The 35th KOREA-JAPAN Urological Congress

Program & Abstracts

Date

December 7 (Fri) - 8 (Sat), 2018

Venue

Okinawa Convention Center

President

Shigeo Horie, M.D, Ph.D

Professor and Chairman, Department of Urology,

Juntendo University, Graduate School of Medicine

In conjunction with the

10th Meeting of the Society for Anti-Aging Medicine in Urology

Contents

Welcome Message

Dear Colleagues and Friends,

It is my great honor to host the 35th Korea-Japan Urological Congress at the Okinawa Convention Center from December 7th to 8th, 2018. The first Japan-Korea Urological Congress took place in Kobe in 1984. Since then, Korea has been in charge of hosting the odd years and Japan has been in charge of hosting the even years.

Korea and Japan are two of the most prominent Asian countries in the field of clinical and basic research of urology. Korea is especially advanced in the field of robotic surgery, far ahead of Japan, and has helped in training Japanese doctors. I am honored to host the 35th Korea-Japan Urological Congress, but at the same time, I hope that we can create an environment where our friends from Korea can relax and enjoy discussions on urological topics of the future.

The theme of our Congress is “Good Doctor”, based on a Korean human drama which portrays the growth of the individual as he asks himself what a good doctor is. For today’s society with different individual values, the Society’s urologists from both countries would like to keep this theme in mind as our ultimate goal.

Let us get away from the cold December weather in Korea and Japan’s mainland, to relax on the warm island of Okinawa. I hope we can enjoy our interchange, further deepen our relationships, and surround ourselves in nature and mild weather with all of the doctors, medical staff, and corporate members.

Enjoy the beautiful Okinawa!

Shigeo Horie, M.D, Ph.D
President
The 35th Korea-Japan Urological Congress
Professor and Chairman
Department of Urology, Juntendo University
Graduate School of Medicine

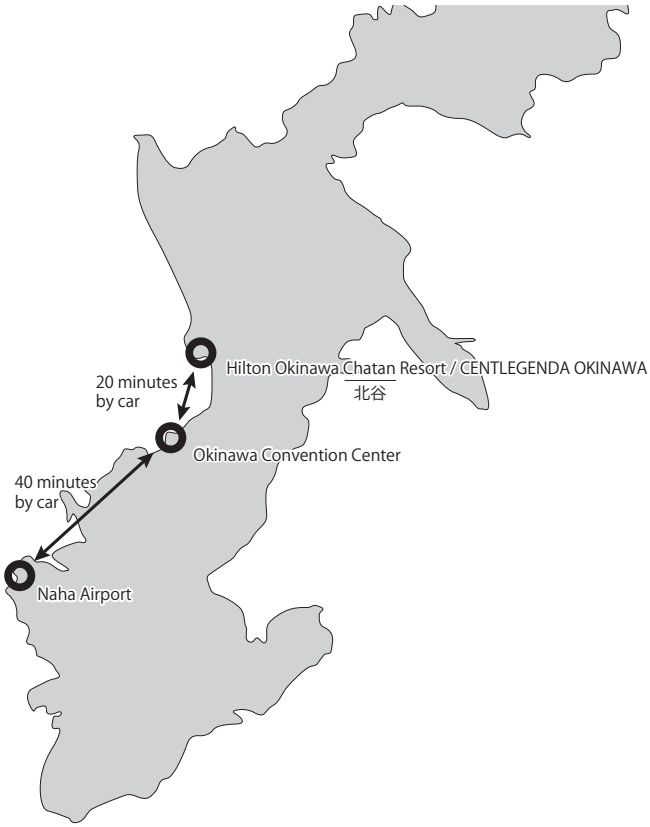
Congress History

No.	Place	Topic	Date	Year	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	Sexual Transmitted Disease, Urolithiasis, Urinary Diversion	Nov. 26	1988	Osamu Yoshida
6th	Busan	Renal Failure, Renal Cell Carcinoma	Oct. 14	1989	Jong Byung Yoon
7th	Fukuoka	Urinary Tract Infection, Urinary Incontinence	Sep. 1	1990	Joichi Kumazawa
8th	Yuseong	Nonvesical Urothelial Tumor, Impotence	Sep. 14	1991	Sung Kun Koh
9th	Tokyo	Benign Prostate Hyperplasia, 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	Renal Cell Carcinoma, 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, Benign Prostate Hyperplasia, Urinary Tract Infection	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	Seoul	Prostate Cancer & Benign Prostate Hyperplasia, 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	Hiromi 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, Endourology, Voiding Dysfunction, and Andrology	Sep. 16-17	2011	Sae Chul Kim
29th	Kagoshima	Oncology, Endourology and Laparoscopic Surgery, Voiding Dysfunction and Erectile Dysfunction	Sep. 14-15	2012	Masayuki Nakagawa
30th	Seoul	Oncology, Endourology, Voiding Dysfunction, and Andrology	Sep. 6-7	2013	Tae-Kon Hwang
31st	Tokyo	Uro-oncology, Lower Urinary Tract Sympto, Reconstruction, Regeneration, and Functional Recovery	Sep. 27-28	2014	Shin Egawa
32nd	Seoul	Uro-oncology, Endourology, Voiding dysfunction and Andrology	Sep. 18-19	2015	Han Yong Choi
33rd	Aomori	Renal transplantation, LUTS, Endourology, Oncology, Andrology	Oct. 7-8	2016	Chikara Oyama
34th	Daegu	Andrology, BPH and Building dysfunction, Laparoscopy/Robotics, Oncology, Pediatrics, Urolithiasis/Endoscopy	Sept. 22-23	2017	Chun Il Kim

Organizing Committee

Honorary Members (Institution at the retirement)					
Yoshio Aso	*The University of Tokyo*	*Japan*	Hideyuki Akaza	*University of Tsukuba*	*Japan*
Soo Eung Chai	*Sungkyunkwan University*	*Korea*	Hwang Choi	*Seoul National University*	*Korea*
Yoshihiko Hirao	*Nara Medical University*	*Japan*	Sadao Kamidono	*Kobe University*	*Japan*
Kazuki Kawabe	*The University of Tokyo*	*Japan*	Sae Chul Kim	*Chung-Ang University*	*Korea*
Young Kyoon Kim	*Seoul National University*	*Korea*	Sung Kun Koh	*Korea University*	*Korea*
Toshihiko Kotake	*Osaka Medical Center*	*Japan*	Joichi Kumazawa	*Kyushu University*	*Japan*
Hiromi Kumon	*Okayama University*	*Japan*	Takashi Kurita	*Kinki University*	*Japan*
Sung Won Kwon	*CHA University*	*Korea*	Chong Wook Lee	*Seoul National University*	*Korea*
Moo Sang Lee	*Yonsei University*	*Korea*	Toyohei Machida	*Jikei University*	*Japan*
Makoto Miki	*Tokyo Medical University*	*Japan*	Masaru Murai	*Keio University*	*Japan*
Seiji Naito	*Kyushu University*	*Japan*	Tadao Niijima	*The University of Tokyo*	*Japan*
Eigoro Okajima	*Nara Medical University*	*Japan*	Tong Choon Park	*Yeungnam University*	*Korea*
Yang Il Park	*Chonnam National University*	*Korea*	Young Kyung Park	*Chonbuk National University*	*Korea*
Joung Sik Rim	*Wonkwang University*	*Korea*	Soo Bang Ryu	*Chonnam National University*	*Korea*
Taiji Tsukamoto	*Sapporo Medical University*	*Japan*	Michiyuki Usami	*Osaka Medical Center*	*Japan*
Jin Han Yoon	*Dong-A University*	*Korea*	Osamu Yoshida	*Kyoto University*	*Japan*
Tae-Kon Hwang	*Catholic University*	*Korea*			
Korean Members					
Hanjong Ahn	*Ulsan University*	*Korea*	Han Yong Choi	*Sungkyunkwan University*	*Korea*
Sangwon Han	*Yonsei University*	*Korea*	Chun Il Kim	*Keimyung University*	*Korea*
Hyung Jin Kim	*Chonbuk National University*	*Korea*	Wun-Jae Kim	*Chungbuk National University*	*Korea*
Jae-Seung Paick	*Seoul National University*	*Korea*	Kwangsung Park	*Chonnam National University*	*Korea*
Jaemann Song	*Yonsei University*	*Korea*	Gyung Tak Mario Sung	*Dong-A University*	*Korea*
Japanese Members					
Shin Egawa	*Jikei Medical University*	*Japan*	Shigeo Horie	*Juntendo University*	*Japan*
Yoshiyuki Kakehi	*Kagawa University*	*Japan*	Naoya Masumori	*Sapporo Medical University*	*Japan*
Masayuki Nakagawa	*Kagoshima University*	*Japan*	Hiroyuki Nishiyama	*Tsukuba University*	*Japan*
Norio Nonomura	*Osaka University*	*Japan*	Osamu Ogawa	*Kyoto University*	*Japan*
Chikara Ohyama	*Hirosaki University*	*Japan*	Mototsugu Oya	*Keio University*	*Japan*
Atsushi Takenaka	*Tottori University*	*Japan*			

Access



Hilton Okinawa Chatan Resort
ヒルトン沖縄北谷リゾート

【Address】40-1 Mihama, Chatan-cho, Nakagami-gun, Okinawa 904-0115, Japan
（〒 904-0115 沖縄県中頭郡北谷町美浜 40-1）
【Phone】+81-98-901-1111（098-901-1111）
From Naha International Airport: 40 min. drive (Highway)

* Bus: Please visit “Bus Station No 3” at the Naha Airport and take Route Number and take Route Number 120 and get off at Kuwae. 15-minute walk from the bus stop.
* Limousine Bus: Please buy tickets at Naha Airport Limousine Bus counter desk.

CENTLEGENDA OKINAWA
セントレジェンダ沖縄

【Address】49 Mihama, Chatan-cho, Nakagami-gun, Okinawa 904-0115, Japan
（〒 904-0115 沖縄県中頭郡北谷町美浜 49）
【Phone】+81-98-983-7000（098-983-7000）
From Hilton Okinawa Chatan Resort : 5 min walk.

Okinawa Convention Center
沖縄コンベンションセンター

【Address】4-3-1 Mashiki, Ginowan City, Okinawa 901-2224, Japan
Conference Building A
（〒 901-2224 沖縄県宜野湾市真志喜 4-3-1）
【Phone】+81-98-898-3000（098-898-3000）
From Naha International Airport: 40 min.

* Bus: Please visit “Bus Station No 3” at the Naha Airport and take Route Number No.26 or No.99
* Limousine Bus: Please visit “Limousine Bus Station” at the Naha Airport and buy ticket.
Note: Get off at Laguna Garden Hotel bus stop and walk to the center for 10 minutes.

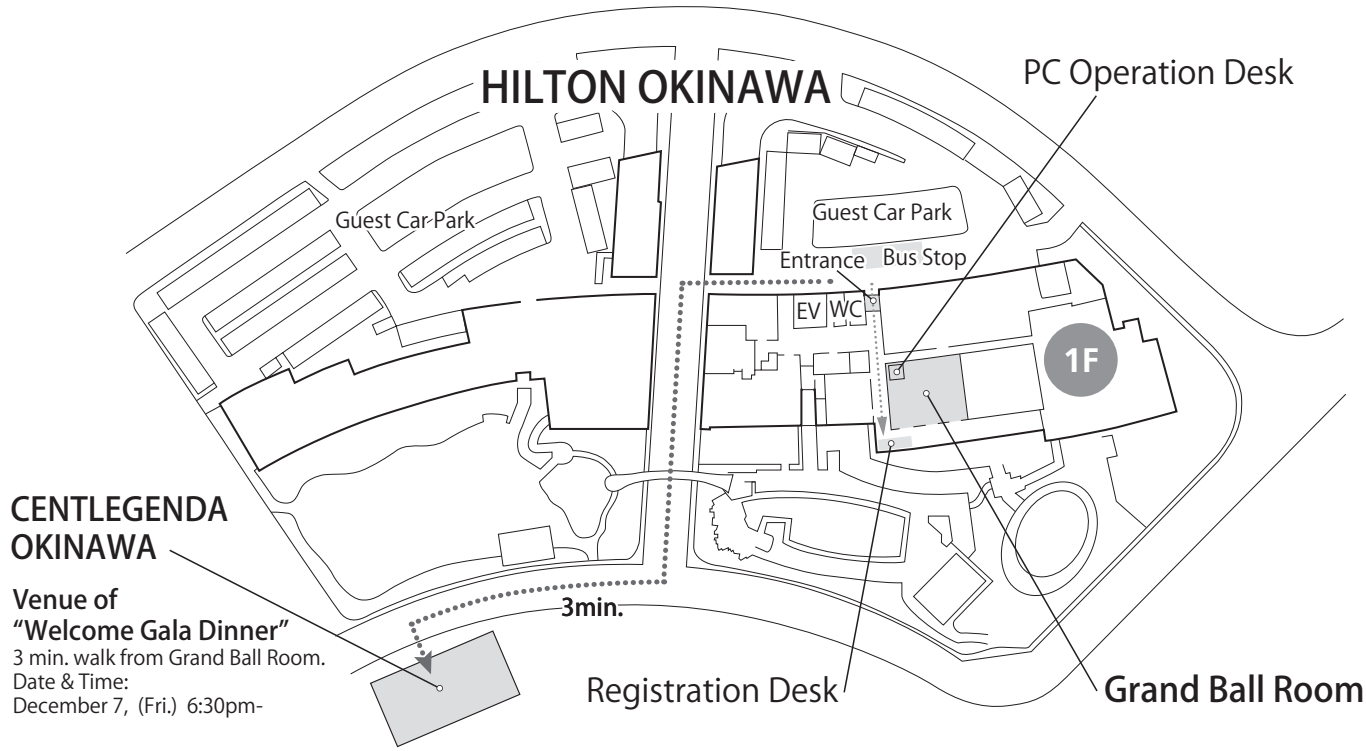
Shuttle bus time table

Date	Depature	Time	Arrival	Time
12/7	Naha Airport	13:00	Hilton Okinawa Chatan Resort	13:40
	Naha Airport	14:00	Hilton Okinawa Chatan Resort	14:40
	Naha Airport	15:00	Hilton Okinawa Chatan Resort	15:40
12/8	Hilton Okinawa Chatan Resort	7:30	Okinawa Convention Center	8:00
	Hilton Okinawa Chatan Resort	8:00	Okinawa Convention Center	8:30
	Okinawa Convention Center	17:30	RINKEN'S KITCHEN	18:00
	Okinawa Convention Center	17:45	RINKEN'S KITCHEN	18:15
12/9	Hilton Okinawa Chatan Resort	9:15	Okinawa Convention Center	9:45
	Okinawa Convention Center	9:55	Naha Airport	10:40
	Okinawa Convention Center	16:45	Naha Airport	17:25

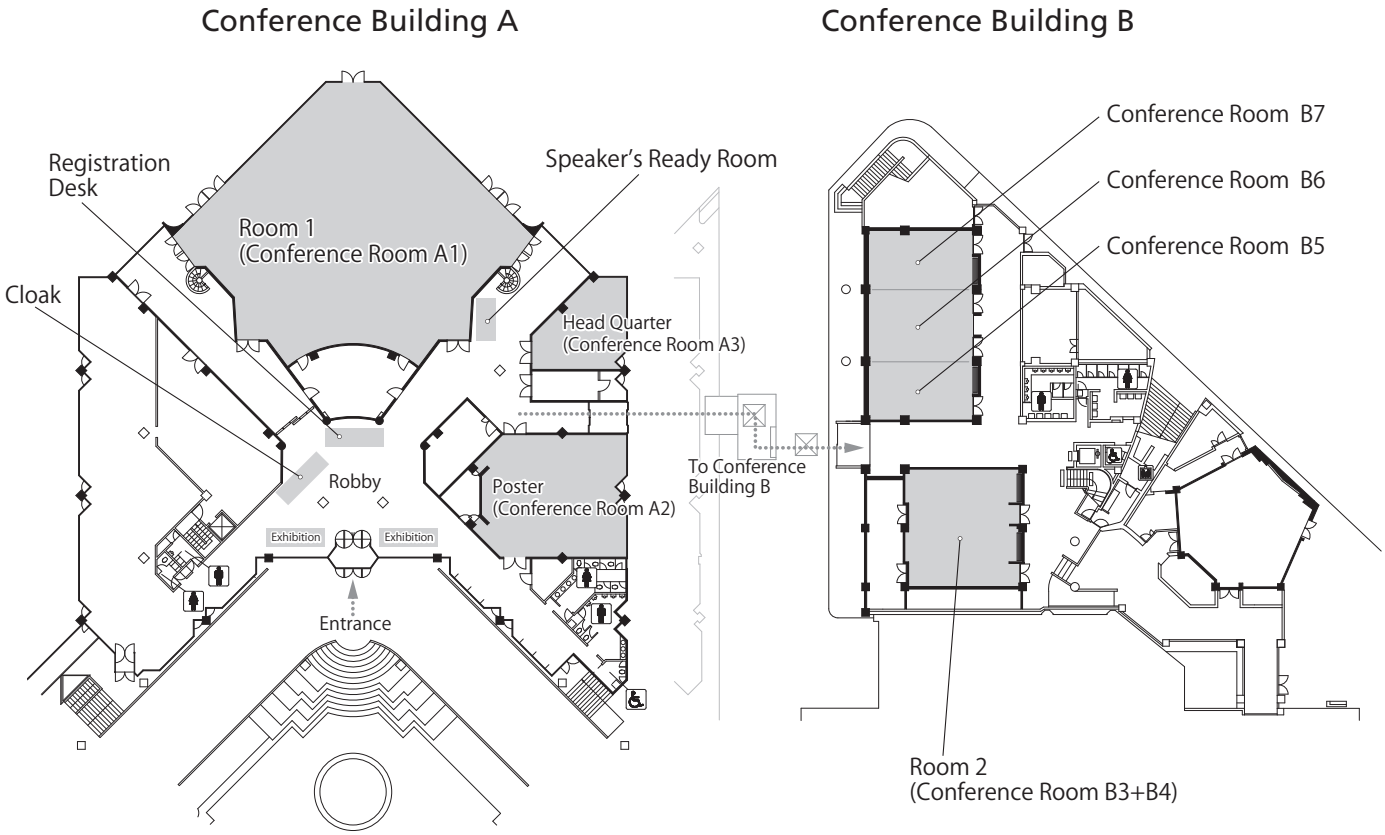
* The bus could be late depends on the traffic condition.

Floor Plan

Dec. 7th
Hilton Okinawa Chatan Resort Grand Ball Room



Dec. 8th
Okinawa Convention Center



Registration

1. Registration Hours

Date	Time	Venue
Dec. 7 (Fri)	15:00-17:30	Hilton Okinawa Chatan Resort, Grand Ball Room
Dec. 7 (Fri)	18:00-19:30	CENTLEGENDA OKINAWA, Lobby
Dec. 8 (Sat)	8:00-17:00	Okinawa Convention Center, Conference Building A, Lobby

2. How to Register

1) Participants who have pre-registered

Your reference number will be required at the Pre-registration Desk to comfirm your registration. You should have received the number in an email when you completed pre-registration. Please bring the printout of email or tell your reference number at the desk to receive a congress badge, program & abstracts book and a name badge holder.

*Please note that we can not confirm your registration without your reference number.

2) Participants who will register onsite

Onsite-registration is available at the Registration Area. Please visit the Onsite registration Desk and complete the required registration form that can be found at the Registration Area.

3. Payment Method

For both pre-registered participants and those registering onsite, the participation fee must be paid on the day of the congress.

All payments must be made in Japanese Yen (JPY) and only cash will be accepted. No other currencies are acceptable.

Currency Exchange Guide

We strongly recommend preparing Japanese Yen before arriving to Okinawa, Japan.
For your convenience, the Naha airport also has a currency exchange booth.
Please refer below for further details.
· Business Hours: 9:30-20:30 · Location: Naha Airport 1F · Telephone: +81 98 891 8880

Category	Delegate	Resident*1	Accompanying Person*2
Pre-Registration	15,000 JPY	5,000 JPY	3,000 JPY
Onsite-Registration	18,000 JPY	8,000 JPY	5,000 JPY

*1 Resident
[Eligibility] Senior Resident Doctor, Graduated Student
[Benefit] Participation fee is discounted.

Note: For registration on the day of the Congress, graduate and Ph.D. students must show their student ID and senior resident doctors must show their completed certificate at the registration desk. If the appropriate ID or certificate is not present at the registration desk, the participant will be charged the regular price.

*2 Accompanying Person
Accompanying person is limited to the spouse and family of registered Delegate or Resident doctor.

Delegate & Resident registration fees includes:

1) Admission to all sessions including Luncheon/Evening seminars
2) Admission to the exhibition & poster area
3) Participation in all programs of 10th Meeting of the Society for Anti-Aging Medicine in Urology. (Please note that the program events will all be conducted in Japanese.)
4) Documents including a book of abstracts
5) Refreshments (coffee breaks) and lunch
6) Admission to events (Welcome Gala Dinner on Dec. 7th and Presidential Dinner on Dec. 8th)

Accompanying Person Registration Fees Include:

Access is limited to events (Welcome Gala Dinner on Dec. 7th and Presidential Dinner on Dec. 8th)

Events

Participants are invited to attend events to meet and enjoy the company of fellow attendees. Both events below are open to all attendees.

■ Welcome Gala Dinner
Date & Time: December 7, 2018 (Friday) 6:30pm-
Venue: CENTLEGENDA OKINAWA
904-0115, OKINAWA, 49 MIHAMA, CHATAN-CHO NAKAGAMI-GUN, JAPAN
From Naha International Airport: 35min. drive)
Style: Buffet party

■ Presidential Dinner
Date & Time: December 8, 2018 (Saturday) 6:30pm-
Venue: RINKEN'S KITCHEN
904-0115, OKINAWA, 8-11 MIHAMA, CHATAN-CHO NAKAGAMI-GUN
From Naha International Airport: 40min. drive)
Style: Buffet party

*The shuttle buses will transport between Okinawa Convention Center and the dinner venue after the congress.

General Information

1. Cloakroom

Date	Time	Venue
Dec. 7 (Fri)	All day	Hilton Okinawa Chatan Resort, 3F, Concierge Desk
Dec. 7 (Fri)	18:00-20:30	CENTLEGENDA OKINAWA, Lobby
Dec. 8 (Sat)	8:00-18:00	Okinawa Convention Center, Lobby

2. Exhibition and Refreshment Service

Exhibition: Robby / Refreshment Service: Okinawa Convention Center, Conference Room A2

3. Lunch Box

Complimentary lunch boxes will be served in the luncheon seminars.

4. Photography and Recording

Recording by any means (photographing, audiotaping, videotaping) of any presentation/session is prohibited, except by an authorized photographer or by First Authors who wish to photograph their own poster presentation.

Instructions for Chairpersons and Speakers

For Chairpersons

1. Please arrive 15 min. before the start of your session and take the designated chairpersons' standby seat.
2. Chairpersons are requested to remain within the time allotted for the session and each presentation.

For Speakers

1. All oral presentations should be digital (PC) presentations. Please note that slides and video tapes may not be used.
2. Audio playback is available.
3. The screen resolution is XGA (1024×768); aspect ratio 4:3.
4. There is no limit to the number of presentation slides, but please make sure your presentation finishes on time.
5. To prevent the possible spread of computer viruses, always scan your presentation files beforehand with updated anti-virus software.
6. If you created your presentation using Windows, please save it using a USB drive or bring your own computer.
7. If you are using a Macintosh, please bring your own computer.
8. Please submit your presentation and test it at the Speaker's Ready Room at least 30 min. before the start of your session. If using your own computer, please note that after testing your presentation, your computer will be stored at the PC operation desk located on the left side of the lecture hall.
9. Speaker's Ready Room Hours and Location

Date	Time	Location
Dec. 7th (Fri)	15:00-16:40	PC Operation Desk, Grand Ball Room, Hilton Hotel Chatan Resort
Dec. 8th (Sat)	8:00-16:30	Speaker's Ready Room, Okinawa Convention Center, Conference Building A, Lobby

10. Please see below on how to create your presentation data.

For those bringing their presentation data (Windows only)

1) Please make your presentation on a Windows PowerPoint 2007, 2010, 2013, or 2016 and using the standard OS fonts:
Times New Roman, Arial, Arial Black, Arial Narrow, Century, Century Gothic, Courier, Courier New, Georgia

2) Animation and video can be used, however, please use a file that can be played back on Windows Media Player 12 with default codecs. We recommend using the file format WMV.
* If you have a video file, please bring your personal PC with you as a backup.

3) If you have any data (graphs or still images) in your presentation that uses links, please insert a "Picture" in place of the link as it can be the cause of some computer troubleshooting.
* Please make sure to double check your presentation on an alternate PC beforehand.

4) Please check your device for viruses using updated security software as there have been cases of virus infection through media.
5) Your data will be stored for your presentation and will be deleted by the secretariat after the congress.

For those bringing their own PC

1) There are no limitations to OS, applications, hardware, however a Mini D-sub 15 pin cable will be used to connect the computer to the projector. Please note that certain computers (Macintosh, Surface) may require a proprietary connector (MiniDisplayPort). If that is the case, please bring your own connector.

[D-sub15 pin] 

[separate connectors] 

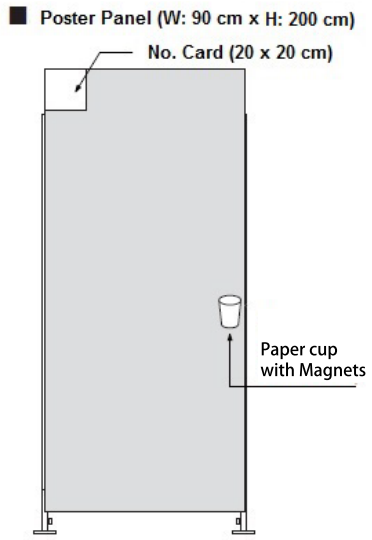
2) Please make sure your screensaver and virus software are turned off and that your computer is not in power saving mode. Please also unlock the password.
3) Please bring in your charger, as battery issues can be the source of technical troubles.
4) It is recommended to have backup data with you.
5) After the presentation, we will return your computer near the PC operation desk. Please come to the PC operation desk as soon as possible after your presentation as there is limited venue space.

11. Presentation Time

Podium: 5 min. presentation, 2 min. discussion

Other presentations, symposia, etc.: Presentation time differs depending on session. Please refer to the notice sent by the congress secretariat.

For Poster Presentation



1. Each poster presenter will be provided with a 210cm x 90cm poster board. The total usable area excluding your poster title and information is 200cm (h) x 90 cm (w). Your poster must not exceed the usable area dimensions. Your poster number will be designated by our staff. Please prepare your presentation information (poster title, affiliation, author name) and presentation material by yourself.
2. Please refer to the schedule below to setup and removal for your poster on December 8th at Conference Room A2.
   Set up / 8:30-9:30 Removal / 16:30-17:30
   Poster viewing is 9:30-16:30.
3. Magnets will be on your poster board. Do not use foam core or any thick or multi-layered materials. Do not use adhesives (glue, tape, spray adhesives, Velcro, etc.) directly on the poster panels.
4. Make sure to observe the assigned timetable for registration, set up, viewing time and removal. Posters must be removed by end of the congress day. All posters left after the removal hours will be discarded by the congress staff.
5. Poster viewing will be held between 9:30 and 16:30. Please note there will be no scheduled time for poster presentations.

Program at a Glance

【Day 1】Friday, Dec. 7th Venue: Hilton Okinawa Chatan Resort

ROOM	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00
Grand Ball Room											

【Day 2】Saturday, Dec. 8th Venue: Okinawa Convention Center

ROOM	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00
Conference Room A1 Room 1		8:30-9:20 **Symposium 1** **New Androgen Therapy** Chairpersons Seiichi Saito Tai Young Ahn Sponsored by Janssen Pharmaceutical K.K.		9:20-10:10 **Symposium 2** **TKI of RCC** Chairpersons Masayuki Nakagawa Hanjong Ahn Sponsored by Novartis Pharma		10:25-11:05 **Visionary Lecture** Chairpersons Osamu Ogawa Kyu-Sung Lee Speakers Masato Fujisawa Je Jong Kim		11:15-12:15 **Special Lecture** **Drug Development from Asia** Chairperson Shigeo Horie Speakers Eiji Higashihara Kyung Seop Lee Sponsored by Otsuka Pharmaceutical Co., Ltd. / GemVax		12:30-13:20 **Luncheon Seminar 1** **Immuno-Oncology RCC 2018** Chairpersons Masato Fujisawa Jinsoo Chung Sponsored by Bristol-Myers Squibb K.K. / ONO PHARMACEUTICAL CO., LTD.	
Conference Room B3+4 Room 2		8:30-9:20 **Symposium 6** **New Trends of Radiation Therapy for Prostate Cancer** Chairpersons Han Yong Choi Akio Matsubara Sponsored by AstraZeneca K.K.		9:20-10:10 **Symposium 7** **Prostate Cancer and Bone** Chairpersons Hiroaki Shiina Tag Keun Yoo Sponsored by Bayer Yakuhin, Ltd			11:05-11:45 **Educational Session 1** **Andrology** Chairpersons Kwangsung Park Hisamitsu Ide	11:45-12:15 **Podium 1** Chairperson Yoshiro Sakamoto		12:30-13:20 **Luncheon Seminar 2** **Chemotherapy of Prostate Cancer** Chairpersons Osamu Ogawa Byung Ha Chung Sponsored by Sanofi K.K.	
Conference Room A2 Poster		**Poster Set-up**		**Poster Viewing**							

13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00
				Opening Remarks	16:10-17:00 **Legends Lecture** Chairpersons Nam Cheol Park Shigeo Horie Speakers Hideyuki Akaza Jae-Seung Paick Sponsored by Takeda Pharmaceutical Company Limited		17:10-18:00 **Evening Seminar** **New Horizon of the Treatment of CRPC** Chairpersons Yoshiyuki Kakehi Dongdeuk Kwon Sponsored by Astellas Pharma Inc.			**Welcome Gala Dinner** Time:18:30- Venue CENTLEGENDA OKINAWA	

13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30	19:00
13:20-14:00 **Keynote Lecture** Chairpersons Yoshiyuki Kakehi Wun-Jae Kim Speakers Shigeo Horie Hanjong Ahn	14:10-15:00 **Symposium 3** **Immuno-Oncology Bladder Cancer 2018** Chairpersons Akinobu Gotoh Kyung Seop Lee Sponsored by MSD K.K. / TAIHO PHARMACEUTICAL CO., LTD.		15:00-15:50 **Symposium 4** **BPH and LUTS** Chairpersons Sae Woong Kim Yoshihiko Hirao Sponsored by GlaxoSmithKline K.K.		16:00-16:50 **Symposium 5** **NMIBC** Chairpersons Chun Il Kim Hiroshi Kitamura Sponsored by Chugai Pharmaceutical Co., Ltd.		16:50-17:20 **Podium 2** Chairperson Akira Tsujimura	Closing Remarks		**Presidential Dinner** Time 18:30- Venue RINKEN'S KITCHEN	
	14:10-15:10 **Educational Session 2** **Robotic Surgery I** Chairpersons Chikara Ohyama Gyung Tak Mario Sung		15:10-15:50 **Educational Session 3** **Robotic Surgery II** Chairpersons Masahiro Yashi Jaemann Song		16:00-16:50 **Symposium 8** **New Horizon of Laser Surgery** Chairpersons Kyu-Sung Lee Shigeo Horie Sponsored by HALTEK Ltd. / Fotona d. o. o.						
						Poster Removal					

Friday, Dec. 7th (Day1)

Hilton Okinawa Chatan Resort
Grand Ball Room

16:00 - 16:10

Opening Remarks

Legends Lecture

16:10 - 17:00

Sponsored by Takeda Pharmaceutical Company Limited

Chairpersons
Nam Cheol Park *Department of Urology, Pusan National University School of Medicine & Pusan National University Hospital, Korea*
Shigeo Horie *Department of Urology, Juntendo University Graduate School of Medicine, Japan*

LL1 **What can Asia-Prostate Cancer Study (A-CaP) Group Contribute to Cancer Control in Asia?**
Hideyuki Akaza (Japan)
Strategic Investigation on Comprehensive Cancer Network,The University of Tokyo / The chief Director of A-CaP Study Group, Japan

LL2 **The Precautionary Approach and Management for Noninfectious Complications of Inflatable Penile Implant**
Jae-Seung Paick (Korea)
Mediplex Sejong Hospital, Incheon, Korea

Evening Seminar

17:10 - 18:00

New Horizon of the Treatment of CRPC — Sponsored by Astellas Pharma Inc.

Chairpersons
Yoshiyuki Kakehi *National University Corporation Kagawa University, Japan*
Dongdeuk Kwon *Department of Urology, Chonnam National University Medical School, Gwangju and Chonnam National University Hwasun Hospital, Hwasun, Korea / Chairman of Professor's Association of Chonnam National University Medical School, Korea*

ES-1 **Precision medicine in CRPC**
Won Tae Kim (Korea)
Department of Urology, Chungbuk National University, Korea

ES-2 **CRPC treatment by androgen-unrelated agents**
Norio Nonomura (Japan)
Department of Urology, Osaka University Graduate School of Medicine, Japan

ES-3 Special Brief Remark
Management of M0 CRPC
Jun Hyuk Hong (Korea)
Department of Urology, University of Ulsan, Asan Medical Center, Seoul, Korea

ES-4 Special Brief Remark
Whole body MRI-based treatment approach against metastatic castration-resistant prostate cancer: loco-regional radiotherapy targeting for oligo-progressive disease
Soichiro Yoshida (Japan)
Department of Urology, Tokyo Medical and Dental University, Japan

Saturday, Dec. 8th (Day2)

Okinawa Convention Center
Room 1 （Conference Room A1）

Symposium 1

8:30 - 9:20

New Androgen Therapy — Sponsored by Janssen Pharmaceutical K.K.

Chairpersons
Seiichi Saito — *Department of Urology, University of the Ryukyus, Graduate School of Medicine, Japan*
Tai Young Ahn — *Department of Urology, Asan Medical Center University of Ulsan, College of Medicine Seoul, Korea*

SY1-1 **Recent advances in the treatment of castration resistant prostate cancer**
Hirotsugu Uemura (Japan)
Department of Urology, Kindai University Faculty of Medicine, Osaka-Sayama, Osaka, Japan

SY1-2 **Smart Care of Prostate Cancer Patient using IoT & AI**
Ji Youl Lee (Korea)
Department of Urology, Smart Hospital, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea

SY1-3 Special Brief Remark
Alteration of androgen-targeted therapy in men with advanced prostate cancer
Hiroaki Shiina (Japan)
Department of Urology, Shimane University Faculty of Medicine, Japan

Symposium 2

9:20 - 10:10

TKI of RCC — Sponsored by Novartis Pharma

Chairpersons
Masayuki Nakagawa — *Department of Urology, Kagoshima University Faculty of Medicine, Japan*
Hanjong Ahn — *Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea*

SY2-1 **Current status and future perspectives of molecular targeted therapy against kidney cancer**
Masatoshi Eto (Japan)
Department of Urology, Graduate School of Medical Sciences, Kyushu University, Japan

SY2-2 **The Role of TKIs in the era of immuno-Oncology in advanced kidney cancer**
Jinsoo Chung (Korea)
Urology, Center for Prostate Cancer, National Cancer Center, Korea

SY2-3 Special Brief Remark
Systemic therapy for RCC
Kazunari Tanabe (Japan)
Department of Urology, Tokyo Women's Medical University, Japan

Visionary Lecture

10:25 - 11:05

Chairpersons
Osamu Ogawa — *Department of Urology, Kyoto University Graduate School of Medicine, Japan*
Kyu-Sung Lee — *Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*

VL-1 **Future prospects of urologic robotic surgery in Japan**
Masato Fujisawa (Japan)
Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine, Japan

VL-2 **ED Treatment in Korea: Before and after PDE5 inhibitors**
Je Jong Kim (Korea)
Department of Urology, Korea University Anam Hospital, Korea

Special Lecture

11:15 - 12:15

Drug Development from Asia — Sponsored by Otsuka Pharmaceutical Co., Ltd. / GemVax

Chairperson
Shigeo Horie — *Department of Urology, Juntendo University Graduate School of Medicine, Japan*

SL-1 **Autosomal Dominant Polycystic Kidney Disease: Progression and Prevention**
Eiji Higashihara (Japan)
Hereditary Kidney Disease Research, Kyorin University School of Medicine, Japan

SL-2 **The Possibility of GV1001® as a therapeutic alternative in BPH - Prior to Phase III clinical trial**
Kyung Seop Lee (Korea)
Department of Urology, Dongguk University Hospital, Dongguk University School of Medicine, Gyeongju, Korea

Luncheon Seminar 1

12:30 - 13:20

Immuno-Oncology RCC 2018 — Sponsored by Bristol-Myers Squibb K.K. / ONO PHARMACEUTICAL CO., LTD.

