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CLINICAL Genitourinary Prostate, Kidney, & Bladder Cancer

Table of Contents

Publisher's Note

- A12 Clinical Skin Cancer: The Next Addition to Elsevier's Clinical Cancer (ECC) Journal Portfolio

Commentary

- 261 Brentuximab Vedotin in CD30-Expressing Germ Cell Tumors After Chemotherapy Failure
Andrea Necchi, Andrea Anichini, Daniele Raggi, Patrizia Giannatempo, Domenico Magazzù, Nicola Nicolai, Maurizio Colecchia, Biagio Paolini, Elisa Coradeschi, Elena Tassi, Giulia Grazia, Roberta Mortarini, Giuseppina Calareso, Raffaella De Fato, Elena Togliardi, Flavio Crippa, Roberto Salvioni, Pinuccia Valagussa, Alessandro M. Gianni

Reviews

- 265 Diving Into Cabazitaxel's Mode of Action: More Than a Taxane for the Treatment of Castration-Resistant Prostate Cancer Patients
Begoña Mellado, Natalia Jimenez, Mercedes Marin-Aguilera, Oscar Reig
- 271 A Systematic Review of the Prognostic Role of Hematologic Scoring Systems in Patients With Renal Cell Carcinoma Undergoing Nephrectomy With Curative Intent
Nathan Grimes, Matthew Tyson, Cathal Hannan, Colin Mulholland
- 277 Outcome and Safety of Sorafenib in Metastatic Renal Cell Carcinoma Dialysis Patients: A Systematic Review
Alessandro Leonetti, Melissa Bersanelli, Bruno Castagneto, Cristina Masini, Giovanni Di Meglio, Benedetta Pellegrino, Sebastiano Buti

Original Studies

- 284 Comparison of Patient-Reported Quality-of-Life and Complications in Men With Prostate Cancer, Between Two Modes of Administration
Fanny Sampurno, Rasa Ruseckaite, Jeremy L. Millar, Sue M. Evans
The aim of this study was to assess the quality-of-life (QOL) of men with prostate cancer in Victoria, Australia. Results suggest that modes of administration and instruments to measure QOL outcomes in patients with potential sensitive issues need to be carefully chosen in order not to underestimate the findings. Demographic and clinical factors need to be carefully considered while interpreting the QOL outcomes and conducting follow-up studies.
- 290 Long-Term Oncologic Outcome of an Initial Series of Laparoscopic Radical Prostatectomy for Clinically Localized Prostate Cancer After a Median Follow-up of 10 Years
Ashkan Mortezaei, Tullio Sulser, Jacopo Robbiani, Eva Drescher, Daniel Disteldorf, Daniel Eberli, Cedric Poyet, Martin K. Baumgartner, Hans-Helge Seifert, Thomas Hermanns

The long-term oncologic outcomes for laparoscopic radical prostatectomy (LRP), a minimal invasive approach for the treatment of localized prostate cancer, are still only sparsely available. We, therefore, evaluated the outcomes after 10 years of an initial series of 100 patients who had undergone LRP. The estimated 10-year biochemical recurrence-free survival was 78.6%, indicating excellent long-term oncologic control for patients with localized prostate cancer.

298 Increased Expression of Tripartite Motif (TRIM) 47 Is a Negative Prognostic Predictor in Human Prostate Cancer

Tetsuya Fujimura, Satoshi Inoue, Tomohiko Urano, Kenich Takayama, Yuta Yamada, Kazuhiro Ikeda, Daisuke Obinata, Daisaku Ashikari, Satoru Takahashi, Yukio Homma

Recent investigations have focused on androgen signaling in prostate cancer (PC) progression. We investigated protein and mRNA expression levels of tripartite motif protein 47 (TRIM47), defined as E3 ubiquitin ligases, in PC. Higher TRIM47 expression was associated with advanced pathologic T stage (\geq T3b) and worse cancer-specific survival rates. TRIM47 may represent a novel therapeutic target.

