

# PROGRAM AT A GLANCE

## *Shirotori Hall (A)*

	<b>May 12, 2011</b>	<b>May 13, 2011</b>	<b>May 14, 2011</b>
8:30	Registration	Registration	Registration
8:40		Symposium 3	Symposium 5
10:00	Opening Ceremony Symposium 1 Uremic Toxins Update 1	Muscle and Nervous System in CKD	Organ Dysfunction in CKD
10:45		Lecture 2 Free Communications 2	Lecture 4 Free Communications 4
11:45	<i>Break</i>	<i>Break</i>	<i>Break</i>
12:00	Luncheon Seminar	Luncheon Seminar	Luncheon Seminar
13:00	Lecture 1 Free Communications 1	Lecture 3 Free Communications 3	Lecture 5 Free Communications 5
14:00	Poster Session – Hall (B)	Poster Session – Hall (B)	Poster Session – Hall (B)
15:00	<i>Break</i>	<i>Break</i>	<i>Break</i>
15:20	Symposium 2 Uremic Toxins Update 2	Symposium 4 Cardiovascular Disease in CKD	Symposium 6 Therapeutic Strategies for CKD
17:00			
17:25			

## *Shirotori Hall B (Poster Session)*

	<b>May 12, 2011</b>	<b>May 13, 2011</b>	<b>May 14, 2011</b>
9:00	Poster Session P1-01~P1-27	Poster Session P2-01~P2-27	Poster Session P3-01~P3-25
12:00	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
14:00	Poster Session (Discussion)	Poster Session (Discussion)	Poster Session (Discussion)
15:00	Poster Session	Poster Session	Poster Session
16:30			

# PROGRAM

## Shirotori Hall (A)

Thursday, May 12, 2011

10:00 OPENING CEREMONY

Toshimitsu Niwa, Congress President (Japan)  
Boleslaw Rutkowski, Society President (Poland)  
Shaul G. Massry, Honorary Society President (USA)

10:05 - 11:45 SYMPOSIUM 1. **Uremic Toxins Update 1**

Moderators: Boleslaw Rutkowski (Poland)  
Toshimitsu Niwa (Japan)

10:05 **S1-1 Indoxyl sulfate induces nephro-vascular senescence**

Toshimitsu Niwa (Japan)

10:30 **S1-2 PTH receptors are present in many tissues and are down regulated by CKD**

Shaul G. Massry (USA)

10:55 **S1-3 Cellular toxicity of nicotinamide metabolites**

Boleslaw Rutkowski (Poland)

11:20 **S1-4 What is new in the world of protein bound uremic toxins**

Raymond Vanholder (Belgium)

11:45 - 12:00 BREAK

12:00 - 13:00 LUNCHEON SEMINAR sponsored by Mitsubishi Tanabe Pharma Co. and Kureha Co.

Moderator: Hirofumi Makino (Japan)

**Toxic potential of uremic solutes and its removal**

Takaaki Abe (Japan)

**Calcium, PTH and blood pressure in chronic renal failure**

Shaul G. Massry (USA)

13:00 - 14:00 LECTURE1

FREE COMMUNICATIONS 1: **Uremic Toxins**

Moderators: Miroslaw Smogorzewski (USA)  
Hidehisa Shimizu (Japan)

13:00 **L-1 Uric acid as an old but new uremic toxin**

Shunya Uchida (Japan)

13:20 **FC1-1 Does indoxyl sulfate, a uremic toxin, have direct effects on endothelium progenitor cells**

VinCent Wu<sup>1</sup>, Kwan-Dun Wu<sup>1</sup>, on behalf of the NSARF<sup>2</sup> study group

<sup>1</sup>Departments of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan

<sup>2</sup>National Taiwan University Hospital Study Group of Acute Renal Failure, Taiwan

**13:30 FC1-2 Renoprotective effect of phytochemical polyphenols via reduced accumulation of indoxyl sulfate in cisplatin-evoked acute kidney injury rats**

Hideyuki Saito<sup>1,2</sup>, Masahiro Kusumoto<sup>2</sup>, Hiroki Kamobayashi<sup>2</sup>, Megumi Komori<sup>2</sup>, Misato Yoshimura<sup>2</sup>, Ayaka Wakida<sup>2</sup>, Akinobu Hamada<sup>1,2</sup>

<sup>1</sup>Department of Pharmacy, Kumamoto University Hospital,

<sup>2</sup>Department of Clinical Pharmaceutical Sciences, Graduate School of Pharmaceutical Sciences, Kumamoto University, Honjo 1-1-1, Kumamoto, Japan

**13:40 FC1-3 Serum p-cresol sulfate levels associated with diabetes mellitus in long-term hemodialysis patients**

Heng-Jung Hsu<sup>1,2</sup>, I-Wen Wu<sup>1,2</sup>, Chin-Chan Lee<sup>1,2</sup>, Chiao-Yin Sun<sup>1,2</sup>, Ming-Fang Hsieh<sup>1,2</sup>, Chun-Yu Chen<sup>1,2</sup>, Chiao-Ying Hsu<sup>1,2</sup>, Chi-Jen Tsai<sup>1,2</sup>, Mai-Szu Wu<sup>1,2</sup>

<sup>1</sup>School of Medicine, Chang Gung University, Taipei, Taiwan

<sup>2</sup>Department of Nephrology, Chang Gung Memorial Hospital, Keelung, Taiwan

**13:50 FC1-4 Uremic toxin, 3-carboxy-4-methyl-5-propyl-2-furanpropionate (CMPF) causes renal cell damage *via* oxidative stress induction**

Yohei Miyamoto<sup>1</sup>, Yasunori Iwao<sup>2</sup>, Katsumi Mera<sup>1</sup>, Hiroshi Watanabe<sup>1,3</sup>, Daisuke Kadowaki<sup>1,3</sup>, Keizo Sato<sup>4</sup>, Masaki Otagiri<sup>1,5</sup>, Toru Maruyama<sup>1,3</sup>

<sup>1</sup>Department of Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, Japan

<sup>2</sup>School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

<sup>3</sup>Center for Clinical Pharmaceutical Sciences, School of Pharmacy, Kumamoto University, Kumamoto, Japan

<sup>4</sup>School of Pharmacy, Kyushu University of Health and Welfare, Miyazaki, Japan

<sup>5</sup>Faculty of Pharmaceutical Sciences, Sojo University, Kumamoto, Japan

14:00 - 15:00 POSTER DISCUSSION

15:00 - 15:20 BREAK

**15:20 - 17:50 SYMPOSIUM 2. Uremic Toxins Update 2**

Moderators: Timothy Meyer (USA)

Akira Saito (Japan)

**15:20 S2-1 Dysregulated oxygen metabolism of the kidney by uremic toxins**

Masaomi Nangaku (Japan)

**15:45 S2-2 Role of uremic toxins and oxidative stress in the development of CKD-MBD**

Masafumi Fukagawa (Japan)

**16:10 S2-3 The removal of protein-bound solutes by dialysis**

Timothy W. Meyer (USA)

- 16:35 **S2-4** **Dicarbonyl glucose degradation products and advanced glycation endproducts (AGEs) in uremia - the damage caused and strategies to prevent it**  
Paul J. Thornalley (UK)
- 17:00 **S2-5** **New aspects on glucose degradation products in peritoneal dialysis**  
Monika Pischetsrieder (Germany)