Chairpersons
Masato Fujisawa *Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine, Japan*
Jinsoo Chung *Urology, Center for Prostate Cancer, National Cancer Center, Korea*

LS1-1 **Immunotherapy for RCC: mechanisms of action and resistance**
Yuji Miura (Japan)
Department of Medical Oncology, Toranomon Hospital, Japan

LS1-2 **Immune Checkpoint Inhibitor in Renal Cell Carcinoma**
Wun-Jae Kim (Korea)
Department of Urology, College of Medicine, Chungbuk National University, Korea

LS1-3 Special Brief Remark
Immuno-Oncological therapy for renal carcinoma: the current state of Japan
Noboru Nakaigawa (Japan)
Department of Urology, Yokohama City Univesity Graduate School of Medicine, Japan

LS1-4 Special Brief Remark
A New Hope for the treatment of mRCC - Immuno-Oncology
Tae Gyun Kwon (Korea)
Kyungpook National University, Korea

Keynote Lecture

13:20 - 14:00

Chairpersons
Yoshiyuki Kakehi *National University Corporation Kagawa University, Japan*
Wun-Jae Kim *Department of Urology, College of Medicine, Chungbuk National University, Korea*

KL-1 **Precision Urology Comes of Age**
Shigeo Horie (Japan)
Department of Urology, Juntendo University Graduate School of Medicine, Japan

KL-2 **Positive surgical margins after radical prostatectomy**
Hanjong Ahn (Korea)
Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Symposium 3

14:10 - 15:00

Immuno-Oncology Bladder Cancer 2018 — Sponsored by MSD K.K. / TAIHO PHARMACEUTICAL CO., LTD.

Chairpersons
Akinobu Gotoh *Laboratory of Cell and Gene Therapy, Institute for Advanced Medical Sciences, Hyogo College of Medicine, Japan*
Kyung Seop Lee *Department of Urology, Dongguk University Hospital, Dongguk University School of Medicine, Gyeongju, Korea*

SY3-1 **Immunotherapy for urothelial carcinoma; Current status and future prospects**
Hiroyuki Nishiyama (Japan)
Department of Urology, Faculty of Medicine, Tsukuba University, Japan

SY3-2 **Current updates of checkpoint inhibitor in bladder cancer**
Byong Chang Jeong (Korea)
Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

SY3-3 Special Brief Remark
Immunotherapy for urothelial cancer: state of the art and future perspectives
Hiroshi Kitamura (Japan)
Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan

SY3-4 Special Brief Remark
A new paradigm in treatment of urothelial cancer
Ho Kyung Seo (Korea)
Center for Prostate Cancer, National Cancer Center, Korea

Symposium 4

15:00 - 15:50

BPH and LUTS — Sponsored by GlaxoSmithKline K.K.

Chairpersons
Sae Woong Kim *Department of Urology, Catholic Integrative Medicine Research Institute, Research Dept. at Seoul St. Mary's Hospital, School of Medicine, The Catholic University of Korea, Seoul, Korea*
Yoshihiko Hirao *Osaka Gyoumeikan Hospital, Japan*

SY4-1 **The impacts of Metabolic syndrome and life style on the Prevalence of BPH in Korea: from the Nation-wide Insurance Data cohort**
Hwancheol Son (Korea)
Department of Urology, Seoul National University Boramae Medical Center
Department of Urology, College of Medicine, Seoul National University, Korea

SY4-2 **Water absorption from the urinary bladder**
Hiroki Watanabe (Japan)
Watanabe Memorial Choumei Research Laboratory, Japan

SY4-3 Special Brief Remark
Best practice in the management of storage symptoms in male LUTS/BPH
Myung-Soo Choo (Korea)
Department of Urology, Asan Medical Center, University of Ulsan, Korea

SY4-4 Special Brief Remark
Anti-aging effect of laser treatment for benign prostatic hyperplasia
Keisuke Saito (Japan)
Department of Urology, Juntendo University Shizuoka Hospital, Japan

Symposium 5

16:00 - 16:50

NMIBC — Sponsored by Chugai Pharmaceutical Co., Ltd.

Chairpersons **Chun Il Kim** *Department of Urology, Keimyung University Dongsan Medical Center, Korea*

Hiroshi Kitamura *Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research University of Toyama, Japan*

SY5-1 **Alternative intravesical therapy for BCG unresponsive NMIBC** — **Seok Ho Kang (Korea)**, *Korea University, College of Medicine Seoul, Korea*

SY5-2 **Photodynamic diagnosis for bladder cancer using 5-aminolevulinic acid** — **Hideo Fukuhara (Japan)**, *Department of Urology, Kochi Medical School, Japan*

SY5-3 Special Brief Remark

What is the unmet needs in the management of NMIBC? — **Tomomi Kamba (Japan)**, *Department of Urology, Graduate School of Medical Sciences, Kumamoto University, Japan*

SY5-4 Special Brief Remark

The Role of immuno-oncology in BCG unresponsive NMIBC — **Ho Kyung Seo (Korea)**, *Center for Prostate Cancer, National Cancer Center, Korea*

Podium 2

16:50 - 17:20

Chairperson **Akira Tsujimura** *Department of Urology, Juntendo University Urayasu Hospital, Japan*

O02-1 **Withdrawn**

O02-2 **Induction Chemotherapy Followed by Surgery versus Upfront Radical Cystectomy in Patients with Clinically Node-positive Muscle-invasive Bladder Cancer** — **Sahyun Pak (Korea)**, *Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea*

O02-3 **An analysis of hospital based cancer registry data of retroperitoneal and male genital soft tissue sarcoma in Japan** — **Tomokazu Kimura (Japan)**, *Department of Urology, Faculty of Medicine, University of Tsukuba, Japan*

O02-4 **Overall dysfunction of T cells was significantly correlated with tumor grade in Renal Cell Carcinoma patients** — **Atsunari Kawashima (Japan)**, *Department of Urology, Osaka University Graduate School of Medicine, Japan*

17:20 - 17:30

Closing Remarks

Okinawa Convention Center
Room 2 （Conference Room B3+4)

Symposium 6

8:30 - 9:20

New Trends of Radiation Therapy for Prostate Cancer — Sponsored by AstraZeneca K.K.

Chairpersons
Han Yong Choi — *Department of Urology, Sungkyunkwan University School of Medicine, Korea*
Akio Matsubara — *Department of Urology, Graduate School of Biomedical Sciences, Hiroshima University, Japan*

SY6-1 **Focal Brachytherapy for Prostate Cancer**
Dong Soo Park (Korea)
Department of Urology, Cha University Bundang Medical Center, Korea

SY6-2 **Heavy ion radiation therapy for prostate cancer**
Kazuhiro Suzuki (Japan)
Department of Urology, Gunma University Graduate School of Medicine, Japan

SY6-3 Special Brief Remark
Progress of Radiation Therapy for Prostate Cancer
Kazuo Nishimura (Japan)
Osaka International Cancer Institute, Japan

Symposium 7

9:20 - 10:10

Prostate Cancer and Bone — Sponsored by Bayer Yakuhin, Ltd

Chairpersons
Hiroaki Shiina — *Department of Urology, Shimane University Faculty of Medicine, Japan*
Tag Keun Yoo — *Department Urology, Eulji University, Nowon Eulji Medical Center, Korea*

SY7-1 **Importance of bone management in prostate cancer**
Hiroji Uemura (Japan)
Yokohama City University Medical Center, Japan

SY7-2 **Bone issues in prostate cancer**
Jae Il Chung (Korea)
Busan Paik Hospital Inje University, Korea

SY7-3 **Bone Targeting Agents in Prostate Cancer**
Jae Young Joung (Korea)
Center for Prostate Cancer, National Cancer Center, Korea

Educational Session 1

11:05 - 11:45

Andrology

Chairpersons
Kwangsung Park — *Urology at Chonnam National University Medical School, Gwangju, Korea*
Hisamitsu Ide — *Dokkyo Medical University Saitama Medical Center, Japan*

EdS1-1 **Application of Filler in Urological Field, Premature Ejaculation**
Du Geon Moon (Korea)
Department of Urology, Korea University Guro Hospital, Korea

EdS1-2 **Recent trend of semen quality for Japanese men at the marriage**
Akira Tsujimura (Japan)
Department of Urology, Juntendo University Urayasu Hospital, Japan

Podium 1

11:45 - 12:15

Chairperson
Yoshiro Sakamoto — *Department of Urology, Juntendo University Nerima Hospital, Japan*

O01-1 ***Bmal1*** **is a regulator of p21 expression in prostate and associated with prostate proliferation**
Masakatsu Ueda (Japan)
Kyoto University Graduate School of Medicine, Department of Urology, Japan

O01-2 **Conversion of prostate cancer from hormone independency to dependency due to AMACR or E74-like factor inhibition**
Kiyoshi Takahara (Japan)
Department of Urology, Fujita Health University School of Medicine, Japan

O01-3 **Effects of exosomes from adipose-derived stem cells on recovery of erectile function in a bilateral cavernous nerve injury rat model**
Yong Hyun Park (Korea)
Department of Urology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea

O01-4 **The mutational burden of targeted genes significantly correlated with overall survival after targeted therapy in metastatic renal cell carcinoma**
Sung Han Kim (Korea)
Department of Urology, Prostate Cancer Center, National Cancer Center, Goyang, Gyeonggi-do, Rep. Korea

Luncheon Seminar 2

12:30 - 13:20

Chemotherapy of Prostate Cancer — Sponsored by Sanofi K.K.

Chairpersons
Osamu Ogawa *Department of Urology, Kyoto University Graduate School of Medicine, Japan*
Byung Ha Chung *Department of Urology, Gangnam Severance Hospital, Yonsei University College of Medicine, Korea*

LS2-1 **Chemotherapy of prostate cancer and aggressive disease**
Masashi Kato (Japan)
Department of Urology, Nagoya University Graduate School of Medicine, Japan

LS2-2 **Immunotherapy for Castrate-Resistant Prostate Cancer**
Sung Kyu Hong (Korea)
Department of Urology, Seoul National University Bundang Hospital, Seongnam
Department of Urology, Seoul National University College of Medicine, Korea

LS2-3 Special Brief Remark
Chemotherapy of Prostate Cancer
Masayoshi Nagata (Japan)
Department of Urology, Juntendo University, Graduate School of Medicine, Japan

LS2-4 Special Brief Remark
Chemotherapy of mHSPC
Jin Seon Cho (Korea)
Hallym University, Korea

Educational Session 2

14:10 - 15:10

Robotic Surgery I

Chairpersons
Chikara Ohyama *Department of Urology, Hirosaki University School of Medicine, Japan*
Gyung Tak Mario Sung *Department of Urology, Dong-A University Medical Center, Korea*

EdS2-1 **Present Status of Robotic Urologic Surgery in Japan**
Atsushi Takenaka (Japan)
Division of Urology, Tottori University Faculty of Medicine, Japan

EdS2-2 **Robotic Partial Nephrectomy for Complex Renal Tumor**
Ryoichi Shiroki (Japan)
Fujita Health University School of Medicine, Japan

EdS2-3 **Novel robotic systems and future directions**
Koon Ho Rha (Korea)
Department of Urology, Severance Hospital, Urological Science Institute, Yonsei University College of Medicine, Republic of Korea

Educational Session 3

15:10 - 15:50

Robotic Surgery II

Chairpersons
Masahiro Yashi *Department of Urology, Dokkyo Medical University, Japan*
Jaemann Song *Department of Urology, Cheju Halla General Hospital, Korea*

EdS3-1 **Tips for reducing complications after robot-assisted laparoscopic partial nephrectomy**
Kazuhide Makiyama (Japan)
Department of Urology, Yokohama City University, Japan

EdS3-2 **Robot-Assisted Radical Cystectomy with Total Intracorporeal Urinary Diversion: Korean Experience**
Seok Ho Kang (Korea)
Korea Universtiy College of Medicine, Korea

EdS3-3 Special Brief Remark
Complication of robot-assisted radical cystectomy
Byong Chang Jeong (Korea)
Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

EdS3-4 Special Brief Remark
Current Status of Robotic Cystectomy
Satoru Muto (Japan)
Department of Urology, Juntendo University Graduate School of Medicine, Japan

Symposium 8

16:00 - 16:50

New Horizon of Laser Surgery — Sponsored by HALTEK Ltd. / Fotona d. o. o.

Chairpersons
Kyu-Sung Lee *Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea*
Shigeo Horie *Department of Urology, Juntendo University Graduate School of Medicine, Japan*

SY8-1 **Mechanism and efficacy of vaginal and intraurethral sub ablative erbium: YAG laser treatment for women and men incontinence and prostatodynia**
Adrian Gaspar (Argentina)
Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina

SY8-2 **Comparison between erbium:YAG laser therapy and sling procedures in the treatment**
Nobuo Peter Okui (Japan)
Dr. Okui's Urogynecology and Urology, Japan

Poster

P-01 **Results of protocol biopsy at 3 years after renal transplantation in our hospital**
Department of Urology, Faculty of Medicine, Kagawa University, Kagawa, Japan **Nobufumi Ueda**

P-02 **Exploratory study of prognostic factors in mCRPC patients who administered Enzalutamide focusing on early PSA decline and PSA kinetics at PSA progression; results of retrospective multicenter study**
Gunma University Dept. of Urology, Japan **Yoshiyuki Miyazawa**

P-03 **Correlation between Drawing Ability and Laparoscopic Suturing Time Using Dry Box**
Department of Urology, Faculty of Medicine, Kagawa University, Japan **Hiroyuki Tsunemori**

P-04 **A case of laparoendoscopic reduced port nephrectomy for renal AML followed by in-bag manual morcellation**
Department of Urology, Oita University Faculty of Medicine, Oita, Japan **Kazunori Iwasaki**

P-05 **Laparoscopic partial cystectomy for invasive bladder cancer: report of four cases**
Department of Urology, Kameda Medical Center, Japan **Natsuo Kimura**

P-06 **Predictive factors for the survival of CRPC patients treated with abiraterone acetate**
Dokkyo Medical University, Japan **Hideyuki Abe**

P-07 **Relevance in prostate biopsy between Gleason score and PI-RADS ver.2 score**
Department of Urology, Juntendo University Urayasu Hospital, Urayasu, Japan **Azusa Yoshiyama**

P-08 **Impact of preoperative ureteroscopy on intravesical recurrence in patients after nephroureterectomy in Kyushu University Hospital**
Department of Urology, Graduate School of Medical Science Kyushu University, Japan **Keisuke Monji**

P-09 **Prostate cancer promotion via the C5a-C5a receptor system**
Department of Urology, Kumamoto University, Japan
Department of Molecular Pathology, Kumamoto University, Japan **Ryuji Imamura**

P-10 **A case of ischemic priapism**
Department of Urology, Showa University Fujigaoka Hospital, Yokohama, Japan **Hiroo Sugishita**

P-11 **Assessment of patients' condition using G8 screening tool for prostate cancer**
Department of Urology and Renal Transplantation, Yokohama City University Medical Center, Japan **Rumiko Sugimura**

P-12 **Characteristics of newly-wed men with sexual dysfunction**
Department of Urology, Juntendo University, Graduate School of Medicine, Tokyo, Japan
Department of Urology, Juntendo University Urayasu Hospital, Urayasu, Japan **Ippei Hiramatsu**

P-13 **Clinical implication of bacillus Calmette-Guérin (BCG) therapy in patients with carcinoma in situ (CIS) of the upper urinary tract: a comparison with nephroureterectomy**
Department of Urology, Hirosaki University Graduate School of Medicine, Japan **Takahiro Yoneyama**

P-14 **Neutrophil-lymphocyte ratio as prognostic role in metastatic carcinoma patients receiving nivolumab: a multi-institutional retrospective study**
Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan **Naotaka Nishiyama**

P-15 **Intraperitoneal prostate cancer recurrence following laparoscopic radical prostatectomy: A case report**
Departments of Urology and Renal Transplantation, Yokohama City University Medical Center, Yokohama, Japan **Ryota Morinaga**

P-16 **External validation of the CHAARTED and LATITUDE criteria in patients with hormone-naïve metastatic prostate cancer: A multi-institutional study in Japan**
Department of Urology, Hirosaki University School of Medicine, Japan **Shingo Hatakeyama**

P-17 **NOTCH2-HEY1 axis promotes tumor progression in bladder cancer by cell cycle progression and dedifferentiation**
Department of Urology, Hiroshima University, Hiroshima, Japan **Tetsutaro Hayashi**

P-18 **The prediction of severity of acute pyelonephritis with urinary obstruction due to ureteral calculi**
Department of Urology, Juntendo University, Shizuoka Hospital, Shizuoka, Japan **Nanako Masuda**

P-19 **Revised Equations for estimated GFR from serum creatinine in Japanese renal transplant candidates**
Department of Urology, Osaka University Graduate School of Medicine, Osaka, Japan **Shigeaki Nakazawa**

P-20 **Characteristics of urinary tract infection caused by extended-spectrum β-lactamase *Escherichia coli***
Department of Urology, Matsue City Hospital, Matsue, Japan **Noriya Yamaguchi**

P-21 **The challenge of testosterone replacement therapy for women in Japan**
Women's Clinic LUNA Next Stage, Japan **Yuki Sekiguchi**

P-22 **The inpatient treatment trend of upper urinary urolithiasis in Japan from the Japanese Diagnosis Procedure Combination Database**
Department of Urology, Juntendo University, Graduate School of Medicine, Japan **Shuji Isotani**

P-23 **Bowel related symptoms after nerve-sparing robot-assisted radical prostatectomy: A longitudinal study**
Department of Urology, Tottori University Faculty of Medicine, Yonago, Japan **Shogo Teraoka**

P-24 **Initial experience of Pembrolismab in 13 cases with advanced urotherial carcinoima**
Department of Urology, Juntendo University **Takeshi Ieda**

P-25 **Uc.416+A promotes epithelial-to-mesenchymal transition through miR-153 in renal cell carcinoma (94/100)**
Department of Urology, Hiroshima University Graduate School of Biomedical and Health Sciences, Hiroshima, Japan **Yohei Sekino**

P-26 **Radiologic response predicts prognosis after neoadjuvant chemotherapy for bladder cancer**
Hirosaki University Graduate School of Medicine, Dept. of Urology, Japan **Yuka Kubota**

P-27 ***miRNA-99a-3p* inhibits tumorigenesis in ccRCC cell lines, including sunitinib-resistant cells by targeting *RRM2***
Department of Urology, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan **Yoichi Osako**

P-28 **Chronological change in erectile dysfunction and its risk factors (A community-based longitudinal survey)**
Department of Urology, Hirosaki University Graduate School of Medicine, Japan **Atsushi Imai**

P-29 **Anomaly detection method for cystoscopic diagnosis of bladder cancer based on deep learning**
Department of Urology, Faculty of Medicine, University of Tsukuba, Japan **Atsushi Ikeda**

P-30 **Evaluation of phospholipids expression in prostate cancer cell lines in LCMS**
Kyoto University Graduate School of Medicine, Department of Urology, Japan **Kosuke Okasho**

P-31 **Can Ratio of neutrophil to lymphocyte counts Predict Bacteremia in Obstructive Calculous Pyelonephritis?**
Department of Urology, Okinawa Chubu Hospital, Japan **Yusuke Yagihashi**

P-32 **Characterization of cryoablation-induced immune response in kidney cancer using T cell receptor sequencing**
Department of Urology, Osaka University Graduate School of Medicine, Japan
Department of Urological Immuno-Oncology, Osaka University Graduate School of Medicine, Japan **Taigo Kato**

P-33 **Cross-Department Retrospective Study of Surgery for Pheochromocytoma / Paraganglioma in Single Institute**
School of Medicine, University of Tsukuba, Japan **Yoojin Chung**

P-34 **Photodynamic diagnostic ureteroscopy with 5-aminolaevulinic acid for the detection of upper urinary tract tumor**
Kobe University Graduate School of Medicine, Division of Urology, Department of Surgery Related, Japan
Kobe University, International Clinical Cancer Research Center, Division of Urology, Japan **Chanhyon Kin**

P-35 **Laparoscopic Sacrocolpopexy with Ventral Rectopexy for Vaginal and Rectal prolapse Patients: A Case Series**
Department of Urology, Kameda Medical Center, Japan **Ting-Wen Huang**

P-36 **Relationship between the patients' background factors and parastomal hernia after radical cystectomy plus ileal conduit**
Department of Urology, Juntendo Nenrima Hosipital, Japan **Aki Handa**

P-37 **Withdrawn**

P-38 **Withdrawn**

P-39 **The optimal extent of pelvic lymph node dissection in patients who received chemotherapy prior to radical cystectomy**
Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea **Wook Nam**

P-40 **Comparative study of flexible and rigid cystoscopy for detection of recurrent bladder cancer**
Department of Urology, Kosin University College of Medicine, Busan, Korea **Seo Won Tae**

P-41 **Synergistic effects of extracorporeal shockwave therapy and Korean herbal formulation on erectile dysfunction in diabetic animal model**
Department of Urology, Seoul St. Mary's Hospital, The Catholic University of Korea, College of medicine, Korea **Woong Jin Bae**

P-42 **Down-regulation of TLR4 by electric stimulation relieves inflammation in chronic prostatitis/chronic pelvic pain syndrome**
Department of Urology, Seoul St. Mary's Hospital, The Catholic University of Korea, College of medicine, Korea **Woong Jin Bae**

P-43 **The Relationship between Thyroid Hormone and Lower Urinary Tract Symptoms/ Benign Prostatic Hyperplasia and the Impact of Testosterone on Their Relationship**
Department of Urology, National Police Hospital, Seoul, Korea **Jun Ho Lee**

P-44 **3-YEAR FOLLOW-UP OF PATIENTS WITH STRESS URINARY INCONTINENCE TREATED WITH SUB-ABLATIVE VAGINAL ER:YAG LASER**
Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina **Adrian Gaspar**

P-45 **Efficacy of Erbium: YAG Laser Treatment Compared to Topical Estriol Treatment for Vaginal Atrophy Symptoms**
Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina **Adrian Gaspar**

P-46 **INTRAURETHRAL ERBIUM YAG LASER FOR THE MANAGEMENT OF URINARY SYMPTOMS OF GENITOURINARY SYNDROME OF MENOPAUSE**
Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina **Adrian Gaspar**

P-47 **MANAGEMENT OF PROSTATODYNIA IN YOUNGER PATIENTS WITH SUB-ABLATIVE ERBIUM: YAG INTRAURETRAL LASER**
Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina **Adrian Gaspar**

Abstracts

Legends Lecture

Chairpersons		**Nam Cheol Park** (Korea) **Shigeo Horie** (Japan)	
Speakers	LL1	What can Asia-Prostate Cancer Study (A-CaP) Group contribute to Cancer Control in Asia?	**Hideyuki Akaza** (Japan)
	LL2	The Precautionary Approach and Management for Noninfectious Complications of Inflatable Penile Implant	**Jae-Seung Paick** (Korea)

Sponsored by Takeda Pharmaceutical Company Limited

Chairpersons

Nam Cheol Park

Department of Urology, Pusan National University School of Medicine & Pusan National University Hospital, Korea

2017-current	President, Korean Society for Integrative Functional Medicine Research in Genitourology
2015-current	President, Korea Institute of Public Sperm Bank
2016-2018	President, Asia-Oceania Federation of Sexology
2012-current	Editorial Board, Translational Andrology and Urology, China
2011-2013	President The Korean Association for Sexology
2009-2012	President, Pusan National University Hospital, Busan, Korea
2009-2011	President, Asia Pacific Society for Men's Health & Aging
2009-2011	President, The Korean Society for Aging Male Research
2008-2010	International Editorial Board, International Journal of Urology, Japan
2007-2011	Secretary General, Asia-Pacific Society for Sexual Medicine
2006-2008	President, The Korean Andrological Society
2004-2010	President, Busan Section, Planned Parenthood Federation of Korea
2000-2006	Chairman, Department of Urology, Pusan National University School of Medicine and Pusan National University Hospital, Korea
1989-current	Professor, Department of Urology, Pusan National University School of Medicine and Pusan National University Hospital, Korea

Shigeo Horie

Department of Urology, Juntendo University Graduate School of Medicine, Japan

Education

1979-1981	College of Arts and Sciences, The University of Tokyo, Tokyo, Japan
1981-1985	Faculty of Medicine, The University of Tokyo

Post Graduate Training and Present Position

1985	Residency in Urology; University of Tokyo Hospital and affiliated hospitals
1988	Instructor, Department of Urology, Faculty of Medicine, University of Tokyo
1988	Research fellow, Division of Nephrology, The University of Texas, Southwestern Medical Center at Dallas, Dallas, TX.
1989	Clinical fellow, Transplant Service, Parkland Memorial Hospital, Dallas, TX.
1995	Staff Surgeon, National Cancer Center Hospital
1998	Assistant Professor, Department of Urology, The University of Tokyo
2002	Associate Professor, Department of Urology, Kyorin University
2003	Professor and Chairman, Department of Urology, Teikyo University
2011	Professor and Chairman, Department of Urology, Juntendo University

What can Asia-Prostate Cancer Study (A-CaP) Group contribute to Cancer Control in Asia?

Hideyuki Akaza

Strategic Investigation on Comprehensive Cancer Network,The University of Tokyo
The chief Director of A-CaP Study Group, Japan

Qualifications and Professional Career

1980	M.D. The University of Tokyo, Japan
1982	Visiting assistant professor, University of Tennessee, USA
1986	Lecturer, Department of Urology, Faculty of Medicine, the University of Tokyo
1990-1996	Associate professor, Department of Urology, Institute of Clinical Medicine, University of Tsukuba
1997-2004	Professor and Chairman, Department of Urology, Institute of Clinical Medicine, University of Tsukuba
2000-2009	Deputy Director of Tsukuba University Hospital
2004-2010	Professor & Chairman, Urology & Andrology, Doctoral Program in Clinical Sciences, Post-graduate, University of Tsukuba
2008-2010	Director, Tsukuba General Cancer Clinic Center
2010-	Emeritus Professor, University of Tsukuba
2010-2015	Professor, Research Center for Advanced Science and Technology, the University of Tokyo
2014-	Member, Interfaculty Initiative in Information Studies/Graduate School of Interdisciplinary Information Studies The University of Tokyo
2015-	Professor, Interfaculty Initiative in Information Studies/Graduate School of Interdisciplinary Information Studies The University of Tokyo

Recent Main Academic Activity

- The Japanese Urological Association Sakaguchi Prize (1982)
- Executive member of Japan Society of Clinical Oncology (1999-2006)
- Expert committee member of Ministry of Health, Labour and Welfare
- Executive member of The Japanese Urological Association
- Executive member of Japanese Biotherapy Association
- Committee member of Japanese Cancer Association
- President of The 44th Annual Meeting of Japan Society of Clinical Oncology (2006)
- The Japan Society of Clinical Oncology Komei Nakayama Prize (2007)
- Chairperson of 8th International Symposium on the Role of Soy in Health Promotion and Chronic Disease Prevention and Treatment
- President of the 20th Asia Pacific Cancer Conference
- President of Asia Pacific Society of Urological Oncology
- Director of UICC-ARO (Asian regional office)
- Member of UICC TNM Expert Panel Genitourinary Cancer
- Vice Secretary General of the Asian and Pacific Federation of Organization for Cancer Research and Control (APFOCC)
- Chair of NCCN Asian Consensus Statement
- Distinguished Service Award for Japanese Urology (2014)

Abstract

Following on from the A-CaP launch symposium in December 2015 in Tokyo and the succeeding second to fourth A-CaP meetings at somewhere in Asia until 2018, members have discussed the status of progress with patient registration, the outlook for further registrations and ways in which to utilize the database that is being accumulated through the A-CaP project.

We have already accumulated over 25,000 cases of newly diagnosed prostate cancer patients from 14 countries in Asia. There are a lot of diversity in the patients' characteristics such as PSA at diagnosis, tumor stage, age at diagnosis, initial treatment, etc. Such differences may mainly depend on the difference of socio-economical and medical systems in each country. Cancer is now firmly on the global health agenda with the adoption of the WHA Cancer Resolution, and countries around the world are coming to grips with the necessity for concerted and cooperative action on cancer prevention and control. In addition, cancer burden is rapidly increasing in proportion to the growing aging society in Asia. Real- world clinical data obtained by multi-national registry study such as A-CaP is a good tool to elucidate various problems to prevent the realization of universal health coverage (UHC) for cancer in Asia. From 2019 A-CaP project will move to the second phase of patients' outcome research using the accumulated data- base. Patients' outcome data in details; in each treatment, disease stage, medical resource, insurance system, will give us inevitable information for realization of UHC.

The Precautionary Approach and Management for Noninfectious Complications of Inflatable Penile Implant

Jae-Seung Paick

Mediplex Sejong Hospital, Incheon, Korea

Soo Woong Kim (Seoul National University college of Medicine, Korea)
Min Chul Cho (Seoul National University college of Medicine, Korea)

Short CV

After graduating from Seoul National University School of Medicine he returned to his alma mater to become Professor, later serving as Chairman of Department of Urology, also Director of Clinical Research Institute and Director of Institute of Medical History and Culture Seoul National University Hospital. He retired at the regular retirement age last August. His research interests and clinical activity mainly lies in the field of andrology and prostate. Having authored more than 190 articles published in peer-reviewed international journals. He was grateful for having chance to serve as President of Korean Urological Association.

Abstract

Currently, the role for penile implant in the management of ED is well established with several devices available. The penile implant could be the best option depending on the clinical situation, even though penile implants are often considered third-line therapy after inadequate response to use PDE5is, intracavernosal injections and vacuum erection devices.

The most common device implanted in penile surgery is the three-piece penile implant. Although mechanical failure can occur, the current devices are more reliable as a result of ongoing improvements (enhancements). Infection still remains the most dreaded complication but since the introduction of antibiotic and hydrophilic coating, infection become less common.

A large body of evidence has been described improved surgical approach and techniques for managing intraoperative and postoperative noninfectious complications. I will present my experiences on some of them in this talk, including indication for surgery, concern with a long penile implant cylinder, surgical approach/incision, reservoir placement and so on.

Evening Seminar || New Horizon of the Treatment of CRPC

Chairpersons		**Yoshiyuki Kakehi** (Japan) **Dongdeuk Kwon** (Korea)	
Speakers	ES-1	Precision medicine in CRPC	**Won Tae Kim** (Korea)
	ES-2	CRPC treatment by androgen-unrelated agents	**Norio Nonomura** (Japan)
	ES-3	Special Brief Remark Management of M0 CRPC	**Jun Hyuk Hong** (Korea)
	ES-4	Special Brief Remark Whole body MRI-based treatment approach against metastatic castration-resistant prostate cancer: loco-regional radiotherapy targeting for oligo-progressive disease	**Soichiro Yoshida** (Japan)

Sponsored by Astellas Pharma Inc.

Chairpersons

Yoshiyuki Kakehi

National University Corporation Kagawa University, Japan

Education

1981.3 Graduated from Kyoto University Faculty of Medicine
1989.3 Graduated from Kyoto University Graduate School of Medicine

Employment

2000.1 Associate Professor, Department of Urology, Kyoto University Graduate School of Medicine
2001.4-2017.9 Professor and Chairman, Department of Urology, Kagawa University Faculty of Medicine
2005.4-2008.3 Vice Dean, Kagawa University Faculty of Medicine
2008.4-2013.9 Vice Director, Kagawa University Hospital
2013.10-2015.9 Vice President, Kagawa University
2015.10-2017.9 Trustee & Vice President, Kagawa University
2017.10-present President, Kagawa University

Dongdeuk Kwon

Department of Urology, Chonnam National University Medical School, Gwangju and Chonnam National University Hwasun Hospital, Hwasun, Korea / Chairman of Professor's Association of Chonnam National University Medical School, Korea

POSTGRADUATE TRAINING and EXPERIENCE

2018.3 – present Professor, Department of Urology, Chonnam National University Medical School, Gwangju and Chonnam National University Hwasun Hospital, Hwasun, Korea
2011.4- 2018.3 Chairman, Department of Urology, Chonnam National University Hwasun Hospital, Hwasun, Jeollanamdo, Korea
Direct and Professor, Department of Urology, Chonnam National University Medical School, Gwangju, Korea
2006.4-2011.3 Associate Professor, Department of Urology, Chonnam National University Hwasun Hospital, Jeollanamdo, Korea
2004.7-2006.3 Assistant Professor, Department of Urology, Chonnam National University, Gwangju, Korea
2002.7-2003.12 Research Fellow, Department of Urology, University of Pittsburgh Medical Center, USA
1999.3-2002.6 Clinical Assistant Professor, Department of Urology, Chonnam National University, Gwangju, Korea
1997.3-1999.2 Clinical Fellow, Department of Urology, Chonnam National University Hospital, Gwangju, Korea

Precision medicine in CRPC

Won Tae Kim

Department of Urology, Chungbuk National University, Korea

Short CV

1994-2000	Chungnam National University, College of Medicine (M.D.)
2004-2008	Resident in Urology, Samsung Cheil Hospital
2008-2009	Instructor and clinical research assistant professor, Yonsei University, Severance Hospital
2009-	Instructor, Assistant professor, and Associate professor, Urology, Chungbuk National University
2009-2016	Yonsei University, Graduate School (Master D. & Ph.D)
2016-2017	Visiting Professor in Cancer Institute NJ, Rutgers University, NJ

Abstract

Prostate cancer (PC) is the second most common cancer in men and is the fifth leading cause of cancer-related deaths among men. Androgen receptor (AR) signaling plays a key role in PC tumor growth and progression, with androgens stimulating PC proliferation and survival. Castration-resistant PC (CRPC) is characterized by increasing levels of prostate-specific antigen or radiographic progression despite androgen-deprivation therapy (ADT).

Until recently, no agent had demonstrated significant benefit in large Phase 3 trials in the non-metastatic CRPC patient population. In February 2018, apalutamide became the first FDA-approved treatment for patients with non-metastatic CRPC. And enzalutamide has been shown to offer benefits in non-metastatic CRPC patients, with FDA approval being granted in July 2018.

In metastatic CRPC patients, there was no new FDA approval agent. However, there were challenges to provide survival benefit by various new drugs such as darolutamide, ODM-204, and immune check point inhibitors and by overcoming enzalutamide resistance.

In this presentation, I will discuss new horizon of the treatment of CRPC based on the literatures.

CRPC treatment by androgen-unrelated agents

Norio Nonomura

Department of Urology, Osaka University Graduate School of Medicine, Japan

Kazutoshi Fujita (Department of Urology, Osaka University Graduate School of Medicine, Japan)
Motohide Uemura (Department of Urology, Osaka University Graduate School of Medicine, Japan)

Short CV

1986.3	Graduated Osaka Univesity
1986.4-1991.3	Department of Urology, Osaka University (Postgraduate course)
1991.11-1993.12	National Institutes of Health/Bethesda (Visiting Fellow)
1994.1-1998.7	Assistant professor, Department of Urology, Osaka University
1998.8-2010.9	Associate professor, Department of Urology, Osaka University
2010.10-present	Professor and Chairman, Department of Urology, Osaka University

Abstract

Castration resistant prostate cancer (CRPC) is a serious problem during the treatment for prostate cancer. Now, we have 2 kinds of AR-targeting agents (ARTA) and 2 kinds of taxanes. Because ARTA is reported to be much milder than taxanes in terms of adverse effects, these drugs are often used before taxanes. However, docetaxel is still a very powerful anti-cancer drugs and can be administered in outpatient clinic. We introduce our original regimen of docetaxel-based chemotherapy in combination with dexamethasone and estramustine phosphate. Though in a retrospective study, response rate is about the same as the standard regimen of docetaxel (TAX327 regimen). Moreover, it causes much less adverse events such as leukocytopenia or febrile leukocytopenia. We also introduce our own therapeutic strategy using HVJ-E (hemagglutinating virus of Japan envelope). We performed investigator-initiated phase 1 trial for CRPC patients. All the adverse effects were very mild and tolerable. One among 7 patients responded to HVJ-E treatment. This treatment contains potential as a new therapy for CRPC. In the preclinical experiments, UV-irradiated HVJ-E binds to its cell membrane receptor (glycoprotein) and causes cell fusion. Fragmented viral DNA leads to JAK/STAT kinase activation and causes apoptosis of prostate cancer cells.

