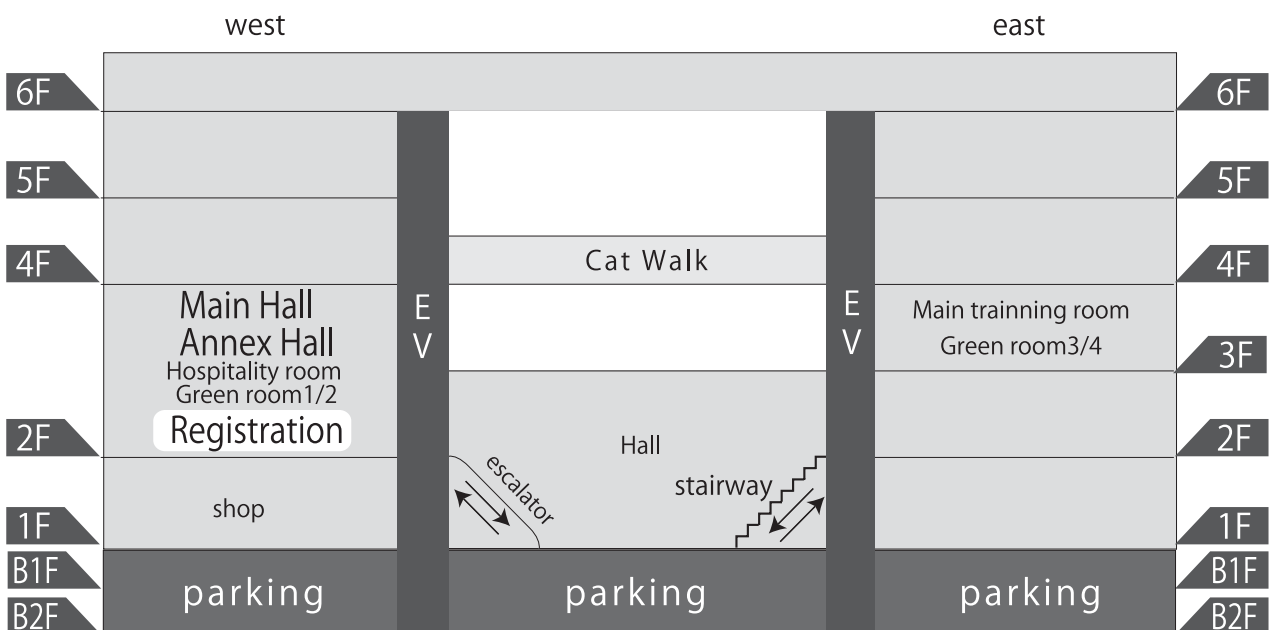
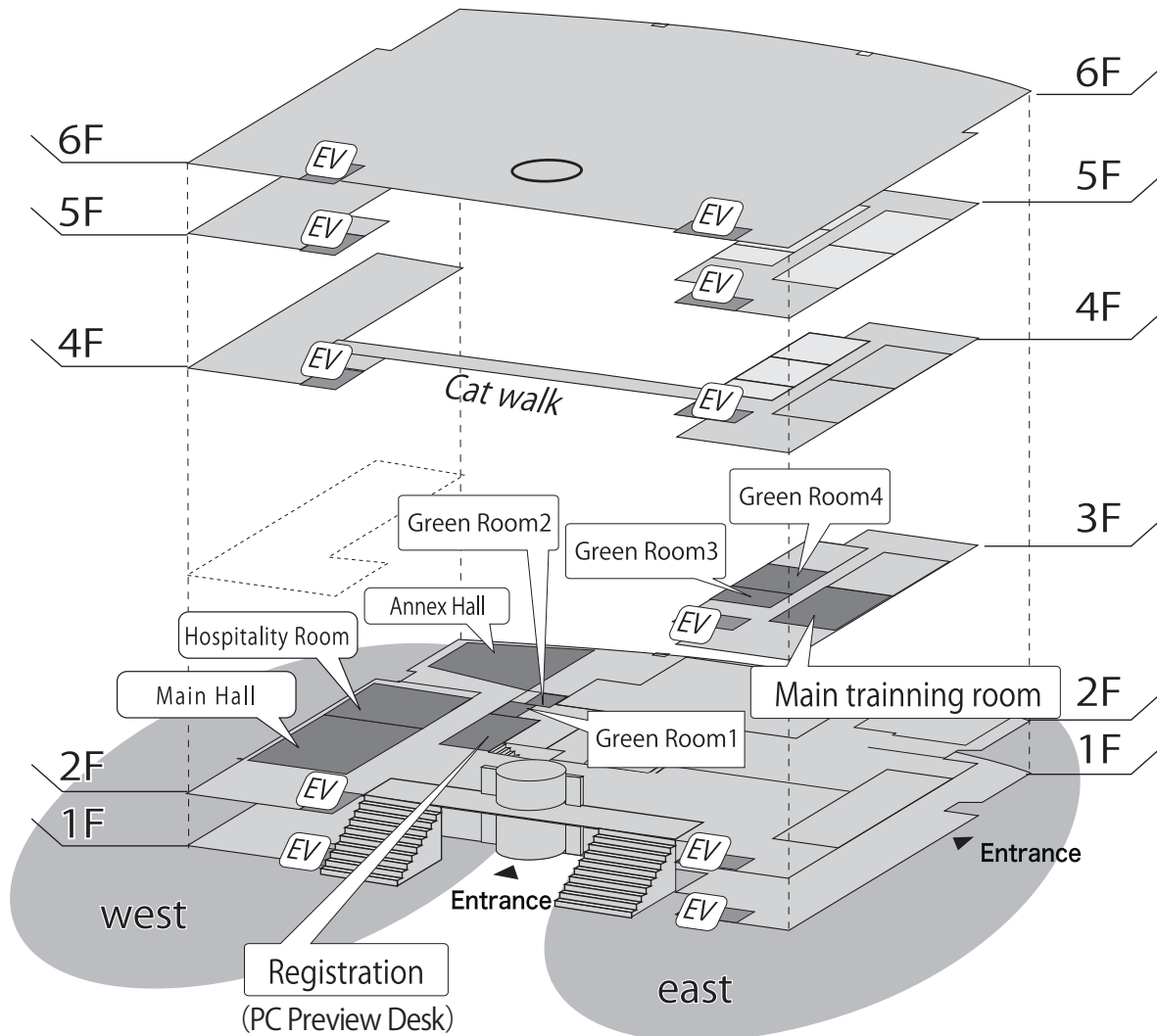
- 1) All speakers are requested to stop by PC Preview Desk at Congress venue and review the presentation data until 60 minutes before your presentation. Full-time staff will help you at PC Preview Desk.
- 2) Presentation time for one speaker of sponsored seminars (Evening Seminars, Luncheon Seminars, and Satellite Symposiums) is 30 minutes including discussion. Presentation time for other general papers is 7 minutes in total (5 min. presentation +2 min. discussion), Please keep the time to ensure smooth proceedings, according to chairpersons' moderation.
- 3) You can control your presentation by using a computer mouse and a key pad for PowerPoint on the desk for speaker.
- 4) When you bring your own notebook computer, please pick it up at the PC control desk in the venue after your presentation.
- 5) When you bring CD-ROM/USB-Flash Memory for the presentation, please keep it for a back-up even after your slide submission. After your presentation, we promise you to delete the files in the venue computer.

