# Program

## Special Lecture 1

**Day 1, January 25, Thursday  11:00 ~ 11:50**  
Venue 1 (Nirai Kanai banquet room, 6F)  
Chair: Naoki Yoshimi (Department of Pathology and Oncology, Graduate School of Medicine, University of the Ryukyus)

**SL1  Development of bioresources in Okinawa and toxicology**  
Yoko Aniya  
Okinawa Institute of Science and Technology Graduate University

## Special Lecture 2

**Day 2, January 26, Friday  11:00 ~ 11:50**  
Venue 1 (Nirai Kanai banquet room, 6F)  
Chair: Hideki Wanibuchi (Department of Molecular Pathology, Osaka City University Medical School)

**SL2  Mechanisms of food allergy and oral immune tolerance in early infancy and possible diagnostic biomarkers of them**  
Hiroshi Kido, M.D., Ph.D.  
Institute for Enzyme Research, Tokushima University

## Symposium 1  Innovation of carcinogenic risk assessment

**Day 1, January 25, Thursday  13:20 ~ 15:00**  
Venue 1 (Nirai Kanai banquet room, 6F)  
Chair: Akiyoshi Nishikawa (National Institute of Health Sciences)  
Tetsuya Tsukamoto (Department of Diagnostic Pathology, Fujita Health University School of Medicine)

**SY1-1  Early detection of risk of bladder carcinogenesis by immunohistochemistry for γ-H2AX**  
- Takeshi Toyoda
title=1, Kohei Matsushita
title=1, Young-Man Cho
title=1, Jun-ichi Akagi
title=1  
Mizuki Sone
title=1,2, Akiyoshi Nishikawa
title=3, Kumiko Ogawa
title=1  
\(^{1}\) Division of Pathology, National Institute of Health Sciences,  
\(^{2}\) Tokyo University of Agriculture and Technology,  
\(^{3}\) Biological Safety Research Center, National Institute of Health Sciences

**SY1-2  The role of surfactant protein and application for assessment of the risk of carcinogenesis.**  
Masanao Yokohira  
Onco-pathology, faculty of medicine, Kagawa university

**SY1-3  Elucidation of molecular markers and establishment of rat model for early detection of prostatic carcinogens.**  
- Shugo Suzuki, Aya Naiki-Ito, Hiroyuki Kato, Satoru Takahashi  
Nagoya City University Graduate School of Medical Sciences Experimental Pathology and Tumor Biology
SY1-4  A novel gene expression-based short-term model for detecting genotoxic hepatocarcinogens
Min Gi, Masaki Fujioka, Ann Kakehashi, Hideki Wanibuchi
Department of Molecular pathology, Osaka City University Graduate School of Medicine

Symposium2  A safety assessment of nano-materials and its prospect

Day 2, January 26, Friday  8:50 ~ 10:50    Venue 1 (Nirai Kanai banquet room, 6F)
Chair:  Masumi Suzui (Department of Molecular Toxicology, Graduate School of Medical Sciences and Medical School Nagoya City University) • Kaori Miyata (Sumitomo Chemical Co., Ltd)

SY2-1  Nanomaterial respiratory toxicity monitored in rats after whole body inhalation.
Jun Kanno
Japan Bioassay Research Center, Japan Organization of Occupational Health and Safety

SY2-2  International trends and necessity of chronic effects information on risk assessment of nanomaterials
Akihiko Hirose
Division of Risk Assessment, Biological Safety Research Center, National Institute of Health Sciences

SY2-3  Nano-safety research of nanoparticles used in foods toward sustainable nanotechnology
Kazuma Higashisaka1,2, Kazuya Nagano1, Hiroshi Matsumoto2, Yasuo Tsutsumi1,3

SY2-4  Novel Antioxidative Nanotherapeutics by Nitroxide-radical Containing Polymer Nanoparticles
Yukio Nagasaki
Department of Materials Science and Medical Sciences, Satellite, University of Tsukuba, Tsukuba, Japan

Panel Discussion  Expertise training for toxicologic pathologists and encouragement of their career design

Day 1, January 25, Thursday  15:10 ~ 17:10    Venue 1 (Nirai Kanai banquet room, 6F)
Chair: Midori Yoshida (Food Safety Commission of Japan, Cabinet Office) • Mitsuru Kuwamura (Osaka Prefecture University)

PD-1  Current status of histopathology slide educational session for JSTP certification exam, and the role of toxicologic pathologists in drug development
Satoru Hosokawa
Global Drug Safety Research, Eisai Co., Ltd.