Management of M0 CRPC

Jun Hyuk Hong

Department of Urology, University of Ulsan, Asan Medical Center, Seoul, Korea

Short CV

1990.2 Graduated from Seoul National University, Medical College

2001.3 – Present, Assistant Prof. to Professor, University of Ulsan, Asan Medical Center
2014.3 – Present, Chief, Center for Urologic Oncology, Asan Medical Center
2018.3 – Present, Chief, Center for Robot Surgery, Asan Medical Center
2018.3 – Present, Chief, Prostate Center, Asan Medical Center

2016.9 – Present, Secretary General, APPS (Asian Pacific Prostate Society)
2016.10 – Present, Director of International Relations Committee, KUA (Korean Urological Association)
2017.3 – Present, Vice President, KPS (Korean Prostate Society)
2018.3 – Present, Secretary General, KOMHA (Korean Society for Men's Health and Aging)

Message

Systemic treatment options for mCRPC include hormonal therapy, chemotherapy, immunotherapy, and radionuclide therapy as well as bone-modifying agents and palliative or supportive measures. I would summarize recent updates briefly.

Whole body MRI-based treatment approach against metastatic castration-resistant prostate cancer: loco-regional radiotherapy targeting for oligo-progressive disease

Soichiro Yoshida

Department of Urology, Tokyo Medical and Dental University, Japan

Education

2001 M.D., Tokyo Medical and Dental University, Tokyo, Japan

Brief Chronology of Employment

2006-2010 Staff Urologist, Tokyo Medical and Dental University, Tokyo, Japan
2010-2012 Visiting Fellow, Urologic Oncology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
2012-Present Assistant Professor, Tokyo Medical and Dental University School of Medicine, Tokyo, Japan

Areas of Research Interest

Analysis for the utility of diffusion-weighted MRI for the urological caners
Bladder preservation therapy against muscle-invasive bladder cancer
Overcome treatment resistance by targeting chaperone function of heat shock protein
Application of 3D endoscopic technology to the urologic surgery

Message

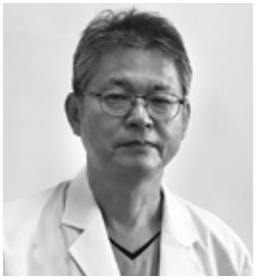
Oligo-metastatic disease is of increasing importance in prostate cancer. Next-generation imaging modalities enable the evaluation of tumor cell viability, and loco-regional therapy directed at the oligo-progressive disease in mCRPC.

Symposium 1 || New Androgen Therapy

Chairpersons		**Seiichi Saito** (Japan) **Tai Young Ahn** (Korea)	
Speakers	SY1-1	Recent advances in the treatment of castration resistant prostate cancer	**Hirotsugu Uemura** (Japan)
	SY1-2	Smart Care of Prostate Cancer Patient using IoT & AI	**Ji Youl Lee** (Korea)
	SY1-3	Special Brief Remark Alteration of androgen-targeted therapy in men with advanced prostate cancer	**Hiroaki Shiina** (Japan)

Sponsored by Janssen Pharmaceutical K.K.

Chairpersons



Seiichi Saito

Department of Urology, University of the Ryukyus, Graduate School of Medicine, Japan

Education

M.D. 1983 Tohoku University School of Medicine
Ph.D. 1990 Tohoku University

Professional Training and Employment

1983-1989 Resident in Department of Urology, Tohoku University Hospital and its related hospitals
1990-1991 Chief, Department of Urology, Ogachi-Chuo Hospital in Akita Prefecture
1991-1993 Research Fellow, The Biomembrane Institute, University of Washington
1993-2001 Assistant Professor, Department of Urology, Tohoku University Hospital
2002-2008 Associate Professor, Department of Urology, Tohoku University, Graduate School of Medicine
2008- Professor, Department of Urology, University of the Rykyus, Graduate School of Medicine

Tai Young Ahn

Department of Urology, Asan Medical Center University of Ulsan, College of Medicine Seoul, Korea

Dr. Ahn obtained his Medical Degree in 1977 from Seoul National University in Seoul. From 1981 to 1984 he completed the residency in Urology at the Seoul National University Hospital.
In 1984 he joined the National Police Hospital as a staff physician working in the department of Urology. In 1989 he joined the Asan Medical Center and University of Ulsan, College of Medicine as the Assistant Professor of the Department of Urology. During that period Dr. Ahn was involved in many basic and clinical research projects in the field of sexual medicine and simultaneously he became the Professor and Chairman of the Department.
From 1991 to 1992 he joined the Department of Urology, Boston University, Boston, U.S.A. as a Research Fellow under the guidance of Dr. Inigo Saenz de Tejada and Dr. Irwin Goldstein.
From 2002 to 2004 he served as the Chairman of Korean Andrological Society. In 2007, he had served as the Chairman of Local Organizing Committee of 2007 APSSM(Asia Pacific Society for Sexual Medicine) meeting which was held in Jeju, Korea.
In 2009, he was elected as President-elect of APSSM in Singapore.
He had served APSSM as President from Nov. 2011 till June 2013.

Recent advances in the treatment of castration resistant prostate cancer

Hirotsugu Uemura

Department of Urology, Kindai University Faculty of Medicine, Osaka-Sayama, Osaka, Japan

Short CV

1983.4	MD. Nara Medical University
1983.4-1985.12	Resident, Nara Medical University Hospital and Saiseikai Hospital
1986.1-1991.6	Staff in Urology, Kaisei Hospital and Nara Medical Univ. Hospital
1991.7-1993.12	Research fellow in Urology, Nijmegen University, The Netherlands
1994.11	PhD Nijmegen University, The Netherlands
1994.1-1997.2	Staff in Urology, Nara Medical University
1997.3-2003.6	Assistant Professor in Urology, Nara Medical University
2003.7-2004.3	Associate Professor in Urology, Nara Medical University
2004.4-present	Professor and Chair in Urology, Kinki Univ. Faculty of Medicine
2010.10-2016.9	Vice president of Kinki University Hospital

Abstract

Patients with localized disease are generally cured by either surgery or radiation treatment, however, those that relapse or present with more advanced metastatic are treated with androgen-deprivation therapy. Treatments targeting androgen receptor (AR) signaling by androgen withdrawal or AR antagonists have been implemented in clinical practice and clinical trials. Unfortunately, most of these individuals will develop resistance and progress to lethal metastatic castration-resistant prostate cancer(CRPC). Chemotherapy with docetaxel has stayed as a most creditable therapy for many years, however, new therapeutic strategies have been coming out recently. Abiraterone acetate and Enzalutamide are AR targeting (ART) oral agents, denosumab (BMA: bone modified agent) and bone seeking radionuclides Ra223 are targeting bone metastasis, cabazitaxel is approved as a second line chemotherapy after DTX. In the present communication, I will summarize the findings of the RCT of above therapeutics for CRPC and will show the update data from the ongoing clinical trials for CRPC.

Smart Care of Prostate Cancer Patient using IoT & AI

Ji Youl Lee

Department of Urology, Smart Hospital, Seoul St. Mary's Hospital, The Catholic University of Korea, Korea

Education
1989: Graduated from Medical College, The Catholic University of Korea

Degree
1983 - 1989: Medical Doctor, Catholic University Medical College
1990 - 1992: Master of Medical Science, Catholic University Graduate School
1997 - 2000: Doctor of Medical Science, Catholic University Graduate School

Experience in Hospital
2009 – Present: Director, Urology Oncology Team, Seoul St. Mary's Hospital
2017 – Present: Director, Smart Hospital, Seoul St. Mary's Hospital
2014 – Present: Director, Department of Urology, Seoul St. Mary's Hospital

Academic Position
2006 – Present: President, Korea Prostate Bank
2014 – Present: Director, Catholic Prostate Institute, The Catholic University of Korea
2015 – 2018 : President, Catholic Central Bio-Bank
2015 – Present: Director, Catholic Cancer Research Institute

Social Position
2017 – Present: President, Asia-Pacific Society of Uro-oncology (APSU)
2017 – Present: Vice-president, Asian Pacific Prostate Society (APPS)
2017 – Present: President, Korean Prostate Society (KPS)

Abstract
A 'Smart Hospital' relies on optimized and automated processes, built on an ICT environment of interconnected assets (the Internet of Things (IoT)) aimed at improving existing patient care procedures and introducing new capabilities. It relies on the big data revolution – the 'Fourth Industrial Revolution' – which combines connected devices with cloud computing, big data analytics and artificial intelligence (AI) – to ensure that the critical infrastructure is 'smart'.
Now I am doing the Prostate cancer Project, which is named "Smart care of prostate cancer patient using IoT and AI". First of all, I tried Smart aftercare. Bio-telemetry collects meaningful data and analytics through sensors to monitor variability in heart rate and other vital signs throughout the day. Wearable technology, including smartwatches, eyeglass displays…We also use the Virtual rehabilitation. Smart aftercare refers to the use of telecommunication technology to remove time and distance barriers in the delivery of healthcare services after prostate cancer treatment. Telehealth can help doctors and nurses provide education and counseling, social support, disease monitoring, and disease management reminders to prostate cancer patients in their homes.
Precision medicine based on genomics and big data, Genomics is a major part of digital health, not a side note. Computers and robotics are necessary to, among other things, scale genomic sequencing and enable gene editing.
Smart Prostate Cancer Database (SPC-DB) system shares the whole patient information including demographic, clinical, diagnostic, treatment, and treatment outcome results through clinical data warehouse system of the institution. We will start Asian Prostate Cancer Database System. Our first step was to develop research database structure including data elements for a successful observational database. We defined the important questions to which providers want answers, and data elements need to be captured. And, the second step was to compare different ways of data collection and suggest more efficient methods. Data capture with less human effort is important step to maintain the database for long period time. The purpose of prostate cancer database is to propose the multi center observational research database structure incorporating clinical factors and patient self reports and suggest effective ways of data collection linking with clinical information systems. Our objective was to develop research database system having easy data access, transparent scientific reproducibility, and interoperability between multiple centers.

Alteration of androgen-targeted therapy in men with advanced prostate cancer

Hiroaki Shiina

Department of Urology, Shimane University Faculty of Medicine, Japan

Short CV

1985	Graduated from Shimane Medical University
1995	Lecturer, Department of Urology, Shimane Medical University
1997	Associate Professor, Department of Urology, Shimane Medical University
2012	Professor and Chairman, Department of Urology, Shimane University Faculty of Medicine
2015.10-2018.3	Vice Dean, Shimane University Faculty of Medicine
2018.34-present	Vice Director, Shimane University Hospital

Message

Contemporary research associated with androgen-based pathways has led to the development of new strategy against advanced prostate cancer. Summary of current approach evolving practice is presented.

Symposium 2 || TKI of RCC

Chairpersons		**Masayuki Nakagawa** (Japan) **Hanjong Ahn** (Korea)	
Speakers	SY2-1	Current status and future perspectives of molecular targeted therapy against kidney cancer	**Masatoshi Eto** (Japan)
	SY2-2	The Role of TKIs in the era of immuno-Oncology in advanced kidney cancer	**Jinsoo Chung** (Korea)
	SY2-3	Special Brief Remark Systemic therapy for RCC	**Kazunari Tanabe** (Japan)

Sponsored by Novartis Pharma

Chairpersons

Masayuki Nakagawa

Department of Urology, Kagoshima University Faculty of Medicine, Japan

Brief Sketch

1981	MD, Graduated from Kumamoto University School of Medicine
1981-1983	Resident, Dept. of Urology, Kumamoto University Hospital
1983-1984	Assistant Professor, Dept. of Urology, Oita Medical University
1984-1988	Doctoral Course, Oita Medical University
1988	PhD, Oita Medical University
1988-1989	Assistant Professor, Dept. of Urology, Oita Medical University
1989-1991	Guest Researcher, National Cancer Institute, Bethesda, USA
1992-1996	Instructor, Dept. of Urology, Oita Medical University
1996-1999	Associate Professor, Dept. of Urology, Oita Medical University
1999-present	Professor and Chairman, Dept. of Urology, Kagoshima University
2011-2014	Vice Director of Kagoshima University Hospital
2010-2015	Director of Research, UAA
2012-2015	SIU National Delegate for Japan
2013-2017	Board of Director, Japanese Urological Association (JUA), Treasurer of JUA
2015-2017	UAA National Deputy Delegate for Japan

Hanjong Ahn

Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Education

Feb. 26, 1992	Graduate Postgraduate School, Seoul National University, Seoul, Korea (Doctor of Philosophy in Medicine)
Feb. 26, 1982	Graduate College of Medicine, Seoul National University, Seoul, Korea (Doctor of Medicine)

Training

1989-1990	Fellowship/Dept. of Urology, Asan Medical Center
1983-1986	Residency/Dept. of Urology, Seoul National University Hospital
1982-1983	Internship/Seoul National University Hospital

Academic Positions

2012-2017	Director/Prostate Cancer Research Committee/KUOS
2014-2016	Executive director/Korean Cancer Association
2012- 2014	President/Korean Urological Oncology Society
2008- 2014	Director/Urologic Cancer Center/Asan Medical Center
2000-2017	Professor/Dept. of Urology/University of Ulsan College of Medicine
1996- 1999	Associate Professor/Dept. of Urology/ University of Ulsan College of Medicine
1992-1995	Assistant Professor/Dept. of Urology/ University of Ulsan College of Medicine
1993-1994	Visiting Scholar/Dept. of Urology / Northwestern University/Chicago, Illinois, USA
1990-1991	Instructor/Dept. of Urology/University of Ulsan College of Medicine

Current status and future perspectives of molecular targeted therapy against kidney cancer

Masatoshi Eto

Department of Urology, Graduate School of Medical Sciences, Kyushu University, Japan

Short CV

1986 Graduated from Faculty of Medicine, Kyushu University
1998 Assistant Professor in Urology, Kyushu University
1999 Research Associate in Surgery, University of Pittsburgh
2001 Assistant Professor in Urology, Kyushu University Hospital
2003 Lecturer in Urology, Kyushu University Hospital
2009 Professor and Chairman in Urology, Kumamoto University
2015 Professor and Chairman in Urology, Kyushu University
2018 Director of Center for Advanced Medical Innovation, Kyushu University, Director of Center for Integration of Advanced Medicine, Life Science and Innovative Technology, Kyushu University Hospital

Abstract

Cytokines, such as interferon-α and interleukin-2, have been used for the treatment of advanced kidney cancer for a long time. Since the first approval of sorafenib for advanced kidney cancer in 2007, 4 tyrosine kinase inhibitors (TKI) and 2 mTOR inhibitors have been approved in Japan, implicating the transition to the era of molecular-targeted therapy. Although the overall survival of kidney cancer patients has been clearly prolonged since the introduction of molecular-targeted therapy, the limitation of molecular-targeted therapy has been recently apparent. In such situation, an immune checkpoint inhibitor (ICI), nivolumab, has been approved for the treatment of kidney cancer after TKIs in 2016. In addition, the combined therapy of nivolumab and ipilimumab has been just approved for untreated kidney cancer patients this August in Japan. However, new generation TKIs, such as cabozantinib and lenvatinib, have been also recently approved abroad, and clinical trials using such drugs in combination with ICIs are ongoing. In this lecture, I am going to talk about the current status and future perspectives of TKIs, including several topics, such as biomarkers in kidney cancer treatments, pre-surgical and adjuvant usages of TKIs.

The Role of TKIs in the era of immuno-Oncology in advanced kidney cancer

Jinsoo Chung

Urology, Center for Prostate Cancer, National Cancer Center, Korea

Short CV

1983 - 1989 Seoul National University College of Medicine; M.D.
1999 - 2001 Graduate School of University, Seoul National University; Ph.D.
1990 - 1994 Department of Urology, Seoul National University Hospital; Residency
1998 - 2001 University of Ulsan College of Medicine; Instructor, Assistant Professor
2001- Present Urology, Center for Prostate Cancer, National Cancer Center Hospital; Staff
2014 - 2017 Department of Urology, National Cancer Center Hospital; Chair
2013 - 2018 Kidney Cancer Study Group, Korean Urological Oncology Society; President
2017 - Present Hospital, National Cancer Center; Director

Abstract

The treatment of renal cell carcinoma represents one of the great success stories in translational cancer research, with the development of novel therapies targeting key oncogenic pathways. These include drugs that target the VEGF and mTOR pathways, as well as novel immuno-oncology agents. Despite the therapeutic advancements, there is a paucity of well-validated prognostic and predictive biomarkers in advanced kidney cancer. With a number of highly effective therapies available across multiple lines, it will become increasingly important to develop a more tailored approach to treatment selection. (*Graham J et al, ASCO Educational book, 2018*).

Several TKIs and mTOR inhibitors has been achieved in impressive successes in the treatment of mRCC, recently, several new immuno-oncology agents have also shown impressive activity in advanced kidney cancer and are currently being explored in combination with targeted agents. As the number of therapeutic options increases, it will become increasingly important to develop a more tailored personalized strategies, taking into consideration on both tumor and patient characteristics to develop a tailored treatment selection.

In this section, I will present the current landscape and recent developments on the treatment of mRCC. This will be focused on the current role of TKIs in the Immuno – Oncology era. Given the complexity of current mRCC treatment, a combination of clinical and biologic approaches to individualized care will be of paramount importance in therapeutic decision making.

Systemic therapy for RCC

Kazunari Tanabe

Department of Urology, Tokyo Women's Medical University, Japan

Short CV

1982 -1984	Residency (Junior) Department of Urology Kyushu University School of Medicine
1984 -1988	Residency (Senior) Department of Urology Tokyo Women's Medical College
1988 -1989	Clinical Fellow Department of Urology, Tokyo Women's Medical College
1989 -1991	Chief of Urologic Surgery Toda General Hospital
1991 -1993	Research Fellow Department of Urology The Cleveland Clinic Foundation
1993 -2004	Assistant Professor Head, Section of Renal Transplantation/Renovascular Surgery Department of Urology, Tokyo Women's Medical University
2004 -2009	Professor of Graduated School of Medicine,Department of Urology,Tokyo Women's Medical University
2004 -2006	Associate Professor Department of Urology,Tokyo Women's Medical University
2006 -present	Professor and Chairman Department of Urology, Tokyo Women's Medical University
2015 -present	Director of The Hospital Tokyo Women’s Medical University

Message

In the last decade, systemic therapy for RCC have changed dramatically and molecular targeted medicines, such as VEGFR-TKI and mTOR inhibitors have been main treatment for mRCC and extended survival significantly. Now immuno-oncologic era has come and been improving survival progressively.

Visionary Lecture

Chairpersons		**Osamu Ogawa** (Japan) **Kyu-Sung Lee** (Korea)	
Speakers	VL-1	Future prospects of urologic robotic surgery in Japan	**Masato Fujisawa** (Japan)
	VL-2	ED Treatment in Korea: Before and after PDE5 inhibitors	**Je Jong Kim** (Korea)

Chairpersons

Osamu Ogawa

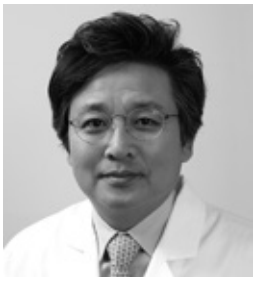
Department of Urology, Kyoto University Graduate School of Medicine, Japan

Education

1993: D. Med. Sci., Faculty of Medicine, Kyoto University
1982: M.D., Faculty of Medicine, Kyoto University

Professional Training and Employment

2018-present President of Urological Association of Asia (UAA)
2016-2018 Board of Director, Society of International Urology(SIU)
2010-2014 Secretary General of UAA
2010-2013 Director of Science of UAA
1998-present Professor and Chairman, Dept. of Urology Kyoto University Graduate School of Medicine
1996-1998 Associate professor, Dept. of Urology, Akita Univ.
1993-1996 Assistant professor, Dept. of Urology, Kyoto University
1991-1993 Postdoctoral fellow, Dept. of Biochemistry Otago University, New Zealand
1983-1989 Medical staff in Dept. of Urology Kitano Hospital, Osaka, Japan
1982-1983 Resident in Dept. of Urology, Kyoto University



Kyu-Sung Lee

Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Professor of Urology and General Director in the Smart Health Care & Medical Device Research Center at Samsung Medical Center in Seoul, Korea. He is chairman of Department of Urology, Samsung Medical Center.

Completed his undergraduate training at Seoul National University College of Medicine, where he also underwent postgraduate training, specializing in urology. He previous worked as a Clinical and Research Fellow of Urology at Samsung Medical Center, and completed a PhD (Urology) at Seoul National University College of Medicine.
Prof Lee has held previous positions as a Visiting Professor of Urology at both the University of Virginia School of Medicine in Virginia, US, and the University of California San Diego, in California, US.

Future prospects of urologic robotic surgery in Japan

Masato Fujisawa

Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine, Japan

Education

1978 - 1984	M.D.	Kobe University School of Medicine, Kobe
1985 - 1989	Ph.D.	Department of Urology, Kobe University Graduate School of Medicine, Kobe

Professional Training and Employment

1984 - 1985	Resident in Urology	Kobe University Hospital
2001	Assistant Professor	Kobe University School of Medicine
2002 - 2005	Professor	Department of Urology, Kawasaki Medical School
2005 -	Professor and Chairman	Division of Urology, Department of Organs Therapeutics, Kobe University Graduate School of Medicine
2007 -	Professor and Chairman	Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine
2014 -	Director of Kobe University Hospital	
2015 -	President of Japanese Urological Association	
2018 -	President of Japan Society of Andrology	

Abstract

Robotic surgery has a promising role in increasing the acceptability of urologic surgery.

Since the approval of medical insurance for radical prostatectomy, the number of cases is rapidly increasing. Additionally the number of partial nephrectomy is also increasing year by year, reaching to about 3000 in 2017. Moreover, the insurance for robotic cystectomy was approved in April, 2018.

We are trying to get the approval of insurance for another procedures such as pyeloplasty. However, it is very difficult to find the best primary end point over conventional laparoscopic surgery so far.

During several years, we have been collaborating with the industry to develop new robotic surgical system in Japan. I hope that this system will reduce the cost and make robotic surgery more common in several procedure in Japan.

ED Treatment in Korea: Before and after PDE5 inhibitors

Je Jong Kim

Department of Urology, Korea University Anam Hospital, Korea

Short CV

Academic or Medical Associations Position

2004	Korean Society for Sexual Medicine and Andrology, President
2004	The Asian Journal of Andrology, Associate Editor in Chief
2005	Korean Society for Aging Male Research, President
2008	Chairman ISSM 2010 Organizing Committee
2018	The Korean Urological Association, Honorary President

Educational Background & Professional Experience

~ 2018	Korea University Anam Hospital Professor
1989	Korea University College of Medicine Ph.D.
1989-1990	Boston University research fellow

Abstract

Erectile dysfunction (ED) is a worldwide problem of men's health and its prevalence is anticipated to increase from 152 million in 1995 to 322 million by 2025. In 2004, a large-scale survey for ED was conducted by the KSSMA and the overall prevalence of ED was shown to be 32.4%. Before introducing of PDE5Is psychotherapy, penile prostheses, intracavernosal injection and intraurethral therapy were applied in Korea.

The true revolution in the non-surgical management of ED was with the introduction of oral PDE5Is in the late 1990s. PDE5Is rapidly became the patient-friendly method of ED treatment and are currently considered as first-line monotherapy. Currently, three PDE5Is are worldwide available i.e., sildenafil, vardenafil and tadalafil. But, new PDE5Is, including avanafil, udenafil, and mirodenafil developed in Korea are also in clinical use in several countries. Also, 2013 and 2017 will mark the launch of generic alternatives for sildenafil and tadalafil after termination of patent, the two most popular ED medications further reducing its cost.

PDE5Is usually used as on demand method in Korea. In addition, daily administration of PDE5Is introduce the advantage of allowing for spontaneity of sexual activity. Meanwhile, epidemiological data have indicated a strong association between ED and LUTS. Both ED and BPH-LUTS respond to administration of PDE5Is, suggesting a shared pathophysiological mechanism and recent studies provided interesting outcomes for the use of PDE5Is as an effective treatment for both ED and LUTS.

Special Lecture || Drug Development from Asia

Chairperson		**Shigeo Horie** (Japan)	
Speakers	SL-1	Autosomal Dominant Polycystic Kidney Disease: Progression and Prevention	**Eiji Higashihara** (Japan)
	SL-2	The Possibility of GV1001® as a therapeutic alternative in BPH - Prior to Phase III clinical trial	**Kyung Seop Lee** (Korea)

Sponsored by Otsuka Pharmaceutical Co., Ltd. / GemVax

Chairperson

Shigeo Horie

Department of Urology, Juntendo University Graduate School of Medicine, Japan

Education

1979-1981 College of Arts and Sciences, The University of Tokyo, Tokyo, Japan
1981-1985 Faculty of Medicine, The University of Tokyo

Post Graduate traininfg and Present Position

1985 Residency in Urology; University of Tokyo Hospital and affiliated hospitals
1988 Instructor, Department of Urology, Faculty of Medicine, University of Tokyo
1988 Research fellow, Division of Nephrology, The University of Texas, Southwestern Medical Center at Dallas, Dallas, TX.
1989 Clinical fellow, Transplant Service, Parkland Memorial Hospital, Dallas, TX.
1995 Staff Surgeon, National Cancer Center Hospital
1998 Assistant Professor, Department of Urology, The University of Tokyo
2002 Associate Professor, Department of Urology, Kyorin University
2003 Professor and Chairman, Department of Urology, Teikyo University
2011 Professor and Chairman, Department of Urology, Juntendo University

Autosomal Dominant Polycystic Kidney Disease: Progression and Prevention

Eiji Higashihara

Hereditary Kidney Disease Research, Kyorin University School of Medicine, Japan

Short CV

Prof. Eiji Higashihara is urologist, working at the Kyorin University. He spent several years as a research fellow and a visiting associate professor in nephrology at Health Science Center at Dallas, Texas. He dedicated himself to two lines work. As an urologist, he is one of the pioneers for developing laparoscopic adrenalectomy. With nephrology background, he contributed to developing tolvaptan as a first therapeutic drug of ADPKD. He served as president of 17th Congress of Japan Society for Endoscopic Surgery in 2004, and 49th Congress of Japanese Society of Nephrology in 2006. He has published over 100 peer-reviewed English papers.

Abstract

Autosomal dominant polycystic kidney disease (ADPKD) is the most common hereditary kidney disease with a progressive enlargement of kidney cyst volume, resulting in renal parenchyma destruction and progression to end-stage renal disease in half of patients by 70 years. When PKD1 or PKD2 gene products, polycystin-1 or polycystin-2, are disrupted functionally by PKD mutations, renal cyst development is stimulated by vasopressin in the vasopressin-sensitive distal tubular epithelial cells. Blockade of vasopressin-cAMP pathway resulted in decreased cyst burden and renal function deterioration in animal PKD models.

Several series of clinical trials demonstrated the efficacy of vasopressin V2-receptor antagonist tolvaptan to decrease total kidney volume (TKV) growth rate and estimated glomerular filtration rate (eGFR) decline rate in patients with ADPKD.

Mayo Clinic investigators proposed the Mayo Imaging Classification of ADPKD (MIC) as a renal prognosis prediction model. The classifications of the MIC model depend on the assumption that height-adjusted TKV (HtTKV) increases continuously and exponentially at an annual kidney growth rate of α (%/year) from HtTKV of 150 mL/m at age 0.

We named it as an age-adjusted HtTKV growth rate (AHTKV-α), and will discuss the significance of AHTKV-α as a more sensitive outcome measurement in ADPKD clinical trials than TKV slope.

The Possibility of GV1001® as a therapeutic alternative in BPH
- Prior to Phase III clinical trial

Kyung Seop Lee

Department of Urology, Dongguk University Hospital, Dongguk University School of Medicine, Gyeongju, Korea

Se yun Kwon (Dongguk University, Korea)
Tag Keun Yoo (Eulji University, Korea)

Short CV

2000-2001 Visiting Scholar University of Michigan, Ann Arbor, MI
1993-present Head of Department, Professor Dongguk University
President, Korea Prostate Society (2011.3-2013.3)
President, Korea Urology Ultrasound Society (2012.10-2015.5)
President, Dongguk University Gyeongju Hospital (2009.2-2012.2)
President, Korea Prostate Laser Association (2014.1-2016.1)
Faculty & editor, APPS
Faculty, (Medical Policy Treatment Committee) Korea Urologic Association (2012-2013)
Research & Planning, Korea Urologic Association (2008.11-2010.11)
Korean Foundation for Cancer Research (2011-2016)
Korea Urologic Association, Korea Andrology Association, Korea Urologic Oncology
A randomized, placebo-controlled, single-blind, parallel design, multi-center, phase II clinical trial to evaluate the efficacy and safety of GV1001 in patients with benign prostatic hyperplasia (BPH)

Abstract

GV 1001 was first developed as a vaccine for use as active immunotherapy of cancers expressing telomerase including pancreatic and prostate cancer. In vivo study, GV 1001 have demonstrated efficacy in alleviating BPH symptoms by reducing the size of the prostate gland. The action mechanism of GV1001 has been proposed to be through its dual activity as a GnRH inhibitor and 5a-reductase inhibitor. Based on these mechanisms, phase 2 clinical trial was conducted in Korea to evaluate the efficacy and safety of GV1001 in patients with BPH. We divided 3 treatment groups (group 1: GV 1001 0.4mg, 2-week interval, group 2: GV 1001 0.56mg, 2-week interval, group 3: GV 1001 0.56mg, 4-week interval) and a placebo (group 4). At week 13, a statistically significant difference in the mean change from baseline (CFB) in IPSS was seen in treatment group 1 (GV 1001 0.4mg, 2-week interval) and group 2 (GV 1001 0.56mg, 2-week interval) vs group 4. There was a statistically significant reduction in prostate gland volume at week 16 in all treatment groups, compare to group 4. Adverse event reporting was similar across all 4 groups. We concluded that GV1001 was effective and well tolerated in BPH patients.

Luncheon Seminar 1 || Immuno-Oncology RCC 2018

Chairpersons		**Masato Fujisawa** (Japan) **Jinsoo Chung** (Korea)	
Speakers	LS1-1	Immunotherapy for RCC: mechanisms of action and resistance	**Yuji Miura** (Japan)
	LS1-2	Immune Checkpoint Inhibitor in Renal Cell Carcinoma	**Wun-Jae Kim** (Korea)
	LS1-3	Special Brief Remark Immuno-Oncological therapy for renal carcinoma: the current state of Japan	**Noboru Nakaigawa** (Japan)
	LS1-4	Special Brief Remark A New Hope for the treatment of mRCC - Immuno-Oncology	**Tae Gyun Kwon** (Korea)

Sponsored by Bristol-Myers Squibb K.K. / ONO PHARMACEUTICAL CO., LTD.

Chairpersons

Masato Fujisawa

Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine, Japan

Professional Training and Employment

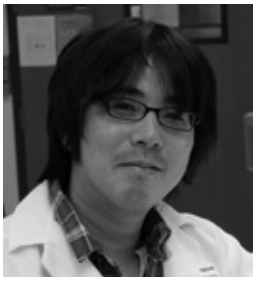
1984 - 1985	Resident in Urology Kobe University Hospital
2001	Assistant Professor Kobe University School of Medicine
2002 - 2005	Professor Department of Urology, Kawasaki Medical School
2005 -	Professor and Chairman Division of Urology, Department of Organs Therapeutics, Kobe University Graduate School of Medicine
2007 -	Professor and Chairman Division of Urology, Department of Surgery Related, Kobe University Graduate School of Medicine
2014 -	Director of Kobe University Hospital
2015 -	President of Japanese Urological Association
2018 -	President of Japan Society of Andrology

Jinsoo Chung

Urology, Center for Prostate Cancer, National Cancer Center, Korea

Postgraduate & Faculty Appointments

1989-1990	Seoul National University Hospital Internship
1990-1994	Department of Urology, Seoul National, University Hospital, Residency
1994-1997	Captain of Korean Army, Captain
1997-1998	Ulsan University Hospital, University of Ulsan College of Medicine, Clinical Fellow in Urology
1998-2000	Ulsan University Hospital, University of Ulsan College of Medicine, Instructor of Urology
2000-2001	University of Ulsan College of Medicine, Assistant Professor
2001-Present	Urology, Center for Prostate Cancer, National Cancer Center Hospital, Staff
2001-2015	Genitourinary Cancer Branch, Research Institute, National Cancer Center, Chief Scientist
2004.09-2005.08	Department of Urology, School of Medicine, UCLA, Visiting assistant researcher
2015-2017	Center for Prostate Cancer, National Cancer Center Hospital, Head
2014-2017	Department of Urology, National Cancer Center Hospital, Chair
2017-present	Hospital, National Cancer Center, Director
2018-present	Department of Cancer Biomedical Science, National Cancer Center Graduate School of Cancer Science and Policy, Adjunct Professor



Immunotherapy for RCC: mechanisms of action and resistance

Yuji Miura

Department of Medical Oncology, Toranomon Hospital, Japan

Short CV

Dr. Miura is a Genitourinary Medical Oncologist working as a chief doctor in Department of Medical Oncology at Toranomon Hospital (Tokyo, Japan). He completed M. D. Degree at Kagoshima University Faculty of Medicine (Kagoshima, Japan) in March 2002. He is board certificated Medical Oncologist (by Japanese Society of Medical Oncology [JSMO]) and Hematologist (by Japanese Society of Hematology [JSH]). He was involved in basic research about the immunotherapy for genitourinary cancer in Department of Genitourinary Medical Oncology, Immunotherapy Platform, University of Texas, MD Anderson Cancer Center (TX, USA) from Jan 2016 to May 2018.

Abstract

The immune checkpoint inhibitors (ICI) have developed significant improvement of clinical outcomes in renal cell carcinoma (RCC). Recently, the combination of ipilimumab plus nivolumab as a first-line treatment for patients with RCC has shown the survival benefit and been approved in many countries. Furthermore, the result of clinical trials that evaluate the combination therapies of ICI, such as anti-PD-1 antibody or anti-PD-L1 antibody, plus vascular endothelial growth factor (VEGF)-targeted agents are going to come out near future. However, how to use them differently in clinical practice remain elusive. Theoretically, these two types of combination therapy have been developed based on different strategy of treatment concept. One is to overcome resistance of ICI, another is formation of memory T-cell. We will discuss about these concepts based on current evidences from basic and clinical researches.

Immune Checkpoint Inhibitor in Renal Cell Carcinoma

Wun-Jae Kim

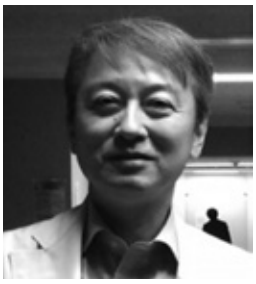
Department of Urology, College of Medicine, Chungbuk National University, Korea

Short CV

1999 -	Professor, Department of Urology, College of Medicine, Chungbuk National University
2006-2008	Chief, Chungbuk National Univ. Institute for Tumor Research
2008-2014	Chief, Personalized Tumor Engineering Research Center (PT-ERC)
2011-2013	Chief, Chungbuk National Univ. Institute for Tumor Research
2013-2016	President, Chungbuk National Biobank
2014-	Chief, Mid-Career Researcher Program
2015-	Chief, Target based Diagnostics and Therapeutics Center for Urological Cancers(TDTC)

Abstract

Renal cell carcinoma (RCC) is histologically recognized as an immunogenic tumor based on its response rate to immunotherapy, the incidence of spontaneous regression, and the high level of tumor T cell infiltration. Immunotherapy using cytokine interleukin-2 was approved by FDA to treat metastatic RCC over twenty years, however it is highly toxic and has low response rates (10-20%). Over the last decade an alternate method, immune checkpoint inhibitors have become a major modality for the treatment of RCC. By blocking the pathways that dampen lymphocyte activity, the immune system can produce impressive antitumor responses which can be potentially durable. Nivolumab, a programmed cell death 1 inhibitor, has been approved as second-line therapy following antiangiogenic targeted treatment for advanced RCC based upon improvement in overall survival in a phase Ⅲ trial, and the combination of nivolumab plus ipilimumab (an anticytotoxic T lymphocyte-associated protein 4 antibody) in treatment-naive patients has been incorporated into European Association of Urology guidelines based upon on results of another phase Ⅲ trial. Other checkpoint inhibitors have demonstrated clinical activity, but data are more limited, and these agents are not approved for this indication. Here in, I introduced the current trend in immune checkpoint inhibitors related to RCC.



Immuno-Oncological therapy for renal carcinoma: the current state of Japan

Noboru Nakaigawa

Department of Urology, Yokohama City Univesity Graduate School of Medicine, Japan

Short CV
Education
1983-1989 Yokohama City University School of Medicine

Experience
1989-1990 Resident in Yokohama City University Hospital
1991-1992 Department of Urology, Yokohama City University Hospital
1996-1999 Visiting research fellow, Laboratory of Immunobiology, National Cancser Institute (MD USA)
2000-2002 Assistant professor, Department of Urology, Yokohama City University Hospital
2003-present Associate professor, Department of Urology, Yokohama City University Hospital

Message
I review the Immuno-Oncological therapy for advanced renal cell carcinoma and report the impact of this novel therapy in the real-word from our experience.