Floor Guide

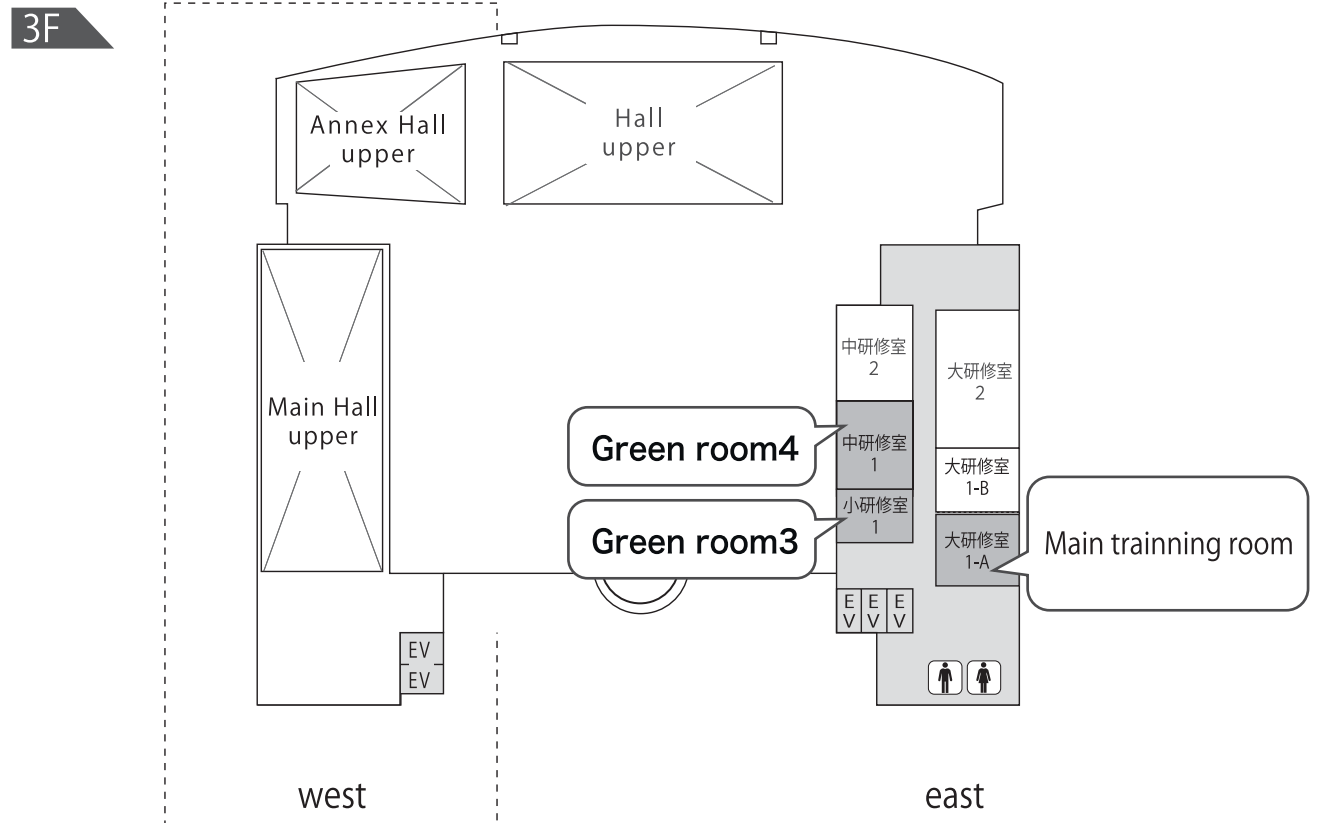
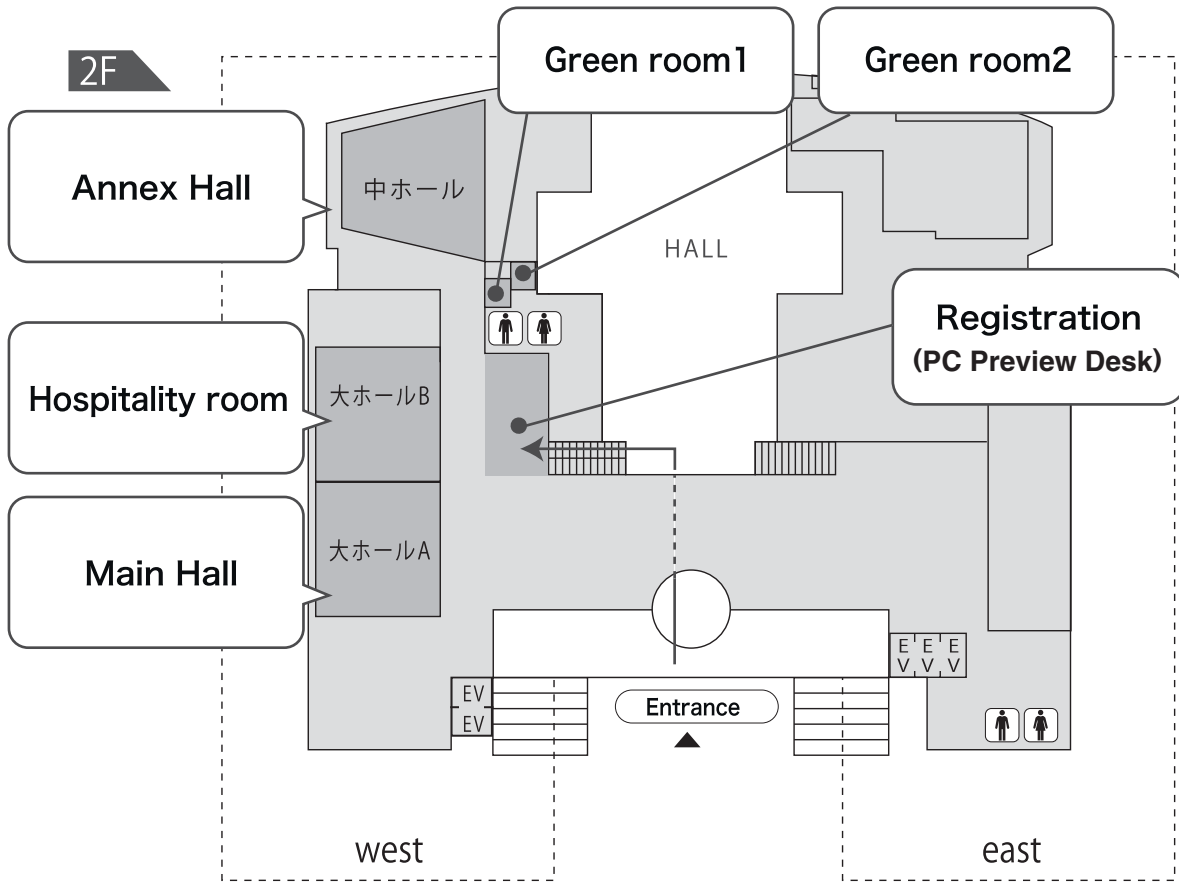