## Friday, May 13, 2011

- 8:40 - 10:45 **SYMPOSIUM 3. Muscle and Nervous System in CKD**  
Moderators: William E. Mitch (USA)  
Tsutomu Sanaka (Japan)
- 8:40 **S3-1 Uremic toxicity blocks both protein metabolism and satellite cell function in muscles: is there a role for inflammation?**  
William E. Mitch (USA)
- 9:05 **S3-2 Muscle and fat metabolism after kidney transplantation**  
Vladimír Teplan (Czech Republic)
- 9:30 **S3-3 Ghrelin and muscle metabolism in chronic uremia**  
Gianfranco Guarnieri (Italy)
- 9:55 **S3-4 Effect of experimental chronic renal insufficiency (CRI) on the neuronal activity in certain brain areas of rats**  
Katarína Šebeková (Slovakia)
- 10:20 **S3-5 Mental health, anxiety and depression in maintenance dialysis patients**  
Joel D. Kopple (USA)
- 10:45 - 11:45 **LECTURE 2.**  
**FREE COMMUNICATIONS 2: Progression of CKD**  
Moderators: Gianfranco Guarnieri (Italy)  
Kimio Tomita (Japan)
- 10:45 **L-2 Bone-marrow-derived cells and inflammatory processes in the progression of kidney fibrosis**  
Takashi Wada (Japan)
- 11:05 **FC2-1 The effect of reduction of uremic toxin for chronic kidney disease progression; Kremezin Study Against Renal disease progression in Korea (K-STAR)**  
Ran-hui Cha<sup>1</sup>, Yun Jung Oh<sup>1</sup>, Shin-Wook Kang<sup>2</sup>, Dae Ryong Cha<sup>3</sup>, Se Joong Kim<sup>4</sup>, Chul Whee Park<sup>5</sup>, Chun Soo Lim<sup>1</sup>, Ki Young Na<sup>1</sup>, Yon Su Kim<sup>1</sup>, on behalf of K-STAR study team  
<sup>1</sup>Seoul National University College of Medicine,  
<sup>2</sup>Yon Sei University College of Medicine,  
<sup>3</sup>Korea University College of Medicine,  
<sup>4</sup>Gachon Gil School of Medicine,  
<sup>5</sup>The Catholic University of Korea College of Medicine, Seoul, Korea
- 11:15 **FC2-2 Contributing factors and effectiveness by ROC curve analysis in responder to oral adsorbent therapy on CKD patients**  
Shigeko Hara<sup>1,2</sup>, Yoshifumi Ubara<sup>1</sup>, Tatsuya Suwabe<sup>1</sup>, Rikako Hiramatsu<sup>1</sup>, Eiko Hasegawa<sup>1</sup>, Noriko Hayami<sup>1</sup>, Keiichi Sumida<sup>1</sup>, Masayuki Yamanouchi<sup>1</sup>, Naoki Sawa<sup>1</sup>, Kenmei Takaichi<sup>1</sup>  
<sup>1</sup>Kideney center,  
<sup>2</sup>Okinaka memorial institute, Toranomon Hospital, Tokyo, Japan
- 11:25 **FC2-3 Urinary full-length form of megalin is a novel biomarker for diabetic**

## **nephropathy**

Akihiko Saito<sup>1</sup>, Shinya Ogasawara<sup>2,3</sup>, Hideyuki Kabasawa<sup>2</sup>, Michihiro Hosojima<sup>2</sup>, Ryohei Kaseda<sup>2</sup>, Tetsuro Takeda<sup>2</sup>, Yoshiki Suzuki<sup>4</sup>, Ichiei Narita<sup>2</sup>, Yoshiaki Hirayama<sup>3</sup>, Sakari Sekine<sup>3</sup>

<sup>1</sup>Department of Applied Molecular Medicine, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

<sup>2</sup>Division of Clinical Nephrology and Rheumatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

<sup>3</sup>Denka Seiken Co., Ltd., Gosen, Japan

<sup>4</sup>Health Administration Center, Niigata University, Niigata, Japan

### **11:35 FC2-4 Urinary IL-18 and L-FABP as early predictive biomarkers in contrast-induced AKI (acute kidney injury) on chronic kidney disease (CKD) stage 3 patients.**

Yoshio Terada<sup>1</sup>, Kosuke Inoue<sup>1</sup>, Yoshiko Shimamura<sup>1</sup>, Koji Ogata<sup>1</sup>, Yoshinori Taniguchi<sup>1</sup>, Satoko Ueda<sup>1</sup>, Masayuki Ishihara<sup>1</sup>, Hiroaki Kitaoka<sup>2</sup>, Yoshinori Doi<sup>2</sup>, Toru Kagawa<sup>1</sup>

<sup>1</sup>Department of Endocrinology, Metabolism and Nephrology,

<sup>2</sup>Department of Medicine and Geriatrics, Kochi Medical School, Kochi University, Nankoku, Japan

11:45 - 12:00 BREAK

12:00 - 13:00 LUNCHEON SEMINAR sponsored by Mitsubishi Tanabe Pharma Co. and Kureha Co.

Moderator: Yasuhiko Tomino (Japan)

### **The effects of AST-120 on endothelial dysfunction in CKD**

Naoki Kashihara (Japan)

### **Effects of AST-120 on progression of CKD and the effects of the drug on the cardiovascular system**

Gerald Schulman (USA)

13:00 - 14:00 LECTURE3.

### **FREE COMMUNICATIONS 3: Cardiovascular Disease in CKD**

Moderators: Nathan W. Levin (USA)

Yasuhiko Ito (Japan)

13:00 L-3 **Fabry disease screening study for hemodialysis patients**

Eiji Kusano (Japan)

13:20 FC2-5 **Vida-5 is a novel non-hypercalcemic VDR modulator with cardio-renal protective effects in the 5/6 nephrectomized rat**

J. Ruth Wu-Wong, Megumi Kawai, Yung-wu Chen, Masaki Nakane  
Vidasym, Chicago, IL, USA

13:30 FC2-6 **Impact of mild to moderate renal dysfunction on left ventricular relaxation function and prognosis in ambulatory patients with nonischemic dilated cardiomyopathy**

Akihiro Hirashiki, Kei Ohshima, Xian Wu Cheng, Rie Okamoto, Norihiro Shinoda, Takahiro Okumura, Mutsuharu Hayashi, Toyoaki Murohara  
Department of Cardiology, Nagoya University Graduate School of Medicine, Nagoya, Japan

**13:40 FC2-7 Correction of hyperphosphatemia suppresses cardiac remodeling in uremic rats**

Masahide Mizobuchi<sup>1</sup>, Chiaki Kumata<sup>1</sup>, Hiroaki Ogata<sup>2</sup>, Ai Nakazawa<sup>2</sup>,  
Fumihiko Koiwa<sup>3</sup>, Eriko Kinugasa<sup>2</sup>, Tadao Akizawa<sup>1</sup>

<sup>1</sup>Division of Nephrology, Department of Medicine, Showa University school  
of Medicine, Tokyo, Japan

<sup>2</sup>Internal Medicine, Showa University Northern Yokohama Hospital,  
Yokohama, Japan

<sup>3</sup>Department of Medicine, Division of Nephrology, Showa University  
Fujigaoka Hospital, Yokohama, Japan

**13:50 FC2-8 Different risk factors between incident cardiovascular disease (CVD) and death after CVD in hemodialysis patients**

Tetsuo Shoji<sup>1</sup>, Ikuto Masakane<sup>2</sup>, Yuzo Watanabe<sup>3</sup>, Kunitoshi Iseki<sup>4</sup>,  
Yoshiharu Tsubakihara<sup>5</sup>, for the Committee of Renal Data Registry, Japanese  
Society for Dialysis Therapy (JSDT-CRDR)

<sup>1</sup>Osaka City University Graduate School of Medicine, Osaka, Japan

<sup>2</sup>Yabuki Shima Clinic, Yamagata, Japan

<sup>3</sup>Kasugai Municipal Hospital, Aichi, Japan

<sup>4</sup>University Hospital of the Ryukyus, Okinawa, Japan

<sup>5</sup>Osaka General Medical Center, Osaka, Japan

14:00 - 15:00 POSTER DISCUSSION

15:00 - 15:20 BREAK

**15:20 - 17:50 SYMPOSIUM 4. Cardiovascular Disease in CKD**

Moderators: Sudhir V. Shah (USA)  
Takashi Shigematsu (Japan)

**15:20 S4-1 Novel concepts in understanding accelerated atherosclerosis in chronic kidney disease**

Sudhir V. Shah (USA)

**15:45 S4-2 New insights on CKD vascular calcifications**

Ziad A. Massy (France)

**16:10 S4-3 Cardiovascular complications in CKD: Implications of advanced glycation end-products and their receptor, RAGE**

Yoshiki Nishizawa (Japan)

**16:35 S4-4 Novel cardiovascular disease biomarkers in CKD**

Bengt Lindholm (Sweden)

**17:00 S4-5 Predictors of progression of kidney disease in hypertensive nephropathy: Lessons from the AASK Study**

Mirosław Smogorzewski (USA)