304 Phase 2 Study of Bevacizumab and Temezirolimus After VEGFR TKI in Metastatic Renal Cell Carcinoma

Kathleen M. Mahoney, Susanna Jacobus, Rupal S. Bhatt, Jiayi Song, Ingrid Carvo, Su-Chun Cheng, Mekailah Simpson, André P. Fay, Igor Puzanov, M. Dror Michaelson, Michael B. Atkins, David F. McDermott, Sabina Signoretti, Toni K. Choueiri

Combining bevacizumab and temezirolimus in metastatic renal cell carcinoma patients previously treated with vascular endothelial growth factor receptor tyrosine kinase inhibitor is possible, but with dose reductions and treatment discontinuations. This combination resulted in modest activity. Temezirolimus and bevacizumab combination is not recommended for use outside of a clinical trial.

314 Synergistic Survival: A New Phenomenon Connected to Adverse Events of First-Line Sunitinib Treatment in Advanced Renal Cell Carcinoma

Krisztián Nagyiványi, Barna Budai, Krisztina Bíró, Fruzsina Gyergyay, László Noszek, Zsófia Küronya, Hajnalka Németh, Péter Nagy, Lajos Gécz

Significantly longer survivals were observed when some adverse events occurred after first-line sunitinib treatment of 274 patients with advanced renal cell carcinoma. The higher number of adverse events was an independent marker of longer progression-free and overall survival. Multiple adverse events increased progression-free and overall survival in a synergistic manner.

323 A Combination of Cisplatin and 5-Fluorouracil With a Taxane in Patients Who Underwent Lymph Node Dissection for Nodal Metastases From Squamous Cell Carcinoma of the Penis: Treatment Outcome and Survival Analyses in Neoadjuvant and Adjuvant Settings

Nicola Nicolai, Laura Maria Sangalli, Andrea Necchi, Patrizia Giannatempo, Anna Maria Paganoni, Maurizio Colecchia, Luigi Piva, Mario Achille Catanzaro, Davide Biondi, Silvia Stagni, Tullio Torelli, Daniele Raggi, Elena Faré, Giorgio Pizzocaro, Roberto Salvioni

We addressed the use of perioperative chemotherapy in nodal metastases from penile cancer. Forty-seven N2 to 3 MO patients received perioperative taxane, cisplatin and 5-fluorouracil (T-PF) and 38.3% are disease-free at 22 months. Neoadjuvant T-PF allowed 12 (43%) clinical responses and 4 (14%) complete pathologic remissions among 28 patients, and the 2-year disease-free survival (DFS) was 7.1%. The 2-year DFS was 36.8% after adjuvant T-PF. T-PF is active and is associated with long-term survival after surgery. Chemotherapy must be offered with caution in patients with resectable nodal metastases.

331 Cisplatin- Versus Non-Cisplatin-based First-Line Chemotherapy for Advanced Urothelial Carcinoma Previously Treated With Perioperative Cisplatin

Jennifer A. Locke, Gregory Russell Pond, Guru Sonpavde, Andrea Necchi, Patrizia Giannatempo, Ravi Kumar Paluri, Guenter Niegisch, Peter Albers, Carlo Buonerba, Giuseppe Di Lorenzo, Ulka N. Vaishampayan, Scott A. North, Neeraj Agarwal, Syed A. Hussain, Sumanta Pal, Bernhard J. Eigel

To identify the optimal choice for first-line chemotherapy for advanced urothelial carcinoma (UC), we investigated the outcomes between cisplatin and non-cisplatin regimens in patients with metastatic UC after perioperative cisplatin-based chemotherapy (PCBC) in a multicenter retrospective study. In patients who had undergone previous PCBC for UC, a repeat challenge with cisplatin conferred poorer overall survival, especially in those with progression in < 1 year.

341 Prognostic Significance of Preoperative Serum Lactate Dehydrogenase in Upper Urinary Tract Urothelial Carcinoma

Xin-Ke Zhang, Zhi-Ling Zhang, Xu Lu, Ping Yang, Mu-Yan Cai, Wan-Ming Hu, Jing-Ping Yun, Fangjian Zhou, Chao-Nan Qian, Yun Cao

Upper urinary tract urothelial carcinoma (UUTUC) is one of the uncommon malignancies. In this study, we retrospectively evaluated the prognostic implication of the preoperative lactate dehydrogenase in 100 UUTUC patients. We found that the preoperative lactate dehydrogenase was an independent prognostic factor for patients with UUTUC. This finding could be of help in clinical practice.