Floor Guide

※Please take the east EV, if you want to go to 3Floor.



Floor Guide



Congress Schedule

September 14, 2012 (Friday)

Pearl Hall Tenpyo at Castle Park Hotel (Level 4F)

14:00~16:00	Registration open & Slide Submission
16:00~17:00	Evening Seminar 1 Radical prostatectomy: where are we going? Chairpersons: Seiji Naito (Kyushu University, Japan) Joung Sik Rim (Wonkwang University, Korea) Speakers: Shin Egawa (Jikei University, Japan) Hanjong Ahn (Asan Medical Center, Korea) Sponsor: Takeda Pharmaceutical Company Ltd.
17:00~18:00	Evening Seminar 2 Metastatic renal cell carcinoma: current management and controversial issues. Chairpersons: Yoshiyuki Kakehi (Kagawa University, Japan) Han Yong Choi (Sungkyunkwan University, Korea) Speakers: Mototsugu Oya (Keio University, Japan) Young Deuk Choi (Younsei University, Severance Hospital, Korea) Sponsor: Novartis Pharmaceuticals Corporation

Royal Garden at Castle Park Hotel (Level 2F)

18:30~19:00	Mini Opera Concert Performed by Prof. Suguru Yonezawa
19:00~21:30	Welcome Party

September 15, 2012 (Saturday)

Main Hall & Annex Hall, Kagoshima Prefectural Citizens Exchange Center (Level 2F)

08:30~09:00	Registration open & Slide Submission	
09:00~09:10	Opening Ceremony	
09:10~09:55	Podium Session 1 (Main Hall) Oncology 1: Prostate Cancer / Renal Cell Carcinoma Chairpersons: Youichi Arai (Tohoku University, Japan) Joung Sik Rim (Wonkwang University, Korea)	
	Podium Session 2 (Annex Hall) Basic Research 1: Prostate Cancer/Others Chairpersons: Tomonori Habuchi (Akita University, Japan) Wun-Jae Kim (Chungbuk National University Hospital, Korea)	
09:55~10:40	Podium Session 3 (Main Hall) Oncology 2: Bladder Cancer / Others Chairpersons: Hideyuki Akaza (Research Center for Advanced Science and Technology, Japan) Jae Mann Song (Yonsei University Wonju Christian Hospital, Korea)	
	Podium Session 4 (Annex Hall) Basic Research 2: Renal Cell Carcinoma / Others Chairpersons: Mototsugu Oya (Keio University, Japan) In Ho Chang (Chung-Ang University, Korea)	
10:40~10:55	Coffee Break	
10:55~12:00	Podium Session 5 (Main Hall) Endourology: Donor nephrectomy /Prostatectomy / Others Chairpersons: Toshiro Terachi (Tokai University, Japan) Choung Soo Kim (Asan Medical Center, Korea)	
	Podium Session 6 (Annex Hall) Basic Research 3: Bladder Cancer / Others Chairpersons: Chikara Oyama (Hirosaki University, Japan) Hanjong Ahn (Asan Medical Center, Korea)	

12:00~12:30	Podium Session 7 Miscellaneous Chairpersons: Hidehiro Kakizaki (Asahikawa Medical University, Japan) Duk-Yoon Kim (Catholic University of Daegu, Korea)	(Main Hall)
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Main training room, Kagoshima Prefectural Citizens Exchange Center (Level 3F)