A New Hope for the treatment of mRCC -Immuno-Oncology

Tae Gyun Kwon

Kyungpook National University, Korea

Short CV
Subspecialty: Urological Oncology, Robotic/ Laparoscopic Surgery

Education
1988 M.D. Kyungpook National University, College of Medicine
1999 Ph.D. Kyungpook National University, Graduate School of Medicine

Professional appointment
2008 - Present Professor, Dept. of Urology, School of Medicine, Kyungpook National University

Research interest
- Tissue engineering and stem cell research for urological application
- Clinical and translational research

Message
Targeted therapy has been the main option fir the treatment of mRCC. Recently, hopeful results on immuno-oncologic drug have been published and another option has emerged.

Keynote Lecture ||

Chairpersons		**Yoshiyuki Kakehi** (Japan) **Wun-Jae Kim** (Korea)	
Speakers	KL-1	Precision Urology Comes of Age	**Shigeo Horie** (Japan)
	KL-2	Positive surgical margins after radical prostatectomy	**Hanjong Ahn** (Korea)

Chairpersons

Yoshiyuki Kakehi

National University Corporation Kagawa University, Japan

Education

1981.3 Graduated from Kyoto University Faculty of Medicine
1989.3 Graduated from Kyoto University Graduate School of Medicine

Employment

2000.1 Associate Professor, Department of Urology, Kyoto University Graduate School of Medicine
2001.4-2017.9 Professor and Chairman, Department of Urology, Kagawa University Faculty of Medicine
2005.4-2008.3 Vice Dean, Kagawa University Faculty of Medicine
2008.4-2013.9 Vice Director, Kagawa University Hospital
2013.10-2015.9 Vice President, Kagawa University
2015.10-2017.9 Trustee & Vice President, Kagawa University
2017.10-present President, Kagawa University

Wun-Jae Kim

Department of Urology, College of Medicine, Chungbuk National University, Korea

Education

1999 - Professor, Department of Urology, College of Medicine, Chungbuk National University
2006-2008 Chief, Chungbuk National Univ. Institute for Tumor Research
2008-2014 Chief, Personalized Tumor Engineering Research Center (PT-ERC)
2011-2013 Chief, Chungbuk National Univ. Institute for Tumor Research
2013-2016 President, Chungbuk National Biobank
2014- Chief, Mid-Career Researcher Program
2015- Chief, Target based Diagnostics and Therapeutics Center for Urological Cancers(TDTC)

Precision Urology Comes of Age

Shigeo Horie

Department of Urology, Juntendo University Graduate School of Medicine, Japan

Education

1979-1981 College of Arts and Sciences, The University of Tokyo, Tokyo, Japan
1981-1985 Faculty of Medicine, The University of Tokyo

Post graduate training and Present Position

1985 Residency in Urology; University of Tokyo Hospital and affiliated hospitals
1988 Instructor, Department of Urology, Faculty of Medicine, University of Tokyo
1988 Research fellow, Division of Nephrology, The University of Texas, Southwestern Medical Center at Dallas, Dallas, TX.
1989 Clinical fellow, Transplant Service, Parkland Memorial Hospital, Dallas, TX.
1995 Staff Surgeon, National Cancer Center Hospital
1998 Assistant Professor, Department of Urology, The University of Tokyo
2002 Associate Professor, Department of Urology, Kyorin University
2003 Professor and Chairman, Department of Urology, Teikyo University
2011 Professor and Chairman, Department of Urology, Juntendo University

Abstract

Today's medical consensus revolves around Evidence-Based Medicine (EBM) built on the results of many randomized controlled trials. Ever since the advent of EBM, guidelines based on EBM have provided a basis for clinical decision-making. Treatments based on these guidelines largely improved the prognosis of a certain ailment. However, these guidelines can only provide the best fit based on the statistics. Treatments based on the statistics leave behind many un- or less-responsive patients. "Precision Medicine" launched by the Obama administration in the U.S. started to take shape. I will show our practice of "Precision Medicine" in the treatment of metastatic prostate cancer.

The innovation of surgery constitutes of precision, less-invasiveness and short-learning curves. Surgical simulation and navigation are the key component of "Precision Surgery". From 2013, We utilized 3D segmentation imaging of a kidney for robotic partial nephrectomy (PN). We ran the virtual simulation and the surgical navigation of PN with a 3D-printed kidney model. Precision Surgery predicted the post-surgical organ functions, which enables patients to select proper treatment.

I will introduce our practice of "Precision Surgery" in PN.

Positive surgical margins after radical prostatectomy

Hanjong Ahn

Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Sahyun Pak (Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea)

Education

Feb. 26, 1992 Graduate Postgraduate School, Seoul National University, Seoul, Korea (Doctor of Philosophy in Medicine)

Feb. 26, 1982 Graduate College of Medicine, Seoul National University, Seoul, Korea (Doctor of Medicine)

Academic Positions

2012-2017 Director/ Prostate Cancer Research Committee/KUOS
2014-2016 Executive Director/ Korean Cancer Association
2012-2014 President / Korean Urological Oncology Society
2008-2014 Director/ Urologic Cancer Center/Asan Medical Center
2000-2017 Professor/ Dept. of Urology/University of Ulsan College of Medicine
1996-1999 Associate Professor/Dept. of Urology/University of Ulsan College of Medicine
1992-1995 Assistant Professor/Dept. of Urology/University of Ulsan College of Medicine
1993-1994 Visiting Scholar/Dept. of Urology/Northwestern University/Chicago, Illinois, USA
1990-1991 Instructor/Dept. of Urology/University of Ulsan College of Medicine

Abstract

Positive surgical margins (PSMs) are not an unusual occurrence after radical prostatectomy. Although PSMs have a detrimental effect on biochemical recurrence-free survival, the long-term impact on metastatic progression and cancer-specific survival remains unclear. [1] One recent study of SEARCH cohort data reported that PSMs after radical prostatectomy are not an independent risk factor for CRPC, metastasis, or cancer-specific mortality. [2] Consistent with these findings, we observed that PSMs were independently associated with biochemical recurrence (HR=2.30, p<0.001) in 3,031 consecutive men with non-metastatic prostate cancer who underwent radical prostatectomy between January 1998 and June 2013 at Asan Medical Center. However, PSMs did not independently predict distant metastasis, cancer-specific mortality, or overall mortality.

Nevertheless, limiting PSMs is an important surgical concern and can improve patient outcome by preventing the need for secondary interventions and reducing anxiety of cancer recurrence. While inherent tumor biology is a non-modifiable risk factor for PSMs, modifiable factors include surgical experience, surgical technique, and intraoperative frozen section (IFS) analysis. [1,3] Among these, IFS analysis is a common procedure in general surgical pathology practice and enables determination of surgical margin status during radical prostatectomy. Previous studies have demonstrated an average 13.2% decrease in the rate of PSMs after IFS analysis. [4] Only a small number have assessed the effects of converting margins from positive to negative on oncologic outcomes, and the results of these studies have been mixed. [4] We found that conversion of soft tissue margins at the prostate apex and bladder neck from histologically positive to negative improved the biochemical recurrence-free survival and distant metastasis-free survival in 2,013 consecutive patients who underwent radical prostatectomy with IFS analysis. [5] Further resection to make PSMs negative may help to decrease the risk of biochemical recurrence in low- and intermediate-risk prostate cancer patients; however, the benefit for high-risk cancers patients was not apparent.

1. Yossepowitch O, Briganti A, Eastham JA, Epstein J, Graefen M, Montironi R, et al. Positive surgical margins after radical prostatectomy: a systematic review and contemporary update. European urology. 2014;65:303-313.
2. Mithal P, Howard LE, Aronson WJ, Terris MK, Cooperberg MR, Kane CJ, et al. Positive surgical margins in radical prostatectomy patients do not predict long-term oncological outcomes: results from the Shared Equal Access Regional Cancer Hospital (SEARCH) cohort. BJU international. 2016;117:244-248.
3. Preston MA, Blute ML. Positive surgical margins after radical prostatectomy: does it matter? European urology. 2014;65:314-315.
4. Nunez AL, Giannico GA, Mukhtar F, Dailey V, El-Galley R, Hameed O. Frozen section evaluation of margins in radical prostatectomy specimens: A contemporary study and literature review. Annals of diagnostic pathology. 2016;24:11-18.
5. Pak S, Park S, Kim M, Go H, Cho YM, Ahn H. The impact on oncological outcomes after radical prostatectomy for prostate cancer of converting soft tissue margins at the apex and bladder neck from tumour-positive to-negative. BJU international. 2018 [Epub].

Symposium 3 || Immuno-Oncology Bladder Cancer 2018

Chairpersons		**Akinobu Gotoh** (Japan) **Kyung Seop Lee** (Korea)	
Speakers	SY3-1	Immunotherapy for urothelial carcinoma; Current status and future prospects	**Hiroyuki Nishiyama** (Japan)
	SY3-2	Current updates of checkpoint inhibitor in bladder cancer	**Byong Chang Jeong** (Korea)
	SY3-3	Special Brief Remark Immunotherapy for urothelial cancer: state of the art and future perspectives	**Hiroshi Kitamura** (Japan)
	SY3-3 7	Special Brief Remark A new paradigm in treatment of urothelial cancer	**Ho Kyung Seo**(Korea)

Sponsored by MSD K.K. / TAIHO PHARMACEUTICAL CO., LTD.

Chairpersons

Akinobu Gotoh

Laboratory of Cell and Gene Therapy, Institute for Advanced Medical Sciences, Hyogo College of Medicine, Japan

Positions and Employment

1987-1988	Medical Residency, Kobe University Hospital
1988-1992	Postgraduate Course, Department of Urology and the 2nd Department of Pathology, Kobe University School of Medicine
1992-1994	Resident at Kobe National Hospital (Dept. of Urology) Part-time Lecturer, Kobe University School of Medicine (Dept. of Urology and Pathology)
1994-1995	Postdoctoral fellow, Department of Urology, University of Texas, MD Anderson Cancer Center
1995-1996	Postdoctoral fellow, Department of Urology, University of Virginia, Health Sciences Center
1996-2001	Assistant Professor, Department of Urology, Kobe University School of Medicine
2001-2001	Assistant Professor, Division of Urology, Department of Organs Therapeutics, Faculty of Medicine, Kobe University Graduate School of Medicine
2001-2005	Associate Professor, International Center for Medical Research, Kobe University School of Medicine
2002-2005	Vice Director, Division of Gene Diagnosis & Gene Therapy, Department of Clinical Genetics, Kobe University Hospital
2002-2004	Clinical Professor of Medical College, Korea University
2003-	Visiting Lecturer, Showa University School of Medicine
2006-	Professor and Director, Laboratory of Cell and Gene Therapy, Institute for Advanced Medical Sciences, Hyogo College of Medicine
2006-2010	Visiting Professor, Headquarters for Innovative Cooperation and Development, Kobe University
2007-2011	Councilors of Hyogo College of Medicine
2008-2009	Chief Director, Medical Policy of City of Maizuru
2009-	Advisory Board, International Society of Personalized Medicine
2012-	Delegate, Japanese Urological Association
2012-	Board of Director, Foundation for Kobe International Medical Alliance
2014-	Managing Director, Foundation for Kobe International Medical Alliance

Kyung Seop Lee

Department of Urology, Dongguk University Hospital, Dongguk University School of Medicine, Gyeongju, Korea

EDUCATION

1979-1981	Premedical Keimyung University, Daegu, Korea
1981-1985	Medical School, Keimyung University, Daegu, Korea
1987-1989	Master Keimyung University, Daegu, Korea
1995-1997	PhD Yeongnam University, Daegu, Korea

POST DOCTORAL TRAINING

2000-2001	Visiting Scholar University of Michigan, Ann Arbor, MI
1993-present	Head of Department, Professor Dongguk University,

Immunotherapy for urothelial carcinoma; Current status and future prospects

Hiroyuki Nishiyama

Department of Urology, Faculty of Medicine, Tsukuba University, Japan

Short CV

2011-present:	Professor and chairman, Dept of Urology, Tsukuba University, Japan
2009-2011:	Associate professor, Dept. of Urology, Kyoto University, Japan
2005-2009:	Instructor, Dept. of Urology, Kyoto University
2000-2005:	Assistant professor, Dept. of Urology, Kyoto University
1998-2000:	Postdoctoral fellow, Imperial Cancer Research Fund, UK
1989:	Passed the Examination of National Board
Speciality:	Oncology, Male infertility and Urological Surgery

Abstract

Uro-epithelium carcinoma derives from uro-epithelium covering renal-pelvis/ureter, bladder and urethra, and bladder cancer is the most common malignancy among them. As uro-epithelium carcinoma is common in elderly persons, male and/or smokers, smoking/some kinds of drugs/Chinese herb/occupation are known to be risk factors for uroepithelium carcinoma. Standard therapy for non-muscle invasive bladder cancer (NMIBC) is TUR-BT and BCG-intravesical instillation, and one for metastatic disease is chemotherapy as 1st-line therapy and immune checkpoint inhibitors as 2nd-line therapy. PD1/PDL1inhibitor is promising drugs for UC but the efficacy is limited. Now personalized medicine is not familiar in uro-epithelial carcinoma but several trials including FGFR-inhibitors for patients with FGFR3 mutation, or immune checkpoint inhibitors as 1st-line therapy for PDL1-high-expression patients. In the future, combination immunotherapy will be expected as a standard therapy for metastatic disease. Also, as for the treatments against NMIBC, several researches approach to develop the molecular markers to predict the efficacy of BCG intravesical therapy and also new combination immunotherapy using BCG and immune checkpoint inhibitors.

Current updates of checkpoint inhibitor in bladder cancer

Byong Chang Jeong

Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Short CV

1989-1996	College of Medicine, Seoul National University (M.D.)
2004-2006	Postgraduate School, College of Medicine, Seoul National University (PhD.)
2008-2014	Assistant Professor, Samsung Medical Center, Sungkyunkwan University School of Medicine
2012-2013	Postdoctorial fellowship, Dept. of Urology, Johns Hopkins Medical Institutions, USA
2014-	Associate Professor, Samsung Medical Center, Sungkyunkwan University School of Medicine
2018-	Vice-Dean of student affairs, Sungkyunkwan University School of Medicine

Abstract

FDA in USA has approved five agents targeting the programmed cell death 1 (PD-1) pathways as second line therapy after platinum-based chemotherapy since 2016. Korean FDA also approved a PD-L1 inhibitor, atezolizumab first in 2017. Now nivolumab and pembrolizumab has been approved as the 1st line in cisplatin-ineligible patients with metastatic urothelial cancer and the 2nd line after cisplatin treatment in 2018 in Korea.

Pembrolizumab is the only drug that showed a significantly better survival compared to conventional chemotherapy as the second line treatment in patients with progression after cisplatin-based chemotherapy in phase 3 trial. So Japan FDA approved only pembrolizumab as the 2nd line therapy for metastatic urothelial cancer.

Several clinical trials of combined therapy such as chemotherapy and checkpoint inhibitors or two immunothereapies of ipilumab and nivolumab and so on are being done as first and second line treatment. Perioperative management for localized muscle invasive bladder cancer (MIBC) of immunotherapy is ongoing. Neoadjuvant or adjuvant therapy using checkpoint inhibitors will be mandatory. Even in NMIBC treatment, clinical trials of immune agents are being tried for patients with BCG failure.

Ongoing studies will help define the optimal sequence, combination strategies, and predictive biomarkers of response.

Immunotherapy for urothelial cancer: state of the art and future perspectives

Hiroshi Kitamura

Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan

Short CV

1994-1997	Clinical Fellow, Sapporo Medical University Hospital, Sapporo, JAPAN
1998-2001	Oncologic Surgery Fellow, National Cancer Center Hospital, Tokyo, JAPAN
2003-2005	PhD student, Sapporo Medical University Graduate School of Medicine, Sapporo, JAPAN
2006-2009	Postdoctoral Fellow, Instructor Le Centre d'Immunothérapie des Cancers, Institut Curie, Paris, FRANCE
2009-2015	Assistant Professor, Department of Urology Sapporo Medical University School of Medicine, Sapporo, JAPAN
2015-	Professor and Chairman, Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, JAPAN

Message

Immune checkpoint inhibitors will provide clinical benefits not only for patients with metastatic UC in 2nd-line but also for other situations, e.g. high-risk NMIBC, 1st-line, adjuvant and neoadjuvant settings.

A new paradigm in treatment of urothelial cancer

Ho Kyung Seo

Center for Prostate Cancer, National Cancer Center, Korea

Short CV

Department of Urology, Center for Prostate Cancer, Hospital and Biomarker Branch, Research Institute, National Cancer Center

Professional Training And Positions

1994- 1995	Busan National University Hospital (Internship)
1995- 1999	Department of Urology, Busan National University (Residency)
2002- 2002	Department of Urology, Busan National University (Fellowship)
2002- 2003	Department of Urology, Ewha Woman's University College of Medicine (Assistant Professor)
2003- 2009	Center for Specific Organ Cancers, National Cancer Center (Specialist)
2007- 2008	Memorial Sloan-Kettering Cancer Center, USA (Visiting scholar)
2009- Present	Center for Prostate Cancer, National Cancer Center (Specialist)
2014- 2017	Genitourinary Cancer Research Branch, Reserach Institue, National Cancer Center (Senior researcher)
2017- Present	Biomarker Branch, Reserach Institue, National Cancer Center (Chief)
2017- Present	Department of Urology, National Cancer Center (Chief)
2017- Present	Center of Prostate Cancer, National Cancer Center (Head)

Message

In recent years, with an increased understanding of cancer immunobiology, systemic immunotherapies targeting immune checkpoint inhibition have been explored and clinically used in the area of urothelical carcinoma. The programmed cell death 1 receptor (PD-1) and its ligand (PD-L1) are important negative regulators of immune activity, preventing the destruction of normal tissues and autoimmunity. In this presentation, I am going to review the current and ongoing clinical trials, regarding immune checkpoint inhibitors, being conducted in various clinical settings of urothelial carcinoma.

Symposium 4 || BPH and LUTS

Chairpersons		**Sae Woong Kim** (Korea) **Yoshihiko Hirao** (Japan)	
Speakers	SY4-1	The impacts of Metabolic syndrome and life style on the Prevalence of BPH in Korea: from the Nation-wide Insurance Data cohort	**Hwancheol Son** (Korea)
	SY4-2	Water absorption from the urinary bladder	**Hiroki Watanabe** (Japan)
	SY4-3	Special Brief Remark Best practice in the management of storage symptoms in male LUTS/BPH	**Myung-Soo Choo** (Korea)
	SY4-4	Special Brief Remark Anti-aging effect of laser treatment for benign prostatic hyperplasia	**Keisuke Saito** (Japan)

Sponsored by GlaxoSmithKline K.K.

Chairpersons

Sae Woong Kim

Department of Urology, Catholic Integrative Medicine Research Institute, Research Dept. at Seoul St. Mary's Hospital, School of Medicine, The Catholic University of Korea, Seoul, Korea

Education

1980-1982	Undergraduate School of Medicine, The Catholic University of Korea
1982-1986	Faculty of Medicine, The Catholic University of Korea
1986-1989	Postgraduate School, The Catholic University of Korea (master's course)
1989-1996	Postgraduate School, The Catholic University of Korea (doctor's course)
2000 -	Training of International Conference on Harmonization Good Clinical Practice (ICH GCP)

Hospital and other related professional experience

1991-1994	Chairman, Department of Urology, Chang-won Hospital
1994-1998	Assitant Professor, Department of Urology, St. Mary's Hospital, School of Medicine, The Catholic University of Korea
1998-1999	Research Fellow, Department of Urology, School of Medicine, University of California, San Diego, USA (Andrology, Prostate)
1999-2005	Associate Professor, Department of Urology, St. Mary's Hospital, School of Medicine, The Catholic University of Korea
2005-2008	Professor and Chief, Department of Urology, St. Mary's Hospital, School of Medicine, The Catholic University of Korea
2009-2015	Chief, Department of Urology, Seoul St. Mary's Hospital, the Catholic University of Korea, College of Medicine
2012-2016	Chairman, Department of Urology, the Catholic University of Korea, College of Medicine
2009 -	Professor and Chief, Department of Urology, Seoul St. Mary's Hospital, School of Medicine, The Catholic University of Korea
2014 -	Director of integrative medicine, Seoul St. Mary's Hospital, School of Medicine, The Catholic University of Korea
2017-	Vice president, Seoul St. Mary's Hospital, School of Medicine, The Catholic University of Korea

Yoshihiko Hirao

Osaka Gyoumeikan Hospital, Japan

EDUCATION

1972	Nara Medical University, Fellow (Urology)
1977-79	Northwestern Univ. Medical School, research fellow (Pathology)
1983	Nara Medical University, Associate Professor (Urology)
1996	Nara Medical University, Professor (Urology)
2012	Nara Medical University, Emeritus and Research Professor
2012	Osaka Gyoumeikan Hospital, Honorary Director

Research field

Urooncology, Voiding function, Medical engineering

The impacts of Metabolic syndrome and life style on the Prevalence of BPH in Korea: from the Nation-wide Insurance Data cohort

Hwancheol Son

Department of Urology, Seoul National University Boramae Medical Center
Department of Urology, College of Medicine, Seoul National University, Korea

Sangjun Yoo (Department of Urology, Seoul National University Boramae Medical Center, Korea)
Sohee Oh (Department of Biostatistics, Seoul National University Boramae Medical Center, Korea)
Hyeon Jeong (Department of Urology, Seoul National University Boramae Medical Center, Korea)

Short CV

Professor Hwancheol Son specializes in diseases of the prostate, including LASER surgery. He has presented many abstracts on the prostate at many international and domestic academic meetings and has lectured in several special society meetings. He has also performed or assisted in several prostate LASER surgeries in China, Indonesia, and Taiwan.

His interests also include urinary incontinence and andrology. Currently, he is conducting an Internet-based epidemiologic survey clinically and bladder dysfunction experimentally.

Professor Son is an active member of many professional organizations, including the American Urological Association, International Society for Sexual Medicine, Asia-Pacific Society for Sexual Medicine, International Continence Society, Korean Urological Association, Korean Andrology Association, Korean Prostate Society, Korean Continence Society, and Korean Urinary Tract Infection Society.

Abstract

Objectives: To investigate the influence of metabolic syndrome (MetS) and its components on the prevalence of benign prostatic hyperplasia (BPH) requiring treatment using a large historical cohort.
Materials and methods: This study included 130,454 men selected from the National Health Insurance Service health checkup database. A generalized estimating equation was performed to assess the predictors of BPH requiring treatment. In addition, the effects of HDL-cholesterol level on BPH requiring treatment was also assessed.
Results: The prevalence of BPH requiring treatment was higher in men with MetS except in men aged < 50 years. Multivariable analysis showed that MetS was associated with higher prevalence of BPH requiring treatment regardless of age. Among the MetS components, low high density lipoprotein cholesterol (HDL-cholesterol) levels showed the strongest association with the prevalence of BPH requiring treatment in all age categories. In addition, regardlss of statin-usage, HDL-cholesterol level ≥ 60mg/dL was significnatly associated with decreased prevalence of BPH requiring treatment compared to those with HDL-cholesterol level < 40mg/dL.
Conclusion: MetS and its components, particularly low HDL-cholesterol levels, were strongly correlated with an increased prevalence of BPH requiring treatment.

Water absorption from the urinary bladder

Hiroki Watanabe

Watanabe Memorial Choumei Research Laboratory, Japan

Yuji Azuma (Watanabe Memorial Choumei Research Laboratory, Japan)

Short CV

Graduated Tohoku Univ (1960)
Prof, Kyoto Prefectural Univ Med (1976)
Prof, Meiji Univ Integrative Med (1998)
Principal, Kyoto Central Nursing School (2007)
Director, Choumei RL (2013)

Abstract

A considerable amount of water might be absorbed from urine in the urinary bladder during sleep (Watanabe H, Azuma Y: Int J Urol 23: 182, 2016). To evaluate changes in bladder capacity during sleep, overnight measurements were performed using transabdominal real-time 3-D ultrasound with original attachment in adult volunteers. In cases with greater urine production, the bladder stored the urine until a level of functional bladder capacity (FBC) very rapidly but never expanded beyond that level . Usually in this state, at the time of exceeding FBC, a temporary reduction of bladder capacity between 50 and 150mL was distinctly observed at intervals of 1-2 hours, which suggested of absorption. Based upon this evidence, we proposed a hypophysis, "Two-steps extension model of the bladder epithelium", for dynamic bladder function. Pathogenesis of nocturnal enuresis and some other diseases will be discussed from this model.

Best practice in the management of storage symptoms in male LUTS/BPH

Myung-Soo Choo

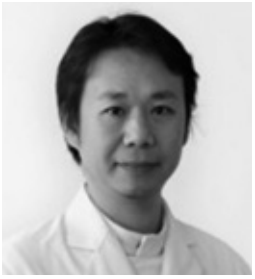
Department of Urology, Asan Medical Center, University of Ulsan, Korea

Short CV

I have been working in the Asan Medical Center, Seoul Korea since early 1994 as a staff and practiced in the management of voiding dysfunction including BPH and female urology. I am interested in not only clinical trials but also basic research in this field. Recently I am doing basic research in the voiding dysfunction with multipotent stem cells. I am serving as an associate editor of LUTS Journal. I am a ex-President of KUA.

Message

With the paradigm shift OAB symptoms are important in the management of BPH. Muscarinic receptor antagonists and Beta 3-agonists (β 3-agonists) alone, or in combination with α-blockers, represent the gold standard of treatment in men with predominant storage LUTS.



Anti-aging effect of laser treatment for benign prostatic hyperplasia

Keisuke Saito

Department of Urology, Juntendo University Shizuoka Hospital, Japan

Short CV

2001, March	Teikyo University, School of Medicine Graduate
2005, July	Shizuoka Cancer Center, Division of Urology Staff
2007, February	Chiba Prefecture, Nadogaya Hospital Department of Urology Staff
2007, March	Teikyo University, The Graduate School of Medicine
2007, April	Harvard University researcher: Research Fellow Clinical Care Massachusetts Genral Hospital, Harvard University
2007, May	Teikyo University, School of Medicine, Department of Urology, Class Assistant
2008, May	Teikyo University, School of Medicine, Department of Urology, Assistant Professor
2011, April	Houyukai, Asuka Homecare clinic, Director of Home Healthcare Service
2012, April	Teikyo University, School of Medicine, Reserch Institute of Cultural Properties(International Education) Lecturer
2013, June	Juntendo University, School of Medicine Hospital, Department of Urology(con-current part-time lecturer)
2014, April	Teikyo University, School of Medicine, Department of Urology, Lecturer
2017, May	Juntendo University Shizuoka Hospital, Department of Urology, Associate Professor

Message

Laser treatment for benign prostatic hyperplasia (HoLEP) increased postoperative bladder blood flow and serum testosterone levels.

Symposium 5 || NMIBC

Chairpersons		**Chun Il Kim** (Korea) **Hiroshi Kitamura** (Japan)	
Speakers	SY5-1	Alternative intravesical therapy for BCG unresponsive NMIBC	**Seok Ho Kang** (Korea)
	SY5-2	Photodynamic diagnosis for bladder cancer using 5-aminolevulinic acid	**Hideo Fukuhara** (Japan)
	SY5-3	Special Brief Remark What is the unmet needs in the management of NMIBC ?	**Tomomi Kamba** (Japan)
	SY5-4	Special Brief Remark The Role of immuno-oncology in BCG unresponsive NMIBC	**Ho Kyung Seo** (Korea)

Sponsored by Chugai Pharmaceutical Co., Ltd.

Chairpersons

Chun Il Kim

Department of Urology, Keimyung University Dongsan Medical Center, Korea

Education

Feb. 1975	Completed Premedical Course, Yonsei University
Feb. 1979	Graduated from College of Medicine, Yonsei University, Seoul, Korea (M.D.)
Sept. 1991	Graduated Doctor Course, Graduate School, Yonsei University, Seoul, Korea (D.M. Sc=Ph.D)

Professional experience

Mar. 1983	Residency of Urology, Yonsei Uni. Severance Hospital
Mar. 1986	Instructor, Dept. of Urology, Keimyung University, Daegu, Korea
Apr. 1988	Assistant Professor, Dept. of Urology, Keimyung University
Apr. 1990	Associate Professor, Dept. of Urology, Keimyung University
Apr. 1992	Professor, Dept. of Urology, Keimyung University
1992-1993	Research Fellow, Dept. of Urology, Washington University
Mar. 1996 - present	Chief and Chairman, Department of Urology, Keimyung University

Hiroshi Kitamura

Department of Urology, Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan

Employment

1994-1995	Resident, Sapporo Medical University Hospital, Sapporo, JAPAN
1996-1997	Clinical Fellow, Sapporo Medical University Hospital, Sapporo, JAPAN
1998-2001	Oncologic Surgery Fellow, National Cancer Center Hospital, Tokyo, JAPAN
2003-2005	PhD student, Sapporo Medical University Graduate School of Medicine, Sapporo, JAPAN
2006-2009	Postdoctoral Fellow, Le Centre d'Immunothérapie des Cancers Institut Curie, Paris, FRANCE
2009-2015	Assistant Professor, Department of Urology Sapporo Medical University School of Medicine, Sapporo, JAPAN
2015-	Professor and Chairman Department of Urology Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, JAPAN

Alternative intravesical therapy for BCG unresponsive NMIBC

Seok Ho Kang

Korea Universtiy College of Medicine, Seoul, Korea

Tae Il Noh (Korea Universtiy College of Medicine, Seoul, Korea)

Present Position

Professor & Director, Department of Urology, Korea University College of Medicine, Seoul, Korea
Director, Robotic and Minimally Invasive Surgery Center, Korea University Hospital
Director, International Health Care Center, Korea Universtiy Hospital
Executive board member, Korean Endourology Society
Executive board member, Korean Urological Oncology Society

Education

Mar,1991~Feb,1997 Medical Doctor degree, College of Medicine, Korea University
Sep,2001~Aug,2003 Master degree, College of Medicine, Korea University
Sep,2004~Feb,2007 Ph.D. degree, College of Medicine, Korea University

Abstract

Intravesical immunotherapy with live attenuated Bacillus Calmette-Guérin (BCG) remains the standard treatment of care for patients with high-risk and intermediate-risk non-muscle-invasive bladder cancer (NMIBC) and as adjuvant therapy after thorough transurethral resection of NMIBC. Despite BCG therapy, in up to 40% of patients it would recur and 60% to 70% of those would fail repeat BCG induction be deemed BCG unresponsive. BCG-unresponsive NMIBC is a particularly high-risk disease state, defined as the presence of high-grade tumours that are either refractory to BCG treatment or that relapse within 6 months of the most recent BCG exposure.

No established and effective intravesical therapies are available for patients whose tumours recur after BCG, representing a clinically important unmet need. For such patients, cystectomy remains the preferred treatment option per the American Urological Association and European Association of Urology, though some patients would be medically unfit or refuse radical surgery. Development and discovery of treatment options for BCG-unresponsive NMIBC is a high priority in order to decrease the morbidity, burden of health-care expenditures, and mortality related to bladder cancer.

Further intravesical therapy for bladder-preservation therapies may preserve quality of life in these patients and in some cases can be curative. There are numerous non-BCG intravesical salvage options available, including immunotherapy, single-agent chemotherapy, combination chemotherapy, and device-assisted chemotherapy. In addition, investigation of radiation-based treatment and other novel therapies including checkpoint inhibitors (programmed death-1/programmed death ligand-1), are currently underway.

Widespread clinical acceptance and use of emerging therapies will require novel agents and well-designed trials to demonstrate meaningful oncological benefit, which has been defined by expert consensus as disease-free rates of >30% at 12 months and 25% at 24 months. However, to date, few agents or regimens have demonstrated >30% disease-free survival at 1 year, or >25% at 2 years.

Enhanced intravesical chemotherapy and immune treatments are promising developments. And some principles seem apparent, including the fact that chemotherapeutic regimens seem to offer better outcomes (possibly because of the completely different mechanism of tumor-killing as compared with BCG) than alternative intravesical immunotherapies, and that combination chemotherapeutic regimens seem superior to monotherapies. Overall, no guidelines currently exist to guide management of these patients. As such, patients need to be thoroughly counseled on their options and the importance of individualized patient plans made through shared decision-making cannot be understated.

Photodynamic diagnosis for bladder cancer using 5-aminolevulinic acid

Hideo Fukuhara

Department of Urology, Kochi Medical School, Japan

Keiji Inoue (Department of Urology, Kochi Medical School, Japan)

Short CV

May 2003~ Resident at Kochi Medical School
August 2004~ Clinical staff at Division of Urology in Kochi Prefecture Hatakenmin Hospital
August 2005~ Clinical staff at Dept. of Urology in Kochi Medical School
August 2006~ Clinical staff at Division of Urology in Kochi Prefecture Hatakenmin Hospital
August 2008~ Clinical staff at Dept. of Urology in Kochi Medical School
April 2015~ Clinical staff at Division of Urology in National Hospital Organization Kure Medical Center
April 2016~ Assistant Professor at Dept. of Urology in Kochi Medical School

Abstract

Photodynamic technology using light-sensitive and fluorescent substances has attracted attention as an auxiliary diagnostic tool in cancer. Light-sensitive and fluorescent substances injected into the body accumulate specifically in tumor cells, and by light irradiation and excitation at specific wavelengths, fluorescence is emitted. 5-Aminolevulinic acid (ALA) is converted to protoporphyrin IX (PpIX) in the mitochondria. On excitation of PpIX with blue visible light, red fluorescence is emitted in the mitochondria. This is the mechanism involved in ALA-photodynamic diagnosis (ALA-PDD).

ALA-PDD for bladder cancer was clinically introduced at our medical center in 2004. ALA-PDD has made it possible to visualize smaller lesions and flat lesions that were previously difficult to visualize by cystoscopy using a white-light source. This has increased diagnostic accuracy, decreased recurrence rates, and improved treatment outcomes in bladder cancer. We present our trial of ALA-PDD in bladder cancer in Kochi Medical School.

What is the unmet needs in the management of NMIBC ?

Tomomi Kamba

Department of Urology, Graduate School of Medical Sciences, Kumamoto University, Japan

Short CV

1992 Graduate from Kyoto University, 1992-94 Resident, Kyoto Univ. and Kurashiki Central Hospital, 1994-1999 Staff physician, Department of Urology, Shiga Medical Center for Adults, 1999-2003 Graduate student in Kyoto Univ. Graduate School of Medicine, 2003-2005 Postdoctoral fellow in UCSF, 2005-2009 Assistant professor, Kyoto Univ, 2009-2014 Lecturer, Kyoto Univ, 2014-2016 Associate professor, Kyoto Univ, 2016- Professor and chairman, Department of Urology, Kumamoto University

Message

Patients with NMIBC frequently experience disease recurrence or progression. I would like to discuss shortly on the current unmet needs in the management of NMIBC.

The Role of immuno-oncology in BCG unresponsive NMIBC

Ho Kyung Seo

Center for Prostate Cancer, National Cancer Center, Korea

Short CV

Department of Urology, Center for Prostate Cancer, Hospital and Biomarker Branch, Research Institute, National Cancer Center

Professional Training And Positions

1994- 1995 Busan National University Hospital (Internship)
1995- 1999 Department of Urology, Busan National University (Residency)
2002- 2002 Department of Urology, Busan National University (Fellowship)
2002- 2003 Department of Urology, Ewha Woman's University College of Medicine (Assistant Professor)
2003- 2009 Center for Specific Organ Cancers, National Cancer Center (Specialist)
2007- 2008 Memorial Sloan-Kettering Cancer Center, USA (Visiting scholar)
2009- Present Center for Prostate Cancer, National Cancer Center (Specialist)
2014- 2017 Genitourinary Cancer Research Branch, Reserach Institue, National Cancer Center (Senior researcher)
2017- Present Biomarker Branch, Reserach Institue, National Cancer Center (Chief)
2017- Present Department of Urology, National Cancer Center (Chief)
2017- Present Center of Prostate Cancer, National Cancer Center (Head)

Message

In recent years, with an increased understanding of cancer immunobiology, systemic immunotherapies targeting immune checkpoint inhibition have been explored and clinically used in the area of urothelical carcinoma. The programmed cell death 1 receptor (PD-1) and its ligand (PD-L1) are important negative regulators of immune activity, preventing the destruction of normal tissues and autoimmunity. In this presentation, I am going to review the current and ongoing clinical trials, regarding immune checkpoint inhibitors, being conducted in various clinical settings of urothelial carcinoma.