PD-2  Education and Postgraduate Career Guidance on Toxicologic Pathology in Japanese Veterinary Schools
Makoto Shibutani
Tokyo University of Agriculture and Technology

PD-3  Veterinary Education in the U.S. and Career Development Path for Toxicologic Pathologists
Hajime Hiraragi
Amgen Inc., Comparative Biology & Safety Sciences, South San Francisco, CA, USA
PD-4 A Comparison of Practice of Industrial Toxicologic Pathologists in Japan and the United States
Takayuki Tsuchiya
Department of Safety Assessment and Laboratory Animal Resources (West Point, PA U.S.A.), MR L, Merck & Co., Inc., Kenilworth, NJ, USA

Workshop Pathological aspects and the mechanisms in NASH models
Day 2, January 26, Friday 14:20 ~ 15:20 Venue 1 (Nirai Kanai banquet room, 6F)
Chair: Satoru Takahashi (Nagoya City University Graduate School of Medical Sciences) • Atsuhiko Kato (Chugai Pharmaceutical Co., Ltd.)

WS-1 Role of systemic immunity in the progression of hepatic inflammation in a rat model of nonalcoholic steatohepatitis
○ Takeshi Izawa, Shoko Ohji, Machi Atarashi, Rena Miyagi, Ai Hashimoto, Mitsuru Kuwamura, Jyoji Yamete
Veterinary Pathology, Osaka Prefecture University

WS-2* How does the hepatic lesion progress to fibrosis and tumor in a newly established murine model for NASH
○ Yui Terayama, Kazue Akira, Takashi Yamagiwa, Yuki Nakatani, Nanayu Oshima, Tsuyoshi Morio, Tetsuro Matsuura, Kiyokazu Ozaki
Laboratory of Pathology, Setsunan University

WS-3* Effects of trans fatty acid and its substitute on NASH model by a modified CDAA diet
○ Noriko Kemuriyama<sup>1)</sup>, Kaori Ikehata<sup>1)</sup>, Takuya Yamashita<sup>1)</sup>, Kinuko Uno<sup>1)</sup>, Soon Hui Teoh<sup>1)</sup>, Shuji Ogawa<sup>2)</sup>, Atsushi Watanabe<sup>2)</sup>, Katsuhiro Miyajima<sup>1)</sup>, Dai Nakae<sup>1)</sup>

WS-4* Establishment a model of non-alcoholic steatohepatitis-related hepatocarcinogenesis in connexin 32 dominant negative transgenic rats
○ Aya Naiki-Ito<sup>1(2)</sup>, Hiroyuki Kato<sup>1)</sup>, Shugo Suzuki<sup>1)</sup>, Satoru Takahashi<sup>1)</sup>

WS-5 Differences of pathological findings between two NASH model mice
○ Takahiro Okuno, Naomi Ishii, Anna Kakehashi, Masaki Fujioka, Min Wei, Hideki Wanibuchi
Department of Pathology, Osaka City University Graduate School of Medicine

Oral Presentation I Carcinogenic mechanism & cancer prevention
Day 1, January 25, Thursday 8:50 ~ 9:26 Venue 1 (Nirai Kanai banquet room, 6F)
Chair: Katsuhiko Yoshizawa (Mukogawa Women’s University) • Mayumi Kawabe (DIMs Institute of Medical Science, Inc.)

O-01* Toxicity and mechanism of action of palmitoyl piperidinopiperidine
○ S Ando<sup>1)</sup>, H Matsumoto<sup>1)</sup>, K Fukamachi<sup>1)</sup>, M Futakuchi<sup>1(2)</sup>, N Yoshimi<sup>3)</sup>, M Suzui<sup>1)</sup>
<sup>1)</sup>Dept. Mol. Tox., Grad. Sch. Med. Sci., Nagoya City Univ.,<sup>2)</sup>Dept. Path., Nagasaki Univ. Hosp.,<sup>3)</sup>Dept. Path. Oncol., Faculty of Medicine, Univ. of the Ryukyus
O-02 Genotypic/phenotypic differences between DMBA- and PhIP-induced mammary adenocarcinomas in BALB/c-p53" mice
○ Yukino Machida¹, Yukiko Sudo¹, Naoko Uchiya¹, Masako Ochiai², Toshio Imai¹

O-03 * Study of the mechanism of carcinogenesis by prenatal exposure to dimethylnarsinic acid in mice
○ Masaki Fujioka, Min Gi, Takahiro Okuno, Kenji Kumada, Anna Kakehashi, Yuji Oishi, Hideki Wanibuchi

Oral Presentation II Toxic mechanism

Day 1, January 25, Thursday 9:26 ~ 10:14 Venue 1 (Nirai Kanaibanquet room, 6F)
Chair: Akira Inomata (Fujifilm Corporation) · Yoshiro Tani (Daiichi Sankyo Co., Ltd.)