12:00~13:00	Organizing Committee Meeting
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Main Hall & Annex Hall, Kagoshima Prefectural Citizens Exchange Center (Level 2F)

12:35~13:35	Luncheon Seminar 1 Up-to-date management of overactive bladder Chairpersons: Taiji Tsukamoto (Sapporo Medical University, Japan) Jae-Seung Paick (Seoul National University, Korea) Speakers: Hidehiro Kakizaki (Asahikawa Medical University, Japan) Duk-Yoon Kim (Catholic University of Daegu, Korea) Sponsor: Astellas Pharma Inc.	(Main Hall)
	Luncheon Seminar 2 The battle against invasive bladder cancer: what is the next step? Chairpersons: Toshiyuki Kamoto (Miyazaki University, Japan) Kyung Do Kim (Chung-Ang University, Korea) Speakers: Chikara Oyama (Hirosaki University, Japan) Wun-Jae Kim (Chungbuk National University Hospital, Korea) Sponsor: Eli Lilly Japan	(Annex Hall)
13:35~13:50	Coffee Break	

13:50~14:50	<p>Satellite Symposium 1 (Main Hall)</p> <p>Treatment strategy for BPH/male LUTS in 2012.</p> <p>Chairpersons: Yoshihiko Hirao (Osaka Gyoumeikan Hospital, Japan) Tae Kon Hwang (Seoul St. Mary's Hospital)</p> <p>Speakers: Mitsuhiko Yokoyama (Kawasaki Medical University, Japan) Ji Youl Lee (Seoul St. Mary's Hospital, Korea)</p> <p>Sponsor: AsahiKASEI Pharma.</p>
14:50~15:50	<p>Satellite Symposium 2 (Main Hall)</p> <p>Therapeutic approaches in the management of castration-resistant prostate cancer.</p> <p>Chairpersons: Osamu Ogawa (Kyoto University, Japan) Soo Bang Ryu (Chonnam National University, Korea)</p> <p>Speakers: Nobuo Shinohara (Hokkaidou University, Japan) Choung Soo Kim (Asan Medical Center, Korea)</p> <p>Sponsor: Sanofi-Aventis Japan</p>
14:50~15:00	Closing Ceremony
16:00~18:00	Sightseeing Bus Tour

Sakurajimanoma at Castle Park Hotel (Level 2F)

18:30~21:00	Farewell Party
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Scientific Program

Evening Seminar

1

Radical prostatectomy: where are we going?

September 14, 16:00-17:00
(Pearl Hall Tenpyo)

Chairpersons:

Seiji Naito (Kyushu University)
Joung Sik Rim (Wonkwang University)

Speakers:

- 1 Shin Egawa (Jikei University)
- 2 Hanjong Ahn (Asan Medical Center)

Sponsored by

Takeda Pharmaceutical Company Ltd.

Chairpersons



Seiji Naito

Professor, Kyushu University

Subspecialties:

Urological oncology, Endourology

Brief Sketch:

- 1974- MD Kumamoto University, Faculty of Medicine
- 1974-1976 Resident, Department of Urology, Kyushu University Hospital, Fukuoka
- 1976-1980 Postgraduate Course in Pathology at Kyushu University
- 1980- PhD, Kyushu University
- 1980-1982 Medical Staff, Department of Urology, Hiroshima Red Cross Hospital, Hiroshima
- 1982-1984 Assistant Professor, Department of Urology, Faculty of Medicine, Kyushu University
- 1984-1986 Visiting Assistant Professor, Department Urology and Cell Biology, M.D. Anderson Hospital, University of Texas, Houston, Texas, USA
- 1986-1994 Assistant Professor, Department of Urology, Faculty of Medicine, Kyushu University
- 1994-1998 Associate Professor, Department of Urology, Faculty of Medicine, Kyushu University
- 1998-present Professor and Chairman, Department of Urology, Graduate School of Medical Sciences, Kyushu University



Joung Sik Rim, M.D., Ph.D.

Professor, Department of Urology, Wonkwang University
School of Medicine & Hospital

Subspecialties:

Uro-Oncology (Prostate, Bladder), Endourology

Brief Sketch:

- 1985- Professor, Wonkwang University School of Medicine & Hospital
- 1997-1999 Executive Committee Member of Korean Urological Oncology Society
- 1997-2003 Executive Committee Member of Korean Endourological Society
- 1998-2002 Executive Board Member of Korean Urological Association
- 2001-2004 Director of Gunsan Medical Center of Wonkwang University Hospital
- 2003-2005 President of Korean Endourological Society
- 2006-2011 Director of Wonkwang University Hospital
- 2003- Council member of East Asian Society of Endourology
- 2006- Council member of Korean Endourological Society
- 2007-2010 Executive Committee Member of Korean Urological Oncology Society
- 2010- Council member of Korean Urological Oncology Society
- 2010- Active Committee member of Korea-Japan Urological Congress



Shin Egawa

Jikei University School of Medicine

The treatment of prostate cancer has been affected by the emergence of minimally invasive techniques. Advances in laparoscopic and robotic technology along with sophisticated new ablative procedures have changed the way urologists approach patients with this malignancy. The increasing availability of robotic technology to urologists has expanded the role and indications for RARP (robot-assisted radical prostatectomy). Compared with the open approach, laparoscopic radical prostatectomy (LRP) and RARP have a similar outcome in terms of oncological as well as functional control, but potentially distinct favorable benefits in terms of blood loss, transfusion rates and minor complications, in the hands of experienced surgeons. Currently, collaborative research is underway to further improve the versatility and utility of robotics in surgery, as some scientists are working on miniaturizing the robots. It is possible that future robots will be smaller, more efficient and will perhaps be endowed with a bionic or haptic feedback technology to further bridge the gap of lack of tactile sensation. Robots will also provide radiologic imaging on the console. Further advances and refinements in the robotic instruments and technique of computer-assisted surgery may lead to the development of more single-port techniques.