Symposium 6 || New Trends of Radiation Therapy for Prostate Cancer

Chairpersons **Han Yong Choi** (Korea) **Akio Matsubara** (Japan)

Speakers

SY6-1	Focal Brachytherapy for Prostate Cancer	**Dong Soo Park** (Korea)
SY6-2	Heavy ion radiation therapy for prostate cancer	**Kazuhiro Suzuki** (Japan)
SY6-3	Special Brief Remark Progress of Radiation Therapy for Prostate Cancer	**Kazuo Nishimura** (Japan)

Sponsored by AstraZeneca K.K.

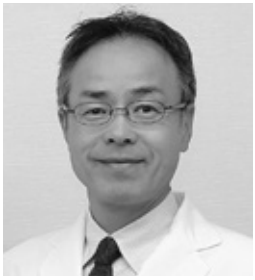
Chairpersons

Han Yong Choi

Department of Urology, Sungkyunkwan University School of Medicine, Korea

Professional Training and Employment

1978 -1982	Resident, Dept. of Urology, Seoul National University Hospital
1985 -1992	Chief, Dept. of Urology, Masan Koryo General Hospital
1992 -1994	Research Fellow, Dept. of Urology, Duke University Medical Center Durham, N.C., U.S.A.
1994 -2017	Medical Staff, Dept. of Urology, Samsung Seoul Hospital
1997 -2017	Professor, Dept. of Urology, Sungkyunkwan University School of Medicine
1999 -2005	Chairman, Dept. of Urology, Samsung Seoul Hospital
2006-2008	President of the Korean Urological Oncology Society
2008-2012	President & CEO, Samsung Seoul Hospital
2012-2016	Vice President, Medical Affair, Sungkyunkwan University
2015-2016	Emeritus President of the Korean Urological Association
2017-	Emeritus Professor of Urology, Sungkyunkwan University School of Medicine

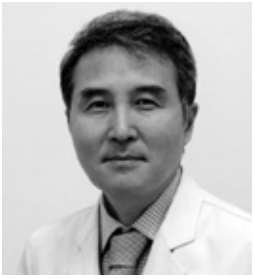


Akio Matsubara

Department of Urology,
Graduate School of Biomedical Sciences,
Hiroshima University, Japan

Post-Graduate Clinical Training

1985-86	Resident, Department of Urology, Hiroshima University Hospital, Hiroshima, Japan
1986-87	Resident, Department of Urology, Hiroshima Prefectural Hospital, Hiroshima, Japan
1987-90	Clinical Fellow, Department of Urology, Miyoshi Central Hospital, Miyoshi, Japan
1990-93	Resident, Department of Urology, Hiroshima University Hospital, Hiroshima, Japan
1993-96	Clinical Associate, Department of Urology, Hiroshima University Hospital, Hiroshima, Japan
1997-98	Clinical Associate, Department of Urology, Hiroshima University Hospital, Hiroshima, Japan
1998	Clinical Fellow, Department of Urology, KKR Takamatsu Hospital, Takamatsu, Japan
1998-2001	Clinical Associate, Department of Urology, Hiroshima University Hospital, Hiroshima, Japan
2001-02	Assistant Professor, Department of Urology, Graduate School of Biomedical Sciences Hiroshima University, Hiroshima, Japan
2002-2008	Associate Professor, Department of Urology, Graduate School of Biomedical Sciences Hiroshima University, Hiroshima, Japan
2008-present	Professor, Department of Urology, Graduate School of Biomedical Sciences Hiroshima University, Hiroshima, Japan



Focal Brachytherapy for Prostate Cancer

Dong Soo Park

Department of Urology, Cha University Bundang Medical Center, Korea

Short CV

Professor of Urology Bundang CHA Medical Center
Bachelor of Medicine Yonsei University College of Medicine, Seoul, Korea
Doctor of Medicine Yonsei University College of Medicine, Seoul, Korea
Internship, Residency and Fellowship in Severance Hospital, Yonsei University College of Medicine, Seoul, Korea
Visiting Scientist in M.D.Anderson Cancer Center, Houston, TX, USA (Chemotherapy for Genito-Urinary cancer)
Postdoctoral Research Scholar in Univ. of Iowa, Iowa City, IA, USA (Immuno-Oncology Lab)

Abstract

Treatment guidelines for localized prostate cancer by major organizations recommend four different methods: active surveillance, radical prostatectomy, EBRT, and brachytherapy. However, middle ground between active surveillance and definitive treatment has emerged in the form of focal therapy a decade ago, which aims to replicate the organ preservation avoiding complications related to whole gland treatment without significantly jeopardizing cancer control.

The goal of focal therapy is to achieve adequate control of cancer while maintaining the patient's quality of life.

The energy sources commonly used in focal therapy are HIFU, LASER, cryo, photodynamic, RFA, and radioisotope for brachytherapy. Among these sources only brachytherapy is the recommended armamentarium for the treatment of prostate cancer in major guidelines.

While other methods in focal therapy may lead to failure ensuing salvage stages, brachytherapy shows higher success rate, thereby allowing definitive treatment.

The essential but difficult part in focal therapy is at the patient selection because of the multi-focality nature of prostate cancer.

Even if the index lesion is controlled, the untreated lesion could later on develop as lethal tumor. Any focus of clinically significant cancer in the untreated region develops within 18 months after focal therapy. PSA and multi-parametric MRI are useful tools for follow-up, and these methods can examine failure where boost focal therapy or radical surgery could be applied afterwards.

Furthermore, in cases where focal brachytherapy cannot cover the entire lesion, partial brachytherapy may be advisable.

In the first half, I will review the background knowledge of the focal brachytherapy, existing platforms, imaging approaches, and currently published data.

Then, I will focus on who is an appropriate candidate and how to treat for focal or partial brachytherapy. In addition, whole gland brachytherapy using I-125 with sparse implantation technique will be presented.

State-of-the art technical consideration such as MR-TRUS fusion brachytherapy will also be outlined.

Heavy ion radiation therapy for prostate cancer

Kazuhiro Suzuki

Department of Urology, Gunma University Graduate School of Medicine, Japan

Hiroshi Matsui (Heavy ion medical center, Gunma University Department of Urology, Gunma University Grauate School of Medicine, Japan)

Hidemasa Kawamura (Department of Radiation-Oncology, Gunma University Grauate School of Medicine, Japan)

Tatsuya Ohno (Heavy ion medical center, Gunma University, Japan)

Short CV

Graduated from Gunma University School of Medicine in 1998, and got PhD from Gumma Univeristy Graduate School of Medicine in 1996. Postdoctal fellow of Ohio State University, Department of Hematology/ Oncology (Prof. Michael Caligiuri) from 1997 to 1999. Professor and Chairman of Department of Urology, Gunma University Graduate School of Medicine in 2004, and Professor of Heavy Ion Medical Center, Gunma Unviersity in 2009.

Abstract

Gunma University developed the Gunma University Heavy Ion Medical Center (GHMC), and the carbon ion radiotherapy was started in March 2010. Carbon ion has a unique characteristic of dose distribution called as a “bragg peak”. Heavy ion beam transfers a high energy not in the body surface but in the deep site of the body, and the ion stops sharply after the energy transfer. Carbon ion beam also has a potential for double strand break of DNA, and has a relative higher biological effectiveness (RBE). These characteristics are the rationale for carbon ion radiotherapy. Carbon ion radiotherapy is used as a monotherapy for low risk group and the part of intermediate risk group, i.e., Gleason socre 3+4=7, and used with 6 month neoadjuvant androgen deprivation therapy (ADT) for rest of intermediate risk group. For high risk group, total 2 year ADT is performed. In clinical trial GUNMA0702, 304 patients were treated in 5% with low risk, 47% with intermediate risk and 48% with high risk. PSA progression at 5 years was observed in 8.3%, 6.6%, and 8% in low, intermediate, and high risk, respectively. Overall survival rate at 5 years was 96.6% with 1% of prostate cancer death (3 pts).

Progress of Radiation Therapy for Prostate Cancer

Kazuo Nishimura

Osaka International Cancer Institute, Japan

Short CV

Assistant Professor, Department of Urology, School of Medicine, Osaka University, Suita, Japan 1998-2005
Associate Professor, Department of Urology, School of Medicine, Osaka University, Suita, Japan 2005-2009
Vice Director, Department of Urology, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan 2009-2010
Director, Department of Urology, Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan 2010-2017
Director, Department of Urology, Osaka International Cancer Institute, Osaka, Japan 2017-Present

Message

A variety of radiation therapies have been applied for prostate cancer and their technological advances have been remarkable. These modalities should be appleid to the right patient in the right way.

Symposium 7 || Prostate Cancer and Bone

Chairpersons		**Hiroaki Shiina** (Japan) **Tag Keun Yoo** (Korea)	
Speakers	SY7-1	Importance of Bone Management in Prostate Cancer	**Hiroji Uemura** (Japan)
	SY7-2	Bone issues in prostate cancer	**Jae Il Chung** (Korea)
	SY7-3	Bone Targeting Agents in Prostate Cancer	**Jae Young Joung** (Korea)

Sponsored by Bayer Yakuhin, Ltd

Chairpersons

Hiroaki Shiina

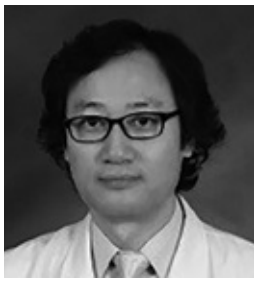
Department of Urology, Shimane University Faculty of Medicine, Japan

Professional Training and Employment

1985 Graduated from Shimane Medical University
1995 Lecturer, Department of Urology, Shimane Medical University
1997 Associate Professor, Department of Urology, Shimane Medical University
2012 Professor and Chairman, Department of Urology, Shimane University

Faculty of Medicine

2015.10-2018.3 Vice Dean, Shimane University Faculty of Medicine
2018.4- present Vice Director, Shimane University Hospital



Tag Keun Yoo

Department Urology, Eulji University, Nowon Eulji Medical Center, Korea

Education/Academic appointments

1986-2 Hanyang University Medical College, graduated
1987-1991 Urology Resident at Hanyang University Hospital
1991-1994 Faculty, Department of Urology, Chungju General Hospital
1994- Present Faculty, Department of Urology, Nowon Eulji Medical Center
1998-Present Professor, Department of Urology, Eulji University School of Medicine
2000.10-2001.9 Visiting Scholar, Department of Urology, Northwestern University, Chicago, IL

Importance of bone management in prostate cancer

Hiroji Uemura

Yokohama City University Medical Center, Japan

Yasuhide Miyoshi (Yokohama City University Medical Center, Japan)
Takashi Kawahara (Yokohama City University Medical Center, Japan)

Short CV

1985	MD, Yokohama City University School of Medicine
1985	Yokohama City University Hospital, resident
1987–1990	Yokosuka Kyousai Hospital
1990-1992	Yokosuka Hokubu-Kyousai Hospital
1992–1995	University of Wisconsin, Comprehensive Cancer Center
1995-2002	Assistant Professor, Yokohama City University
2003	Associate Professor, Yokohama City University
2016	Director, Clinical Professor, Department of Urology and Renal Transplantation, Yokohama City University Medical Center

Abstract

Japan has the higher prevalence of prostate cancer (PCa) among Asia Pacific countries. And the proportion of advanced stages with bone metastasis (BM) remains high level compared to US. Those patients usually receive hormonal therapy such as androgen deprivation therapy (ADT). Long-term ADT has been reported to deteriorate bone health including increased fracture risk from osteoporosis and the development of BM. It is important to maintain bone health for long survival because fractures are associated with shorten survival.

BM is critical for survival in PCa patients; therefore, developing to BM from non-metastatic situation is a turning point to initiate systemic treatments for BM. One thirds of non-metastatic castration resistant PCa (nmCRPC) had developed BM at 2 years. Baseline PSA level (>10 ng/mL) and PSA velocity independently predicted shorter time to first BM. Denosumab significantly improved median BM free survival, time to first BM, and time to symptomatic BM, but improved neither overall survival (OS) nor progression free survival. Monitoring BM is very important because considerable patients develop to CRPC associated with BM. Radium-223, alpha emitter, selectively targets BM and was proven to improve OS in CRPC. Physicians must pay attention of bone health and BM for PCa patients.

Bone issues in prostate cancer

Jae Il Chung

Busan Paik Hospital Inje University, Korea

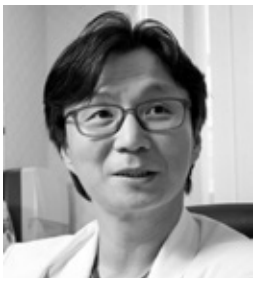
Short CV

Education

Feb. 17, 2001	Graduate Postgraduate School Kosin University, Busan, Korea (PhD)
February 26, 1988	Graduate College of Medicine Inje University, Busan, Korea (MD)
2010.03 -- Now	Professor and Director of Department of Urology Inje University Busan Paik Hospital, Busan, Korea

Abstract

Normal bone physiology maintains structural integrity through ongoing process of remodelling. Bone formation by osteoblasts is balanced by bone resoption by osteoclasts. The receptor activator of nuclear factor-kB (RANK) signaliing pathway is important to the regulation of osteoclast maturation and function. Osteoclast precusors differentiate to multinucleated osteoclasts when stimulated by RANKL. Mature osteoclast survival and bone resorption are also promoted by RANKL. Each of these stimulatory actions of RANKL can be attenuated by the action of osteoprotegerin (OPG), a decoy receptor that acts as a sink for RANKL. Bone turnover is accelarated by the presence of metastatic prostate cancer. Osteoclasts and osteoblasts ecah have been found to be highly activated within biopsies of tumor involved bone in prostate cancer patients. Bone metastases are a common freature of advanced prostate cancer. The cellular and molecular mechanisms involved in bone metastasis are likely to be broadly similar across tumor types. The initation and progression of bone metastasis is a complex, multi-step process, invloving a large number of cell-cell interaction coupled with a myriad of soluble factors. Recently there has been a recognition of the importance of the contribution of the tumor microinvironment and that of the hematopoietic system for tumor cell growth in bone. Other studies have aimed at determining whether characteristics of the primary tumor are potentially predictive of future bone metastasis, which would allow use of a screening test to identify patients at hiigh risk and thereby intensity therapy. A hallmark of malignant tumor is their ability to spread and invade distant sites, where they subsequently form new colonies that may develop into secondary tumors. This is a complex, multistep process involving different signalling pathways in a large number of cell types, and extensive research has been carried out to characterize the different steps involved with the aim to identify potential therapeutic targets.



Bone Targeting Agents in Prostate Cancer

Jae Young Joung

Center for Prostate Cancer, National Cancer Center, Korea

Short CV

1998	Gyeongsang National University College of Medicine Medicine M.D.
2001	Ulsan University Graduate School of Medicine Medical Science Ph.D
1999-2003	Asan Medical Center Residency
2003-2007	Urologic Oncologic Clinic, Public health docor and Clinical fellow
2008-Present	Center for Prostate Cancer, National Cancer Center, Staff
2017-Present	Precision Medicine Branch, National Cancer Center, Senior Scientist
2012-2013	Cancer Institute of New Jersey (USA), Visiting Scholar

Abstract

Bone metastases are present in the vast majority of men with advanced prostate cancer, representing the main cause for morbidity and mortality. Recurrent or metastatic disease is managed initially with androgen deprivation but the majority of the patients eventually will progress to castration-resistant prostate cancer, with patients developing bone metastases in most of the cases.[1]

Radium-223 dichloride(Ra-223) is a targeted α -emitter showing improvement in overall survival in patients with castration-resistant prostate cancer(CRPC) and bone metastases.[2]

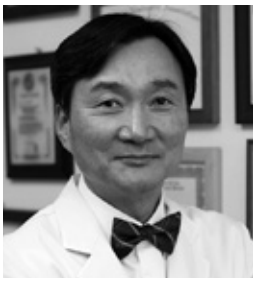
Data presented here suggest that treatment with Ra-223 is a firmly established therapeutic option in CRPC with symptomatic bone metastases and no visceral/bulky nodal involvement. Upfront use of Ra-223 compared with subsequent therapy lines increases the likelihood of completing full six injections of treatment and allow the exposure to an effective treatment before performance status deterioration. And some retrospective analysis produced data also on the combination of Ra-223 with new antiandrogen agents suggesting that coadministration of a radiopharmaceutical α -emitter and new hormonal agents is safe and may provide substantial benefit. In the therapeutic landscape of CRPC, no clear evidence supports the best way to sequence available agents, and there is an urgent need for prospective studies to define it.[3]

1. Suzman et al. Cancer Metastasis Rev. 2014 September; 33(0): 619–628
2. Parker C, et al. Lancet Oncol 2014;15:1397-406
3. M. Picciotto et al. Expert Opinion on Pharmacotherapy, 18:9, 899-908

Educational Session 1 || Andrology

Chairpersons		**Kwangsung Park** (Korea) **Hisamitsu Ide** (Japan)	
Speakers	EdS1-1	Application of Filler in Urological Field, Premature Ejaculation	**Du Geon Moon** (Korea)
	EdS1-2	Recent trend of semen quality for Japanese men at the marriage	**Akira Tsujimura** (Japan)

Chairpersons



Kwangsung Park

Urology at Chonnam National University Medical School, Gwangju, Korea

He received his medical degree (1983) and PhD (1993) at Chonnam National University, and completed his urology residency at Chonnam National University Hospital, and fellowship (1995-1997) in male erectile dysfunction at Boston University School of Medicine, USA.
Dr. Park is currently a member of National Academy of Medicine of Korea, Chairman of Education Committee of the International Society for Sexual Medicine (ISSM), the Editor-in-Chief of *Sexual Medicine* (ISSM) and also of *Investigative and Clinical Urology* (Korean Urological Association).

Hisamitsu Ide

Dokkyo Medical University Saitama Medical Center, Japan

Academic and professional experiences

1991 Intern, Dept. of Urology, Miyazaki Medical College
1993 Dept. of Parasitology, Miyazaki Medical College
1995 Genetic Division, National Cancer Center Research Institute
1997 Assistant Professor, Dept. of Urology, Miyazaki Medical College
1999 Post-Doctoral fellow, HHMI, Witte lab, UCLA, U.S.A.
2002 Assistant Professor, Dept. of Urology, Kyorin University School of Medicine
2004 Associate Professor, Dept. of Urology, Teikyo University School of Medicine
2017 Associate Professor, Dept. of Urology, Dokkyo Medical University Saitama Medical Center

Application of Filler in Urological Field, Premature Ejaculation

Du Geon Moon

Department of Urology, Korea University Guro Hospital, Korea

Education & Career

1981 - 1990	Korea University College of Medicine, Seoul, Korea (Bachelor degree, M.D.)
1990 - 1991	Internship in Korea University Medical Center
1993 - 1997	Residency of Urology, Korea University Medical Center
1993 - 1995	Korea University Graduate School, Seoul, Korea (Master degree)
1995 - 1997	Korea University Graduate School, Seoul, Korea (Ph.D. degree)
1997 - 2000	Research Fellow, Dept. of Urology, Korea University Medical Center
2000 - Present	Full time Faculty, Clinical Instructor, Assistant Prof., Associate Prof., Professor, Dept. of Urology, Korea University College of Medicine
2002 - 2005	Chief of Urology, Korea University Ansan Hospital
2004 - 2005	Research Fellow, Institute of Regenerative Medicine, Wake Forest Univ. NC, USA
2006 –2016	Chief of Urology, Korea University Guro Hospital
2010 - Present	Director, Korea University Institute of Regenerative Medicine

Abstract

In last two decades, our knowledge of premature ejaculation (PE) has much improved as a result of studies that have reported high prevalence rates, detrimental psychosocial consequences, and possible pharmacological management options. Current treatment choice for premature ejaculation is medical treatment such as the only approved dapoxetine for PE and off-label conventional SSRI and topical anesthetics. The main limitation of medical treatment for PE is recurrence after withdrawal of medication.

Hypersensitivity of glans penis as a cause of PE is still controversial but many patients of primary PE who respond to local anesthetics have penile hypersensitivity, which provides further implications for an organic basis of PE. Surgical treatment of PE such as Selective Dorsal Neurectomy (SDN) and glans penis augmentation (GPA) by HA gel are created to decrease the sensitivity of glans penis. From 2010, ISSM guideline for PE do not recommend surgical treatment because of possible permanent loss of sexual function and insufficient reliable data. Despite these limitations, surgical treatment is continuously increased in Asian countries after development of the only approved SSRI, Dapoxetine and ISSM guideline. Moreover Western countries also have more interest to surgical treatment for the nonresponder to medical treatment and drawbacks of medical treatment.

In 2012, KSSMA conducted a nationwide survey of 527 urologists and reported the efficacy and complications of SDN in 44,000 cases. In the survey, SDN was one of the most popular surgical procedures in private Korean clinical urologists for selected patients who had an effect from local anesthetics or who had penile hypersensitivity. To establish SDN a place for PE treatment, proper selection of patients, standard surgical method of SDN, assessment tools for surgical PE and more reports from well-designed study should be followed.

In 2016, the author and colleagues also conducted a nationwide survey of 54 Korean Urologists who had experiences of surgical management of PE and reported the efficacy and complications of SDN in 10,732 cases, HA GPA in 4,344 cases and autologous fat glans augmentation in 1,905 cases, respectively. In the survey, SDN was reported 70.8% of Satisfaction, 27.1% of Not bad and 2.1% of Dissatisfaction and HA-GPA was reported as 38.9% of Satisfaction, 55.6% of Not bad and 5.6% of Dissatisfaction, respectively. Factors related patient's poor satisfaction of HA-GPA were Unnatural looking after injection (55.6%), Recurrence of PE (36.1%), Not long –lasting (33.3%) and High cost (13.9%). In contrast to SDN, the reported paresthesia and hypoesthesia after HA-GPA were extremely rare and no case of erectile dysfunction was reported in this survey. This survey result warrants further study is needed to clarify the relation between the HA-GPA and loss of sexual function to reconsider the current ISSM guideline in treatment of PE.

Recently percutaneous CT-guided cryoablation of dorsal penile nerve and neuromodulation of dorsal penile nerves by pulsed radiofrequency are reported. Now, it is time to reevaluate surgical treatment rather than to ignore as unscientific treatment because both doctors and patients need surgical alternatives for PE patients who do not satisfy with medical treatment.Compared to SDN, GPA by HA gel seems do not induce serious sensory loss with erectile dysfunction and the recommendation should be reevaluated by ISSM but more reliable reports are requested.

Key words: ejaculation, medical, surgical

Recent trend of semen quality for Japanese men at the marriage

Akira Tsujimura

Department of Urology, Juntendo University Urayasu Hospital, Japan

Professional Training and Employments:

2017-	Professor, Department of Urology, Juntendo University Urayasu Hospital
2015-2017	Associate Professor, Department of Urology, Juntendo University Urayasu Hospital
2014-2015	Associate Professor, Department of Urology, Juntendo University Graduate School of Medicine
2005-2014	Associate Professor, Department of Urology, Osaka University Graduate School of Medicine
1997-2004	Assistant Professor, Department of Urology, Osaka University Graduate School of Medicine
1996-1997	Instructor, Department of Urology, Osaka University Medical School
1990-1996	Residency and Instructor, Department of Urology, Osaka National Hospital
1988-1990	Intern in Urology, Osaka University Hospital and the Affiliated Hospitals

Fellow:

New York University Medical School, New York, USA (May 1998- May 2000)

Abstract

Because human fertility rates are declining all over the world, the infertility has been serious problem rapidly in the field of reproductive medicine and public health. It is also generally known that the cause of infertility exists in male in about half of infertility couples. Recently, a reliable systematic review and meta-regression analysis showed shocking data that the sperm concentration and total sperm count declined, on average, 1.4% and 1.6% per year with an overall decline of 52.4% and 59.3% respectively, between 1973 and 2011 among North America, Europe, Australia and New Zealand. Furthermore, a systematic review and meta-analysis using data from 90 studies (93,839 subjects) clearly showed that age-associated declines in semen volume, total sperm count, percentage motility, progressive motility, and normal morphology. These data mean that male age needs more recognition as a potential contributor to the negative pregnancy outcomes associated with delayed first reproduction.

In the present study, we investigated the characteristics of newly or just before-wed men regarding semen quality. Especially, we analyzed the influencing factor on poor semen quality among biochemical and endocrinologic.

Luncheon Seminar 2 || Chemotherapy of Prostate Cancer

Chairpersons		**Osamu Ogawa** (Japan) **Byung Ha Chung** (Korea)	
Speakers	LS2-1	Chemotherapy of prostate cancer and aggressive disease	**Masashi Kato** (Japan)
	LS2-2	Immunotherapy for Castrate-Resistant Prostate Cancer	**Sung Kyu Hong** (Korea)
	LS2-3	Special Brief Remark Chemotherapy of Prostate Cancer	**Masayoshi Nagata** (Japan)
	LS2-4	Special Brief Remark Chemotherapy of mHSPC	**Jin Seon Cho** (Korea)

Sponsored by Sanofi K.K.

Chairpersons

Osamu Ogawa

Department of Urology, Kyoto University Graduate School of Medicine, Japan

Education

1993 D. Med. Sci., Faculty of Medicine, Kyoto University
1982 M.D., Faculty of Medicine, Kyoto University

Professional Training and Employment

2018-present President of Urological Association of Asia (UAA)
2016-2018 Board of Director, Society of International Urology(SIU)
2010-2014 Secretary General of UAA
2010-2013 Director of Science of UAA
1998-present Professor and Chairman, Dept. of Urology, Kyoto University Graduate School of Medicine
1996-1998 Associate professor, Dept. of Urology, Akita Univ.
1993-1996 Assistant professor, Dept. of Urology, Kyoto University
1991-1993 Postdoctoral fellow, Dept. of Biochemistry, Otago University, New Zealand
1983-1989 Medical staff in Dept. of Urology, Kitano Hospital, Osaka, Japan
1982-1983 Resident in Dept. of Urology, Kyoto University

Byung Ha Chung

Department of Urology, Gangnam Severance Hospital, Yonsei University College of Medicine, Korea

Professor, Department of Urology, Gangnam Severance Hospital, Yonsei University College of Medicine, Republic of Korea
Chief, Minimally Invasive Robotic Surgery Center, Gangnam Severance Hospital, Republic of Korea
Advisory Panel and Speaker, Advanced Prostate Cancer Consensus Conference (2017)
Honorary President, The Korean Prostate Society
Honorary President, Asian-Pacific Prostate Society

Chemotherapy of prostate cancer and aggressive disease

Masashi Kato

Department of Urology, Nagoya University Graduate School of Medicine, Japan

Toyonori Tsuzuki (Dept. of Surgical Pathology, Aichi Medical University, Japan)

EDUCATIONAL HISTORY

2002 Ph.D. Post Graduate School, Nagoya University
1996 M.D. Kobe University School of Medicine

PROFESSIONAL BACKGROUND

2018 Associate Professor, Department of Urology, Nagoya University
2010 Assistant Professor, Department of Urology, Nagoya University
2005 Department of Urology, Chukyo Hospital
2004 Assistant Professor, Department of Urology, Nagoya University
2003 Fellow, Department of Surgery, Division of Transplantation, UCSF
1999 Post Graduate School, Nagoya University
1996 Resident in Okazaki City Hospital

Abstract

Taxane chemotherapy is the gold standard of care for men with metastatic prostate cancer (PCa) that is progressing despite hormonal therapy. These agents were approved to show the improvement in overall survival (OS) for metastatic castration-resistant prostate cancer (CRPC) include docetaxel and cabazitaxel. Later, two large randomized studies of patients with metastatic hormone-sensitive prostate cancer (HSPC) reported significant OS improvements with the addition of 6 cycles of docetaxel to standard-of-care androgen deprivation therapy (ADT), and survival benefit was found in patients with high-volume aggressive disease. Visceral mets, 1st ADT<1 year, and symptomatic state were also reported to be an indication for chemotherapy for mCRPC, and biomarker is needed due to heterogeneity of the disease.

Recently, the presence of intraductal carcinoma of the prostate (IDC-P) was reported to be strongly associated with high-grade and high-volume invasive PCa as well as unfavorable clinical outcomes. It is also newly picked up in the 2017 EAU guideline and there has few reports to mention treatment option on IDC-P so far.

Here we show the topic of chemotherapy in PCa at varying phases of disease in the former, and focus on IDC-P to discuss possible treatment strategy for these aggressive tumor in the latter.

Immunotherapy for Castrate-Resistant Prostate Cancer

Sung Kyu Hong

Department of Urology, Seoul National University Bundang Hospital, Seongnam
Department of Urology, Seoul National University College of Medicine, Korea

Short CV

Dr. Hong works as Professor (tenure) at Department of Urology, Seoul National University College of Medicine (2017-present) and at Department of Urology, Seoul National University Bundang Hospital. He also visited Sidney Kimmel Center for Prostate and Urologic Cancers, Memorial Sloan-Kettering Cancer Center, NY, USA (2012. 9. -2014. 2.). Currently, Dr. Hong serves as secretary general of Korean Prostate Society, Board member, Korean Urological Oncology Society, Director of International Communications (Asian Pacific Prostate Society: APPS), Deputy Editor of Investigative and Clinical Urology, Managing Editor of Prostate International, Editorial board member of Case Report in Urology, and Editorial review board member of Case Studies in Surgery.

Abstract

Therapeutic approaches that induce the function of the immune system to eliminate cancer cells have produced a paradigm shift in the management of various cancers including prostate cancer (PCa). However, despite the approval of sipuleucel-T (Provenge®) for the treatment of castrate-resistant prostate cancer in 2010, subsequent progress in PCa immunotherapy development have been limited by disappointing results with novel vaccination approaches, and by innate general resistance against immune checkpoint blockade. Nevertheless, there still remains strong preclinical and clinical evidence to suggest that PCa is a susceptible target for immunotherapies. Recently, diverse innovative strategies have been employed to prime native antigen-specific responses against PCa (e.g. adoptive cell transfer, alleviation of immunosuppression in the tumor microenvironment, etc.).

Another promising area of clinical research in PCa immunotherapy is the use of checkpoint inhibitors. These treatments work by targeting molecules that serve as checks and balances in the regulation of immune responses. By blocking inhibitory molecules or, alternatively, activating stimulatory molecules, these treatments are designed to unleash and/or enhance pre-existing anti-cancer immune responses.

In current presentation, I tried to describe the current status of PCa immunotherapy focusing on the vaccines and checkpoint inhibitors, and the combined immunotherapeutic approaches from a variety of angles.

Chemotherapy of Prostate Cancer

Masayoshi Nagata

Department of Urology, Juntendo University, Graduate School of Medicine, Japan

Short CV

2000 March	Graduated from Faculty of Medicine, the University of Tokyo
2000-2006	Residency; Urology training program, Department of Urology, the University of Tokyo The University of Tokyo and affiliated hospitals
2006-2010	Department of Urology, Graduate School of Medicine, The University of Tokyo
2010-2013	Research associate, Department of Urology, Faculty of Medicine, the University of Tokyo
2013-2015	Medical Director, Department of Urology, National Center for Global and Health Hospital
2015. July -	Associate Professor, Department of Urology, Juntendo University Graduate School of Medicine

Message

When considering taxane-based chemotherapy for castration-resistant prostate cancer, it is focused on when to use it from the viewpoint of maximum efficacy and minimum adverse events.

Chemotherapy of mHSPC

Jin Seon Cho

Hallym University, Korea

Short CV

Academic Education:

1979-1985	M.D. College of Medicine, Yonsei University, Seoul, Korea
1986-1989	Master Degree, Graduate School, Yonsei University, Seoul, Korea
1989-1993	Ph.D. Graduate School, Yonsei University, Seoul, Korea
1997-1998	Visiting Scholar, Department of Urology, Northwestern University, Chicago, USA

Career:

2005-Current	Professor, Department of Urology, Hallym University Sacred Heart Hospital, Anyang, Korea Professional Organization and Society
2016-2018	President of the Korean Urological Oncology Society

Message

Updated guidelines for metastatic hormone-sesitvive prostate cancer and optimal treatment sequence for metastatic castration-resistant prostate cancer

Educational Session 2 || Robotic Surgery I

Chairpersons		**Chikara Ohyama** (Japan) **Gyung Tak Mario Sung** (Korea)	
Speakers	EdS2-1	Present Status of Robotic Urologic Surgery in Japan	**Atsushi Takenaka** (Japan)
	EdS2-2	Robotic Partial Nephrectomy for Complex Renal Tumor	**Ryoichi Shiroki** (Japan)
	EdS2-3	Novel robotic systems and future directions	**Koon Ho Rha** (Korea)

Chairpersons

Chikara Ohyama

Department of Urology, Hirosaki University School of Medicine, Japan

Professional Training and Employment:

4/16-Present	Vice-principal, Hirosaki University Hospital
8/04-Present	Professor and Chairman, Department of Urology, Hirosaki University School of Medicine
3/02-7/04	Assistant Professor, Department of Urology, Akita University School of Medicine, Akita, Japan
11/99-2/02	Instructor, Department of Urology, Tohoku University School of Medicine, Sendai, Japan
11/98-11/99	Senior Urologist, Department of Urology, Sendai National Hospital, Sendai, Japan
7/96-10/99	Post Doctoral Associate, Burnham Institute, La Jolla Cancer Research Center, La Jolla, CA, USA.
2/96-7/96	Instructor, Department of Urology, Tohoku University School of Medicine, Sendai, Japan
92-96	Medical Staff, Department of Urology, Tohoku University School of Medicine, Sendai, Japan
91-92	Chief, Urological Clinic, Ogachi Central Hospital, Akita, Japan
86-91	Medical Staff, Urology, Tohoku University Hospital
84-86	Resident, Urology, Tohoku University Hospital
84	Passed the Examination on National Board

Gyung Tak Mario Sung

Department of Urology, Dong-A University Medical Center, Korea

July 1997 - July 1999	Fellowship in Advanced Urologic Laparoscopy and MIS Glickman Urological Institute, The Cleveland Clinic Foundation, Cleveland, OH, 44195, USA
March, 2001 - August, 2002	Staff, Urological Institute, The Clinic Foundation, Cleveland, Ohio, USA
August 17-20, 2006	Co-chairman, Local Organizing Committee, 24th World Congress of Endourology and SWL (WCE), Aug.17-20, 2006, Cleveland, Ohio, USA
March 2002 – Feb. 2010	Chairman and Chief Professor, Department of Urology, Dong-A University Hospital, Busan, Korea
March, 2008 – Present	President of Asian Society of Endourology (ASE)
March 2014 – Present	Associate editor of Asian Journal of Urology (AJU)
Sept., 2015 - Present	Vice President of Korean Urological Association
March 2014 – Present	Deputy Director of Asian School of Urology, UAA
Jan, 2017 – Oct.7, 2018	Co-Chair, Local Organizing Committee Society of International Urology (SIU) 2018, Seoul.

Present Status of Robotic Urologic Surgery in Japan

Atsushi Takenaka

Division of Urology, Tottori University Faculty of Medicine, Japan

Short CV

Medical School: Yamaguchi University (1980-1986)
Internship: Kobe University (1986-1987)
Graduate School of Medicine: Kobe University (1987-1991), Ph.D (Urology and Pathology)
Assistant Professor in Kawasaki Medical School (2003-2005)
Visiting Professor in Weill Medical College of Cornell University (2006)
Associate Professor in Kobe University Graduate School of Medicine (2007-2010)
Professor and chairman in Tottori University Faculty of Medicine (2010-)
Vice director of Tottori University Hospital (2017-)

Abstract

About 300 da Vinci machines have been installed in Japan, and Japan became the second largest country in the number of da Vinci machine in the world. Since April of 2018, 12 operations including surgeries for bladder cancer, gastric cancer, esophageal cancer, rectal cancer, endometrial cancer, lung cancer, mediastinal tumor, uterine leiomyoma, and valvular disease of the heart, are covered by public insurance. So, the second stage of robotic surgery started in Japan in this year.

Japanese Society of Endourology (JSE) established proctoring system for the safe introduction and promotion of robotic surgery in 2015. Until now, 348 proctors have been certified by JSE. This year, JSE changed this system along with the change of the insurance system, i.e., JSE certifies the proctor by each surgery, robotic radical prostatectomy, radical cystectomy, and partial nephrectomy.

We would like to introduce the present status of robotic surgery in Japan and the recent JSE action for robotic surgery.