346 Clinical Significance of p53 and p16^{ink4a} Status in a Contemporary North American Penile Carcinoma Cohort

Kamran Zargar-Shoshtari, Philippe E. Spiess, Anders E. Berglund, Pranav Sharma, Julio M. Powsang, Anna Giuliano, Anthony M. Magliocco, Jasreman Dhillon

There is strong, but not complete, concordance between immunohistochemical stains for p16^{ink4a} and human papilloma virus in situ hybridization. Warty, basaloid, or mixed warty basaloid tumor subtypes are significantly more common in p16^{ink4a}-positive patients. In p16^{ink4a}-negative patients, positive p53 status is associated with nodal metastasis (pN+). In pN+ patients, cancer-specific survival (CSS) was significantly worse in patients with negative p16^{ink4a} and p53 expression. p16^{ink4a} status is a significant predictor for improved CSS.

352 Expression Levels of DNA Damage Repair Proteins Are Associated With Overall Survival in Platinum-Treated Advanced Urothelial Carcinoma

Stephanie A. Mullane, Lillian Werner, Elizabeth A. Guancial, Rosina T. Lis, Edward C. Stack, Massimo Loda, Philip W. Kantoff, Toni K. Choueiri, Jonathan Rosenberg, Joaquim Bellmunt

In a cohort of 104 patients with metastatic urothelial carcinoma (mUC) who had received platinum therapy, we examined the correlation between ERCC1, RAD51, PARP-1, PAR, BRCA1, and BRCA2 and overall survival (OS). A greater percentage of nuclear staining of ERCC1 (hazard ratio [HR], 2.7; 95% confidence interval [CI], 1.5-4.9; $P = .0007$), RAD51 (HR, 5.6; 95% CI, 1.7-18.3; $P = .005$), and PAR (HR, 2.2; 95% CI, 1.1-4.4; $P = .026$) was associated with worse OS.

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e283 Combined Angiogenesis and Proliferation Markers' Expressions as Long-Term Prognostic Factors in Renal Cell Cancer

Juha P. Virman, Petri Bono, Tiina H. Luukkaala, Kaisa L. Sunela, Paula M. Kujala, Pirkko-Liisa I. Kellokumpu-Lehtinen

The prognostic role of MIB-1, BCL-2, VEGFR3, and CD31 expression was retrospectively evaluated in 224 renal cell cancer (RCC) patients. The combination of high MIB-1/low BCL-2 was with poor survival compared with low MIB-1/high BCL-2, and the combination of low VEGFR3/low CD31 was also associated with poor survival compared with high VEGFR3/high CD31. These molecular expressions might be valuable in planning the follow-up for RCC patients.

e291 Impact of Accidental Tumor Incision During Laparoscopic Partial Nephrectomy on the Oncologic and Clinical Outcomes

Hiroki Ito, Kazuhide Makiyama, Takashi Kawahara, Kimito Osaka, Koji Izumi, Yumiko Yokomizo, Noboru Nakaigawa, Shoji Yamanaka, Masahiro Yao

We here, for the first time, report that the risk of accidental tumor incision (ATI) during laparoscopic partial nephrectomy is influenced by the presence of a pseudocapsule, and, to some degree, by the tumor size. Moreover, we also show that ATI during laparoscopic partial nephrectomy is not necessarily associated with poor outcomes such as local tumor recurrence.

e299 Duration of Androgen Deprivation Therapy for High-Risk Prostate Cancer: Application of Randomized Trial Data in a Tertiary Referral Cancer Center

Vinayak Muralidhar, Meredith M. Regan, Lillian Werner, Mari Nakabayashi, Carolyn P. Evan, Joaquim Bellmunt, Toni K. Choueiri, Aymen A. Elfiky, Lauren C. Harshman, Rana R. McKay, Mark M. Pomerantz, Christopher J. Sweeney, Mary-Ellen Taplin, Philip W. Kantoff, Paul L. Nguyen

We evaluated the patterns of androgen deprivation therapy (ADT) use for high-risk prostate cancer at a tertiary referral cancer center. Genitourinary oncology specialists tended to prescribe longer course ADT after the 2008-2009 trial publications supporting long-course ADT. However, specialists have continued to weigh the risks and benefits of ADT: 49.4% of patients diagnosed starting in 2010 received shorter course ADT, most often because of side effects, comorbidities, or age.