## Saturday, May 14, 2011

- 8:40 - 10:45 **SYMPOSIUM 5. Organ Dysfunction in CKD**  
Moderators: Vladimir Teplan (Czech Republic)  
Takeshi Nakanishi (Japan)
- 8:40 **S5-1 Effect of uremia on immune function and structure**  
Nosratola D. Vaziri (USA)
- 9:05 **S5-2 Adipokines as uremic toxins**  
Daniel Teta (Switzerland)
- 9:30 **S5-3 International evaluation of unrecognizably uglyfying human faces in late and severe SH in CKD. Sagliker Syndrome (SS). A unique catastrophic entity. Cytogenetic studies for chromosomal abnormalities, CaSR genes' exons 2 and 3 and GNAS 1 mutation**  
Yahya Sagliker (Turkey)
- 9:55 **S5-4 New onset post transplant diabetes mellitus begins in the dialysis period**  
Marian Klinger (Poland)
- 10:20 **S5-5 Intradialytic balance of calcium and phosphorus**  
Nathan W. Levin (USA)
- 10:45 - 11:45 **LECTURE 4.**  
**FREE COMMUNICATIONS 4: Inflammation in CKD**  
Moderators: Nosratola D. Vaziri (USA)  
Seiichi Matsuo (Japan)
- 10:45 **L-4 Kidney-lung crosstalk in AKI**  
Yukio Yuzawa (Japan)
- 11:05 **FC3-1 Progression of glomerulosclerosis in the Imai rat is mediated by intra-renal angiotensin system activation via oxidative stress, inflammation and impaired Nrf2 activity**  
Tadashi Sato<sup>1</sup>, Hyun Ju Kim<sup>2</sup>, Bernardo Rodriguez-Iturbe<sup>3</sup>, Nosratola D Vaziri<sup>2</sup>  
<sup>1</sup>Department of Pediatrics, NHO Ureshino Medical Center, Ureshino-City, Saga, Japan  
<sup>2</sup>Division of Nephrology and Hypertension, University of California Irvine, Irvine, CA, USA  
<sup>3</sup>Department of Universitario, Universidad del Zulia and Instituto de Investigaciones Biomédicas, Maracaibo, Venezuela
- 11:15 **FC3-2 Inflammation dependent effect of *SIRT1* on mortality in chronic kidney disease patients**  
Tae Yamamoto, Abdul Rashid Qureshi, Louise Nordfors, Anna Witasp, Juan Jesus Carrero, Peter BárányBarany, Olof HeimbürgerHeimbürger, Martin Schalling, Peter Stenvinkel, Bengt Lindholm  
Renal Medicine and Baxter Novum, Karolinska Institute, Stockholm, Sweden
- 11:25 **FC3-3 Decrease in frataxin (FRX) is linked to oxidative stress in patients on maintenance hemodialysis (MHD)**

Yukiko Hasuike, Aritoshi Kida, Rie Kitamura, Kohori Hori, Hiroshi Nonoguchi, Takeshi Nakanishi  
Department of Internal Medicine, Division of Kidney and Dialysis, Hyogo College of Medicine, Nishinomiya, Japan

**11:35 FC3-4 The lower level of reduced albumin induces serious cardiovascular incidence in peritoneal dialysis patients**

Hiroyuki Terawaki<sup>1</sup>, Yukie Takada<sup>2</sup>, Makoto Ogura<sup>1</sup>, Nanae Matsuo<sup>1</sup>, Tomoyoshi Terada<sup>2</sup>, Keitaro Yokoyama<sup>1</sup>, Masaaki Nakayama<sup>3</sup>, Yoshindo Kawaguchi<sup>1</sup>, Seiichi Era<sup>2</sup>, Tatsuo Hosoya<sup>1</sup>

<sup>1</sup>Division of Kidney and Hypertension, The Jikei University School of Medicine, Tokyo, Japan

<sup>2</sup>Division of Physiology and Biophysics, Gifu University Graduate School of Medicine, Gifu, Japan

<sup>3</sup>Research Division of Dialysis and Chronic Kidney Disease, Tohoku University Graduate School of Medicine, Sendai, Japan

11:45 - 12:00 BREAK

12:00 - 13:00 LUNCHEON SEMINAR sponsored by Chugai Pharmaceutical Co., Ltd.

Moderator: Kunitoshi Iseki (Japan)

**ESA therapy in Japan: From JET and Co-JET study**

Tadao Akizawa (Japan)

**The role of other growth factors and nutrients (other than erythropoietin, iron, folate and vitamin B12) on hemoglobin formation and anemia**

Joel D. Kopple (USA)

13:00 - 14:00 LECTURE 5.

**FREE COMMUNICATIONS 5: Therapeutic Strategies for CKD**

Moderators: Boleslaw Rutkowski (Poland)

Eriko Kinugasa (Japan)

13:00 L-5 **New insights into protein intake in chronic renal failure patients**

Toshiyuki Nakao (Japan)

13:20 FC3-5 **The evaluation of affecting factors for phosphate removal during hemodialysis session using direct measurement of dialysate phosphate**

Takashi Shigematsu<sup>1</sup>, Hayato Ueki<sup>2</sup>, Miki Arima<sup>2</sup>, Naoya Kodama<sup>2</sup>, Tetsuya Goto<sup>2</sup>, Toshihiro Kodama<sup>2</sup>, Akifumi Maeda<sup>2</sup>, Shigeo Negi<sup>1</sup>, Tooru Mima<sup>1</sup>, Toshifumi Sakaguchi<sup>1</sup>

<sup>1</sup>Division of Nephrology and Blood Purification Medicine, Wakayama Medical University, Wakayama, Japan

<sup>2</sup>Division of Dialysis Unit, Hakubun-Kai, Kodama Hospital, Wakayama, Japan

13:30 FC3-6 **Serum free p-cresyl sulfate predicts mortality in elderly hemodialysis patients- A prospective nested case-control study**

I-Wen Wu<sup>1,2</sup>, Kuang-Hung Hsu<sup>3</sup>, Heng-Jung Hsu<sup>1,2</sup>, Chin-Chan Lee<sup>1,2</sup>, Chiao-Yin Sun<sup>1,2</sup>, Mai-Szu Wu<sup>1,2</sup>

<sup>1</sup>Department of Nephrology, Chang Gung Memorial Hospital, Keelung, Taiwan

<sup>2</sup>School of Medicine, Chang Gung University,

<sup>3</sup>Laboratory for Epidemiology, Department of Health Care Management, Chang Gung University, Taipei, Taiwan

**13:40 FC3-7 Atorvastatin inhibited indoxyl sulfate-induced proliferation of rat vascular smooth muscle cells**

Shuichi Tsuruoka, Eri Kobori, Michiru Hotta, Akira Hiwatashi, Shuzo Kaneko, Kunihiro Yamagata

Department of Nephrology, University of Tsukuba, Tsukuba, Japan

**13:50 FC3-8 Combined therapy with lanthanum carbonate and calcium carbonate for hyperphosphatemia decreases serum FGF-23 level independently of calcium and PTH**

Shigeo Negi<sup>1</sup>, Takashi Shigematsu<sup>2</sup>, the Japan COLC Study Group

<sup>1</sup>Division of Nephrology and Blood Purification Medicine, Wakayama Medical University, Wakayama, Japan

<sup>2</sup>Research Group in the Japan COLC Study

14:00 - 15:00 POSTER DISCUSSION

15:00 - 15:20 BREAK

**15:20 - 17:25 SYMPOSIUM 6. Therapeutic Strategies for CKD**

Moderators: Bengt Lindholm (Sweden)

Takashi Akiba (Japan)

**15:20 S6-1 Assessing treatment strategies to prevent progression of CKD**

Gerald Schulman (USA)

**15:45 S6-2 N-acetylcysteine in the therapy of hyperhomocysteinemia of chronic kidney failure**

Alessandra F. Perna (Italy)

**16:10 S6-3 Uric acid, allopurinol, and mortality in CKD stage 5D**

Takashi Akiba (Japan)

**16:35 S6-4 Survival is not enough**

Natale G. De Santo (Italy)

17:00 CLOSING REMARKS

# Shirotori Hall (B)

Thursday, May 12, 2011

## POSTER DISCUSSION: Uremic Toxins 1

Moderators: Paul J. Thornalley (UK)  
Takaaki Abe (Japan)

### P1-01 Metabolomic search for uremic toxins in chronic renal failure rats

Kenjiro Murakami<sup>1</sup>, Kaori Kikuchi<sup>1</sup>, Yoshiharu Itoh<sup>1</sup>, Ryoko Tateoka<sup>1</sup>, Atsuko Ezawa<sup>1</sup>, Toshimitsu Niwa<sup>2</sup>

<sup>1</sup>Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

<sup>2</sup>Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

### P1-02 Uremic toxins as possible markers of the effect of an oral sorbent AST-120

Ryoko Tateoka<sup>1</sup>, Kaori Kikuchi<sup>1</sup>, Yoshiharu Itoh<sup>1</sup>, Atsuko Ezawa<sup>1</sup>, Kenjiro Murakami<sup>1</sup>, Toshimitsu Niwa<sup>2</sup>

<sup>1</sup>Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

<sup>2</sup>Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

### P1-03 Uremic toxins in hemodialysis patients: their protein binding and reduction rates

Yoshiharu Itoh<sup>1</sup>, Kaori Kikuchi<sup>1</sup>, Ryoko Tateoka<sup>1</sup>, Atsuko Ezawa<sup>1</sup>, Kenjiro Murakami<sup>1</sup>, Yoshinari Tsuruta<sup>2</sup>, Toshimitsu Niwa<sup>3</sup>