Robotic Partial Nephrectomy for Complex Renal Tumor

Ryoichi Shiroki

Fujita Health University School of Medicine, Japan

Kosuke Fukaya (Fujita Health University School of Medicine, Japan)
Naohiko Fukami (Fujita Health University School of Medicine, Japan)
Mamoru Kusaka (Fujita Health University School of Medicine, Japan)

Short CV

2016	Deputy director in Fujita Health University Hospital, Aichi, Japan
2009	Professor & Chairperson, Urology, Fujita Health University School of Medicine, Aichi
2000 - 2008	Associate Professor, Fujita Health University School of Medicine, Aichi,
1992 - 1994	Research fellow, Surgery, Washington University School of Medicine, St. Louis MO. USA
1984 - 1986	Resident in Medicine, Keio University Hospital, Tokyo, Japan
1984	Graduation from Keio University School of Medicine, Tokyo

Abstract

Partial nephrectomy (PN) is the current standard of care for the treatment of localized renal tumor because of the oncological equivalence and better functional outcomes in comparison with radical. Due to the instrument articulation and 3D vision, robotic-assisted PN (RAPN) reduces the technical challenges associated with tumor excision and parenchymal reconstruction. Although RAPN was initially used for simple tumors, the growing experiences have progressively allowed the treatment of larger and complex masses.

There are some scoring systems for measuring the complexity of renal tumors such as RENAL nephrometry or PADUA. These scores include tumor characteristics like size, nearness to the renal sinus and location. These scores were demonstrated to correlate with the perioperative outcomes such as ischemic time, blood loss and complications. Among them, T1b case, complete endophydic and hilar-located tumors were thought to be difficult to treat. In addition to the tumor, patient factors were also associated with problems in RAPN. Those factors consist of CKD status, toxic fat surrounding tumor and contra lateral renal function. These factors might be comprised with extended ischemic time possibly leading to raise the risk of postoperative hemodialysis or complications.

I want to discuss some of my experienced complex RAPN cases with audience.

Novel robotic systems and future directions

Koon Ho Rha

Department of Urology, Severance Hospital, Urological Science Institute, Yonsei University College of Medicine, Republic of Korea

Ki don Chang (Department of Urology, Yonsei University Wonju College of Medicine, Korea)
Ali Abdel Raheem (Department of Urology, Tanta University Medical School, Egypt)

Short CV

PERSONAL INFORMATION : Koon Ho RHA, M.D., FACS, Ph.D.
HOSPITAL/ACADEMIC APPOINTMENTS
2012.9 - present Associate Dean, Academic Affairs, Yonsei University
2002.4 - present Professor; Department of Urology, Yonsei University
2002-2003 Faculty (Visiting Assistant Professor); Department of Urology
Johns Hopkins University School of Medicine, USA
MEMBERSHIP IN PROFESSIONAL SOCIETIES
Fellow, American College of Surgeons (FACS)
Ediotorial board member, Journal of Endourology
President Elect & Advisory board member, Engineering and Urology Society
Advisory board member and consulting editor, Journal of Robotic Surgery
SCI PEER-REVIEWED SCI PUBLICATIONS (170)
CLINCIAL EXPERIENCE : > 1700 robotic cases (1500 prostatectomies)

Abstract

Robot-assistance is increasingly used in surgical practice. We performed a nonsystematic literature review using PubMed/MEDLINE and Google for robotic surgical systems and compiled information on their current status. We also used this information to predict future about the direction of robotic systems based on various robotic systems currently being developed. Currently, various modifications are being made in the consoles, robotic arms, cameras, handles and instruments, and other specific functions (haptic feedback and eye tracking) that make up the robotic surgery system. In addition, research for automated surgery is actively being carried out. The development of future robots will be directed to decrease the number of incisions and improve precision. With the advent of artificial intelligence, a more practical form of robotic surgery system can be introduced and will ultimately lead to the development of automated robotic surgery system.

Educational Session 3 || Robotic Surgery II

Chairpersons		**Masahiro Yashi** (Japan) **Jaemann Song** (Korea)	
Speakers	EdS3-1	Tips for reducing complications after robot-assisted laparoscopic partial nephrectomy	**Kazuhide Makiyama** (Japan)
	EdS3-2	Robot-Assisted Radical Cystectomy with Total Intracorporeal Urinary Diversion: Korean Experience	**Seok Ho Kang** (Korea)
	EdS3-3	Special Brief Remark Complication of robot-assisted radical cystectomy	**Byong Chang Jeong** (Korea)
	EdS3-4	Special Brief Remark Current Status of Robotic Cystectomy	**Satoru Muto** (Japan)

Chairpersons

Masahiro Yashi

Department of Urology, Dokkyo Medical University, Japan

Education
Jichi Medical University, Shimotsuke-shi, Tochigi, Japan (MD1991, PhD2003)

Professional Experience/Activities
Dokkyo Medical University, Mibu, Tochigi Professor, 2016-present/Associate professor, 2012-2016
Perform RARP ePLND, as well as diagnose and treat PCa patients at high-volume office. More than 600 of RARP experiences, and surgical instruction for young urologists. Study of localized, advanced, and castration-resistant PCa.
St. Luke's International Hospital, Chuo-ku, Tokyo Urological medical staff, 2007-2012
Assess, diagnose, and treat benign/malignant prostatic diseases, bladder cancer, and renal cancer/failure patients. 650 of retropubic prostatectomy, 100 of radical cystectomy with neobladder construction, and laparoscopic nephrectomy/live donor nephrectomy experiences. Study of renal function and ethics in live kidney transplantation, and comprehensive neuroendocrine (NE) marker evaluation in PCa.

Jaemann Song

Department of Urology, Cheju Halla General Hospital, Korea

Professional

1977-78	Intern, Severance Hospital, Seoul
1978-82	Resident, Dept of Urology, Severance Hospital, Seoul
1982-85	Flight Surgeon & Chairman, Dept of Urology, Aerospace Medicine Hospital, Korean Air Force, Seoul
1985-87	Instructor, Urology, Yonsei University Wonju College of Medicine(YUWCM), Wonju
1987-90	Assistant Professor, Urology, YUWCM, Wonju
1988-90	Research Fellow & Associate, Urology Research Lab, Mayo Clinic, Rochester, Minnesota, USA
1990-96	Associate Professor, Urology, YUWCM, Wonju
1996-2018	Professor, Urology, YUWCM, Wonju
1997-99	Chief, Dept of Planning & Management, YUWCM & Wonju Severance Christian Hospital(WSCH), Wonju
2000-06	Chairman, Department of Urology, YUWCM, Wonju
2006-07	CEO, Credit Union Bank of YUWCM & WSCH, Wonju
2007-13	Superintendent, WSCH, Wonju
2011-13	President & CEO, YUWCM & WSCH, Wonju
2013	Exchange Professor, UCSF, SF, USA
2018-	Emeritus Professor of Yonsei University Chairman, Dept of Urology, Cheju Halla General Hospital

Tips for reducing complications after robot-assisted laparoscopic partial nephrectomy

Kazuhide Makiyama

Department of Urology, Yokohama City University, Japan

Masahiro Yao (Department of Urology, Yokohama City University, Japan)

Short CV

Speciality: robotic and laparoscopic surgery, simulation

Education:

2002	Doctor of Medical Science, Yokohama City University
1994	M.D. Faculty of Medicine, Yokohama City University

Training:

1994-1996	Resident, Yokohama City University

Appointments:

2009-present	Associate Professor, Department of Urology, Yokohama City University
2002-2009	Assistant Professor, Department of Urology, Yokohama City University
2001-2002	Assistant Professor, Department of Urology, Tokyo Woman's Medical University
2000-2001	Medical staff in Urology, Yokohama City Unversity Medical Center
1998-2000	Medical staff in Urology, Chigasaki Municipal Hospital
1996-1998	Medical staff in Urology, Yokohama Minami Kyosai Hospital

Abstract

Partial nephrectomy is the standard treatment for T1 renal cell carcinoma. Recently, it has become possible to resect highly complex tumors in a minimally invasive manner using surgical robots. The goals of partial nephrectomy are cancer control, preserving renal function, and avoiding complications. As tumor complexity increases, it becomes harder to achieve these goals. We consider that the importance of these goals should be ranked as follows: 1) avoiding complications, 2) cancer control, and 3) preserving renal function. We present videos that demonstrate our robot-assisted laparoscopic partial nephrectomy method, which aims to reduce complications.

The main points of our technique are outlined below. We always use the 4th arm to obtain a better surgical field via either the transperitoneal or retroperitoneal approach. We prefer to employ total arterial clamping, which makes it easier to identify intrarenal structures during tumor resection. Major blood vessels are cut using a sealing device to avoid postoperative bleeding. When the tumor is located near the renal vein, we prefer to clamp both the renal artery and vein to avoid air embolisms. We close Gerota's fascia to compress the partial nephrectomy site.

Robot-Assisted Radical Cystectomy with Total Intracorporeal Urinary Diversion: Korean Experience

Seok Ho Kang

Korea Universtiy College of Medicine, Korea

Tae Il Noh (Korea Universtiy College of Medicine, Korea)
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Present Position
Professor & Director, Department of Urology, Korea University College of Medicine, Seoul, Korea
Director, Robotic and Minimally Invasive Surgery Center, Korea University Hospital
Director, International Health Care Center, Korea Universtiy Hospital
Executive board member, Korean Endourology Society
Executive board member, Korean Urological Oncology Society

Education
Mar,1991~Feb,1997 Medical Doctor degree, College of Medicine, Korea University
Sep,2001~Aug,2003 Master degree, College of Medicine, Korea University
Sep,2004~Feb,2007 Ph.D. degree, College of Medicine, Korea University

Abstract
Since its description in 2003, the use of RARC has been steadily increasing in the world as minimally invasive alternatives to open RC in an effort to reduce morbidity and enhance recovery. In the National Cancer Databse in the United States, 39.4% of patients underwent minimally invasive approaches to radical cystectomy in 2013, an increase from 26.3% in 2010. In Korea, the trend is steadily increasing to about 12% of the total cystectomy by 2016. Actually, most academic and referral centers routinely perform RARC, recently.
It has been suggested that RARC results in improvements in perioperative morbidity and ease of recovery, as well as permitting earlier initiation of adjuvant systemic therapies. However, despite these potential perioperative benefits, RARC has been criticized for the paucity of reports regarding a few oncologic concerns. Despite there is continued need for high-quality randomized controlled trials to define its role in patients undergoing RC, expanding published data are accumulating.
By the several data up to now, RARC can implement adequate PLND in terms of its territory and yield and shows an acceptable PSM rate. In addition, it is possible to avoid the urine leak or inadvertent bladder injury and safely operate with keeping the oncologic principle. Also, it showed similar results to the open series in patients with most T3 or higher stages.
In this presentation, we will present the current status of RC with urinary diversion (UD), especially in Korea. Then, we discuss the fundamental surgical principles that have led to contemporary techniques of UD as well as the technical aspects of several recently described robotic intracorporeal urinary diversions (ICUD) in the context of these surgical principles.

Complication of robot-assisted radical cystectomy

Byong Chang Jeong

Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Short CV

1989-1996	College of Medicine, Seoul National University (M.D.)
2004-2006	Postgraduate School, College of Medicine, Seoul National University (PhD.)
2008-2014	Assistant Professor, Samsung Medical Center, Sungkyunkwan University School of Medicine
2012-2013	Postdoctorial fellowship, Dept. of Urology, Johns Hopkins Medical Institutions, USA
2014-	Associate Professor, Samsung Medical Center, Sungkyunkwan University School of Medicine
2018-	Vice-Dean of student affairs, Sungkyunkwan University School of Medicine

Message

Recently robot-assisted radical cystectomy (RARC) has been expanding worldwide. The first RARC was performed in USA in 2003. Since then 18.5% of total RC in USA is RARC in 2012. Meta-analysis of 5 RCTs comparing RARC to open RC showed the same oncological outcomes, reduced blood loss, and short hospital stay of RARC. Major postoperative complication rate was similar between two groups. Some insists that intra-corporeal RARC may be superior to open RC but there has been no RCT now. Technically RARC must be safe, feasible, easy-doing minimal invasive surgery. In further RARC may be a standard surgery for bladder cancer because of the advantage of minimally invasive surgery.

Current Status of Robotic Cystectomy

Satoru Muto

Department of Urology, Juntendo University Graduate School of Medicine, Japan

Short CV

1985-1992	Faculty of Medicine, Akita University School of Medicine
1992-1998	Residency; Urology training program, Department of Urology, University of Tokyo and affiliated hospital
1998-2002	Graduate school of medicine, The University of Tokyo
2002-2003	Research of Assistant, Department of Urology, Faculty of Medicine, The University of Tokyo
2003-2007	Assistant Professor, Department of Urology, Teikyo University School of Medicine
2007-2016	Associate Professor, Department of Urology, Teikyo University School of Medicine
2017-	Special Appointed Professor, Department of Urology, Juntendo University Graduate School of Medicine

Message

Unfortunately, the technique of robotic cystectomy has not become firmly established yet. I will simply show the current status of RARC all over the world.

Symposium 8 || New Horizon of Laser Surgery

Chairpersons		**Kyu-Sung Lee** (Korea) **Shigeo Horie** (Japan)	
Speakers	SY8-1	Mechanism and efficacy of vaginal and intraurethral sub ablative erbium: YAG laser treatment for women and men incontinence and prostatodynia	**Adrian Gaspar** (Argentina)
	SY8-2	Comparison between erbium:YAG laser therapy and sling procedures in the treatment	**Nobuo Peter Okui** (Japan)

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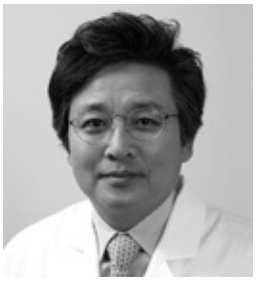
Chairpersons



Kyu-Sung Lee

Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Kyu-Sung Lee is Professor of Urology and General Director in the Smart Health Care & Medical Device Research Center at Samsung Medical Center in Seoul, Korea. He is chairman of Department of Urology, Samsung Medical Center.

Prof Lee completed his undergraduate training at Seoul National University College of Medicine, where he also underwent postgraduate training, specializing in urology. He previous worked as a Clinical and Research Fellow of Urology at Samsung Medical Center, and completed a PhD (Urology) at Seoul National University College of Medicine.
Prof Lee has held previous positions as a Visiting Professor of Urology at both the University of Virginia School of Medicine in Virginia, US, and the University of California San Diego, in California, US.

He is a member of numerous professional organizations including the Korean Urological Association, Korean Continence Society, American Urological Association, International Uro-gynecology Association, International Continence Society, European Association of Urology and Urological Association of Asia. He is the editorial board for the *International Neurourology Journal, Investig Clin Urol, and LUTS.* He is president-elect of Korean Urological Association

Shigeo Horie

Department of Urology, Juntendo University Graduate School of Medicine, Japan

Education

1979-1981 College of Arts and Sciences, The University of Tokyo, Tokyo, Japan
1981-1985 Faculty of Medicine, The University of Tokyo

Post graduate traininfg and Present Position

1985 Residency in Urology; University of Tokyo Hospital and affiliated hospitals
1988 Instructor, Department of Urology, Faculty of Medicine, University of Tokyo
1988 Research fellow, Division of Nephrology, The University of Texas, Southwestern Medical Center at Dallas, Dallas, TX.
1989 Clinical fellow, Transplant Service, Parkland Memorial Hospital, Dallas, TX.
1995 Staff Surgeon, National Cancer Center Hospital
1998 Assistant Professor, Department of Urology, The University of Tokyo
2002 Associate Professor, Department of Urology, Kyorin University
2003 Professor and Chairman, Department of Urology, Teikyo University
2011 Professor and Chairman, Department of Urology, Juntendo University

Mechanism and efficacy of vaginal and intraurethral sub ablative erbium: YAG laser treatment for women and men incontinence and prostatodynia

Adrian Gaspar

Espacio Gaspar Clinic, Mendoza University, Mendoza, Argentina

Short CV

Dr. Gaspar is an OB/GYN specialist, Cosmeto-gynecologist. Former Professor at the Gynecology Department of the Faculty of Medicine at Mendoza University, Argentina, and an owner and director of the Espacio Gaspar Clinic of Gynecology, Anti-Aging and Bioregenerative Medicine in Mendoza, Argentina. With more than 15 years of education and experience in the use of lasers in medicine, Dr. Gaspar has performed thousands laser vaginal procedures and has trained more than 400 doctors worldwide. He is the pioneer in the use of laser treatments for vaginal rejuvenation, having published the first paper related to this topic in 2011. He has received many awards worldwide due to his pioneering research in the use of lasers for vaginal and urethral treatments. President of SOLAGEF (Sociedad Latinamerica de Ginecologia Esteticay Funcional) and the faculty of World Congress on Controversies in Obstetrics, Gynecology & Infertility.

Abstract

Fotona SMOOTH laser is the patented unique technology of long pulse sub-ablative erbium YAG laser which offers several safe and effective treatments for the urinary symptoms in urogynecology and urology. I have been using this laser since 2010, and established the safe and effective method of vaginal and intraurethral treatment for SUI and GSM. In addition to the women's health application, recently this laser has started using for several Men's health treatments. I will talk about the mechanism and efficacy of these laser treatments.

3-YEAR FOLLOW-UP OF PATIENTS WITH STRESS URINARY INCONTINENCE TREATED WITH SUB-ABLATIVE VAGINAL ER: YAG LASER

Introduction and Hypothesis: Stress urinary incontinence (SUI) is a common health problem that affects roughly 35 % of women in the reproductive period and greatly affects the quality of life. A prospective and controlled study was conducted to assess the long-term efficacy of non-ablative Er:YAG laser treatment of SUI. The effects were compared to the effects of Pelvic Floor Muscle Training (PFMT).

EFFICACY OF ERBIUM YAG LASER TREATMENT COMPARED TO TOPYCAL ESTRIOL TREATMENT OF VAGINAL ATROPHY SYMPTONS

HYPOTHESIS: The objective of this prospective comparative cohort study was to establish the effectiveness and safety of Erbium:YAG (Er:YAG) laser treatment for vaginal atrophy and to compare it with an established topical estriol treatment.

INTRAURETHRAL ERBIUM YAG LASER FOR THE MANAGEMENT OF URINARY SYMPTOMS OF GENITOURINARY SYNDROME OF MENOPAUSE

HYPOTHESIS: The objective of this study was to assess the efficacy and safety of intraurethral erbium laser treatment of urinary symptoms of genitourinary syndrome of menopause.

MANAGEMENT OF PROSTATODYNIA IN YOUNGER PATIENTS WITH SUB-ABLATIVE ERBIUM: YAG INTRAURETRAL LASER

HYPOTHESIS: This prospective study aimed to compare the clinical outcomes between the use of the Erbium: YAG laser, administered in long sub-ablative pulses applied at the level of the male prostatic urethra, to the use of the standard treatment of oral tadalafil for the treatment of prostatodynia symptoms in young patients.

Comparison between erbium:YAG laser therapy and sling procedures in the treatment

Nobuo Peter Okui

Dr. Okui's Urogynecology and Urology, Japan

Short CV

Dr Okui received his PhD in Medicine from Graduate School, University of Tokyo in 1999, and completed his clinical fellowship in Urology in 2000 (University of Tokyo), and Gynecology in 2001 (Harvard Medical School, Brigham and Women's Hospital).

He is nationally recognized Urogynecology physician who practices 800 operations.

As an except on sex hormones and their influence on athletic performance. He is an adviser for the 2020 Olympic game. He has received a number of awards and his been selected as a principle speaker of Japan for World Meeting of the international Society for Sexual Medicine 2020.

Abstract

Purpose: Stress urinary incontinence (SUI) and mixed urinary incontinence (MUI) lead to poor quality of life. In Japan, urinary incontinence is treated with tension-free vaginal tape (TVT) or transobturator tape (TOT) sling procedures, which involves inserting a synthetic material; however, problems arise with artificial mesh in some instances, requiring new treatment methods. Hence, laser therapy, whereby an erbium-doped yttrium aluminum garnet laser is directed into the vagina and urethra, may be useful. The study aimed to compare the effects of these three treatments.

Methods: Subjects included patients who received TVT, TOT, or laser therapy (n = 50 each). The one-hour pad test, International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF), and overactive bladder symptom score were used to assess the patients before and 12 months after treatment. For laser therapy, a probe was inserted into the vagina after applying a local anesthetic to the vaginal wall, and irradiation was performed for 20 min at a wavelength of 2940 nm. This treatment was performed three times every alternate month.

Results: As per the one-hour pad test and ICIQ-SF, the TVT, TOT, and laser therapy groups showed comparable improvements in SUI. For patients with MUI, some in the TVT and TOT groups showed exacerbation; however, all patients in the laser therapy group tended to improve.

Conclusions: The efficacy of laser therapy for urinary incontinence was confirmed. This is the first study to report on the effect of laser therapy on urinary incontinence in Japanese women.

Podium & Posters

Chairpersons

Podium 1

Yoshiro Sakamoto

Department of Urology, Juntendo University Nerima Hospital, Japan

Education

1982 Graduated from Tsukuba University, School of Medicine

1989 Graduated from postgraduate school of Juntendo University, Department of Urology and Pathology

Occupation

1982-1985 Resident in Urology, Juntendo University School of Medicine

1985-1989 Fellow in Urology, Pathology and Immunology (doctor course)

1989-1993 Assistant Professor of Juntendo University School of Medicine, Department of Urology

1993-1998 Assistant Professor of Juntendo University Urayasu Hospital, Department of Urology

1993-1995 Research Fellow in Cancer Biology, Wake Forest University, Bowman Gray School of Medicine (Prof. Frank M Torti), NC, USA

1998-2007 Assistant Professor of Juntendo University School of Medicine, Department of Urology

2007- Associate Professor of Juntendo University Nerima Hospital, Department of Urology

Podium 2

Akira Tsujimura

Department of Urology, Juntendo University Urayasu Hospital, Japan

Professional Training and Employments

2017- Professor, Department of Urology, Juntendo University Urayasu Hospital

2015-2017 Associate Professor, Department of Urology, Juntendo University Urayasu Hospital

2014-2015 Associate Professor, Department of Urology, Juntendo University Graduate School of Medicine

2005-2014 Associate Professor, Department of Urology, Osaka University Graduate School of Medicine

1997-2004 Assistant Professor, Department of Urology, Osaka University Graduate School of Medicine

1996-1997 Instructor, Department of Urology, Osaka University Medical School

1990-1996 Residency and Instructor, Department of Urology, Osaka National Hospital

1988-1990 Intern in Urology, Osaka University Hospital and the Affiliated Hospitals

Fellow

New York University Medical School, New York, USA (May 1998- May 2000)

O01-1 *Bmal1* is a regulator of p21 expression in prostate and associated with prostate proliferation

Masakatsu Ueda[1], Hiromitsu Negoro[1,2], Jin Kono[1], Atsushi Sengiku[1,3], Osamu Ogawa[1]

1. Kyoto University Graduate School of Medicine, Department of Urology, Japan
2. Tsukuba University Hospital, Department of Urology, Japan
3. Sengiku Urology Clinic, Japan

Objectives
Prostate hyperplasia is considered to be induced by many factors like testosterone, estrogen, obesity and chronic inflammation as well as aging, but the mechanism remains unclear. The role of *Bmal1*, a transcription factor associated with circadian rhythm, metabolism, aging and so on, in the prostate is examined by analyzing prostate-specific *Bmal1* KO mice in this study.

Methods
Cre-loxP system-mediated prostate-specific *Bmal1* KO mice were generated. The prostate of these mice was dissected and were divided into each lobe; ventral lobe (VP), dorsolateral lobe (DLP) and anterior lobe (AP). Their weight and histology were compared with those of WT mice. Next, BMAL1-knockdown immortalized prostate cells (epithelial and stromal cells) were generated using shRNA and their proliferation potency was assessed by the WST-8 assay. Furthermore, CAGE (Cap Analysis of Gene Expression) was employed to investigate the underlying mechanism of how *Bmal1* affects prostate proliferation.

Results
Bmal1 deletion resulted in mild weight loss in VP and DLP of 20 week-old-mice, but there were no obvious histological differences between KO and WT mice. BMAL1-knockdown prostate cells exhibited slower proliferation than mock cells. The gene expression analysis revealed that the expression of cell cycle regulating genes is mainly changed including upregulation of *Cdkn1a* (p21) in KO mice.

Conclusions
It is suggested that *Bmal1* can promote prostate proliferation by modulating cell cycle progression.

O01-2 Conversion of prostate cancer from hormone independency to dependency due to AMACR or E74-like factor inhibition

Kiyoshi Takahara, Atsuhiko Yoshizawa, Masanobu Saruta, Shuhei Tomozawa, Masaru Hikichi, Kosuke Fukaya, Manabu Ichino, Naohiko Fukami, Hitomi Sasaki, Mamoru Kusaka, Ryoichi Shiroki

Department of Urology, Fujita Health University School of Medicine, Japan

Objectives
Castrate-resistant prostate cancers (PCa) eventually develop metastasis, and radical treatment may not be possible for patients at this stage.

Methods
In order to resolve the mechanism of castrate-resistant PCa, we performed a cDNA-microarray assay of two PCa cell lines, LNCaP (androgen dependent) and C4-2 (androgen independent). Among them, we focused on an alpha-methylacyl-CoA racemase (AMACR) and a novel Ets transcription factor, E74-like factor 5 (ELF5), whose expression levels were extremely high in C4-2 in comparison with LNCaP. Then we investigated the biological roles of them in acquisition of androgen-refractory PCa growth.

Results
Immunohistochemistry and Western blot analysis revealed AMACR expression was much stronger in C4-2 than LNCaP, while ELF5 was expressed mainly in cytosol both in LNCaP and C4-2. Inhibition of AMACR expression using AMACR-siRNA induced an increase in the expression of androgen receptor (AR) inducing a significant decrease of cell viability in C4-2 when cultured in androgen-depleted serum. Inhibition of ELF5 expression using ELF5-siRNA in C4-2 induced decreased expression of AR corepressor, period circadian protein homolog 1, and MTT assay of C4-2 after ELF5 siRNA transfection showed the same cell growth pattern of LNCaP.

Conclusions
Our in vitro experiments demonstrated that AMACR and ELF5 inhibition may induce the possibility of reacquisition of hormone sensitiveness of PCa cells. We suggest that they could be novel potential targets for the treatment of hormone-refractory PCa patients.

O01-3 Effects of exosomes from adipose-derived stem cells on recovery of erectile function in a bilateral cavernous nerve injury rat model

Yong Hyun Park, Ae Ryang Jung, Ga Eun Kim, Mee Young Kim, Ji Young Lee, Hyong Woo Moon, Ji Youl Lee

Department of Urology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Korea

Objectives

Post-prostatectomy erectile dysfunction (ED) is the major problem for patients with prostate cancer. Recently, tissue-engineering approach has been attempted for post-prostatectomy ED, but the use of stem cells raised several concerns including immune-mediated rejection, limited cell survival, and malignant transformation. In this study, we investigated the effects of exosomes from adipose-derived stem cells (ADSCs) on recovery of erectile function in a bilateral cavernous nerve injury (BCNI) rat model.

Methods

Exosomes were isolated from the supernatants of cultured ADSCs by pelleting ultracentrifugation and density gradient ultracentrifugation method. Then, we confirmed the expression of exosomal negative marker (calnexin) and exosomal positive marker (CD9, CD81, CD63) by western blot analyses. We investigated the efficacy of exosomes from ADSCs on the cavernous nerve in a BCNI rat model. Rats were randomly divided into three groups: Normal group, BCNI group, and Exosome (BCNI group with exosomes on cavernous nerve) group. Erectile function was assessed by measuring the intracavernous pressure (ICP)/mean arterial pressure (MAP) level. Penile and cavernous nerve tissues were retrieved for histologic and molecular analyses.

Results

Exosomes from ADSCs showed significantly increased expression of CD9 and CD81 and negative expression of calnexin and CD29 that indicate a successful isolation of exosomes from culture medium. In animal experiments, the ICP/MAP ratios in the Exosomes group were significantly increased compared to those in the BCNI group. Exosomes group showed significantly increased smooth muscle/collagen ratio, nNOS content, phospho-eNOS protein expression, and cGMP level, compared with the BCNI group.

Conclusions

Exosomes from ADSCs could significantly improve erectile function and alleviate pathological changes in a BCNI rat model. Exosomes derived from ADSCs may be a potential cell-free agent for post-prostatectomy ED.

O01-4 The mutational burden of targeted genes significantly correlated with overall survival after targeted therapy in metastatic renal cell carcinoma

Sung Han Kim[1], Jongkeun Park[2], Dongwan Hong[2], Weon Seo Park[3], Jinsoo Chung[1]

1.Department of Urology, Prostate Cancer Center, National Cancer Center, Goyang, Gyeonggi-do, Rep. Korea
2.Clinical Genomics Analysis Branch, Research Institute, National Cancer Center, Goyangsi, Gyeonggi-do, Rep. Korea
3.Deaprtment of Pathology, Prostate Cancer Center, National Cancer Center, Goyang, Gyeonggi-do, Rep. Korea

Introduction & objectives

This study aimed to find the correlation between tumor mutation burden and systemic first line therapeutic response in metastatic tissue samples from patients with metastatic renal cell carcinoma (mRCC).

Materials & methods

Between 2005 and 2017, 168 triplet-tissue block samples (with at least one tissue block having passed their quality checks) from 56 mRCC patients were selected for targeted gene sequencing (TGS) using the 88 targeted genes from the National Cancer Center, Korea (NCC) kidney cancer panel. The patients' medical records, including therapeutic responsive profiles with overall survival (OS) to first-line targeted therapy, were evaluated with the mutational burden of triplet tissue samples using 88 TGS. The OS was defined as the time interval between the diagnosis of metastasis and death. A few significant target genes associated with therapeutic response towards targeted therapy were identified after comparing the mutational burden of positive for all three blocks and one or two positive blocks (p-value < 0.05).

Results

The median PFS for the first-line targeted therapy and OS were 8.7 and 42 months, respectively. MSKCC and Heng risk criteria showed 28.9/65,v8/5.3% and 26,3/57.9/15.8% for favorable, intermediate, and poor risk groups, respectively. Also, 55.3% and 52.6% patients received metastatectomy and nephrectomy, respectively. The clinical T stage comprised of T1 26.8%, T2 16.1%, T3 8.9%, T4 1.8%, and Tx 46.4% and N stage of 26.3% of N1. The histopathology showed 50.0%, 1.8%, and 48.2% of clear, non-clear, and unknown cells, respectively. Eighteen (32.1%) patients had all triplet blocks passed for quality check, whereas 21 (37.5%) and 17 (30.4%) patients had two or one passed tissue blocks, respectively. Among the 18 patients with triplet-block, TP53, URB4, PTK2, and SGO2 genes had significant discrimination power for OS on comparing their mutational burden in the three blocks positive group (N=7) and two or fewer blocks positive groups (N=11) ($p<0.05$).

Among the 39 patients with either doublet or triplet blocks passed for quality check, TP53, URB1, PTK2, SGO2, BRAF, NEDD4, PDXDC1, CDH1, FGFR2, RET, RUNX1, and SDHB genes had significant discrimination power for DFS when comparing their mutational burden in the three blocks positive group (N=7) and two or fewer blocks positive groups (N=14) ($p<0.01$).

Conclusions

The study showed the tumor mutational burden of many vital targeted genes to be significantly correlated with OS from metastatic tissues in mRCC.

O02-1 Withdrawn

O02-2 Induction Chemotherapy Followed by Surgery versus Upfront Radical Cystectomy in Patients with Clinically Node-positive Muscle-invasive Bladder Cancer

Sahyun Pak[1], Dalsan You[1], In Gab Jeong[1], Cheryn Song[1], Jae-Lyun Lee[2], Bumsik Hong[1], Jun Hyuk Hong[1], Choung-Soo Kim[1], Hanjong Ahn[1]

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2. Department of Oncology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Objectives
To compare survival outcomes in patients with clinically node-positive muscle-invasive bladder cancer receiving induction chemotherapy (IC) followed by surgery and those who underwent upfront radical cystectomy (RC).

Materials and Methods
Outcomes were reviewed in patients with cT2–4N1–3M0 bladder cancer treated with IC followed by surgery or upfront RC between January 1995 and June 2017. Survival outcomes were analyzed using a propensity score matched cohort analysis.

Results
Of the 340 eligible patients, 106 received IC and 234 underwent upfront RC. After propensity score matching, the overall 3-year metastasis-free survival rate and 5-year cancer-specific survival rate of patients in the IC and RC groups were similar (49.4% vs. 46.0% and 49.6% vs. 49.8%, respectively). The 3-year metastasis-free survival rate was higher in the IC group than the RC group in cN1–2 patients, but this difference did not reach statistical significance (65.1% vs. 49.4%, P = 0.058). However, the 3-year metastasis-free survival rate of cN3 patients was seen to be significantly lower in the IC group than the RC group (22.9% vs. 40.3%, P = 0.047). The 5-year cancer-specific survival rate of cN1–2 patients was higher in the IC group than the RC group (68.1% vs. 52.9%, P = 0.035). However, the 5-year cancer-specific survival rate of patients with cN3 cancers was significantly lower in the IC group than the RC group (19.2% vs. 44.5%, P = 0.015).

Conclusions
In this study, IC was seen to improve cancer-specific survival in patients with cN1–2 muscle-invasive bladder cancers but was associated with poorer survival outcomes than upfront RC in patients with cN3 cancers. Therefore, upfront RC may have a role in the treatment of patients with clinically node-positive muscle-invasive bladder cancer and further investigation in prospective, randomized studies is warranted.

O02-3 An analysis of hospital based cancer registry data of retroperitoneal and male genital soft tissue sarcoma in Japan

Tomokazu Kimura, Yoshiyuki Nagumo, Shuya Kandori, Takahiro Kojima, Koji Kawai, Hiroyuki Nishiyama

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Objectives

Retroperitoneal and male genital soft tissue sarcoma are rare malignancies all over the world, with very low incidence rate. Due to the rarity of the disease, clinical data of Japanese patients with retroperitoneal and male genital sarcoma are limited. The aim of this study is to investigate the characteristics of retroperitoneal and male genital soft tissue sarcoma in Japan.

Methods

We obtained data for the patients with retroperitoneal and male genital soft tissue sarcoma diagnosed from 2012 to 2015 from the records in hospital based cancer registry (HBCR). The patients were identified based on ICD-O-3 site (C48, C60, C61, C62, C63, C64, C65, C66, C67, C68, and C74) and histological codes. The distribution of age, institute, origin, and histological diagnosis, was analyzed.

Results

A total of 4019 patients with retroperitoneal and male genital sarcoma were identified.

The median age was 65 years old (range 0-97). The Number of female patients were 1680(52.6%). Although total of 597 institutes registered the patients, only 10 institutes registered more than 10 patients per year. The peak age of onset of soft tissue sarcoma was sixties, while tumor from urinary tract were occurred at seventies. Most of sarcoma derived from retroperitoneal/peritoneal (C48) amounting to 3191(79.4%) patients. Adipocytic tumor, which include well differentiated liposarcoma and dedifferentiated liposarcoma, was the most common histological type and accounted 1906 patients (47.4%).

Conclusions

We revealed clinical status of retroperitoneal and male genital soft tissue sarcoma in Japan. HBCR data is very helpful to investigate the characteristic of rare malignancies in Japan.

O02-4 Overall dysfunction of T cells was significantly correlated with tumor grade in Renal Cell Carcinoma patients

Atsunari Kawashima[1], Takayuki Kanazawa[2], Taigo Kato[1,3], Takeshi Ujike[1], Akira Nagahara[1], Kazutoshi Fujita[1], Motohide Uemura[1,3], Hisashi Wada[2], Norio Nonomura[1]

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2. Department of Clinical Research in Tumor Immunology, Osaka University Graduate School of Medicine, Japan

3. Department of Urological Immuno-oncology, Osaka University Graduate School of Medicine, Japan

Objectives

To clarify immunological functions of tumor tissue infiltrating lymphocytes (TILs) in patients with renal cell carcinoma (RCC) and show its clinical significance.

Methods

We extracted 109 sets of TILs from 80 RCC patients. Each TIL was characterized on the basis of the expression of PD-1 and Tim-3 measured by flow cytometry. RNA sequencing and gene set enrichment analysis (GSEA) was used to determine the characteristics of each population. Functions of TILs from 18 patients were examined by measuring cytokine productivity (IFNg, TNFa and IL-2) based on each population.

Results

In CD8 T cells, the populations with high PD-1 expression were characterized as exhausted T cells. I CD4 T cells, the population with PD-1dimTim3+ was characterized as regulatory T cells. Both population in CD4 and CD8 T cells was significantly upregulated in the patients with the higher Furman grade (G3&4). The cytokine producing ability of PD-1dimTim-3- CD8+ T cells was significantly higher than that of both PD-1+Tim-3- and PD-1+Tim-3+ CD8 T cells ($p<0.001$), whereas the proportion of non-cytokine producing cells within PD-1dimTim-3+ CD4 T cells was significantly higher than that within the other CD4 T cells. When stratifying according to the tumor grade (high grade (n=11) and low grade (n=7)), the proportion of cytokine producing cells were significantly lower in each PD-1dim Tim-3- and PD-1+Tim-3- both CD4 and CD8 T cells of the high grade patients compared to the low grade patients.