O-04 * Epithelial-Mesenchymal Transition in Cysts in the Choroid Plexus and Renal Tubules
○ Atsuko Murai, Kenji Nakamura, Norifumi Takimoto, Kengo Namiki, Daisuke Hibi, Yukihiro Yanagizawa, Koji Shimouchi, Hiroyuki Yanagi
Safety Research Laboratories, Discovery and Research, Ono Pharmaceutical Co., Ltd.

O-05 DS-7250, a Diacylglycerol Acyltransferase 1 Inhibitor, Enhances Hepatic Steatosis in Zucker Fatty Rats Via Upregulation of Fatty Acid Synthesis
○ Kazuyoshi Kumagai, Kyohei Yasuno, Takuma Iguchi, Kiyonori Kai, Kazuhiko Mori
Medicinal Safety Research Laboratories, Daiichi Sankyo Co., Ltd.

O-06 * Histopathologic Characterization of Mifepristone-Induced Ovarian Toxicity in Cynomolgus Monkeys
○ Yoshikazu Taketa¹, Kanta Horie², Tetsuya Goto³, Etsuko Ohta¹, Kyoko Nakano-Ito¹, Kazuhiro Hayakawa¹, Yuki Seki¹, Aya Goto¹, Satoru Hosokawa¹
¹Tsukuba Drug Safety, Eisai, ²Neurology Business Group, Eisai, ³Sunplanet

O-07 * Drug-Induced Fluorosis in Skeletal/Dental Tissues in Rodent Chronic Toxicity Studies
○ Yuki Seki¹, Kenichi Noritake², Yoshikazu Taketa³, Shoji Asakura⁴, Akiyo Otsuka¹, Aya Goto¹, Etsuko Ohta¹, Kyoko Nakano³, Kazuhiro Hayakawa¹, Jiro Sonoda¹, Satoru Hosokawa¹
¹Eisai Co., Ltd., ²Sunplanet Co., Ltd.

Oral Presentation III Biomarkers

Day 1, January 25, Thursday 10:14 ~ 10:50 Venue 1 (Nirai Kanaibanquet room, 6F)
Chair: Min Gi (Osaka City University Graduate School of Medicine) · Daisuke Hibi (ONO pharmaceutical Co., Ltd.)

O-08 * Short-term detection of gastric carcinogens using DNA double-strand break marker, γ -H2AX
○ Asako Okabe¹, Yuka Kiriyama¹, Shugo Suzuki², Kouhei Sakurai¹, Satoru Takahashi², Tetsuya Tsukamoto¹
¹Dept Diag Path, Fujita Health Univ Sch Med, ²Dept Exp Pathol Tumor Biol, Nagoya City Univ
O-09 * Acute changes in histopathology and intravascular imaging after renal denervation in swine
○ Atsushi Sakaoka\textsuperscript{1,2)}, Akiyuki Takami\textsuperscript{3)}, Yuji Onimura\textsuperscript{1)}, Hitomi Hagiwara\textsuperscript{1)}, Hisako Terao\textsuperscript{1)}, Fumiaki Kumagai\textsuperscript{4)}, Kiyoshi Matsumura\textsuperscript{2)}
\textsuperscript{1)} Terumo, \textsuperscript{2)} Osaka Inst. of Technology, \textsuperscript{3)} Univ. of Fukui, \textsuperscript{4)} Hatano Res. Inst. FDSC

O-10 Potential biomarker for diagnosis of pancreas cancer
○ Katsumi Fukamachi\textsuperscript{1)}, Mitsuru Futakuchi\textsuperscript{1)}, Hiroyuki Tsuda\textsuperscript{2)}, Masumi Suzui\textsuperscript{1)}
\textsuperscript{1)} Department of Molecular Toxicology, Nagoya City University Graduate School of Medical Sciences,
\textsuperscript{2)} Nanotoxicology project, Nagoya City University