Subspeciality

Prostate Cancer, Urological oncology, Laparoscopic Surgery

Brief sketch

1981	Graduate from Iwate Medical College, Morioka, Iwate, Japan
1981-1986	Resident at Department of Urology, Kitasato University School of Medicine
1988-1990	Research fellow, Baylor College of Medicine, USA
1990-1992	Research associate, Baylor College of Medicine, USA
2002-2004	Associate professor, Department of Urology, Kitasato University School of Medicine
2004 to Present	Professor and Chair, Department of Urology, Jikei University School of Medicine.
2010 to present	Chair, Scientific Committee, Urological Association of Asia
2011 to present	Deputy National Delegate of SIU



Hanjong Ahn, M.D. Ph. D.

Professor / Department of Urology, University of Ulsan College of Medicine
Director / Urologic Cancer Center, Asan Medical Center, Seoul, Korea

A rapid increase in incidence of prostate cancer in Western countries after introduction of PSA screening in clinical practice leads to soaring increase of performing radical prostatectomy, a gold standard of treatment for localized prostate cancer. However, such increase in incidence of prostate cancer brings the issue of overdiagnosis as well as overtreatment. Another issue relating to radical prostatectomy over last 10 years is the evolvement of a new less invasive treatment method, Da Vinci robot system, which has become popular markedly due to better functional outcome after robotic prostatectomy and aggressive marketing of the company. In this section, I will briefly address the above issues based on my personal experience.

1. Active surveillance vs. radical prostatectomy in low risk prostate cancer

The detection of low-risk prostate cancer (PCa) has increased considerably from 27.5% to 46.4% in US between 1990 and 2001 because of widespread use of PSA test ^[1]. PSA-based screening has been demonstrated to reduce the rate of PCa specific-death from 51% to 31% in ERSPC study ^[2]. Active surveillance (AS) is a solution to the widely acknowledged problems of overdiagnosis and overtreatment in PCa detected by PSA screening. However, the proportion of low risk PCa among total PCa is much lower in Asian countries, whereas the detection of high risk and advanced diseases have not significantly decreased yet even after introduction of PSA test ^[3-6]. In this respect, AS seems not to be necessary in Asian countries.

Since a subset of patients on AS had upgraded GS and extraprostatic extension (ECE) after radical prostatectomy (RP) ^[7-11], selection of proper patients for AS is mandatory. Although predicting factors of upgrading and upstaging were investigated in many studies ^[10, 12-14], the information from initial PSA and prostate biopsy was insufficient to predict upgrading and upstaging. In currently used AS criteria, there is a risk of missing significant disease. Better prediction tools are needed. Some investigators used prostate MRI as predicting factor for disease progression or hidden high-grade tumor ^[15-18]. However, the role of MRI in patients on AS has been not apparent yet.

The role of MRI was evaluated as a predictor of upgrade in Asan Medical Center. In 662 patients who underwent RP between 2007 and 2012, 205 (30.9%) patients with low-risk PCa were included. After RP, 53% of the low risk disease ended up upgraded. Age, PSA density and anterior location of index cancer on MRI were independent factor for prediction of GS upgrade in low-risk patients after RP (OR=1.062, p=0.002; OR=2.031, p=0.021; OR=2.479, p=0.027, respectively). In very low-risk patients, anterior location of index cancer on MRI was the only risk factor for upgrading (OR=5.333, p=0.034). It may be speculated that tumors in anterior location of the prostate gland easily failed to be detected by prostate biopsy. In our data, MRI had a substantial role in predicting GS

upgrade after RP in candidates for AS. In patients with low risk disease, RP should be considered when the anterior tumor presents on MRI at initial diagnosis.

2. Can the robotic prostatectomy replace the open or laparoscopic RP?

In Robotic surgery, presence of 3-D magnification and tools that are able to duplicate hand movements with high accuracy, have allowed urologists to have short learning curves and improve functional outcome of RP^[19]. As a result, the proportion of Robotic RP (RALP) has increased from 8% to 67% between 2004 and 2010 in US^[20]. Then, can RALP replace the open or laparoscopic RP (LRP)? Meta-analysis about oncological outcome, urinary continence and potency rates after RALP was reported recently^[21-23]. Positive surgical margin (PSM) rates were similar following RALP, open RP (ORP) and LRP. Better 12-mo potency rates after RALP was reported in comparison with RRP and a nonstatistically significant trend in favor of RALP was reported after comparison with LRP. After RALP, better 12-mo urinary continence recovery was reported in comparison with both RRP and LRP. RALP had another advantage including cosmetic improvement and decreased blood loss than ORP^[24, 25]. However, oncological outcome of RALP is ongoing concern and the higher cost of RALP is another criticism. Bolenz et al.^[26] reported that the cost was higher for RALP compared with LRP or ORP (RALP: \$13,071, LRP: \$10,877, ORP: \$8,388), but the difference was greater in Korea because of lack of reimbursement from national health insurance for RALP. In Asan Medical Center, the mean total cost of RALP and ORP is \$13,297 and \$4,166. Another considerable point is that the patients who underwent RALP were more likely to be regretful and dissatisfied because of higher expectation of RALP as an "innovation" procedure^[27]. The preoperative counseling is necessary to minimize regret and maximize satisfaction.

In data from Asan Medical Center, the proportion of RALP has increased from 38.0% to 69.4% since the introduction of Da Vinci robot in 2007. In analysis of functional outcomes, after initial cases, patients after RALP demonstrated faster recovery of urinary continence compared with ORP patients (median 1.6-mo vs. 4.3-mo). Potency recovery was more rapid in the RALP at all evaluation time points (median 9.8-mo vs. 24.7-mo). Overall PSM rate was similar between RALP and RRP (24.0 vs. 23.3%) and was not different according to pathologic T stage. Short-term (3-yrs) biochemical recurrence was not different between RALP and ORP after controlling preoperative variables. Taken together, RALP was definitely better than ORP in functional outcomes. However, regarding oncological outcome, longer follow-up studies may elucidate the benefit of RALP compared with ORP.