<sup>1</sup>Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

<sup>2</sup>Division of Nephrology, Meiyo Clinic, Toyohashi, Japan

<sup>3</sup>Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

### P1-04 Metabolomic analysis of human plasma from haemodialysis patients

Emiko Sato<sup>1</sup>, Junko Aizawa<sup>1</sup>, Masahiro Kohno<sup>1</sup>, Tatsuya Fujisawa<sup>2</sup>, Hidenori Yamamoto<sup>3</sup>, Kouichi Fujiwara<sup>2</sup>, Noriaki Tanaka<sup>2,3</sup>

<sup>1</sup>New Industry Creation Hatchery Center, Tohoku University, Sendai, Japan

<sup>2</sup>Kiyokai Tanaka-Kitanoda Hospital, Sakai, Japan

<sup>3</sup>Hojyo-Tanaka Hospital, Kasai, Japan

### P1-05 CE-MS based time-course metabolic profiling in plasma and dialysate with hemodialysis

Shin'ichi Aiyama<sup>1</sup>, Akiyoshi Hirayama<sup>2</sup>, Isao Ito<sup>1</sup>, Seiichi Matsuo<sup>1</sup>, Masaru Tomita<sup>2</sup>, Shoichi Maruyama<sup>1</sup>, Tomoyoshi Soga<sup>2</sup>

<sup>1</sup>Department of Nephrology, Nagoya University Graduate School of Medicine, Nagoya, Aichi, Japan

<sup>2</sup>Institute for Advanced Biosciences, Keio University, Tsuruoka, Yamagata, Japan

### P1-06 Up-regulation of SLCO4C1 uremic toxin transporter expression and function by statins for therapeutics of chronic kidney disease

Takehiro Suzuki<sup>1</sup>, Takafumi Toyohara<sup>2</sup>, Yasutoshi Akiyama<sup>1</sup>, Yoichi Takeuchi<sup>1</sup>, Eikan Mishima<sup>1</sup>, Hiroshi Sato<sup>3</sup>, Sadayoshi Ito<sup>1</sup>, Tomoyoshi Soga<sup>4</sup>, Takaaki Abe<sup>1,5,6</sup>

<sup>1</sup>Division of Nephrology, Endocrinology, and Vascular Medicine, Tohoku University Graduate School of Medicine, Sendai, Japan

<sup>2</sup>Department of Cell Growth and Differentiation, Center for iPS cell Research and Application, Kyoto University, Kyoto, Japan

<sup>3</sup>Clinical Pharmacology and Therapeutics, Graduate School of pharmaceutical Sciences, Tohoku University, Sendai, Japan

<sup>4</sup>Institute for Advanced Biosciences, Keio University, Tsuruoka, Japan

<sup>5</sup>Department of Clinical Biology and Hormonal Regulation, Tohoku University Graduate School of Medicine, Sendai, Japan

<sup>6</sup>Division of Medical Science, Tohoku University Graduate School of Biomedical Engineering, Sendai, Japan

## POSTER DISCUSSION: Uremic Toxins 2

Moderators: Alessandra F. Perna (Italy)  
Shigeiko Hara (Japan)

### **P1-07 Indoxyl sulfate impairs hypoxia response in cultured proximal tubular cells**

Tetsuhiro Tanaka<sup>1,2</sup>, Toshiro Fujita<sup>2</sup>, Masaomi Nangaku<sup>2</sup>

<sup>1</sup>Division for Health Service Promotion, University of Tokyo, Tokyo, Japan

<sup>2</sup>Division of Nephrology and Endocrinology, University of Tokyo School of Medicine, Tokyo, Japan

### **P1-08 Indoxyl sulfate, a representative uremic toxin, suppresses erythropoietin production in HIF-dependent manner**

Chih-Kang Chiang<sup>1,2</sup>, Reiko Inagi<sup>1</sup>, Tetsuhiro Tanaka<sup>1</sup>, Toshiro Fujita<sup>1</sup>, Masaomi Nangaku<sup>1</sup>

<sup>1</sup>Division of Nephrology and Endocrinology, University of Tokyo School of Medicine, Tokyo, Japan

<sup>2</sup>Department of Internal Medicine, National Taiwan University Hospital, College of Medicine, National Taiwan University, Taipei, Taiwan

### **P1-09 Indoxyl sulfate promotes anemia in rats with adenine-induced renal failure**

Junya Hirata, Kazuya Hirai, Misaki Miyamoto, Hiromitsu Tanaka, Mie Akanuma  
Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

### **P1-10 Indoxyl sulfate induces epithelial-mesenchymal transition and interstitial fibrosis in the kidneys of normotensive and hypertensive rats**

Dilinaer Bolati, Hidehisa Shimizu, Gulinuer Muteliefu, Yelixiati Adelibieke,  
Yasuhiko Shimoyama, Toshimitsu Niwa

Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

### **P1-11 AST-120 ameliorates epithelial-mesenchymal transition and interstitial fibrosis in the kidneys of CKD rats**

Dilinaer Bolati, Hidehisa Shimizu, Gulinuer Muteliefu, Yelixiati Adelibieke,  
Yasuhiko Shimoyama, Toshimitsu Niwa

Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

### **P1-12 Indoxyl sulfate induces senescence and dysfunction of proximal tubular cells through activated p53 expression**

Hidehisa Shimizu<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Ayinuer Adijiang<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Gulinuer Muteliefu<sup>1</sup>, Yelixiati Adelibieke<sup>1</sup>, Yasuhiko Shimoyama<sup>1</sup>, Atsushi Enomoto<sup>2</sup>,  
Fuyuhiko Nishijima<sup>3</sup>, Minoru Dateki<sup>4</sup>, Toshimitsu Niwa<sup>1</sup>

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<sup>4</sup>Graduate School of Science, Toho University, Funabashi, Japan

**P1-13 Indoxyl sulfate activates ROS-NF- $\kappa$ B-p53 pathway that accelerates proximal tubular cell dysfunction and senescence**

Hidehisa Shimizu<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Ayinuer Adijiang<sup>1</sup>, Gulnuer Muteliefu<sup>2</sup>, Atsushi Enomoto<sup>2</sup>, Fuyuhiko Nishijima<sup>3</sup>, Minoru Dateki<sup>4</sup>, Toshimitsu Niwa<sup>1</sup>

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**POSTER DISCUSSION: Uremic Toxins 3**

Moderators: Marian Klinger (Poland)

Hideyuki Saito (Japan)

**P1-14 The association between uremic toxin and depression in end stage renal disease with hemodialysis**

Heng-Jung Hsu<sup>1,2</sup>, I-Wen Wu<sup>1,2</sup>, Chin-Chan Lee<sup>1,2</sup>, Chiao-Yin Sun<sup>1,2</sup>, Ming-Fang Hsieh<sup>1,2</sup>, Chun-Yu Chen<sup>1,2</sup>, Chiao-Ying Hsu<sup>1,2</sup>, Chi-Jen Tsai<sup>1,2</sup>, Mai-Szu Wu<sup>1,2</sup>

<sup>1</sup>School of Medicine, Chang Gung University, Taipei, Taiwan

<sup>2</sup>Department of Nephrology, Chang Gung Memorial Hospital, Keelung, Taiwan

**P1-15 Interaction between p-cresyl sulfate and indoxyl sulfate during body disposition can influence their free concentrations in chronic kidney disease**

Hiroshi Watanabe<sup>1,3</sup>, Motoko Tanaka<sup>2</sup>, Yohei Miyamoto<sup>1</sup>, Tsuyoshi Noguchi<sup>1</sup>, Daisuke Kadowaki<sup>1,3</sup>, Masaki Otagiri<sup>1,4</sup>, Toru Maruyama<sup>1,3</sup>

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<sup>2</sup>Department of Nephrology, Akebono Clinic, Kumamoto, Japan

<sup>3</sup>Center for Clinical Pharmaceutical Sciences, School of Pharmacy, Kumamoto University, Kumamoto, Japan

<sup>4</sup>Faculty of Pharmaceutical Sciences, Sojo University, Kumamoto, Japan

**P1-16 Serum p-cresyl sulfate level provides superior prediction to renal progression in chronic kidney disease patients**

I-Wen Wu<sup>1,2</sup>, Kuang-Hung Hsu<sup>3</sup>, Heng-Jung Hsu<sup>1,2</sup>, Chin-Chan Lee<sup>1,2</sup>, Chiao-Yin Sun<sup>1,2</sup>, Mai-Szu Wu<sup>1,2</sup>

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<sup>3</sup>Laboratory for Epidemiology, Department of Health Care Management, Chang Gung University, Taipei, Taiwan

**P1-17 Phenylacetic acid stimulates reactive oxygen species generation and tumor necrosis factor- $\alpha$  secretion in vascular endothelial cells**

Shozo Yano, Miwa Morita, Toru Yamaguchi, Mika Yamauchi, Toshitsugu Sugimoto  
Department of Internal Medicine 1, Shimane University Faculty of Medicine, Izumo, Japan