e307 Role of Inter-Observer Variability and Quantification of Muscularis Propria in the Pathological Staging of Bladder Cancer

Francesca Giunchi, Riccardo Panzacchi, Elisa Capizzi, Riccardo Schiavina, Eugenio Brunocilla, Giuseppe Martorana, Antonietta D'Errico, Michelangelo Fiorentino

We showed that the implementation of dedicated genito-urinary pathologists is able to improve inter-observer variability in the pathological staging of bladder cancer. In addition, we show that the mere presence of muscularis propria bundles in trans-urethral bladder resection specimens significantly predicts stage at radical cystectomy. We enrolled, for this purpose, 101 patients with histologically diagnosis of pT1 bladder cancer who invariably underwent radical cystectomy in the course of disease.

e313 Prognostic Value of Focal Positive Surgical Margins After Radical Prostatectomy

Sangchul Lee, Ki Bom Kim, Jung Ki Jo, Jin-Nyoung Ho, Jong Jin Oh, Seong Jin Jeong, Sung Kyu Hong, Seok-Soo Byun, Gheeyoung Choe, Sang Eun Lee

We present a comparison of the prognostic significance of focal positive margins (FPMs) among patients with clinically localized prostate cancer after radical prostatectomy (RP). FPMs after RP did not significantly affect biochemical recurrence-free survival in all patients or patients with pathologic T2 disease.

e321 Laparoscopic Radical Prostatectomy Plus Extended Lymph Node Dissection in Combination With Immediate Androgen Deprivation Therapy for Cases of pT3-4N0-1M0 Prostate Cancer: A Multimodal Study of 8 Years' Follow-up

Yi Yang, Yun Luo, Guo-Liang Hou, Qun-Xiong Huang, Jun Pang, Xin Gao

We evaluated therapeutic effects through the longtime survival analysis of patients with or without local lymph node (LN) metastatic prostate cancer treated by laparoscopic radical prostatectomy (LRP). LRP plus extended LN dissection was a feasible approach to these patients; many clinical pathologic parameters influenced the postoperative survival results.

e329 Prognostic Significance of the Disparity Between Biopsy and Pathologic Gleason Score After Radical Prostatectomy in Clinical Candidates for Active Surveillance According to the Royal Marsden Criteria

Jung Ki Jo, Sung Kyu Hong, Seok-Soo Byun, Sang Eun Lee, Sangchul Lee, Jong Jin Oh

We identify the biochemical outcome according to biopsy Gleason score among patients who are clinical candidate for active surveillance. We found that different adverse pathologic outcomes and biochemical outcomes were shown according to biopsy pattern although the patients have the same pathologic GS 3+4 after RP.

e335 Safety and Feasibility of Laparoscopic Nephrectomy for Big Tumors (≥ 10 cm): A Retrospective Multicentric Study

Grégory Verhoest, Jean-Philippe Couapel, Emmanuel Oger, Nathalie Rioux-Leclercq, Géraldine Pignot, Jean-Jacques Patard, Axel Bex, Paul Panayotopoulos, Pierre Bigot, Viktor Eret, Milan Hora, Burak Turna, Maxime Lefevre, Jérôme Rigaud, Xavier Tillou, Arnaud Doerfler, Evangelos Xylinas, Yanish Soorojebally, Morgan Rouprêt, Samuel Lagabrielle, Jean-Christophe Bernhard, Jean-Alexandre Long, Julien Berger, Emmanuel Ravier, Philippe Paparel, Laurent Salomon, Alejandro R. Rodriguez, Karim Bensalah

One hundred sixteen patients who had a laparoscopic nephrectomy for big tumors were included. Conversion to open surgery was necessary in 20.7%. Hemorrhage occurred in 16.4%, resulting in open conversion in 62.5%. Intraoperative complications, age, and blood loss were predictive factors of conversion to open surgery. Laparoscopic nephrectomy for tumors > 10 cm can be performed safely with comparable results to open surgery.