Conclusions

This study showed that the dysfunctions of TILs were significantly correlated with tumor aggressiveness in RCC patients.

P-01 Results of protocol biopsy at 3 years after renal transplantation in our hospital

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Objectives

The significance of the protocol biopsy in renal transplantation is to estimate of a latent renal pathological change and improve graft survival. In our hospital, protocol biopsy is being performed at 3 months, 1 year and 3 years after transplantation. Calcineurin-inhibitors (CNIs)–based protocols constitute the most commonly used renal transplant maintenance immunosuppression. CNI-toxicity is a common complication of transplantation and elevated CNI levels are associated with nephrotoxicity, however, it's reported that too low trough levels increase the risk of de novo donor-specific antibodies, acute rejection and worse graft function. In this study, we have investigated results of protocol biopsy at 3 years after renal transplantation and influence of immunosuppressive agents and the trough levels of tacrolimus (TAC).

Methods

This retrospective analysis included 63 patients (44 males, 19 females) receiving Living-donor kidney transplantations at our hospital between March 2003 and June 2015, who were performed protocol biopsy in 3 years later after transplantation.

We investigated biopsy results, patient backgrounds, renal functions and immunosuppressive agents and the trough levels of TAC.

Results

In pathological finding, Borderline change, IF/TA and IgA nephropathy admitted some abnormality were 50/63 patients (79%), and some intervention performed in 16 patients for rejection and an IgA nephropathy.

CNI treatment of the patients consisted of cyclosporine (CyA) (n=8 patients) or TAC (n=55). In CyA group, five of the 8 patients had some intervention, which was statistically significantly higher (p=0.009) than in TAC group（11 of 55 patients）.

The trough level of TAC was kept at the target 3-5 ng/ml (2-13.6 (4.6 ± 1.6) ng/ml).

It were reduced the dose of TAC in 6 patients for CNIT in 3 years inspection results, but there were no differences in the TAC trough level by reduced group and non-reduced group, and there was also no differences on the frequency of interventions according to TAC trough level.

Conclusions

In this study, there was a high incidence of intervention in CyA group. We found no difference in the 3rd year protocol biopsy results according to TAC trough level.

P-02 Exploratory study of prognostic factors in mCRPC patients who administered Enzalutamide focusing on early PSA decline and PSA kinetics at PSA progression; results of retrospective multicenter study

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Background

Recent studies have shown that an early PSA response to AR-targeting agents in mCRPC is associated with a better prognosis. We analyzed the early PSA response to enzalutamide (ENZ) by measuring the PSA doubling time (PSADT) and PSA Velocity while monitoring oncologic outcomes and survival in Japanese patients.

Patients and Methods

A total of 241 patients (70 patients from Gunma University, 68 patients from Gunma Prefectural Cancer Center, 57 patients from Isesaki Municipal Hospital, 46 patients from Tatebayashi Kosei General Hospital) with mCRPC treated with ENZ were analysed. Patients' median age is 75±7.9 (range 53-93). The patients pre-docetaxel settings were 171 cases (71 %), post-docetaxel settings were 70 cases (29 %). The PSA-PFS and OS were assessed according to PCWG2 criteria. This study was approved by the institutional review board of Gunma University Hospital (No.1595).

Results

A case where PSA did not decline at all was defined as Primary Resistance (PR). A case in which PSA once declined after treatment but then progressed was defined as Acquired Resistance (AR). Those in which PSA remained low after treatment were defined as Good Response (GR). We observed 77 PR cases (31.9 %), 125 AR cases (51.9 %) and 39 GR cases (16.2 %). PSA-PFS and OS pre-docetaxel were significantly increased as compared to patients' post-docetaxcel (PSA-PFS; 47.0 wks vs. 13.4 wks p<0.001, OS; Not Yet Reached vs. 80.7 wks p<0.001). Multivariate analysis of prognostic factors, including the PSA response at 4 weeks, was performed using a Cox regression analysis. The PS (0 or 1-2), Hb (≧ 11.4 or <11.4), time to CRPC(≧ 12 m or <12 m), docetaxel treatment history (none or done) and a PSA decrease of 50% at 4 weeks were all significant factors for the prediction of OS (all variables, p <0.05). In cases of acquired resistance (n=125), a multivariate analysis using PSA kinetics factors such as PSADT and PSA Velocity (ng/mL/month) at PSA progression, Hb, time to CRPC(≧ 12 m or <12 m), PSADT (≧ 2 months or <2 months) and PSA Velocity (<20 ng/mL/month or ≧ 20 ng/mL/month), were all factors predicting OS following PSA progression (p<0.05).

Conclusions

Our study has demonstrated that PSA dynamics after ENZ administration may be a useful prognostication factor for mCRPC patients.

P-03 Correlation between Drawing Ability and Laparoscopic Suturing Time Using Dry Box

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Purpose

When surgeons learn surgical procedure, drawing of actual surgical fields is helpful for improving surgical skills. However, no previous reports have investigated original drawing skill of the individual and surgical skill level. We investigated whether there is a correlation between drawing skill and laparoscopic skill level amongst medical students who performed practical laparoscopic suture training using dry box.

Subjects and Methods

The subjects comprised 78 medical students (males: 54, females: 24). The students were given one week to practice after being shown by the medical instructor on how to perform sutures using dry box. Then, needle handling in the dry box and the time of three times ligature were measured. The medical students were also asked to draw a dog, horse, sheep and rabbit without viewing a figure or photograph, and 10 independent evaluators assessed the drawings on a scale from 0 to 10 points with blind fashion.

Results

The median suturing time was 52.35 seconds (20.17 - 405). No correlation was shown between mean score for the four drawings and suturing time. Moreover, no correlations were observed between mean scores for each of the drawings of a dog, horse, sheep or rabbit with suture time. However, results indicated that students who could three-dimensionally express the animals' legs tended to have significantly shorter suture time ($p=0.001$) than students who only drew the animals' legs on a flat plane.

Conclusions

No direct correlation was observed between drawing ability and operative notes. However, students who understood the animals' legs in three-dimensional terms tended to have significantly shorter dry box suturing time. Results suggested that when expressing operative notes as an illustration, making an effort to draw in three-dimensional terms could improve surgical skill level.

P-04 A case of laparoendoscopic reduced port nephrectomy for renal AML followed by in-bag manual morcellation

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Introduction and Objective

Reduced port surgery (RPS) has advantages in terms of minimally invasiveness especially in cosmesis. However one limitation of using reduced port surgery for nephrectomy is the difficulty of safety extracting specimens through small incisions. Herein, we present a first case of laparoendoscopic reduced port nephrectomy for renal angiomyolipoma (AML) followed by in-bag manual morcellation.

Methods

Patient was a 35 year-old woman who had a 7-cm left renal mass. CT scan showed a fat component. Thus, we preoperatively diagnosed as AML. We performed laparoendoscopic reduced port left nephrectomy. A 3-cm umbilicus incision was made and a GelPOINT®Mini access was inserted. Two trocars were placed through the access platform, and additional two 3-mm trocars were inserted. Finally, in-bag manual morcellation was performed using laparoscopic scissors within an isolation bag.

Results

The procedure was successfully completed in 219 min, with an estimated blood loss of a small amount. There were no intraoperative or postoperative complications, and the patient was discharged 7 days after the surgery. Pathological diagnosis was angiomyolipoma. The umbilical scar was concealed within an umbilical fold, and the scars of 3-mm trocar were almost invisible.

Conclusion

Laparoendoscopic reduced port nephrectomy followed by in-bag manual morcellation is a safe and technically feasible procedure that offers great cosmesis especially for young female patients.

P-05 Laparoscopic partial cystectomy for invasive bladder cancer: report of four cases

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Purpose

To report experiences of laparoscopic partial cystectomy for invasive bladder cancer in our facility.

Materials and Methods

We have performed four cases of laparoscopic partial cystectomy for invasive bladder malignancy between January 2014 and October 2017. There were one female and three male patients. The median age was 72 years (58-83 years). Two patients were presenting with Gross hematuria, and diagnosis was established with trans-urethral resection bladder tumor in all patients. The surgery was performed using the transperitoneal approach, resecting the bladder with 2cm margin from the cancer.

Results

There were no open conversions in the four laparoscopic operations. The median operating time was 177 minutes (91-218), and a median estimated blood loss is 10ml (3-60). The median hospital stay was 9 days (5-26), and the median of duration of catheterization was 7.5 days (5-13). There was one postoperative complication: we performed laparoscopic total cystectomy due to the bladder rupture one month after the operation. At a median follow-up of 17 months (range: 5 to 27 months), there was no evidence of metastasis or peritoneal disseminations as evidenced by radiologic or cystoscopic evaluation after the surgeries.

Conclusions

The applications of laparoscopic partial cystectomy are limited because of the risk of dissemination of the cancer. However, in these four cases, we have not found any evidence of metastasis or peritoneal dissemination of bladder cancer due to the laparoscopic surgeries. For the carefully selected patients with bladder malignancy, the operation has some advantages in safety, less invasive, and higher quality of life with remaining bladder.

P-06 Predictive factors for the survival of CRPC patients treated with abiraterone acetate

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Objectives

Abiraterone acetate has been widely used as one of the androgen receptor axis targeted therapies for castration-resistant prostate cancer (CRPC) patients in Japan. We investigated predictive factors for the survival of CRPC patients treated with abiraterone.

Methods

We assessed 195 CRPC patients who were treated with abiraterone between September 2014 and March 2018 at our institutions. Time to PSA progression (TTP) was estimated by Kaplan-Meier method and predictive factors of TTP were evaluated with Cox regression analysis. A risk classification for overall survival (OS) was established by using predictive factors of TTP.

Results

Median time to abiraterone administration from initial diagnosis was 39 months. One-hundred and thirty-four patients were docetaxel-naive and 142 patients were enzalutamide-naive. Median TTP of total patients was 6 months. Patients achieved > 30% of PSA reduction within a month (PSA reduc >30%), lower ALP, higher albumin, lower CRP, duration of the first line hormone therapy >15 months (1st HTx >15m), docetaxel-naive and enzalutamide-naive showed significantly longer median TTP. PSA reduc >30%, better PS, 1st HTx >15m and docetaxel-naive were the independent predictors of longer TTP in multivariate analysis. A risk classification with using these parameters showed the significant difference in OS.

Conclusions

Several clinical features could be the predictive factors for the survival of CRPC patients treated with abiraterone. A risk classification with using TTP predictors are useful for predicting OS.

P-07 Relevance in prostate biopsy between Gleason score and PI-RADS ver.2 score

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Introduction
Recent years PI-RADS score has been used in image diagnosis of prostate cancer to improve detection accuracy of clinically significant prostate cancer.
In our hospital, we considered integrity between Gleason score and PI-RADS.ver2 score about the patients whose MRI findings are PI-RADS 3 and over.

Methods
They are 33 cases of transperineal prostate biopsy in our hospital, the median age 69 (54-81), the patients' MRI findings are PI-RADS 3 and over, from January to July, 2018.
The cases included 7 cases of PI-RADS 3, 11 cases of PI-RADS 4 and 15 cases of PI-RADS5.
We examined the detection rate of prostate cancer and relevance between Gleason score and PI-RADS ver.2 score.

Results
Each detection rate of prostate cancer was 42% (PI-RADS3), 68% (PI-RADS4), and 72% (PI-RADS5).
It was suggested that the higher PI-RADS.ver2 score become, the higher the detection rate is. We'll add more cases and consider the relevance between PI-RADS ver.2 score and Gleason score.

P-08 Impact of preoperative ureteroscopy on intravesical recurrence in patients after nephroureterectomy in Kyushu University Hospital

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Objectives
To determine whether ureteroscopy effects on intravesical recurrence rate with upper tract urothelial carcinoma (UTUC) after radical nephroureterectomy (RNU).

Methods
We conducted a retrospective analysis of 150 patients who were performed ureteroscopy to diagnose with UTUC from January 2011 to March 2018. We analyzed the impact of preoperative ureteroscopy (URS) on intravesical recurrence (IVR) using the Kaplan-Meier method.

Results
The median follow-up time was 11.0 months (interquartile range (IQR): 3.7-32.1 months). Of the 150 patients, 104 patients were diagnosed with UTUC finally and 91 patients were diagnosed by URS (The sensitivity of URS was 87.5%). IVR occurred in 50 patients during follow-up. Patients without preoperative URS have a statically significant better 2-year intravesical recurrence-free survival rates(68.3% vs 46.5%, p=0.0075) than patients who underwent URS. Intraoperative complications of URS occurred in 8 patients, all of them were within Clavien-Dindo classification grade 1-2.

Conclusions
Preoperative URS is safety and useful procedure in UTUC diagnosis, but raise intravesical recurrence rate after RNU.

P-09 Prostate cancer promotion via the C5a-C5a receptor system

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Objectives
Accumulated evidence indicates complement activation and subsequent release of C5a in cancer tissues. To explore a role of the C5a-C5a receptor (C5aR) system in prostate cancer (PC) progression, C5aR expression of PC cells was examined in relation to the clinicopathological parameters of the patients. The effect of C5a on PC cells was investigated.

Methods
PC tissue samples were immunostained with anti-C5aR antibody. The relationship of PC cell C5aR expression to PSA level, Gleason grade (ISUP) or pStage was analyzed statistically. C5aR expression of PC3, LNCap, DU145 and C4-2 cells was assayed by qRT-PCR, immunoblotting and flow cytometry. The effects of C5a on PC cell proliferation and invasion were assessed using cell counting kit WST-8 and Matrigel chamber, respectively.

Results
PC cells express C5a receptor (C5aR) in 49 patients among 119 prostate cancer patients (41%) at pStage 2 and 3 and in three of six castration-resistant PC (CRPC) cases. Noncancerous epithelial cells but basal cells were C5aR-negative. PC cell C5aR expression related to high Gleason grade but not either to PSA level or advanced pStage of the patients. Some PC cell lines expressed C5aR mRNA and the protein on the cell membrane. C5a increased C4-2 and DU145 cell number and invasiveness, which was inhibited by C5aR antagonist W-54011.

Conclusions
C5aR expression of patients' PC cells in relation to high Gleason grade and enhancement of C5aR-positive PC cell growth and invasion by C5a suggest PC promotion by the C5a-C5aR system. Thus, this system can be a new therapeutic target of PC.

P-10 A case of ischemic priapism

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Objectives
Priapism is an urologic emergency that needs early intervention and may lead to irreversible cavernosal damage. Today we report a case of the ischemic priapism lasting for 6 hours and our successful treatment.

Case Description
We present a case of 44-year-old male with a history of more than 5 episodes of stuttering priapism, and who presented with continuous penile erection for more than 6 hours. We examined cavernous blood gas analysis, the result was an ischemic state. In this case, the treatment of priapism includes drainage of the corpus cavenosum along with intracavernous adorenalin injection.

Conclusions
Ischemic priapism is the most common type, as it was also the same in this case , which is frequency idiopathic and commonly associated with hematological diseases,medications or recreational drugs. In this case, the cause of priapism is not sure, but the recurrence dose not occur afterwards.

P-11 Assessment of patients' condition using G8 screening tool for prostate cancer

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Objective

Prostate cancer patients are most common disease in older male patients. Thus geriatric assessment is needed for prostate cancer patients. G8 screening tool is consisted of seven picked up factors from mini nutritional assessment (MNA) and age. G8 is an eight-item screening tool, developed for older cancer patients. This tool covers multiple domains usually assessed by the geriatrician and takes less than 5 minutes. Total score ranged from 0 to 17 and previous reports showed that scores less than 14 were higher risk. This study examined the G8 screening score for prostate cancer patients including castration resistant prostate cancer (CRPC) status.

Patients and Methods

In April 2018 to August 2018, 91 prostate cancer or suspected patients including 28 CRPC cases were asked to fill out G8 screening tool. In these patients, 63 patients diagnosed as prostate cancer were included in this study. We evaluated G8 score in terms of prostate cancer therapy.

Results

Radical prostatectomy and radiation therapy showed higher G8 score comparing to hormonal therapy. On the other hand CRPC patients showed almost same G8 score in terms of treatments including androgen deprivation therapy, newly anti-androgen drugs (enzalutamide and/or abiraterone), or systemic chemotherapy (docetaxel and/or cabazitaxel).

Conclusion

G8 screening tool might be a new assessment tool for CRPC.

P-12 Characteristics of newly-wed men with sexual dysfunction

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Objectives

Recent nationwide survey for male infertility indicated that the etiology of infertility included testicular factors (82.6%), sexual dysfunction (13.5%), and seminal tract obstruction (3.9%). Number of patients with sexual dysfunction was significantly increased, compared to the previous 1997 survey (3.3%). However, very few studies have been conducted regarding sexual dysfunction in newly-wed men.

Methods

The study comprised 719newly-wed men, who wanted to father children. Among them, 139 men (19.3%) had sexual dysfunction, including erectile dysfunction, ejaculatory disorder and sexless. Physical and laboratory data included age, BMI, score of several specific questionnaires, and endocrinologic variables were compared between men with and without sexual dysfunction.

Results

Age was significantly older in men with sexual dysfunction (38.4 ± 7.6 years) than those without it (34.5 ± 6.1 years; $P<0.01$). However, there was no significant difference in BMI between them. Regarding several specific questionnaires, the score of EHS and SHIM was significantly lower in men with sexual dysfunction (2.9 ± 0.9 and 13.4 ± 5.6) than those without it (3.6 ± 0.6 and 20.2 ± 4.2; $P<0.01$). The score of BDI, IPSS and AMS was also significantly higher in men with sexual dysfunction (6.8 ± 6.5, 4.4 ± 4.4 and 27.7 ± 8.8, respectively) than those without it (5.0 ± 5.0, 3.2 ± 3.5 and 23.9 ± 7.5, respectively; $P<0.01$). Endocrinologic examination showed that insulin-like growth factor-1 was significantly lower in men with sexual dysfunction (143.3 ± 41.7 pg/ml) than those without it (155.3 ± 37.2 pg/ml; $P<0.05$).

Conclusions

In newly-wed men with sexual dysfunction, severe status was clearly found in depression and lower urinary tract symptom. Low activity of endocrinologic profiles was also found in men with sexual dysfunction.

P-13 Clinical implication of bacillus Calmette-Guérin (BCG) therapy in patients with carcinoma in situ (CIS) of the upper urinary tract: a comparison with nephroureterectomy

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Background
Clinical benefit of BCG therapy for the management of upper urinary tract carcinoma in situ (CIS) remain unclear. We investigated safety and long-term oncological outcome of BCG therapy for upper urinary tract CIS compared with nephroureterectomy.

Methods
We treated consecutive 460 patients with upper urinary tract carcinoma. We retrospectively reviewed the post-treatment course of 55 patients with CIS of the upper urinary tract who had undergone either a radical nephroureterectomy (RNU group) or BCG therapy (BCG group). Clinical effectiveness, safety, and oncological outcomes were compared between the groups.

Results
The number of patients in RNU and BCG groups were 21 and 34, respectively. Median follow-up was 57 months. There was no significant difference in background of patients including age, sex, performance status between the groups. The cytology became negative in 28 (82%) patients after 6-week course of BCG. BGC related adverse events were observed 90% of patients. Nine patients (26%) experienced tumor recurrence after BCG therapy. There were no significant differences in recurrence-free survival, cancer-specific survival, and overall survival between the two groups.

Conclusions
Although mild adverse events were frequented in BCG therapy for CIS of the upper urinary tract, it might be a useful alternative in for alterative in patients with CIS of the upper urinary tract who are ineligible for radical nephroureterectomy. Further prospective studies are needed to confirm the benefits of BCG therapy for CIS of the upper urinary tract.

P-14 Neutrophil-lymphocyte ratio as prognostic role in metastatic carcinoma patients receiving nivolumab: a multi-institutional retrospective study

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Neutrophil-lymphocyte ratio (NLR) is a well known prognostic marker for renal cell carcinoma (RCC). However, NLR as a predictor of metastatic RCC (mRCC) in patients treated with nivolumab remains unclear. We evaluated the prior therapy and post therapy of NLR, as predictors of progression-free survival (PFS) in mRCC patients treated with nivolumab.
Methods: Data of mRCC recipients of nivolumab therapy were collected from six institutes. Forty-six patients, median age 67 years (IQR 61.0-71.3), were evaluated. The median follow-up interval from treatment with nivolumab was 8.5 months (IQR 5.0-11.5). Of the patients, 17 (37.0%) received one prior therapeutic treatment, 17 (37.0%) received two prior therapeutic treatments and 12 (26.0%) received three or more prior therapeutic treatments, respectively. Of these, 12, 26 and 8 patients had favorable, intermediate and poor prognoses on MSKCC prognostic scoring. NLR data were collected prior to and two months after nivolumab treatment.
Results: The median duration of nivolumab therapy was 5.3 months (IQR3.3-9.62). The objective response rate (CR+PR) was 36.9% and median progression-free survival was 9.5 months. The median NLR values of pretreatment and posttreatment were 3.8 (IQR2.6-5.3) and 3.6 (IQR 2.4-5.7). The median PFS values of pretreatment NLR 3 or more and less than NLR3 were 9.2 and 9.8 months, respectively (P=0.724). The median PFS values of post therapy NLR 3 or more and less than NLR3 were 7.7 and 11.2 months, respectively. A significant difference was seen between post therapy NLR 3 or more and less than NLR 3 (P=0.0341).
Discussion: Although prior therapy NLR is not a predictor for PFS for patients with nivolumab treatment, two months after NLR 3 or more might be poor predictors for PFS. These results might play a useful prognostic role in cases of mRCC patients treated with nivolumab.

P-15 Intraperitoneal prostate cancer recurrence following laparoscopic radical prostatectomy: A case report

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Objectives
We report a case of intraperitoneal prostate cancer (PC) recurrence following laparoscopic radical prostatectomy (LRP).

Case Description
A 74-year-old man received prostate-specific antigen (PSA) test and rose to 4.43 ng/mL. Prostate biopsies revealed Gleason score (GS) 3+3 prostate adenocarcinoma. Computed tomography (CT) and bone scan showed no metastases. The patient underwent LRP with bilateral pelvic lymphadenectomy. The histopathology revealed prostate adenocarcinoma, GS 4+3, pT2a pN0. The PSA on postoperative 3 months was 0.01 ng/mL. On postoperative 2.3 years, the patient underwent salvage radiotherapy (68 Gy) because PSA level rose to 0.59 ng/mL. After salvage radiotherapy, PSA level slightly decreased and then elevated again to 1.31 ng/mL on postoperative 3 years. CT and bone scan showed no evidence of metastases. He underwent androgen deprivation therapy (ADT) and PSA level decreased to undetectable. On postoperative 6 years, it rose to 3.37 ng/mL, then he was treated with apalutamide as clinical trial for M0 castration-resistant PC. Unfortunately, PSA level continuously elevated to 52 ng/mL on postoperative 9 years. We then applied 18-fluoro-2-deoxyclucos positron emission tomography (FDG-PET). It revealed selective accumulation in intraperitoneal 4 cm nodule. He underwent surgical removal of the nodule. The histopathology revealed poorly-differentiated adenocarcinoma which consistent with PC intraperitoneal recurrence following LRP.

Conclusion
We reported a case of intraperitoneal PC recurrence following LRP. FDG-PET was useful for detect the PC recurrence.

P-16 External validation of the CHAARTED and LATITUDE criteria in patients with hormone-naïve metastatic prostate cancer: A multi-institutional study in Japan

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Purpose
To validate the risk criteria for newly diagnosed hormone-naïve metastatic prostate cancer (mHNPC) in the Japanese population.

Materials and Methods
We retrospectively investigated data within the Michinoku Urological Cancer Study Group database containing 504 patients with mHNPC who underwent initial androgen deprivation therapy from 2008 to 2017. The agreement between the CHAARTED and LATITUDE criteria was tested using Cohen's κ coefficient. The impact of Gleason score (GS), extent of disease (EOD), and visceral metastasis on oncological outcomes were validated using the Kaplan–Meier method and multivariable Cox regression models.

Results
Of 504, 319 (63%) and 292 (58%) patients were classified to CHAARTED high-volume disease and LATITUDE high-risk disease, respectively. Cohen's κ coefficient of 0.760 suggested substantial agreement. Although both models were independent predictors for poor prognosis, the presence of visceral metastasis was not significantly associated with poor prognosis. We found the sum of metastatic organs ≥3 was significantly associated with poor prognosis and developed the modified risk model, including GS ≥8, EOD >1, and sum of metastatic organs ≥3. The modified risk model had significantly higher predictive values than the CHAARTED and LATITUDE criteria.

Conclusions
Substantial agreement was observed between the CHAARTED and LATITUDE criteria. The sum of metastatic organs ≥3 might be applicable for tumor burden estimation for Japanese patients with mHNPC.

P-17 NOTCH2-HEY1 axis promotes tumor progression in bladder cancer by cell cycle progression and dedifferentiation

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Objectives
Although each NOTCH receptor shares the canonical NOTCH signaling (NOTCH-CSL-HES/HEY), each NOTCH acts as an oncogene or tumor suppressor. Here, we studied NOTCH2 signaling in bladder cancer (BC).

Methods
We analyzed the Cancer Genome Atlas (TCGA) cohort of BC for genomic aberrations of NOTCH, and studied NOTCH signaling in vitro and in vivo.

Results
In TCGA cohort, NOTCH2 demonstrated genomic gain, while NOTCH1 and NOTCH3 were frequently deleted. Patient tumors with high NOTCH2 expression showed basal subtype and worse prognosis.
To verify NOTCH2 signaling, we established NOTCH2 overexpressing cells. Notch2 overexpression increased cell growth through cell cycle progression and dedifferentiation, and showed higher expression of HEY1 but unaltered HES1 expression compared to the control cells. This increased cell growth and HEY1 expression was abrogated by CSL silencing, suggesting that NOTCH2-CSL-HEY1 axis was activated. We confirmed it in the xenograft that NOTCH2 overexpressing increased BC growth, and NOTCH2 overexpressing tumors stained strongly for nuclear NOTCH2, also expressed nuclear HEY1, while the NOTCH2 negative tumors expressed cytoplasmic NOTCH2 and HEY1 by immunohistochemistry. In TCGA cohort, HEY1 expression correlated with worse survival in the subset of patients with basal tumors.
Next, we studied HEY1 effect on cell proliferation. HEY1 knockdown in NOTCH2 overexpressing cells showed decreased proliferation than control cells in both adherent culture and anchorage independent culture. This reduced proliferation was associated with increased p21 expression and decreased Nestin expression. These results suggested that NOTCH2 induced cell growth was mediated through NOTCH2-HEY1 axis.

Conclusions
NOTCH2-HEY1 axis promotes BC progression through cell cycle progression and dedifferentiation.

P-18 The prediction of severity of acute pyelonephritis with urinary obstruction due to ureteral calculi

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Objectives
Both administration antibiotics and drainage of urine are necessary for the treatment of acute pyelonephritis with urinary obstruction due to the ureteral calculi. Though most patients get better after the treatment, some patients still have the risk of septic shock. Such patients sometimes visit small hospital, even at night with a few medical staffs. It is difficult to predict the patient's outcome. The disease severity prediction index for the patients was investigated.

Methods
We examined 134 patients, who visited our hospital from 2001 to 2013, retrospectively. Ureteral stenting or nephrostomy was undergone within 24 hours in principle. If the blood pressure became under 90mmHg, or lowered more than 40mmHg than usual, the case was defined as serious. Blood data and physical findings were compared between serious and non-serious cases. The factors affecting the seriousness were found. Multiple logistic analysis was done to make the disease severity prediction index.

Results
42 cases were judged as serious and 92 cases as non-serious. Six factors consisting of heart rate, serum creatinine, platelets, ages, PS and CRP affected the consequence significantly ($p<0.05$), however, white blood cells did not.
Multiple logistic analysis was done, four factors consisting of serum creatinine, platelets, PS and CRP affected the consequence significantly ($p<0.05$), and the standardizing coefficients of each points were found to be 2, 2, 1, 1, respectively.
The disease severity prediction index was proposed. If the index was 4 or more, the sensitivity and specificity were found to be 73.8% and 82.6%, respectively.

Conclusions
The disease severity index is useful and reliable for the prediction of acute pyelonephritis.

P-19 Revised Equations for estimated GFR from serum creatinine in Japanese renal transplant candidates

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Objectives
The Japanese Society of Nephrology developed an equation for estimating GFR (eGFR) from Inulin clearance (Cin) data collected from 763 Japanese patients in 2009 (JSN 2009 equation), however mostly those with chronic kidney disease and only 11 healthy kidney donors. Therefore, this equation may not be applicable to the healthy donors. In this study, we developed new equations for healthy Japanese renal donor candidates, and compared the accuracy of new equation with JSN 2009 equation using preoperative and postoperative Cin of donors.

Methods
Between October 2006 and December 2017, 748 Japanese donor candidates were recruited in this study. Data collected from Inoue Hospital (n=512) were used as the development data set, and those from Hyogo Prefectural Nishinomiya Hospital (n=236) were used as the validation data set. And more, 141 donors accepted Cin at Inoue Hospital after nephrectomy, these data are used as the postdonation data set.
The new GFR estimation equations for Japanese renal donor candidates were derived in the development data set by using a multiple linear regression model and the variables age, sex and sCr in relation to measured GFR. Variables age and sCr and mGFR were log transformed.

Results
Using the development data set, we derived a new 3-variable GFR estimation equation for Japanese renal donor candidates : $eGFR_{new}$. Our new eGFR equation was useful for estimation in renal transplant donor candidates. In addition, in post donation data set, $eGFR_{new}$ was more accurate than $eGFR_{JSN2009}$.

Conclusions
In conclusion, compared with JSN 2009 equation, our newly derived equation, which is also composed of routinely measured 3 parameters (age, sex, sCr), results in lower bias and significantly higher accuracy for estimating GFR in the Japanese renal donor candidates in both predonation and postdonation.

P-20 Characteristics of urinary tract infection caused by extended-spectrum β-lactamase *Escherichia coli*

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Objectives
Recently, extended-spectrum β -lactamase-producing (ESBL) Escherichia coli has been more frequently isolated from urine and blood. We aimed to investigate the risk factors of urinary tract infection due to ESBL E. coli.

Methods
We evaluated 107 patients with urinary tract infections due to E. coli detected in blood or urine culture in our hospital between July 2017 and March 2018. ESBL and non-ESBL E. coli were detected in 50 (ESBL group) and 57 (non-ESBL group) of the 107 patients, respectively. The chi-square test and unpaired t test were used to compare differences between the two groups. Multivariate logistic analysis was used to identify risk factors of ESBL E. coli.

Results
The mean ages were 83 years in the ESBL group and 77 years in the non-ESBL group. The proportions of patients in the ESBL and non-ESBL groups were 78% and 81%, respectively. Univariate analyses revealed that age, antibiotic use within the last 6 months, indwelling urinary catheter, and sepsis (blood culture positive) were significantly associated with ESBL E. coli. Multivariate analyses indicated that age (odds ratio = 2.02; 95% confidence interval, 1.001–1.075; P = 0.043) was significantly associated with ESBL E. coli. The presence of an indwelling urinary catheter tended to be associated with ESBL E. coli (P = 0.054).

Conclusions
For elderly patients and/or patients with indwelling urinary tract catheter, antimicrobial agents must be selected as an empirical therapy for urinary tract infection, with consideration of ESBL bacteria as a possible pathogen.

P-21 The challenge of testosterone replacement therapy for women in Japan

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Objectives
Women's testosterone replacement therapy is effective for Hypoactive Sexual Desire Disorder and depression state against antidepressants after menopause. Moreover in the vestibule of vagina, there are many testosterone receptors, and topical administration of testosterone is regarded as effective for spontaneous pain and sexual pain in this area. Women's Clinic LUNA Group have done female testosterone replacement therapy. We report short term results in this meeting.

Patients and Methods
From May 2017 to August 2018, the results of female patients who underwent some testosterone replacement therapy in Women's Clinic LUNA Next Stage were analyzed retrospectively.

Results
The number of patients was 26 (injection 7 and ointment19). The average age was 60 years (maximum 70 years, minimum 51 years). The main side effects were acne and headache early in administration. Some patients complained hypersensitivities at nipples and clitoris. The characteristic side effects which were genital bleeding, hoarseness, clitoris hypertrophy were not recognized. There were 19 patients who had improved their symptoms such as sexual motivation, depression, pain around urethal meatus and vestibule (73%),7 patients were discontinued the therapy due to side effects or no effect(27%).There was a case that the free testosterone level rose up to 10 pg / ml, but the average testosterone level after 2months was 1.5 pg / ml.

Conclusions
There was reported that for follow-up of 5 years, the risk of abnormal occurence of lipid, insulin resistance, CRP, cerebrovascular disorder were not rised. In this study, there were no complaints of serious side effects and the rate of improving each symptom were over 70%. Female testosterone replacement therapy was thought to significantly improve female patient's QOL if patient selection was made appropriately.

P-22 The inpatient treatment trend of upper urinary urolithiasis in Japan from the Japanese Diagnosis Procedure Combination Database

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Objectives
To assess the inpatient treatment trend of upper urinary urolithiasis in Japan. We conducted the epidemiological studies on urinary calculi in our country using Japanese Diagnosis Procedure Combination (DPC) Database, and the result was compared with a national epidemiological survey.

Methods
The DPC database holds clinical information about the main diagnosis that was coded according to the ICD-10. The anonymous DPC data from 2012 to 2016 was download from the website of the ministry of Health, Labor and Welfare of Japan, and the hospitalized cases with upper urinary tract were identified. The treatment procedure, gender, outcome, and hospital stay, and severe complication were also extracted. These results were examined and compared with the previous results of the Japanese national epidemiological survey.

Results
Total 3711739 cases with upper urinary tract calculi are identified, and among these 262009 cases were performed with surgical intervention. The number of cases of upper urinary tract calculi is increasing annually, and the rate of increase in the over 80 years old group is the largest comparing another age group. The URS treatment takes over the SWL at the 2014 as an inpatient treatment and continues to increase, however SWL cases has been decreased. The same trend was observed by the previous results of the Japanese national epidemiological survey.

Conclusions
In these 4 years, the numbers of inpatient URS treatment for upper urinary tract stones were increasing in Japan, however, the inpatient SWL was decreased. Change of the treatment modality was similar trends that were seen as worldwide trend in another countries. Moreover, a rising patient in high-elder population with URS treatment was noticed, it may impact the outcome of the treatment

P-23 Bowel related symptoms after nerve-sparing robot-assisted radical prostatectomy: A longitudinal study

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Introduction and Objective

Urologists sometimes experience the patients who complains of perineal pain or discomfort after robot-assisted radical prostatectomy (RARP). The main objective of this study was to evaluate the rectal pain and bowel function of the patients following RARP.

Methods

This study included 296 consecutive patients who had received RARP for clinically localized prostate cancer between October 2010 and June 2016 at our hospital. This study was approved by the institutional review board of Tottori University. The bowel function and urinary function were assessed using The Extended Prostate Cancer Index Composite (EPIC), before and 1, 3, 6, 9, 12, 18, 24 months after RARP. All statistical analyses were performed using SPSS, and differences in EPIC scores were compared using an unpaired t test.

Results

The median age was 65 years old, and median PSA level was 9.77 ng/ml. The number of patients according to the nerve sparing surgery was below, bilateral nerve sparing was 18, unilateral nerve sparing was 108, bilateral partial-nerve sparing was 44, unilateral partial-nerve sparing was 76, and bilateral non-nerve sparing was 50, respectively. We divided into two groups, group A (bilateral nerve sparing, unilateral nerve sparing, bilateral partial-nerve sparing) and group B (unilateral partial-nerve sparing, bilateral non-nerve sparing). Bowel function score, rectal pain score and bowel bother score at 1 to 3 months after RARP were significantly impaired in group B than group A ($p<0.05$). We confirmed that these scores had improved gradually in 1 year.

Conclusion

In the early period after RARP, bowel symptom were significantly impaired according to the degree of preservation of the neurovascular bundles. These results could be used to counsel patients in the decision making process before RARP.

P-24 Initial experience of Pembrolismab in 13 cases with advanced urotherial carcinoima

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Objectives

Pembrolizumab therapy is spreading as 2nd-line therapy for advanced urotherial carcinoma patients. We investigated clinical outcome of overall survival and predictors of hyper progression who underwent Pembrolizumab therapy.

Methods

A retrospective analysis of 13 patients who underwent Pembrolizumab therapy at our institution between January and August 2018 in our institution was performed.