**P1-18 Plasma pentosidine levels are raised in type 2 diabetic patients with non-proteinuric renal insufficiency (NPRI) and a history of cataract**

Xiu-Li Lim<sup>1</sup>, Bee-Choo Tai<sup>1</sup>, Helen Leong<sup>2</sup>, Daniel P. K. Ng<sup>1</sup>

<sup>1</sup>Department of Epidemiology and Public Health, National University of Singapore, Singapore

<sup>2</sup>Clinical Services, National Healthcare Group Polyclinics, Singapore

**P1-19 Preliminary study of protein-bound toxin dissociation by dilution and pH change methods**

Ken-ichiro Yamamoto<sup>1</sup>, Kei Eguchi<sup>1</sup>, Mariko Takagi<sup>2</sup>, Iwakazu Kaneko<sup>1</sup>, Kiyotaka Sakai<sup>2</sup>, Michio Mineshima<sup>1</sup>

<sup>1</sup>Department of Clinical Engineering, Tokyo Women's Medical University, Tokyo, Japan

<sup>2</sup>Department of Chemical Engineering, Waseda University, Tokyo, Japan

**POSTER DISCUSSION: Progression of CKD**

Moderators: Chen Jin Bor (Taiwan)

Keiko Uchida (Japan)

**P1-20 Characterization of kidney in rats of end stage kidney disease by vibrational spectroscopy**

Hiromi Kimura-Suda<sup>1</sup>, Mieko Kuwahara<sup>2</sup>, Kousuke Hidaka<sup>1</sup>, Kyousuke Kanazawa<sup>1</sup>, Akihiro Ohnishi<sup>3</sup>, Kenji Bannai<sup>2</sup>, Mikio Sugano<sup>2</sup>, Hideyuki Yamato<sup>2</sup>

<sup>1</sup>Chitose Institute of Science and Technology, Chitose, Japan

<sup>2</sup>Kureha Corporation, Tokyo, Japan

<sup>3</sup>PerkinElmer Japan Co., Ltd, Yokohama, Japan

**P1-21 Kremezin (AST-120) ameliorates accumulation of lipid in kidney**

Mieko Kuwahara<sup>1</sup>, Mikio Sugano<sup>1</sup>, Kenji Bannai<sup>1</sup>, Kousuke Hidaka<sup>2</sup>, Kyousuke Kanazawa<sup>2</sup>, Akihiro Ohnishi<sup>3</sup>, Hideyuki Yamato<sup>1</sup>, Hiromi Kimura-Suda<sup>2</sup>

<sup>1</sup>Kureha Corporation, Biomedical Research Laboratories, Tokyo, Japan

<sup>2</sup>Chitose Institute of Science and Technology, Department of Bio- and Material Photonics, Chitose, Japan

<sup>3</sup>PerkinElmer Japan Co., Ltd., Yokohama, Japan

**P1-22 Significance of hyperuricemia as a risk factor for progression of non-proteinuric low eGFR in general health check population on the cohort study during five years**

Hiroshi Tsuji<sup>1</sup>, Shigeko Hara<sup>1,2</sup>, Kazuhisa Amakawa<sup>1</sup>, Yuki Ohmoto<sup>1</sup>, Sadao Arimoto<sup>1</sup>, Shiun Dong Hsieh<sup>1</sup>, Yasuji Arase<sup>1</sup>

<sup>1</sup>Health Management Center,

<sup>2</sup>Kidney Center, Toranomon Hospital, Tokyo, Japan

**P1-23 Effect of selective estrogen receptor modulator in renal proximal tubules**

Yuko Nishi, Minoru Satoh, Naruya Tomita, Tamaki Sasaki, Naoki Kashihara  
Division of Nephrology and Hypertension, Department of Internal Medicine,  
Kawasaki Medical School, Kurashiki, Japan

**P1-24 Albumin causes mitochondrial dysfunction and upregulation of mitochondrial fusion proteins in renal tubular cells**

Wen-Chin Lee, Yi-Chun Wang, Chia-Yin Yang, Jin-Bor Chen

Division of Nephrology, Department of Internal Medicine, Chang Gung Memorial Hospital-Kaohsiung Medical Centre, Chang Gung University College of Medicine, Kaohsiung, Taiwan

**P1-25 Over-expression of S100A12, RAGE and p66 in diabetic nephropathy**

Hirohiko Nokiba<sup>1</sup>, Masaki Hara<sup>1,3</sup>, Yuko Iwasa<sup>1</sup>, Taku Morito<sup>1,3</sup>, Asuka Okaniwa<sup>1</sup>, Takashi Akiba<sup>2</sup>, Ken Tsuchiya<sup>3</sup>, Kousaku Nitta<sup>3</sup>, Minoru Ando<sup>1,3</sup>

<sup>1</sup>Department of Nephrology, Tokyo Metropolitan Komagome Hospital,

<sup>2</sup>Department of Blood Purification, Tokyo Women's Medical University,

<sup>3</sup> Department IV of Internal Medicine, Tokyo Women's Medical University, Tokyo, Japan

**P1-26 Atherogenic transformation of LDL and impaired function of HDL by glycation with methylglyoxal – a uremic toxin**

N. Rabbani, L. Godfrey, P.J. Thornalley

Warwick Medical School, Clinical Sciences Research Institute, University of Warwick, University Hospital, Coventry CV2 2DX, UK

**P1-27 Immunohistochemical detection of erythropoietin in rat kidneys: Effects of indoxyl sulfate and AST-120**

Dilinaer Bolati, Hidehisa Shimizu, Gulinuer Muteliefu, Yelixiati Adelibieke, Yasuhiko Shimoyama, Toshimitsu Niwa

Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

## Friday, May 13, 2011

### POSTER DISCUSSION: Uremic Toxins 4

Moderators: Yon Su Kim (Korea)  
Yoshio Terada (Japan)

#### **P2-01 Indoxyl sulfate reduces Klotho expression and promotes cell senescence in the kidneys of hypertensive rats**

Hidehisa Shimizu<sup>1</sup>, Ayinuer Adijiang<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Gulinuer Muteliefu<sup>1</sup>,  
Yelixiati Adelibieke<sup>1</sup>, Yasuhiko Shimoyama<sup>1</sup>, Yusuke Higuchi<sup>2</sup>, Fuyuhiko  
Nishijima<sup>2</sup>, Toshimitsu Niwa<sup>1</sup>

<sup>1</sup>Department of Advanced Medicine for Uremia, Nagoya University School of  
Medicine, Nagoya, Japan

<sup>2</sup>Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

#### **P2-02 The expression of Klotho in proximal tubular cells is downregulated by indoxyl sulfate**

Hidehisa Shimizu, Dilinaer Bolati, Gulinuer Muteliefu, Yelixiati Adelibieke,  
Yasuhiko Shimoyama, Toshimitsu Niwa

Department of Advanced Medicine for Uremia, Nagoya University Graduate School  
of Medicine, Nagoya, Japan

#### **P2-03 Effects of protein-bound uremic toxins on global DNA methylation and epigenetic regulation of klotho gene – from clinical to the bench**

Chiao-Yin Sun, Mai-Szu Wu

Division of Nephrology, Chang Gung Memorial Hospital, Keelung, Taiwan

#### **P2-04 Indoxyl sulfate induces endothelial senescence by increasing reactive oxygen species production and p53 activity**

Yelixiati Adelibieke, Hidehisa Shimizu, Gulinuer Muteliefu, Dilinaer Bolati,  
Yasuhiko Shimoyama, Toshimitsu Niwa

Department of Advanced Medicine for Uremia, Nagoya University Graduate School  
of Medicine, Nagoya, Japan

#### **P2-05 Indoxyl sulfate accelerates senescence of vascular smooth muscle cells by inducing expression of p53 through ROS production**

Gulinuer Muteliefu<sup>1</sup>, Hidehisa Shimizu<sup>2</sup>, Bolati Dilinaer<sup>2</sup>, Yelixiati Adelibieke<sup>2</sup>,  
Yasuhiko Shimoyama<sup>2</sup>, Masahide Takahashi<sup>1</sup>, Toshimitsu Niwa<sup>2</sup>

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Nagoya, Japan

<sup>2</sup>Department of Advanced Medicine for Uremia, Nagoya University Graduate School  
of Medicine, Nagoya, Japan

#### **P2-06 Indoxyl sulfate is removed more effectively in pre-dilution HDF than in super high flux HD**

Ikuto Masakane, Shiho Esashi

Yabuki Shima Clinic, Yamagata, Japan

#### **P2-07 Indoxyl sulfate promotes JNK and Akt activation, and enhances Angiotensin II signaling in vascular smooth muscle cells**