- e341 Incidence and Predictors of 30-Day Readmission in Patients Treated With Radical Cystectomy: A Single Center European Experience**
Marco Moschini, Giorgio Gandaglia, Paolo Dell'Oglio, Nicola Fossati, Vito Cucchiara, Giusy Burgio, Agostino Mattei, Rocco Damiano, Shahrokh F. Shariat, Andrea Salonia, Francesco Montorsi, Alberto Briganti, Renzo Colombo, Andrea Gallina
 Radical cystectomy (RC) is associated with significant complication rates, however, no data exist about incidence of readmission after RC in European series that are characterized by longer length of stay (LOS) compared with American series. We found a rate of 12% of 30-day readmission, moreover, an increase of LOS seems effective to prevent readmission only in patients older than 70 years.
- e347 Using Interferon Alfa Before Tyrosine Kinase Inhibitors May Increase Survival in Patients With Metastatic Renal Cell Carcinoma: A Turkish Oncology Group (TOG) Study**
Mehmet Artaç, Hasan Şenol Çoşkun, Levent Korkmaz, Murat Koçer, Nazım Serdar Turhal, Hüseyin Engin, İsa Dede, Semra Paydaş, Berna Öksüzoğlu, Hakan Bozcuk, Ahmet Demirkazık
 Survival outcomes of interferon-alfa and tyrosine kinase inhibitors for 104 cases of metastatic renal cell carcinoma were included in this study. First-line interferon-alfa treatment before tyrosine kinase inhibitors had an additive survival affect.
- e355 Robotic Prostatectomy on the Web: A Cross-Sectional Qualitative Assessment**
Hendrik Borgmann, René Mager, Johannes Salem, Johannes Bründl, Frank Kunath, Christian Thomas, Axel Haferkamp, Igor Tsaour
 Many patients diagnosed with prostate cancer search for information on robotic prostatectomy on the Web. We evaluated the quality, popularity, accessibility, reliability, and readability of 43 robotic prostatectomy Web sites. Results showed medium to high ratings in all domains of quality and poor readability of Web sites. Physicians should guide their prostate cancer patients to Web sites with high-quality and adequate readability.
- e363 Do Second Primary Cancers Affect the Risk of Biochemical Recurrence in Prostate Cancer Patients Undergoing Radical Prostatectomy? A Propensity Score-Matched Analysis**
Minyong Kang, Jin-Woo Jung, Jong Jin Oh, Sangchul Lee, Sung Kyu Hong, Sang Eun Lee, Seok-Soo Byun
 Although observational studies have reported clinicopathologic data on prostate cancer (PCa) at the time that other primary cancers have been diagnosed, no studies have focused on the prognostic value of the presence of second primary cancers in patients with PCa. In a propensity score-matched analysis, patients with other malignancies had similar biochemical recurrence-free survival rates compared with those without other cancers.
- e371 Prognostic Value of Gene Methylation and Clinical Factors in Non–Muscle-Invasive Upper Tract Urothelial Carcinoma After Radical Nephroureterectomy**
Yunchao Xing, Gengyan Xiong, Dong Fang, Xinyu Yang, Xuesong Li, Liqun Zhou
 The prognostic value of gene methylation and clinical factors of 192 non–muscle-invasive upper tract urothelial carcinomas (NMIUTUC) were retrospectively analyzed. Compared to upper tract urothelial carcinoma, NMIUTUC have good postoperative survival and similar intravesical recurrence rate but later recurrence. The nomogram has good performance and can be used to guide clinical decisions.
- e379 Local Recurrence After Curative Surgical Treatment of Renal Cell Cancer: A Study of 91 Patients**
YueJun Du, Carsten Grüllich, Boris Hadaschik, Gencay Hatiboglu, Markus Hohenfellner, Sascha Pahernik
 Ninety-one patients with local recurrence (LR) after curative treatment of renal cell cancer were treated surgically. The analyses of the present series revealed that advanced age, T3/T4 stage, Fuhrman grade 3/4, major venous extension, and positive surgical margins are related to the risk of early LR. A shorter time to LR and a larger size of the LR were associated with a poor prognosis after LR resection.
- e387 Does Core Length Taken per cc of Prostate Volume in Prostate Biopsy Affect the Diagnosis of Prostate Cancer?**
Hasan Deliktas, Hayrettin Sahin, Mehmet Cetinkaya, Yelda Dere, Omer Erdogan, Ercan Baldemir
 In prostate biopsies, as the core number and/or core length increases, the possibility of determination of prostate cancer increases. However, there is no consensus as to what the core number or core length should be in

different prostate volumes. In prostate biopsy, core length taken per cc of prostate and the percentage of the sampled prostate volume are important morphometric parameters in the determination of prostate cancer.