Results

The baseline of patients characteristics are as follows; Median age was 70 years old(IQR : 60-73), median NLR(Neutrophil-to-Lymphocyto ratio) was 5.53 (IQR : 3.06-9.58), 3(2.3%)patients were diagnosed as Hyper progression after therapy. The 24 weeks overall survival rates were 62.5% and 17.1% in Low NLR(<5.0) and High NLR(≥5.0) group. There was significant difference in overall survival rates between Low NLR and High NLR group (Log rank p=0.0443). The 24 weeks overall survival rates were 54.0% and 0.0% in Low PS(=0) and High PS(≥2) group. There was significant difference in overall survival rates between Low PS and High PS group (Log rank p=0.0137). Furthermore, we carried out correlation analysis using a chi-square test in age, sex, PS, NLR, value of Hb, value of Alb, value of LDH, value of CRP, past history of radiation therapy, lymphnode metastasis, lung metastasis, liver metastasis, and bone metastasis. There were significant difference that lower value of Alb (<3.5g/dL), higher value of CRP (≥3.0mg/dL), the higher rate of Hyper progression (p=0.0068, p=0.0342).

Conclusions

Patients in High NLR group, and High PS group had a potentially higher risk for survival. The higher value of CRP, the lower value of Alb, the higher rate of hyper progression rate in patients during Pembrolizumab therapy. The treatment-decisions, protocols, and recommendations should be established based on Pembrolizumab therapy.

P-25 Uc.416+A promotes epithelial-to-mesenchymal transition through miR-153 in renal cell carcinoma (94/100)

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Objectives

The transcribed ultraconserved regions (T-UCRs) are a novel class of non-coding RNAs that are absolutely conserved across species and are involved in carcinogenesis. However, the expression and biological role of T-UCRs in renal cell carcinoma (RCC) remain poorly understood. This study aimed to examine the expression and functional role of Uc.416+A and analyze the association between Uc.416+A and epithelial-to-mesenchymal transition in RCC.

Methods

Expression of Uc.416+A in 35 RCC tissues, corresponding normal kidney tissues and 13 types of normal tissue samples was determined by qRT-PCR. We performed a cell growth and migration assay in RCC cell line 786-O transfected with negative control and siRNA for Uc.416+A. We evaluated the relation between Uc.416+A and miR-153, which has a complimentary site of Uc.416+A.

Results

qRT-PCR analysis revealed that the expression of Uc.416+A was higher in RCC tissues than that in corresponding normal kidney tissues. Inhibition of Uc.416+A reduced cell growth and cell migration activity. There was an inverse correlation between Uc.416+A and miR-153. Western blot analysis showed Uc.416+A modulated E-cadherin, vimentin and snail. The expression of Uc.416+A was positively associated with the expression of SNAI1, VIM and inversely associated with the expression of CDH1.

Conclusions

The expression of Uc.416+A was upregulated in RCC and especially in RCC tissues with sarcomatoid change. Uc.416+A promoted epithelial-to-mesenchymal transition through miR-153. These results suggest that Uc.416+A may be a promising therapeutic target. (1597/1600)

P-26 Radiologic response predicts prognosis after neoadjuvant chemotherapy for bladder cancer

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Objectives

We examined the association between radiological responses after platinum-based neoadjuvant chemotherapy and oncological outcomes in patients with muscle invasive bladder cancer (MIBC).

Methods

Between March 2005 and June 2018, we performed platinum-based neoadjuvant chemotherapy followed by radical cystectomy (RC) in 189 patients with T2-4NxM0 MIBC. They received 2 courses of gemcitabine + cisplatin (GCis) or gemcitabine + carboplatin (GCb) based on cisplatin eligibility. Quantitative radiologic response was defined by RECIST ver. 1.1 using contrast enhanced computed tomography (CT). Recurrence-free survival (RFS) and cancer-specific survival (CSS) distributions within radiologic response subgroups were estimated with the Kaplan-Meier method. Cox-regression multivariate analysis was applied to evaluate independent predictor for RFS or CSS.

Results

Number of patients with GCis and GCb were 33 (17%) and 156 (83%), respectively. The median tumor response rate was 45% (IQR: 25-68%). The rates of patients with complete responses (CR), partial response (PR), stable disease (SD), and progression disease (PD) were 13%, 47%, 37%, and 3.7%, respectively. The rates of pathological down staging to <pT2 in CR, PR, SD, and PD were 79%, 40%, 25%, and 0%, respectively. Radiologic response was not significantly different between GCis and GCb (P = 0.589). Radiologic response was a strong predictor of 5-year RFS (CR: 96%, PR: 76%, SD: 63%, PD: 17%) and CSS (CR: 96%, PR: 87%, SD: 75%, PD: 23%). Multivariate analysis showed radiologic responder (CR+PR) was the independent factor for RFS and CSS.

Conclusions

Radiological response post two courses of platinum-based neoadjuvant chemotherapy is associated with prolonged RFS and CSS in patients with MIBC regardless of the regimens.

P-27 *miRNA-99a-3p* inhibits tumorigenesis in ccRCC cell lines, including sunitinib-resistant cells by targeting *RRM2*

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Objectives

The resistance to sunitinib is a large problem in clinical aspect. In this study, we focused on *miR-99a-3p*, which showed decreased expression in sunitinib-resistant RCC based on previous screening analyses.

Methods

Expression levels of *miR-99a-3p* and its candidate target genes were evaluated in RCC cell lines including the sunitinib-resistant cell (SU-R-786-o) established in our group and RCC clinical specimens by qRT-PCR. For the gain of function study, cell proliferation, apoptosis, and colony formation assay were performed in *miR-99a-3p* transfected RCC cell lines. Putative target genes were determined by the analyses with publically available database such as GEO and TargetScan, as well as RNA sequencing expression analysis using SU-R-786-o.

Results

The expression levels of *miR-99a-3p* were downregulated in RCC clinical specimens and cell lines compared to normal kidneys. In addition, its expression in SU-R-786-o was much lower compared to the parent cell. Restoration of *miR-99a-3p* in RCC cells including SU-R-786-o significantly inhibited proliferation through induction of apoptosis. *RRM2* was identified as a direct target by *miR-99a-3p* based on target analyses. Loss of functional studies using si-RRM2 showed that cell proliferation was significantly inhibited through induction of apoptosis especially in SU-R-786-o.

Conclusions

miR-99a-3p might have tumor suppressive effect through induction of cell apoptosis in sunitinib-resistant RCC cells. To the best of our knowledge, this is the first report demonstrating that *miR-99a-3p* directly regulate *RRM2*. The identification of novel target gene regulated by tumor-suppressive *miR-99a-3p* in sunitinib resistant RCC cells may lead to a better understanding of resistant mechanism.

P-28 Chronological change in erectile dysfunction and its risk factors (A community-based longitudinal survey)

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Purpose

The association between erectile dysfunction (ED) and atherosclerosis or cardiovascular diseases is now widely recognized. We conducted a longitudinal survey of the actual status of ED in local residents and examined age-related changes in sexual function and its risk factors.

Methods

The Iwaki Health Promotion Project conducted in Hirosaki City in April 2006 and May 2015 included 345 and 431 male participants, respectively. The subjects of this study were 100 men who participated in both programs and provided complete responses to the International Index of Erectile Function-5 (IIEF-5) questionnaire. Their mean age was 51.9 years (range: 26-68 in 2006). The serum 8-hydroxy-2'-deoxyguanosine (8-OHdG), total testosterone (TT), and free testosterone (FT) levels in 2006 were analyzed, and the IIEF-5 scores were compared between 2006 and 2015 to examine age-related changes.

Results

The overall mean decrease in the IIEF-5 score was -2.96. When the subjects were divided into two groups by age with a mean cut-off age of 51.9 years, the mean decrease in the IIEF-5 score was -2.6 in the younger group and -3.5 in the older group, but the difference did not reach statistical significance ($p = 0.413$). As for factors in the younger group, multiple regression analysis was performed using the rate of change from the IIEF-5 score in 2006 as the dependent variable, and age, serum 8-OHdG, TT, and FT as independent variables. FT was found to be inversely correlated with the rate of change ($p = 0.031$).

Conclusions

The decrease in the IIEF-5 score was -3.0, overall, after an interval of 9 years in the health screening for residents. In the younger group, the IIEF-5 score tended to be decreased to a greater extent than in the older group, but the difference between the two groups was not statistically significant. In the younger group, low FT values tended to be associated with a more marked decrease in the IIEF-5 score over time.

P-29 Anomaly detection method for cystoscopic diagnosis of bladder cancer based on deep learning

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Objectives
In general, anomaly detection method with machine learning requires comprehensively labeled training set that contains some varieties of normal and anomaly samples. However, in medical images, it is not easy to collect almost all kinds of anomaly samples because cystoscopic images contain a wide variety of tumors. Therefore, this study proposes an anomaly detection method based on two kinds of deep learning techniques to detect a lesion as anomaly in cystoscope images by learning only the normal cystoscopic images which can be relatively easily collected.

Methods
The proposed method consists of two steps. In the feature extraction step, Inception-v3 which is a DCNN (Deep Convolutional Neural Network) model pre-trained to classify 1000 classes using ImageNet (a well-known database consisting of 1.2 million general images) is adopted as a fixed feature extractor for the cystoscopic images. In the anomaly detection step, VAE (Variational Auto Encoder) model learns and detects the images using a 2048-dimensional vector extracted from the last fully-connected layer of Inception-v3. VAE is trained with only features extracted from normal cystoscopic images. After that, VAE is let to detect a lesion as an anomaly.
In the experiment, 48 normal images were used for training, and VAE and 12 normal images and 31 anomaly images (including 9 flat lesion images which is difficult to distinguish to normal images) were used for testing. They were collected in the examination performed in University of Tsukuba Hospital.

Results
A sensitivity of 92% and a specificity of 77% were achieved for 5 fold cross validation experiment.

Conclusions
This study suggests the possibility to detect tumor lesions by the proposed anomaly detection method with learning from only normal bladder images.

P-30 Evaluation of phospholipids expression in prostate cancer cell lines in LCMS

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Objectives
Lipid metabolisms have been considered to play important roles in oncogenesis and progression of prostate cancer. We have reported that the profile of phospholipids in prostate cancer tissues is different from that in benign tissues by imaging mass spectrometry. However, the precise roles remain unknown. Herein we established experimental methods to analyze the phospholipids by Liquid Chromatography-Mass spectrometry (LCMS), and we analyzed the profiles of phospholipids in prostate cancer cell lines.

Methods
We extracted and analyzed phospholipids by LC/MS/MS using SHIMADZU LCMS-8050 together with LC/MS/MS MRM library (Shimadzu). First, using the synthetic phospholipids, it was confirmed that phosphatidylcholine (PC), phosphatidylinositol (PI), lysophosphatidylcholine (LPC), lysophosphatidylethanolamine (LPE) and Sphingomyelin (SM) could be detected simultaneously. The dilution series of each phospholipid showed linear relationship between concentration and intensity in LCMS. We evaluated phospholipid compositions of four prostate cancer cell lines, LNCaP, PC3 and DU145.

Results
Analyzing the profile of phospholipids in the cell lines, we found that the ratio of phospholipids with polyunsaturated fatty acids (PUFAs) were significantly higher in PC3 and DU145 than that in LNCaP.

Conclusions
We established the methods to analyze four phospholipids simultaneously by LCMS and LC/MS/MS MRM Library. Difference of phospholipids expression was observed between prostate cancer cell lines. The expression of phosphatidylcholines with PUFAs in PC3 and DU145 were significantly higher than that in LNCaP. The finding suggested that PUFAs might be related to aggressiveness of prostate cancer.

P-31 Can Ratio of neutrophil to lymphocyte counts Predict Bacteremia in Obstructive Calculous Pyelonephritis?

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Objectives
Bacteremia has been used as a marker of severe disease in some studies that investigated urinary tract infections. We aimed to evaluate the performance of Ratio of neutrophil to lymphocyte counts (NLR) in predicting bacteremia among acute pyelonephritis patients with upper urinary tract calculi in Emergency department.

Methods
We reviewed medical records from 132 patients diagnosed with acute pyelonephritis with upper urinary tract calculi admitted to our hospital.

Results
Their age ranged from 26 to 94 years. Of the patients 73(55.3%) underwent surgical decompression. Of 132 evaluable patients, 68 (51.5%) had bacteremia. The bacteremic group had a longer hospital stays ($p<0.001$). Escherichia coli was the most frequently identified pathogen in the urine as well as in blood cultures. Old age was more common in the bacteremic group than in the non-bacteremic group ($p=0.028$). NLR and serum creatinine level were significantly higher in the bacteremic group ($p<0.001$ and $p=0.02$, respectively). Lymphocyte count and platelet count were significantly lower in the bacteremic group ($p<0.001$ and $p=0.046$, respectively). The NLR of 13.3 could predict bacteremia in Obstructive Calculous Pyelonephritis with 73.4% sensitivity and 66.2% specificity. The area under the curve (AUC) was 0.775 (95% confidence interval (CI): 0.694 to 0.855) for Lymphocyte count and 0.726 (95% CI: 0.639 to 0.812) for NLR.

Conclusions
NLR can be used to predict the bacteremia in Obstructive Calculous Pyelonephritis, and it can be used to determine the appropriate indication and timing for drainage.

P-32 Characterization of cryoablation-induced immune response in kidney cancer using T cell receptor sequencing

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Objectives
Cryoablation is one of the treatments for kidney cancer and is expected to induce strong local immune responses as well as systemic T cell-mediated immune reactions that may shrink distant metastatic lesions. Thus, characterization of T cell repertoire and immune environment in tumors before and after treatment should contribute to better understanding of the cryoablation-induced anti-cancer immune responses.

Methods
We collected tumor tissues from 22 kidney cancer patients, before cryoablation and at 3 months after cryoablation. In addition, blood samples were collected at the same time points. We applied a next generation sequencing approach to characterize T cell receptor beta (TCRB) repertoires in tumor tissues and peripheral blood mononuclear cells. We also measured mRNA expression levels of immune-related genes in the tissue samples.

Results
TCRB repertoire analysis revealed expansion of certain T cell clones in tumor tissues by cryoablation. We also found that proportions of abundant TCRB clonotypes were significantly increased in the post-cryoablation tissues than those of pre-cryoablation tumors. Some of these clonotypes were found to be increased in peripheral blood. Expression analysis showed significantly elevated transcriptional levels of *CD8, CD4, GZMA*, and *CD11c* along with high *CD8/FOXP3* ratio in the post-cryoablation tissues.

Conclusions
Cryoablation could induce strong immune reactions in tumors with oligoclonal expansion of anti-tumor T cells, which circulate systemically and possibly attack distant regions.

P-33 Cross-Department Retrospective Study of Surgery for Pheochromocytoma / Paraganglioma in Single Institute

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Objectives
Surgery for pheochromocytoma (PCC) and paraganglioma (PGL) are performed by several surgeon including urologist, general surgeon, and so on. In this study, we evaluated the outcome of PCC and PGL treatment in our institute.

Methods
We retrospectively analyzed 51 patients with PCC or PGL who operated at Universal of Tsukuba Hospital from January 2010 to December 2017.

Results
There are 36 cases of PCC and 15 cases of PGL (11; retroperitoneums, 2; bladders, 1 mediastinal, 1 prostate). The median age was 56 year-old (range; 9-81), there were 24 males and 27 females. In case of PCC, 13 patients were on the right, 20 cases on the left, and 3 cases on both sides. In case of retroperitoneal PGL, 3 and 8 tumors were at right and left, respectively. Twenty-seven cases (52.9%) of operation performed by urologist, 19 cases by breast-thyroid-endocrine surgeon, 2 cases by gastrointestinal surgeon, and 2 cases by pediatric surgeon. Laparoscopic surgery was selected in 35 cases (74.5%) at adrenal and retroperitoneal tumor, compare to open surgery in 12 cases. In case of laparoscopic surgery, the median tumor diameter was 35 mm (18-74). The median surgical time was 192 minutes (82 - 425), and median blood loss was 5 ml (5-820). In case of open surgery, the median tumor diameter was 50.5 mm (15 - 120), the operation time was 271 min (155 - 563) and the median bleeding volume was 418 ml (25 - 3470).

Conclusions
Laparoscopic surgery of PCC and PGL was performed by both urologist and breast-thyroid-endocrine surgeon in our institute. It is important to construct a database across the clinical departments.

P-34 Photodynamic diagnostic ureteroscopy with 5-aminolaevulinic acid for the detection of upper urinary tract tumor

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Objectives
5-aminolevulinic acid (5-ALA) was approved for use in December 2017 in Japan for the detection of bladder tumors treated with transurethral resection of bladder tumor (TUR-Bt). We herein report 3 cases of upper urinary tract tumor with bladder tumor successfully diagnosed by using photodynamic diagnostic (PDD) flexible ureteroscopy with 5-ALA after TUR-Bt.

Case presentation
Case #1
A 62-year-old man was referred to our hospital for macro hematuria. Cystoscopy and CT scan revealed bladder tumor and right renal pelvis tumor. Multiple papillary tumors of right renal pelvis were detected by PDD flexible ureteroscopy with 5-ALA after TUR-Bt. The pathological diagnosis was low grade urothelial carcinoma.
Case #2
A 69-year-old man was referred to our hospital for macro hematuria. Cystoscopy and CT scan revealed bladder tumor and right renal pelvis tumor. Papillary tumor of right pelvis was detected by PDD flexible ureteroscopy with 5-ALA after TUR-Bt. The pathological diagnosis was low grade urothelial carcinoma.
Case #3
A 65-year-old man was referred to our hospital for macro hematuria and right flank pain. Cystoscopy and CT scan revealed bladder tumor and right ureter tumor. But the ureter tumor was not diagnosed by retrograde pyelography. Papillary tumor of ureter was detected by PDD flexible ureteroscopy with 5-ALA after TUR-Bt. The pathological diagnosis was low grade urothelial carcinoma.

Conclusions
In all 3 patients, upper urinary tract tumors were detected by PDD flexible ureteroscopy with 5-ALA after TUR-Bt.

P-35 Laparoscopic Sacrocolpopexy with Ventral Rectopexy for Vaginal and Rectal prolapse Patients: A Case Series

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Objectives

Most pelvic organ prolapse (POP) patients not just suffer from urinary disorder but defecation disorder as well. Many women with severe pelvic floor dysfunction experience both vaginal and rectal prolapse. Laparoscopic sacrocolpopexy (LSC) is a common choice for patients with vaginal prolapse as it is less invasive and durable.

Studies have shown that rectal prolapse patients experience fewer complications after undergoing laparoscopic ventral rectopexy (LVR) alone. On the other hand, patients who undergo concomitant sacrocolpopexy and rectopexy concurrently appears to have more complications.

However, with the cooperation of both urologists and colorectal surgeons, we report a case study series of laparoscopic sacrocolpopexy with ventral rectopexy for both vaginal and rectal prolapse patients. We hypothesized that concurrent procedures might not result in a higher risk of complications.

Case Descriptions

Eight patients undergoing LSC and LVR concurrently, were identified in the surgical data of our department from the year 2016 to 2018. There were six cystocele, one uterine prolapse and one rectocele cases were included in this study.

The average age was 75-year-old while the average BMI was 24 kg/m^2. Additionally, the average blood loss was 7.25ml, with an average operating time of 225.3 minutes. No preoperative complication was found. The average number of hospitalization days was 5.4 days. No recurrence found in the 8 patients over an average of 1year and 7month follow up.

Conclusions

Laparoscopic sacrocolpopexy and rectopexy can be performed concurrently to treat vaginal and rectal prolapse for elderly patients with lesser risk of postoperative complications.

P-36 Relationship between the patients' background factors and parastomal hernia after radical cystectomy plus ileal conduit

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Introduction

The standard treatment for invasive bladder cancer is radical cystectomy. There is a parastomal hernia due to late complications after construction of ileal conduit, and it significantly impairs quality of life. The objective of this study is to evaluate the factors related to parastomal hernia.

Material and Method

We included 50 consecutive patients who underwent radical cystectomy plus ileal conduit from January 2007 to September 2018 at Juntendo Nerima hospital. Age, gender, duration of operation, BMI, amount of bleeding, presence or absence of postoperative ileus, and the transverse diameter of ileal conduit penetrating the fascia were examined as patients' background factors. We evaluated the relationship between these variables (continuous variables are median delimiter) and the presence of parastomal hernia using chi square test. We also examined the escaping direction of the parastomal hernia.

Results

Of the 50 patients, 10 cases confirmed a parastomal hernia. There was no significant correlation between the patient background factors and the parastomal hernia. Of the 10 patients, 9 cases were found on the exterior and head side as the escaping direction of the parastomal hernia.

Discussion

Although we focused on the transverse diameter of the ileal conduit penetrating the fascia, no correlation was observed. Other reasons may result in a parastomal hernia. The sample size is small which is a limitation of our study. Majority of the escaping direction of stomal hernia is outside and the head side. We will report with the literature consideration.

P-37 **Withdrawn**

P-38 **Withdrawn**

P-39 The optimal extent of pelvic lymph node dissection in patients who received chemotherapy prior to radical cystectomy

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Objectives
To investigate the preoperative risk factors predicting node positive disease (pN+) and disease recurrence to determine optimal extent of pelvic lymph node dissection (PLND).

Methods
A total of 81 consecutive patients with clinically node-negative (cN0) muscle invasive bladder cancer (MIBC) who received neoadjuvant chemotherapy (NAC) prior to radical cystectomy (RC) 2007 to 2017 were retrospectively analyzed. All patients underwent extended PLND. Multiple preoperative risk factors and the response to NAC determined by whether the primary tumor and lymph node progressed (LNP) or not on follow up CT scan during the course of chemotherapy. The sites of positive lymph node (LN), recurrence patterns, survival rates were systemically reviewed to determine the optimal extent of PLND in patients who received NAC for cN0 MIBC.

Results
Clinical T stages were cT2 in 28 (34.6%), cT3 in 34 (42.0%), and cT4 in 19 (23.4%) patients. In 9.9% showed disease progression of primary tumor, and 12.3% indicated LNP on CT considering the finding of TURBT. Pathological T stages were pT1 or lower in 42 (51.9%) [pT0;29.6], pT2-4 in 39 (48.1%) patients. Seven (8.6%) had pN+. The only independent preoperative risk factor predicting pN+ and disease recurrence was LNP during NAC on Cox regression analysis. Factors related with pN status, pT stages and present of variant histology were significant for disease recurrence. Five years recurrence free survival, overall survival and cancer specific survival rates were 67.8%, 79.5% and 75%, respectively.

Conclusions
Because LNP on CT scan after NAC predicts pN+ and disease recurrence in patients with cN0-MIBC, extended PLND is mandatory in these patients. In remaining patients, we can carefully propose that node dissection can be confined the standard range of PLND.

P-40 Comparative study of flexible and rigid cystoscopy for detection of recurrent bladder cancer

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Objectives
We compared the effectiveness of flexible cystoscopy (FC) and rigid cystoscopy (RC) for detection of intravesical recurrence of bladder cancer.

Materials and Methods
We studied the positive predictive value (ppv) in the recurrent suspicious lesions in patients with non muscle invasive bladder cancer (NMIBC). We used RC From July 2016 to June 2017 and FC from July 2017 to July 2018. We evaluated the second TURBT free survival (STFS) and cancer specific recurrence free survival (CSRFS) with RC and FC in the 12 months follow-up.

Results
All TURBT patients in the follow-up was 164. We excluded the patients who initially diagnosed to muscle invasive bladder cancer (32 patients) and received intentionally repeated TURBT every 1-4 weeks (10 patients). There were 48 patients received second TURBT for patients with recurrent suspicious lesions. PPV of RC and FC was 81.8% (18/22) and 61.5% (16/26), respectively. There was no statistically significance between two groups ($p = 0.124$), but there was more likely to be benign lesions in the follow-up with FC which is about twice as many as in the follow-up with RC (38.5% vs 18.2%). We analyzed STFS and CSRFS for 1 year. All patients had undergone BCG induction therapy for 6 weeks, and BCG maintenance therapy was followed for the patients with high grade or submucosal invasion. There were no pathological differences between the two groups. STFS was statistically significantly shorter in FC ($p = 0.002$), but there was no statistically significant difference in CSRFS between the two groups, while FC showed shorter trend ($p = 0.060$).

Conclusions
FC had made the bladder lesions detected early but had a low ppv for intravesical recurrence. This is thought to be due to the fact that various inflammatory benign tumor lesions are better seen than RC.

P-41 Synergistic effects of extracorporeal shockwave therapy and Korean herbal formulation on erectile dysfunction in diabetic animal model

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Objectives

Studies on low-intensity extracorporeal shockwave therapy (ESWT) for the treatment of refractory erectile dysfunction (ED) have been reported to date, but inconclusive evidence has been obtained. KH-204, a Korean herbal formula has been reported to have anti-oxidative effects many times. We investigated the synergy effect of ESWT with KH-204 in an animal model of diabetes mellitus (DM) - induced ED.

Methods

Streptozotocin-induced DM rats were divided into 5 groups: group 1, control; group 2, DM; group 3, DM + ESWT; group 4 DM + KH-204; and group 4 DM + ESWT + KH-204. In ESWT groups rats were treated with ESWT 3 times a week for 2 weeks. The KH-204 groups were treated with a daily oral dose of KH-204 for 12 weeks. After all treatments, intracavernous pressure (ICP) was measured, and the cavernous tissues were evaluated.

Results

ICP was evaluated as a measurement of erectile function. The DM + ESWT, DM + KH-204, and DM + ESWT + KH-204 groups showed significantly restored erectile function compared with the DM group ($p<0.05$). Among these groups, the DM+ ESWT + KH-204 group showed the highest ICP. Moreover, ESWT and KH-204 treatment restored smooth muscle contents and many parameters related to potency including vascular endothelial growth factor, eNOS, platelet endothelial cell adhesion molecule, cGMP and nNOS expression levels compared with the DM group ($p<0.05$).

Conclusions

We confirmed the potential efficacy of ESWT and KH-204 in the treatment of ED patients using an animal model. This combination is expected to have good clinical results in the future treatment of refractory ED.

P-42 Down-regulation of TLR4 by electric stimulation relieves inflammation in chronic prostatitis/chronic pelvic pain syndrome

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Objectives

The chronic prostatitis (CP), including chronic pelvic pain syndrome (CPPS), is the most commonly prostatitis case, which is a highly prevalent syndrome with significant decreased quality of life. However, there are insufficient data supporting the use of devices, and the exact mechanism has not been determined so far. The aim of this study was to evaluate the effect of electric stimulation (ES) on CP/CPPS and explore the mechanism.

Methods

RWPE-2 cells randomly divided into 4 groups: 1) sham control group, 2) lipopolysaccharide (LPS) inducing inflammation group, 3) LPS+ES (frequency without heat) group, and 4) LPS+ES (frequency with heat) group. Cells in inflammation and treatment groups were stimulated by LPS inducing inflammation. Sprague-Dawley rats (n=40) were randomly divided into 4 groups: 1) normal control group, 2) prostatitis group, 3) prostatitis+ES (F+/H-) group, and 4) prostatitis+ ES (F+/H+) group. Prostatitis were induced by 17 beta-estradiol and dihydrotestosterone for 4 weeks.

Results

In vitro, ES increased HSP70 and decrease COX-2, NF-KB, and TRL-4. ES could reduce apoptosis in vitro compared with LPS group ($P<0.05$). Prostate tissue produced more anti-inflammatory cytokines, including TRL-4, COX-2, in prostatitis+ES (F+/H+) group than prostatitis group ($P<0.05$). ES inhibited apoptosis in prostatitis tissue. Inflammatory response in prostatitis tissue was relieved by ES.

Conclusions

Electric stimulation improved CP/CPPS and reversed pathologic changes by taking part in the anti-inflammatory response. Electric stimulation therapy may be a potential and noninvasive approach for CP/CPPS in the clinic.

P-43 The Relationship between Thyroid Hormone and Lower Urinary Tract Symptoms/ Benign Prostatic Hyperplasia and the Impact of Testosterone on Their Relationship

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Objectives
Thyroid hormones play an important role in cell growth. Several investigators have documented the role of thyroid hormones in the development of prostate cancer. However, to date there are only limited data available regarding thyroid hormone levels in benign prostatic hyperplasia (BPH).

Methods
A total of 5708 middle aged men were included. Lower urinary tract symptoms were assessed by international prostate symptom score (IPSS), total prostate volume (TPV), maximal flow rate (Qmax), and a full metabolic workup. Serum thyroid-stimulating hormone (TSH) and free thyroxine (T4) were measured. We divided participants into quartiles based on their TSH and free T4 levels: first quartile, Q1; second quartile, Q2; third quartile, Q3; and fourth quartile, Q4.

Results
There was a significant increase in the percentage of men with IPSS>7, Qmax<10 mL/sec, and TPV≥30 mL with increase of FT4 quartile. The adjusted odds ratio (OR) for TPV≥30 mL and IPSS>7 were significantly different between FT4 quartile groups [ORs; (5-95 percentile interval), P value; TPV≥30 mL, Q1: .000 (references); Q2: 1.140(.911-1.361), P=.291; Q3: 1.260 (1.030-1.541), P=.025; Q4: 1.367(1.122-1.665), P=.002; IPSS>7: Q1: .000 (references); Q2: .969 (.836-1.123), P=.677; Q3: 1.123 (.965-1.308), P=.133; Q4: 1.221 (1.049-1.420), P=.010)]. In men with above median levels of testosterone, the FT4 correlated positively with TPV, even after adjusting for confounders. However, the FT4 was not correlated with TPV in men with below median levels of testosterone. TSH was not related to LUTS/BPH measurements.

Conclusions
We found a potential role of thyroid hormone in developing BPH.

P-44 3-YEAR FOLLOW-UP OF PATIENTS WITH STRESS URINARY INCONTINENCE TREATED WITH SUB-ABLATIVE VAGINAL ER: YAG LASER

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Introduction and Hypothesis
Stress urinary incontinence (SUI) is a common health problem that affects roughly 35 % of women in the reproductive period and greatly affects the quality of life. A prospective and controlled study was conducted to assess the long-term efficacy of non-ablative Er:YAG laser treatment of SUI. The effects were compared to the effects of Pelvic Floor Muscle Training (PFMT).

Methods
72 women participated in the study, 29 women were included in PFMT group and 43 women in the laser group. Efficacy of each modality was assessed by 1-h pad test, 24-h pad test, 3-day voiding diary and ICIQ-UI SF questionnaire at multiple follow-up appointments. Statistical analysis was performed using Friedman and Mann-Whitney U test, as appropriate. Patients were questioned about discomfort during treatment and any adverse events following the laser procedure.

Results
All outcome measures in the laser group show statistically significant improvement over time of 12 months following initial laser treatment. The improvement rates in the laser group were significantly higher than in PFMT group. 18-months follow up revealed a fading of the effect that was alleviated by additional maintenance treatments. There were no serious adverse events reported during the study. All reported side effects were mild and transient.

Conclusions
The application of sub-ablative Er:YAG laser for SUI treatment significantly improves the condition, its effects can last up to 12 months and the effects are superior to PFMT. High rates of improvement can be maintained with single touch-up treatments, performed every 6 months.
Keywords: Long-term effectiveness, Non-ablative Er:YAG, Stress urinary incontinence, Vaginal laser

P-45 Efficacy of Erbium: YAG Laser Treatment Compared to Topical Estriol Treatment for Vaginal Atrophy Symptoms

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Objectives
The objective of this prospective comparative cohort study was to establish the effectiveness and safety of Erbium:YAG (Er:YAG) laser treatment for vaginal atrophy and to compare it with an established topical estriol treatment.

Methods
50 patients with vaginal atrophy were divided into two groups. The estriol group received a treatment of 0.5 mg estriol ovules for 8 weeks and the laser group was first treated for 2 weeks with 0.5 mg estriol ovules 3 times per week to hydrate the mucosa and then received three sessions with 2940 nm Er:YAG laser in non-ablative mode. Biopsies were taken before and at 1, 3, 6 and 12 months post-treatment. Maturation index, maturation value and pH where recorded up to 12-months post-treatment, while the VAS analysis of symptoms was recorded up to 18 months post-treatment.

Results
Statistically significant reduction ($p<0.05$) of all assessed symptoms was observed in the laser group at all follow-ups up to 18 months post-treatment. Significant improvement in maturation value and a decrease of pH in the laser group was detected up to 12 months after treatment. The improvement in all endpoints was more pronounced and longer lasting in the laser group. Histological examination showed changes in the tropism of the vaginal mucosa and also angiogenesis with a restorative reaction in the lamina propria in the laser group.

Conclusions
Our results show that Er:YAG laser treatment successfully relieves vaginal atrophy symptoms and that the results are more pronounced and longer lasting compared to topical estriol treatment.

P-46 INTRAURETHRAL ERBIUM YAG LASER FOR THE MANAGEMENT OF URINARY SYMPTOMS OF GENITOURINARY SYNDROME OF MENOPAUSE

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Objectives
The objective of this study was to assess the efficacy and safety of intraurethral erbium laser treatment of urinary symptoms of genitourinary syndrome of menopause.

Methods
Patients with diagnosed Genitourinary Syndrome of Menopause, having less than 5% of vaginal superficial cells in the citology, vaginal pH higher than 5, with urinary symptoms of GSM and impaired continence due to urethral atrophy, received two sessions of intraurethral erbium laser with 3 weeks interval in between the sessions. Laser energy was delivered in non-ablative mode and a 4 mm cannula was used. Therapy efficacy on urinary symptoms was measured using ICIQ-SF, 1 hour pad test. and VAS scores. Follow-ups were at 3 and 6 months.

Results
29 female patients were included in this study and received two sessions of the intraurethral non-ablative mode ErYAG laser.
Significant improvement was observed in all measured parameters at both follow-ups.
ICIQ-SF improved in average for 61,4% at 3 months FU and for 39,8 at 6 months. 1 hour pad test showed reduction of the quantity of leaked urine for 62,2% at 3M FU and 44,7% at 6M FU. All urinary symptoms of GSM improved. Dysuria dropped to 12,3% and 30,6% of base value at three and six months respectively, urinary urgency dropped to 22,5% and 47,2% and frequency dropped to 21,8% and 42,3% also at three and six months respectively. Adverse effects were mild and transient.

Conclusions
Er:YAG laser is efficacious and safe for treatment of urinary symptoms of GSM, however there is a need for prospective, randomized and controlled trials, with larger number of patients, to confirm our findings.

P-47 MANAGEMENT OF PROSTATODYNIA IN YOUNGER PATIENTS WITH SUB-ABLATIVE ERBIUM: YAG INTRAURETRAL LASER

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Hypothesis
This prospective study aimed to compare the clinical outcomes between the use of the Erbium: YAG laser, administered in long sub-ablative pulses applied at the level of the male prostatic urethra, to the use of the standard treatment of oral tadalafil. for the treatment of prostatodynia symptoms in young patients.

Study Design, Materials, And Methods
This is a prospective study, conducted between April and September of 2017, composed of two groups of patients: the Laser Group, composed of 16 patients between 31 and 47 years of age; and, the Control Group, represented by 20 patients between 30 and 45 year old. Both groups of patients were affected by prostatodynia, with characteristic symptoms: perineal pain, dysuria and urinary frequency. In the laser group, the patients received two sessions of Erbium: YAG intraurethral laser in sub-ablative mode, separated by 4 weeks, administering two laser sessions in two months. The control group was treated with tadalafil, at a dose of 5 mg/day, also for two months.

Results
All the evaluated symptoms showed a statistically-significant improvement in the follow-up at one month and three months in both groups. The improvement in chronic perineal pain measured by VAS showed a fall from severe to minimal or absent, and from moderate to minimal to absent. The urinary symptoms of dysuria and frequency, evaluated by the "Quality of Life Due to Urinary Symptoms Questionnaire" and by I-PSS, also showed a statistically-significant improvement in both groups at the month of follow-up, which was even more evident at three months. In the same way, the Q-max measured by uroflowmetry showed a clear improvement in both groups, from 2 to 5 ml/sec with respect to the start values, and it was maintained after three months. Of the 16 patients treated in the laser group, 13 remained asymptomatic and with a normal Q-max at six months of follow-up, while of the 20 patients treated in the control group, only 10%, 2 patients, were asymptomatic at six months of follow-up.

Conclusion
Few of the ailments of the genitourinary tract confuse the patient and the doctor more than the prostatic inflammatory processes. Prostatodynia remains a complex and difficult problem to solve. The systematic approach to these conditions constitutes progress for their understanding and treatment. A good doctor-patient relationship is necessary, since it takes time, patience and understanding on both sides to arrive at positive results. The multiple treatments proposed do nothing but show that a clear knowledge of the problem has not yet been reached. Through this pilot study and knowledge of the benefits of laser-tissue interaction (7), we once again show that laser light in sub-ablative pulses of Erbium: YAG, may represent an option in the therapeutic arsenal with that we have today. It is necessary to perform prospective, randomized studies with a larger number of patients and longer follow-up to confirm these initial good results.