Hitoshi Miyazaki<sup>1</sup>, Hidehisa Shimizu<sup>1</sup>, Chie Murakami<sup>1</sup>, Yuichi Hirose<sup>1</sup>, Sumie  
Goto<sup>2</sup>, Fuyuhiko Nishijima<sup>2</sup>

<sup>1</sup>Graduate School of Life and Environment Sciences, Alliance for Research on North Africa, University of Tsukuba, Ibaraki, Japan

<sup>2</sup>Medicinal Adsorbent Department, Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

**POSTER DISCUSSION: Cardiovascular Disease in CKD**

Moderators: Mirosław Smogorzewski (USA)

Hiromichi Suzuki (Japan)

**P2-08 Impact of indoxyl sulfate on coronary plaque composition**

Hideki Ishii<sup>1</sup>, Toshimitsu Niwa<sup>2</sup>, Ryosuke Kikuchi<sup>1</sup>, Daiji Yoshikawa<sup>1</sup>, Nobutake Kurebayashi<sup>1</sup>, Bunmei Sato<sup>1</sup>, Seiichi Hayakawa<sup>1</sup>, Toyoaki Murohara<sup>1</sup>

<sup>1</sup>Department of Cardiology,

<sup>2</sup>Department of Advanced Medicine for Uremia, Nagoya University Graduate School of Medicine, Nagoya, Japan

**P2-09 Indoxyl sulfate induces leukocyte-endothelial interactions through upregulation of E-selectin**

Shunsuke Ito<sup>1,2</sup>, Mizuko Osaka<sup>1</sup>, Yusuke Higuchi<sup>2</sup>, Fuyuhiko Nishijima<sup>2</sup>, Hideto Ishii<sup>1</sup>, Masayuki Yoshida<sup>1</sup>

<sup>1</sup>Department of Life Science and Medical ethics, Graduate School of Medicine, Tokyo Medical and Dental University, Tokyo, Japan

<sup>2</sup>Biomedical Research Laboratories, Kureha Corporation, Tokyo, Japan

**P2-10 Different sites of vascular calcification in patients on hemodialysis**

Hiromichi Suzuki<sup>1</sup>, Kunihiko Hayashi<sup>2</sup>, Jyunnichi Nishiyama<sup>2</sup>, Takashi Yamazaki<sup>2</sup>, Yuji Nishiyama<sup>2</sup>, Keiko Kaneko<sup>2</sup>

<sup>1</sup>Department of Nephrology, Saitama Medical University, Saitama, Japan

<sup>2</sup>Department of Internal Medicine, Irumadai Clinic, Saitama, Japan

**P2-11 Electrocardiographic abnormalities in all stages chronic kidney disease patients**

Dissayabutra Thasinas<sup>1,2</sup>, Yasuhiro Ando<sup>1</sup>, Shinichi Takeda<sup>1</sup>, Tetsuo Umino<sup>1</sup>, Sayoko Izawa<sup>1</sup>, Kazuhiro Shiizaki<sup>1</sup>, Osamu Saito<sup>1</sup>, Shinji Asakura<sup>3</sup>, Kaisuke Kotoda<sup>4</sup>, Eiji Kusano<sup>1</sup>

<sup>1</sup>Division of Nephrology, Department of Internal Medicine, Jichi Medical University, Tochigi, Japan

<sup>2</sup>Department of Biochemistry, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

<sup>3</sup>Suginoki Clinic, Tochigi, Japan

<sup>4</sup>Kotoda Jib Clinic, Tochigi, Japan

**P2-12 Effect of iron administration on vascular calcification in uremic rats**

Takanori Nakano<sup>1</sup>, Chieko Hamada<sup>1</sup>, Takuya Seto<sup>1</sup>, Yuko Inami<sup>1</sup>, Yoko Hotta<sup>1</sup>, Kosuke Azuma<sup>2</sup>, Hiroaki Io<sup>1</sup>, Hirotaka Watada<sup>2</sup>, Satoshi Horikoshi<sup>1</sup>, Yasuhiko Tomino<sup>1</sup>

<sup>1</sup>Division of Nephrology, Department of Internal Medicine, Juntendo University Faculty of Medicine, Tokyo, Japan

<sup>2</sup>Division of Metabolism and Endocrinology, Department of Internal Medicine, Juntendo University Faculty of Medicine, Tokyo, Japan

**P2-13 Critical level of eGFR for the prevalence of macrovascular disease in type 2 diabetic chronic kidney disease and significance of hyperuricemia**

Kentaro Tanaka<sup>1,2,4</sup>, Shigeko Hara<sup>2,3</sup>, Akifumi Kushiyama<sup>2</sup>, Yoko Yoshida<sup>2</sup>,  
Yoshifumi Ubara<sup>2,3</sup>, Sonoo Mizuiri<sup>4</sup>, Atsushi Aikawa<sup>4</sup>, Shouji Kawatzu<sup>2</sup>

<sup>1</sup>Department of Nephrology, Saiseikai Kanagawa-ken Hospital,

<sup>2</sup>Division of Diabetes and Metabolism, The Institute for Adult Diseases, Asahi Life Foundation, Tokyo, Japan

<sup>3</sup>Kidney Center and Okinaka Memorial Institute for Medical Research, Toranomon Hospital, Tokyo, Japan

<sup>4</sup>Department of Nephrology, Toho university school of medicine, Tokyo, Japan

#### POSTER DISCUSSION: **CKD-MBD**

Moderators: Katarína Šebeková (Slovakia)

Yoshihide Fujigaki (Japan)

#### **P2-14 Hormones affecting bone mineral metabolism in children/adolescents with chronic renal disease**

Katarína Šebeková<sup>1,2</sup>, Juliana Ferenczová<sup>3</sup>, Kristína Klenovicsová<sup>1,2</sup>, Ľudmila Podracká<sup>3</sup>

<sup>1</sup>Slovak Medical University,

<sup>2</sup>Medical Faculty of Comenius University, Bratislava, Slovakia

<sup>3</sup>Medical Faculty, P.J. Šafárik University, Košice, Slovakia

#### **P2-15 Parathyroidectomy reduces oxidative stress in patients with primary and secondary hyperparathyroidism**

Motoko Tanaka<sup>1</sup>, Koki Tokunaga<sup>2</sup>, Yoshihiro Tominaga<sup>3</sup>, Hirotaka Komaba<sup>4</sup>,  
Noritaka Onoda<sup>5</sup>, Hiroyuki Yamashita<sup>6</sup>, Koji Shibuya<sup>7</sup>, Hiroshi Watanabe<sup>2</sup>, Toru Maruyama<sup>2</sup>, Masafumi Fukagawa<sup>4</sup>

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<sup>2</sup>Department of Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, Japan

<sup>3</sup>Department of Transplant and Endocrine surgery, Nagoya Second Red Cross Hospital, Nagoya, Japan

<sup>4</sup>Division of Nephrology and Metabolism, Tokai University School of Medicine, Isehara, Japan

<sup>5</sup>Sayama Clinic, Sayama, Japan

<sup>6</sup>Yamashita Clinic, Fukuoka, Japan

<sup>7</sup>Sumiyoshikawa Hospital, Kobe, Japan

#### **P2-16 Changes of chemical composition affect bone mechanical property in early chronic kidney disease**

Yoshiko Iwasaki<sup>1</sup>, Junichiro J. Kazama<sup>2</sup>, Hideyuki Yamato<sup>3</sup>, Masafumi Fukagawa<sup>4</sup>

<sup>1</sup>Oita University of Nursing and Health Sciences, Oita, Japan

<sup>2</sup>Niigata University Medical and Dental Hospital, Niigata, Japan

<sup>3</sup>Kureha Corporation, Tokyo, Japan

<sup>4</sup>Tokai University, Kanagawa, Japan

#### **P2-17 We should abandon intact PTH to assess parathyroid function in CKD patients**

Junichiro James Kazama, Ryo Koda, Suguru Yamamoto, Minako Wakasugi, Ichiei Narita

Division of Clinical Nephrology and Rheumatology, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

#### **P2-18 Cyanate-induced apoptosis in osteoblast**

Eunah Hwang, Eunju Chang Eunyoung Ha, Mun Kyo-Cheol, Eunyoung Ha,  
Sungbae Park, Hyun-Chul Kim  
Department of Internal Medicine, Department of Biochemistry, Keimyung  
University School of Medicine, Kidney Institute, Daegu, Korea

**P2-19 Peritoneal macrophage infiltration is the predictor of baseline peritoneal solute transport rate in peritoneal dialysis (PD) patients**

Yasuhiko Ito, Akiho Sawai, Masashi Mizuno, Yasuhiro Suzuki, Susumu Toda, Isao Ito, Waichi Sato, Enyu Imai, Shoichi Maruyama, Seiichi Matsuo  
Department of Nephrology and Renal Replacement Therapy, Nagoya University  
Graduate School of Medicine, Nagoya, Japan