- e393 **Consolidation With Radiation or Concurrent Chemo-Radiation After Chemotherapy Results in Durable Complete Remissions of Isolated Nodal Recurrences of Urothelial Cancer: A Case Series and Review**
Mhd. Yaser Al-Marrawi, Heath B. Mackley, Suhail Ali, Henry Wagner, Monika Joshi, Sheldon Holder, Mathew Kaag, Carol Mallon, Giampaolo Talamo, Joseph J. Drabick
- e401 **Brain Metastasis Responsive to Pazopanib in Renal Cell Carcinoma: A Case Report and Review of the Literature**
Megan E. Gooch, Kamyar Nader, Gregory J. Kubicek, Robert A. Somer
- e405 **An Unexpected Subdural Collection: Story of a Prostatic Metastasis**
Pierre Bourdillon, Caroline Apra, Philippe Cornu, Dorian Chauvet
- e409 **Rare Case of Excessive Beta-Human Chorionic Gonadotropin Producing Intrascrotal Leiomyosarcoma: Diagnostic Pitfalls and Therapeutic Implications**
Maximilian Peter Brandt, Thomas Hoefner, Kilian Martin Gust, Marit Ahrens, Marie Boettcher, Hans-Michael Kvasnicka, Georg Bartsch, Christian Thomas, Axel Haferkamp, Igor Tsaor
- e413 **A Case of Gemcitabine and Cisplatin Chemotherapy in a Patient With Metastatic Urothelial Carcinoma Receiving Hemodialysis**
Taisuke Ezaki, Kazuhiro Matsumoto, Shinya Morita, Kazunobu Shinoda, Ryuichi Mizuno, Eiji Kikuchi, Mototsugu Oya
- e417 **Lumbosacral Plexus Involvement as the First Site of Metastatic Recurrence in a Patient With CTNNB1-Mutant Prostate Cancer**
Mark C. Markowski, Sara E. Wobker, Roy E. Strowd, III, Emmanuel S. Antonarakis
- e423 **Gemcitabine and Paclitaxel for Primary Bladder Carcinoma in Renal Transplant Recipients: A Case Report**
Zhi-Ke Li, Ye Chen, Yu Yang, Ke Cheng, Zhi-Ping Li, Ji-Yan Liu
- e427 **Computed Tomography Loopogram: A Novel Technique for Upper Tract Evaluation After Radical Cystectomy**
Andres F. Correa, Audry Kang, Timothy D. Lyon, Jodi K. Maranchie
- e431 **Anti-programmed Death Receptor 1 Blockade Induces Clinical Response in a Patient With Metastatic Collecting Duct Carcinoma**
Kalen J. Rimar, Joshua J. Meeks, Timothy M. Kuzel
- e435 **Well-Differentiated Papillary Mesothelioma of the Tunica Vaginalis: Case Report and Systematic Review of Literature**
Wei Keith Tan, Mae-Yen Tan, Wei Shen Tan, Soon Ching Gan, Rajadurai Pathmanathan, Hui Meng Tan, Wei Phin Tan
- e441 **High-Dose Chemotherapy in a Late Relapse, Platinum-Refractory Nonseminomatous Germ Cell Tumor**
Brendan J. Connell, Manisha J. Patel, Christopher G. Tretter
- e445 **Novel Use of Targeted Therapy via PARP-Inhibition in a Rare Form of Papillary Renal Cell Carcinoma: A Case Report and Literature Review**
Daniel Olson, Savita Bhalla, Ximing Yang, Brenda Martone, Timothy M. Kuzel

e449 Targeted Therapy Based on Tumor Genomic Analyses in Metastatic Urachal Carcinoma

Kah Poh Loh, Esther Mondo, Elizabeth A. Hansen, Lynn Sievert, Chunkit Fung, Deepak M. Sahasrabudhe, Elizabeth Guancial

e453 Pharmacokinetic Analysis of a Hemodialyzed Patient Treated With Pazopanib

Satoshi Noda, Daiki Hira, Susumu Kageyama, Fumiyasu Jo, Akinori Wada, Tetsuya Yoshida, Akihiro Kawauchi, Shin-ya Morita, Tomohiro Terada