Conclusion

In patients on AS, the prediction of upgrade is very important because that means patients with upgraded GS, have missed the chance of early treatment. Thus, the selection is crucial whether to perform AS or RP in patients with low risk disease. MRI may contribute to making a decision.

From recent data, RALP was better than ORP in terms of functional outcomes. However, regarding oncological outcome, longer follow-up studies are necessary. The higher cost of RALP is another obstacle to accept RALP as a standard procedure of RP.

References

1. Cooperberg, M.R., et al., *Contemporary trends in low risk prostate cancer: risk assessment and treatment*. The Journal of urology, 2007. **178**(3 Pt 2): p. S14-9.

2. Schroder, F.H., et al., *Screening and prostate-cancer mortality in a randomized European study*. The New England journal of medicine, 2009. **360**(13): p. 1320-8.
3. Tanaka, N., et al., *Risk-stratified survival rates and predictors of biochemical recurrence after radical prostatectomy in a Nara, Japan, cohort study*. International Journal of Clinical Oncology, 2011. **16**(5): p. 553-559.
4. Song, C., et al., *Nomograms for the prediction of pathologic stage of clinically localized prostate cancer in Korean men*. Journal of Korean medical science, 2005. **20**(2): p. 262-6.
5. Okihara, K., et al., *Clinical characteristics of prostate cancer in Japanese men in the eras before and after serum prostate-specific antigen testing*. International Journal of Urology, 2005. **12**(7): p. 662-667.
6. Song, C., et al., *Prostate cancer in Korean men exhibits poor differentiation and is adversely related to prognosis after radical prostatectomy*. Urology, 2006. **68**(4): p. 820-4.
7. Kane, C.J., et al., *Outcomes After Radical Prostatectomy Among Men Who Are Candidates for Active Surveillance: Results From the SEARCH Database*. Urology, 2010. **76**(3): p. 695-700.
8. Mufarrij, P., et al., *Pathologic outcomes of candidates for active surveillance undergoing radical prostatectomy*. Urology, 2010. **76**(3): p. 689-92.
9. Thaxton, C.S., et al., *Treatment Outcomes of Radical Prostatectomy in Potential Candidates for 3 Published Active Surveillance Protocols*. Urology, 2010. **75**(2): p. 414-418.
10. Beauval, J.B., et al., *Pathologic Findings in Radical Prostatectomy Specimens From Patients Eligible for Active Surveillance With Highly Selective Criteria: A Multicenter Study*. Urology, 2012.
11. Conti, S.L., et al., *Pathological outcomes of candidates for active surveillance of prostate cancer*. The Journal of urology, 2009. **181**(4): p. 1628-33; discussion 1633-4.
12. Hong, S.K., et al., *Prediction of Gleason score upgrading in low-risk prostate cancers diagnosed via multi (> or = 12)-core prostate biopsy*. World Journal of Urology, 2009. **27**(2): p. 271-6.
13. Moussa, A.S., et al., *Prostate biopsy clinical and pathological variables that predict significant grading changes in patients with intermediate and high grade prostate cancer*. BJU international, 2009. **103**(1): p. 43-48.
14. Gofrit, O.N., et al., *Predicting the risk of patients with biopsy Gleason score 6 to harbor a higher grade cancer*. The Journal of urology, 2007. **178**(5): p. 1925-8.
15. Fradet, V., et al., *Prostate cancer managed with active surveillance: role of anatomic MR imaging and MR spectroscopic imaging*. Radiology, 2010. **256**(1): p. 176-83.
16. van As, N.J., et al., *A study of diffusion-weighted magnetic resonance imaging in men with untreated localised prostate cancer on active surveillance*. European urology, 2009. **56**(6): p. 981-7.
17. Guzzo, T.J., et al., *Endorectal T2-weighted MRI does not differentiate between favorable and adverse pathologic features in men with prostate cancer who would qualify for active surveillance*. Urologic Oncology: Seminars and Original Investigations, 2012. **30**(3): p. 301-305.
18. Ploussard, G., et al., *Magnetic resonance imaging does not improve the prediction of misclassification of prostate cancer patients eligible for active surveillance when the most stringent selection criteria are based on the saturation biopsy scheme*. BJU international, 2011. **108**(4): p. 513-517.
19. Menon, M., et al., *Laparoscopic and robot assisted radical prostatectomy: establishment of a structured program and preliminary analysis of outcomes*. The Journal of urology, 2002. **168**(3): p. 945-9.
20. Lowrance, W.T., et al., *Contemporary Open and Robotic Radical Prostatectomy Practice Patterns Among Urologists in the United States*. Journal of Urology, 2012. **187**(6): p. 2087-2092.
21. Novara, G., et al., *Systematic Review and Meta-analysis of Studies Reporting Oncologic Outcome After Robot-assisted Radical Prostatectomy*. European urology, 2012. **62**(3): p. 382-404.
22. Ficarra, V., et al., *Systematic Review and Meta-analysis of Studies Reporting Urinary Continence Recovery After Robot-assisted Radical Prostatectomy*. European urology, 2012. **62**(3): p. 405-417.
23. Ficarra, V., et al., *Systematic Review and Meta-analysis of Studies Reporting Potency Rates After Robot-assisted Radical Prostatectomy*. European urology, 2012. **62**(3): p. 418-430.
24. Jurczok, A., et al., *Prospective non-randomized evaluation of four mediators of the systemic response after extraperitoneal laparoscopic and open retropubic radical prostatectomy*. BJU international, 2007. **99**(6): p. 1461-6.
25. Menon, M., et al., *Prospective comparison of radical retropubic prostatectomy and robot-assisted anatomic prostatectomy: the Vattikuti Urology Institute experience*. Urology, 2002. **60**(5): p. 864-8.
26. Bolenz, C., et al., *Cost comparison of robotic, laparoscopic, and open radical prostatectomy for prostate cancer*. European urology, 2010. **57**(3): p. 453-8.
27. Schroeck, F.R., et al., *Satisfaction and Regret after Open Retropubic or Robot-Assisted Laparoscopic Radical Prostatectomy*. European urology, 2008. **54**(4): p. 785-793.