**POSTER DISCUSSION: Renal Anemia and Miscellaneous Complications**

Moderators: Yahya Sagliker (Turkey)  
Yasuhiro Ando (Japan)

**P2-20 Comparison of the hepcidin removal by different dialysis membranes**

Takahiro Kuragano, Minoru Furuta, Aritoshi Kida, Rie Kitamura, Masayoshi Nanami,  
Toshinaga Otaki, Yukiko Hasuike, Hiroshi Nonoguchi, Takeshi Nakanishi  
Department of Internal Medicine, Division of Nephrology and Dialysis, Hyogo  
College of Medicine, Japan

**P2-21 Serum hepcidin-25 levels and early mortality among cancer patients with chronic kidney disease**

Masaki Hara<sup>1,3</sup>, Takashi Akiba<sup>2</sup>, Ken Tsuchiya<sup>3</sup>, Kosaku Nitta<sup>3</sup>, Minoru Ando<sup>1,3</sup>  
<sup>1</sup>Department of Nephrology, Tokyo Metropolitan Komagome Hospital, Bunkyo-Ku,  
Tokyo, Japan  
<sup>2</sup>Department of Blood Purification, Tokyo Women's Medical University,  
<sup>2</sup>Department IV of Internal Medicine, Tokyo Women's Medical University, Tokyo,  
Japan

**P2-22 Iron metabolism in the rats with total nephrectomy (TNx ): Effect of hemodialysis (HD) on iron egress from spleen**

Aritoshi Kida, Takahiro Kuragano, Rie Kitamura, Masayoshi Nanami, Hiroshi  
Nonoguchi, Takeshi Nakanishi  
Internal Medicine, Division of Kidney and Dialysis, Hyogo College of Medicine,  
Nishinomiya, Hyogo, Japan

**P2-23 Quick increase of TSAT and Ferritin-level are possible by using oral iron tablet for the management of anemia on hemodialysis patients**

Akiyasu Tsuchida, Yukiko Abe, Takuji Naruse, Minoru Komai  
Sannshi-group Hiakri Clinic, Isesaki-city, Gunma, Japan

**P2-24 Combind exposure of iron and TNF- $\alpha$  affect to increase hydroxyl radical production, in human mesothelial cells**

Rie Kitamura, Masayoshi Nanami, Aritoshi Kida, Yoshinaga Otaki, Yukiko Hasuike,  
Takahiro Kuragano, Hiroshi Nonoguchi, Takeshi Nakanishi  
Internal Medicine, Division of Kidney and Dialysis, Hyogo College of Medicine,  
Nishinomiya, Hyogo, Japan

**P2-25 Psychological aspects in patients with chronic kidney disease**

Shinga Esaki, Hiroshi Matsumoto, Tomonari Okada, Yume Nagaoka, Ryo Tomaru, Hideaki Iwasawa, Toshikazu Wada, Asako Gondo, Yoshitaku Miyaoka, Toshiyuki Nakao  
Department of Nephrology, Tokyo Medical University, Tokyo, Japan

**P2-26 A miracle? High muscle tone electrotherapy (HMTE) in treatment of resistant and irreversible peripheral polyneuropathy with diabetes mellitus (DM), chronic kidney disease (CKD) and primary hypertensives (PH)**

Y. Sagliker<sup>1</sup>, N. Paylar<sup>2</sup>, A. Heidland<sup>3</sup>, A. Keck<sup>3</sup>, R. Ereğ<sup>4</sup>, P. Kolasin<sup>5</sup>, P.S. Ozkaynak<sup>2</sup>, H.S. Sagliker<sup>2</sup>

<sup>1</sup>Nephrology-Hypertension, Cukurova University, Adana, Seyhan, Turkey

<sup>2</sup>Sagliker Hypertension Unit, Adana, Seyhan, Turkey

<sup>3</sup>Nephrology, Würzburg University, Würzburg, Germany

<sup>4</sup>Neurology, Özel Adana Hospital, Adana, Seyhan, Turkey

<sup>5</sup>Duzen Laboratories, Adana, Seyhan, Turkey

**P2-27 A new phenomenon: Hypertensionologist's hypertension-Sagliker effect. Classical manual BP measurements must be banned by legislations and ERA and ISN. A real harakiri procedure and compilation of reverse white coat and physical exercise effects**

F. Ocal<sup>1</sup>, Y. Sagliker<sup>1</sup>, N. Paylar<sup>2</sup>, C. Sagliker<sup>2</sup>, T. Inal<sup>1</sup>, P. Kolasin<sup>3</sup>, P.S. Ozkaynak<sup>2</sup>, H.S. Sagliker<sup>2</sup>

<sup>1</sup>Cukurova University, Turkey

<sup>2</sup>Sagliker Hypertension Unit, Turkey

<sup>3</sup>Duzen Laboratories, Turkey

## Saturday, May 14, 2011

### POSTER DISCUSSION: **Inflammation and Oxidative Stress**

Moderators: Marian Klinger (Poland)  
Shoichi Maruyama (Japan)

#### **P3-01 Urinary thioredoxin is an oxidative stress associated biomarker of acute kidney injury**

Kenji Kasuno<sup>1</sup>, Eri Muso<sup>2</sup>, Daisuke Mikami<sup>1</sup>, Naoki Takahashi<sup>1</sup>, Hideki Kimura<sup>1</sup>,  
Yoshinari Yokoyama<sup>1</sup>, Yasunari Nobukawa<sup>1</sup>, Haruyoshi Yoshida<sup>1</sup>

<sup>1</sup>Division of Nephrology and Clinical Laboratories, University of Fukui Faculty of  
Medical Sciences, Fukui, Japan

<sup>2</sup>Division of Nephrology, Kitano Hospital, Tazuke Kofukai Medical Research  
Institute, Osaka, Japan

#### **P3-02 Sivelestat sodium hydrate (ONO-5046), a specific neutrophil elastase inhibitor improves acute lung injury induced by bilateral nephrectomy**

Tomoko Ishizu, Kent Doi, Koji Okamoto, Kousuke Negishi, Eisei Noiri, Toshiro  
Fujita

The Departments of Nephrology & Endocrinology, Hemodialysis & Apheresis,  
University Hospital, The University of Tokyo, Tokyo, Japan

#### **P3-03 Pharmacological inhibition of myostatin suppresses systemic inflammation and muscle atrophy in mice with chronic kidney disease**

L. Zhang, Z. Hu, H. Q. Han, J. Du, W.E. Mitch

Nephrology Division, Baylor College of Medicine, Houston, TX, USA

#### **P3-04 Effect of Darbepoetin alfa (DA) on the progression of inflammatory response in hemodialysis (HD) patients**

Sakurako Nakamura, Naoki Matsushashi

Department of Nephrology, Miyanomori Memorial Hospital, Sapporo, Japan

#### **P3-05 Zymosan triggers severe and long-term peritoneal injury accompanied by complement activation in a rat peritonitis initiated by mechanical scraping**

Masashi Mizuno<sup>1</sup>, Yasuhiko Ito<sup>1</sup>, Tomohiro Mizuno<sup>1</sup>, Yasuhiro Suzuki<sup>1</sup>, Hiroshi  
Kinashi<sup>1</sup>, Enyu Imai<sup>1</sup>, Shoichi Maruyama<sup>1</sup>, Claire L. Harris<sup>2</sup>, B. Paul Morgan<sup>2</sup>,  
Seiichi Matsuo<sup>1</sup>

<sup>1</sup>Nagoya University, Nagoya, Japan

<sup>2</sup>Cardiff University, Cardiff, UK

#### **P3-06 Circulating S100A12 (EN-RAGE) levels predict cardiac dysfunction by Tissue Doppler Echocardiography in peritoneal dialysis patients**

Tae Yamamoto<sup>1</sup>, Shirley Yumi Hayashi<sup>1,2</sup>, Abdul Rashid Qureshi<sup>1</sup>, Marcelo Mazza  
do Nascimento<sup>1</sup>, Ayumu Nakashima<sup>1</sup>, Lars Åke Brodin<sup>2</sup>, Björn Anderstam<sup>1</sup>, Britta  
Lind<sup>1</sup>, Astrid Seeberger<sup>1</sup>, Britta L, Bengt Lindholm<sup>1</sup>

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**POSTER DISCUSSION: Nutrition and Metabolism**

Moderators: Gianfranco Guarnieri (Italy)  
Kunihiro Yamagata (Japan)

**P3-07 Increased platelet count and mortality in hemodialysis patients: the link between thrombocytosis and the malnutrition inflammation-cachexia syndrome**