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1992-1995 Assistant Professor/Dept. of Urology/University of Ulsan College of
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Memberships

Korean Medical Association

Korean Urological Association

Korean Urological Oncology Society

American Urological Association

Urological Research Society

Evening Seminar

2

Metastatic renal cell carcinoma: current
management and controversial issues

September 14, 17:00-18:00
(Pearl Hall Tenpyo)

Chairpersons:

Yoshiyuki Kakehi (Kagawa University)
Han Yong Choi (Sungkyunkwan University)

Speakers:

- 1** Mototsugu Ohya (Keio University)
- 2** Young Deuk Choi (Younsei Univ. Severance Hospital)

Sponsored by

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Chairpersons



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- 1994 - Urologist, Samsung Medical Center
- 1997 - Professor, Urology, Sungkyunkwan University School of Medicine
- 1999 -2003 Urologist-in-Chief, Samsung Medical Center,
- 2004 -2008 Executive Vice President, Samsung Medical Center
- 2006 -2008 President of the Korean Urological Oncology Society
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Membership of International Scientific Association

1. American Urological Association (AUA) :
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2. European Association of Urology(EAU):
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3. Urological Association of Asia: Active Member

Resistance to molecular targeted therapy in metastatic renal cell carcinoma



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Novel molecular findings in cancer have led to the opening for the era of molecular targeted therapy. Molecular targeted agents are currently treatments of choice in metastatic renal cell carcinoma (mRCC). RCC is classified pathologically into the three major types, i.e. clear cell, papillary, and chromophobe. Clear cell is about 80% of all types. Clear cell RCC is well known for its hypervascularity. Most important molecular disorder of clear cell type RCC is VHL tumor suppressor gene. The VHL tumor suppressor protein acts as the substrate recognition component of an ubiquitin E3 ligase that targets protein degradation of HIF- α subunits. Therefore, HIF is constitutively activated in clear cell RCC. HIF induces the expression of vascular endothelial growth factor (VEGF). The angiogenesis of clear cell RCC depends on VEGF. Sorafenib and sunitinib are anti-angiogenic agents called as tyrosine kinase inhibitors (TKIs). TKIs target vascular endothelial growth factor (VEGF) receptor. Mammalian target of rapamycin (mTOR) inhibitors are another class of agents that are active for mRCC. mTOR inhibitors induce cell cycle arrest and block the proliferation in cancer cells whose mTOR is activated. Furthermore, mTOR inhibitors are known to down-regulate the induction of HIF. As a result, mTOR inhibitors have an anti-angiogenesis activity. However, the shrinkage of the tumor by mTOR inhibitors is modest. The act of mTOR inhibitors on RCC is considered cytostatic. This is in contrast to the first line therapy exerting robust cytotoxic activity by TKIs. Based on the results of global phase 3 clinical trials temsirolimus is indicated as the first line therapy for RCC patients with poor prognosis or non-clear subtypes, whereas everolimus as the second line for those refractory to TKIs.

TKIs revolutionized the treatment of RCC. However, subsets of patients fail to achieve any tumor shrinkage. For these patients, biomarkers to predict the effectiveness of the agents are necessary. However, there are no such predictive biomarkers available at present. Other patients have drastic and prolonged effects, followed inevitably by progression. Therefore, sequential therapy is necessary for the patients. Patients whose disease progresses during initial TKI therapy may continue treatment with a different TKI or they may switch to treatment with mTOR inhibitor. For the optimization of the sequential therapy, mechanisms underlying resistance should be elucidated. However, the underlying mechanism of the adaptive resistance is not clearly understood. It is suggested that revascularization consequent to up-regulation of alternative pro-angiogenic cytokines including fibroblast growth factor (FGF), IL-8 and angiopoietin may play a role. Another serious clinical problem in TKI is, when stopped, the patients likely to have aggressive disease. The rebound phenomenon observed in these patients treated by TKIs and recur suggest that surviving cancer cells are more potent in proliferation. The adaptive resistance by malignant phenotype of the cancer paid much attention. Cancer cells adapt the microenvironment by remodeling stroma or may reduce dependence on

angiogenesis and evade by up-regulating pathways involved in survival, invasiveness and metastases. Elucidating molecular phenotype of the resistant cancer cells is necessary for exploring the next stage targeting molecules. Invasion and metastasis are tightly related with epithelial-mesenchymal transition (EMT) and/or cancer stem cells. Another complex issue regarding resistance is that re-challenged TKI exerts some clinical benefits. It is widely believed, at least in the field of chemotherapy, that when a tumor is resistant it remains so permanently. This concept is not applicable to TKIs.

When we consider the sequential therapy or novel targeted therapy to eradicate RCC cancer cells, understanding the mechanism of both the sensitivity and the acquisition of resistance is utmost important.

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Brief sketch

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Aug/2007-present	Professor and Chairman, Department of Urology, Keio University School of Medicine



Young Deuk Choi

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Introduction

The only curative therapeutic option for renal carcinoma is the complete resection of the primary tumor. But, some patients have metastatic disease at the time of diagnosis and a substantial number of patients develop systemic disease progression regardless an initial organ confined tumor.

In the past, patients with metastatic urological cancer were considered incurable and were not candidates for surgical treatment in management of metastases. Systemic chemotherapy was the mainstay of treatment in those metastatic cases. In the dynamic field of urology, patients diagnosed with renal carcinoma with evidence of extension from the kidney who are deemed healthy can undergo cytoreductive nephrectomy, metastasectomy, followed by systemic therapy.