Miklos Z Molnar<sup>1</sup>, E. Streja<sup>1</sup>, C.P. Kovesdy<sup>2</sup>, K. Kalantar-Zadeh<sup>1,3</sup>,

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**P3-08 Body composition and nutritional status in patients receiving extremely long term hemodialysis therapy**

Shigeru Otsubo<sup>1,2</sup>, Miwa Ishihara<sup>1</sup>, Naoki Kimata<sup>3</sup>, Keiko Uchida<sup>4</sup>, Takashi Akiba<sup>3</sup>,  
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<sup>4</sup>Department of Medicine, Kidney Center, Tokyo Women's Medical University, Tokyo, Japan

**P3-09 Association of retention of advanced glycation end products with protein intake in hemodialysis patients with chronic renal failure**

Yoshie Kanazawa<sup>1,2</sup>, Toshikazu Wada<sup>1</sup>, Asao Gondo<sup>1</sup>, Shinga Esaki<sup>1</sup>, Yume Nagaoka<sup>1</sup>, Tomonari Okada<sup>1</sup>, Hiroshi Matsumoto<sup>1</sup>, Toshiyuki Nakao<sup>1</sup>

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<sup>2</sup>Tokyo Kasei Gakuin University, Tokyo, Japan

**P3-10 Water-soluble-vitamins in hemodialysis patients**

Toshikazu Wada, Hiroshi Matsumoto, Tomonari Okada, Yume Nagaoka, Fumihiro Takeguchi, Hideaki Iwasawa, Toshiyuki Nakao

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**P3-11 Circulating follistatin in patients with chronic kidney disease; implications for muscle strength, bone mineral density, inflammation and survival**

Tetsu Miyamoto<sup>1,2</sup>, Juan Jesús Carrero<sup>1</sup>, Abdul Rashid Qureshi<sup>1</sup>, Björn Anderstam<sup>1</sup>, Olof Heimbürger<sup>1</sup>, Peter Bárány<sup>1</sup>, Bengt Lindholm<sup>1</sup>, Peter Stenvinkel<sup>1</sup>

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<sup>2</sup>Second Department of Internal Medicine, University of Occupational and Environmental Health School of Medicine, Kitakyushu, Japan

**P3-12 Prediction of REE using Creatinine Index in maintenance hemodialysis patients**

Tomohito Matsunaga

Eijinkai Hospital Kidney center, Osaka-city, Miyagi Japan

**P3-13 Influence of the assay for measuring albumin on adjusted calcium concentrations in hemodialysis patients**

Akihiko Kato<sup>1</sup>, Takako Takita<sup>2</sup>, Mitsuyoshi Furuhashi<sup>2</sup>, Taiki Fujimoto<sup>2</sup>, Hiroo Suzuki<sup>2</sup>, Hideo Yasuda<sup>3</sup>, Hiroyuki Suzuki<sup>3</sup>, Yoshihide Fujigaki<sup>3</sup>

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Hamamatsu, Japan

POSTER DISCUSSION: **Dialysis**

Moderators: Nathan W. Levin (USA)  
Matsuhiko Hayashi (Japan)

**P3-14 Benefits of first half intensive hemodiafiltration for the removal of uremic solutes**

Yume Nagaoka, Hiroshi Matsumoto, Tomonari Okada, Hideaki Iwasawa, Ryo Tomaru, Toshikazu Wada, Asako Gondo, Toshiyuki Nakao  
Department of Nephrology, Tokyo Medical University, Tokyo, Japan

**P3-15 A prospective multicenter study of Vitamin E bonded polysulfone membrane for Erythropoiesis Stimulation Agents in Hemodialysis Patients (VEESA-STUDY)**

Eriko Kinugasa<sup>1</sup>, Tsutomu Sanaka<sup>2</sup>, Teiryō Maeda<sup>3</sup>, VEESA Study Group  
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<sup>2</sup>Tokyo Women's Medical University Medical Center East, Tokyo, Japan  
<sup>3</sup>Maeda Institute of Renal Research, Kawasaki, Japan

**P3-16 Malnutrition and mortality in patients receiving hemodialysis: a 5-year prospective cohort study**

Yoshihiko Kanno<sup>1</sup>, Tsuneo Takenaka<sup>2</sup>, Tadashi Yoshida<sup>1</sup>, Matsuhiko Hayashi<sup>1</sup>, Hiromichi Suzuki<sup>2</sup>  
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**P3-17 Evaluation of free light chain removal by blood purification**

Midori Hasegawa<sup>1</sup>, Kyoko Kanayama<sup>1</sup>, Atsushi Ohashi<sup>2</sup>, Yukio Yuzawa<sup>1</sup>  
<sup>1</sup>Fujita Health University School of Medicine, Department of Nephrology,  
<sup>2</sup>Fujita Health University College, Division of Clinical Engineering Technology, Aichi, Japan

**P3-18 The effect of acetate and citrate in dialysate on the vessel of hemodialysis (HD) patients**

Chieko Higuchi, Masami Komeda, Madoka Ishii, Hideki Nishimura, Tsutomu Sanaka, Kuniaki Otsuka  
Tokyo Women's Medical University Medical Center East, Internal Medicine, Tokyo, Japan

**P3-19 The impact of pre-existing renal failure on acute kidney injury requiring continuous renal replacement therapy**

Hideo Yasuda<sup>1</sup>, Takamasa Iwakura<sup>1</sup>, Masafumi Ono<sup>1</sup>, Tomoyuki Fujikura<sup>1</sup>, Yukitoshi Sakao<sup>1</sup>, Hiroyuki Suzuki<sup>1</sup>, Akihiko Kato<sup>2</sup>, Yoshihide Fujigaki<sup>1</sup>  
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POSTER DISCUSSION: **Dialysis and Transplantation**

Moderators: Natale G. De Santo (Italy)  
Kouju Kamata (Japan)

**P3-20 C-peptide (CPR) levels of diabetic (DM) maintenance hemodialysis (HD) patients (pts) as compared to non-DM pts**

Ibuki Moriguchi<sup>1</sup>, Yoko Itoh<sup>1</sup>, Naoyuki Kobayashi<sup>1</sup>, Michihito Okubo<sup>1</sup>, Shokichi Naitoh<sup>2</sup>, Kei Kobayashi<sup>2</sup>, Yasuo Takeuchi<sup>2</sup>, Tatsumi Moriya<sup>2</sup>, Kouju Kamata<sup>2</sup>

<sup>1</sup>Sohbudai Nieren Clinic,

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**P3-21 Evaluation of endogenous insulin secretory function in diabetic hemodialysis patients by a newly designed simple test**

Asako Gondo, Hiroshi Matsumoto, Tomonari Okada, Yume Nagaoka, Ryo Tomaru, Hideaki Iwasawa, Toshikazu Wada, Ami Hayashi, Yoshitaka Miyaoka, Toshiyuki Nakao

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**P3-22 SIRT1 gene polymorphisms are associated with cholesterol metabolism and coronary artery calcification in Japanese hemodialysis patients**

Yasuhiko Shimoyama<sup>1</sup>, Yoko Mitsuda<sup>2</sup>, Yoshinari Tsuruta<sup>3</sup>, Nobuyuki Hamajima<sup>2</sup>, Hidehisa Shimizu<sup>1</sup>, Gulinuer Muteliefu<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Adelibieke Yelixiati<sup>1</sup>, Toshimitsu Niwa<sup>1</sup>

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**P3-23 Coronary artery calcification score is associated with mortality in Japanese hemodialysis patients**

Yasuhiko Shimoyama<sup>1</sup>, Yoko Mitsuda<sup>2</sup>, Yoshinari Tsuruta<sup>3</sup>, Nobuyuki Hamajima<sup>2</sup>, Kentaro Taki<sup>1</sup>, Gulinuer Muteliefu<sup>1</sup>, Dilinaer Bolati<sup>1</sup>, Adelibieke Yelixiati<sup>1</sup>, Hidehisa Shimizu<sup>1</sup>, Toshimitsu Niwa<sup>1</sup>

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**P3-24 Stability of alexithymia over time in HD**

Rosa Maria De Santo, Alessandra Perna, Biagio Di Iorio, Maurizio Livecchi, Natale G. De Santo, Massimo Cirillo

Italian Institute for Philosophical Studies, Dialysis Center Neoren, Renal Unit Landolfi Hospital at Solofra, Renal Unit University of Palermo, Nephrology Second University of Naples, Italy

**P3-25 Vitamin D deficiency among long-term kidney transplant recipients in a multi-ethnic post-transplant clinic**

Alan Lau<sup>1</sup>, Sanjeev Akkina<sup>2</sup>, Maya Campara<sup>1,2</sup>, Prathana Anattiwong<sup>1</sup>, Ignatius Y. Tang<sup>2</sup>

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