Treatment of Metastatic RCC

The most well studied field of urological malignancies with regard to metastasectomy is renal cell carcinoma because of the resistance to chemotherapy or radiotherapy and the limited response to immunotherapy. Two decades ago, recombinant interleukin-2 received U.S. Food and Drug Administration (FDA) approval for the treatment of patients with advanced renal cancer and subsequently of patients with melanoma. The exact mechanism by which recombinant interleukine-2 and interferon- α modulate the immunological response, inducing long-term responses in metastatic renal cell carcinoma, is still not clear. Although targeted therapies represent a substantial improvement in patients with metastases, they are still not curative. Approved drugs include tyrosine kinase inhibitors (TKI) such as sunitinib, sorafenib and pazopanib, vascular endothelial growth factor inhibitors such as bevacizumab, and mammalian target of rapamycin (mTOR) inhibitors such as temsirolimus and everolimus.

Sunitinib is a multiple tyrosine kinase receptor inhibitor approved for the treatment of metastatic RCC and gastrointestinal stromal tumor. It is one of several agents (including sorafenib as the first-line agent and everonimus as the second-line agent) that target the activity of angiogenic growth factors and show favorable results in clinical trials involving patients with metastatic clear-cell RCC. The observation that inactivation of von Hippel-Lindau tumor suppressor gene results in hypoxia inducible factor activity and thereby increased expression of vascular endothelial growth factor A, platelet-derived growth factor A, and transforming growth factor β provided the rationale for targeting these pathways in clear- cell RCC. Objective response rate was 47% with sunitinib therapy but majority of patients experienced partial response or stabilization of disease, and only 3% demonstrated a complete response to treatment. Moreover, the median overall survival for patients with metastatic RCC who received sunitinib still was only slightly greater than 2 years.

PREDICTIVE FACTOR FOR THE SEVERE CASE OF ACUTE BACTERIAL PROSTATITIS

Satoshi Yazawa¹⁾, Kent Kanao¹⁾, Eiji Kikuchi¹⁾, Goh Ohji²⁾, Naoto Hosokawa³⁾, Hirohiko Nagata¹⁾, Ryuichi Mizuno¹⁾, Ken Nakagawa¹⁾, Hitoshi Tanoguchi⁴⁾, Yosuke Nakajima⁵⁾, Mototsugu Oya¹⁾

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Introduction/Purpose: Currently, there are few established evidences in the definitive classification on the severity of and clear indication for admission criteria for patients with Acute Bacterial Prostatitis (ABP). In this study, we evaluated presenting symptoms and clinical findings in large number of patients diagnosed with ABP, and assessed the factors associated with poor clinical course of ABP.

Materials and Methods: We retrospectively reviewed the records of 208 patients diagnosed with ABP at Saiseikai Yokohamashi Tobu Hospital (n=31), Isehara Kyodo Hospital (n=58), and Keio University Hospital (n=119). The severe cases were defined as (1) prolonged shock state (24 hours or longer), (2) newly diagnosed shock after initiation of treatment, (3) positive blood culture, or (4) prostatic abscess (Rivers et al. NEJM 2001, Hooton et al. CID 2010, Fine et al. NEJM 1997). Patients who did not meet any of the above criteria were defined as non-severe cases. Patients were divided into the two groups; severe cases and non-severe cases. By comparing the two groups, we analyzed the independent factor associated with severe cases with ABP.

Results: The median age of our patients was 64.7 years. Forty-three patients were classified as severe case and 165 as non-severe case. Univariate analysis showed that (1) age ≥ 65 years, (2) past history of BPH, (3) use of a transurethral catheter, (4) past history of urinary retention, (5) complaint of pain on urination, (6) coma, (7) systolic blood pressure < 90 mmHg or diastolic blood pressure < 60 mmHg, (8) heart rate ≥ 120 bpm, (9) body temperature $\geq 38.0^\circ\text{C}$, (10) WBC $> 18,000/\mu\text{l}$, (11) BUN > 19 mg/dl, and (12) CRP were significantly associated with severe cases with ABP. Multivariate analysis showed that: (1) systolic blood pressure < 90 mmHg or diastolic blood pressure < 60 mmHg, (2) WBC $> 18,000/\mu\text{l}$, and (3) BUN > 19 mg/dl were independently associated with severe cases with ABP.

Conclusion: Our results demonstrated that BP level at the initial diagnosis, WBC, and BUN count are the predictors for severe cases of ABP. These predictors might be helpful to identify the patients with ABP treated under hospitalization and with intensive care.

A case of quadruple malignancy of MALT lymphoma, colon cancer, gastric cancer, renal cell carcinoma in one patient

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We report a case of metachronous quadruple cancer: MALT(Mucosa-Associated Lymphoid Tissue) lymphoma, colon cancer, gastric cancer, renal cell carcinoma in a 75-year-old man. He was admitted to our hospital in June 2011 because of melena. He diagnosed MALT lymphoma, stage IV, colon (primary), abdominal and around bladder lymph nodes, bone marrow. He performed chemotherapy (rituximab, cyclophosphamide, hydroxydaunorubicin, vincristine, prednisolone) for MALT lymphoma from July 2011. In January 2012, gastrointestinal endoscopy and colonoscopy were performed, and then gastric cancer and colon cancer were diagnosed. Right renal cell carcinoma was found on computed tomography (CT). Early ascending colon cancer was detected colonoscopy. Resection of gastric cancer and renal cell carcinoma were performed in March 2012.

Pathologically, the gastric cancer was well-differentiated adenocarcinoma, T1a N0 M0 and stage I ; the colon cancer was well-differentiated adenocarcinoma, T1a, N0, M0 and stage I , the renal cell carcinoma was clear cell renal cell carcinoma, G2, INF α , v (-), T1a N0 M0, and stage I . 18F-fluorodeoxy glucose positron emission tomography(FDG-PET) CT was performed, the result was no malignancy.

Multiple primary malignancies are defined as two or more malignancies in individual without any relationship between the tumors. Because of advances early detection, treatment, and supportive care for cancer, the number of cancer survivors has been gradually increasing, and this led to an increase in the possible occurrence of subsequent malignancies.

As the number of patients with multiple primary cancer is increasing. Cancer patients should be carefully examined given the possibility of multiple cancers.



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