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\textbf{Poster Presentation I -1} & \\
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\textbf{Day 1, January 25, Thursday  17:20 ~ 18:20  Poster Room (Shell Hall banquet room, 7F)} & \\
\hline
\textbf{Chair:  Kyoko Nakano(Ito) (Eisai Co.,Ltd.) • Hirofumi Hatakeyama (Ina Research Inc.)} & \\
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\textbf{P-01 CD44v6 expression in NNK-induced mouse lung adenocarcinoma} & \\
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○ Keiko Yamakawa\textsuperscript{1)}, Masanao Yokohira\textsuperscript{1)}, Nozomi Hashimoto\textsuperscript{1)}, Yuko Narusawa\textsuperscript{1)}, Shota Yoshida\textsuperscript{1)}, Kousuke Saoo\textsuperscript{1,2)}, Katsumi Imaida\textsuperscript{1)}
\textsuperscript{1)} Onco-Pathol., Fac. Med., Kagawa Univ., \textsuperscript{2)} Kaisei General Hosp.
\hline
\textbf{P-02 * Minimal change disease of the kidney in a young Sprague-Dawley rat} & \\
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○ Kyohei Yasuno, Kumi Honda, Shinobu Hakamata, Kiyonori Kai, Kazuhiko Mori Medicinal Safety Research Laboratories, Daiichi Sankyo Co., Ltd.
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\textbf{P-03 Mechanistic analysis of PhIP on carcinogenesis using mouse colon organoids} & \\
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○ Toshio Imai\textsuperscript{1)}, Masako Ochiai\textsuperscript{1)}, Mie Naruse\textsuperscript{1)}, Yoshitaka Hippo\textsuperscript{2)}
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\textbf{P-04 Cytotoxicity of the crude extracts of Musa basjoo in human colon cancer cells} & \\
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○ H Matsumoto\textsuperscript{1)}, S Ando\textsuperscript{1)}, K Fukamachi\textsuperscript{1)}, M Futakuchi\textsuperscript{1,2)}, N Yoshihi\textsuperscript{3)}, M Suzui\textsuperscript{1)}
\textsuperscript{2)} Dept. Pathol., Nagasaki Univ. Hosp., \textsuperscript{3)} Dept. Pathol. & Oncol., Univ. of the Ryukyus
\hline
\textbf{P-05 Overcoming resistance to cetuximab with honokiol, a small-molecule polyphenol} & \\
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○ Mari Iida\textsuperscript{1)}, Hannah E. Pearson\textsuperscript{1)}, Rachel A. Orbuch\textsuperscript{1)}, Nellie K. McDaniel\textsuperscript{1)}, Kwangok P. Nickel\textsuperscript{1)}, Randall J. Kimple\textsuperscript{1)}, Jack Arbiser\textsuperscript{2)}, Deric L. Wheeler\textsuperscript{1)}
\textsuperscript{1)} Department of Human Oncology, University of Wisconsin School of Medicine and Public Health
\textsuperscript{2)} Department of Dermatology, Emory University School of Medicine, Winship Cancer Institute
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\textbf{Day 1, January 25, Thursday  17:20 ~ 18:20  Poster Room (Shell Hall banquet room, 7F)} & \\
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\textbf{Chair:  Kaoru Inoue (National Institute of Health Sciences) • Masanao Yokohira (Kagawa University)} & \\
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\textbf{P-06 Proteome analysis in NASH liver tissue and associated hepatocellular carcinomas} & \\
\hline
○ Anna Kakehashi, Takahiro Okuno, Masaki Fujioka, Min Gi, Hideki Waniubuchi
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P-07 * Responses of cellular senescence-linked cell metabolism-related molecules by genotoxic or non-genotoxic carcinogens in rats
○ Yuko Ito\textsuperscript{1,2)}, Kota Nakajima\textsuperscript{1,2)}, Yasunori Masubuchi\textsuperscript{1,2)}, Fumiyo Saito\textsuperscript{3)}, Yumi Akahori\textsuperscript{3)}, Toshinori Yoshida\textsuperscript{1)}, Makoto Shibutani\textsuperscript{1)}
\textsuperscript{1)} LVP, TUAT, \textsuperscript{2)} UGSVS, Gigu Univ., \textsuperscript{3)} Chem. Eval. Res. Inst.

P-08 Effects of astragalus injection on early hepatocarcinogenesis in SD rats.
○ Meilan Jin, Qian Tang, Mei Zhang, Rendong Fang, Jian Wang, Zili Wang
Laboratory of Veterinary Pathology, College of Animal Science and Technology, Southwest University

P-09 * Chemopreventive effects of luteolin on pancreatic carcinogenesis
○ Hiroyuki Kato, Aya Naiki-Ito, Shugo Suzuki, Satoru Takahashi
Dep. Exp. Pathol. Tumor Biol., Nagoya City Univ.,

P-10 Influence of strain difference of trans fatty acids on NASH-like lesions between Hsd rats and F344 rats fed with a CDA diet.
○ Kinuko Uno, Ktsuhiro Miyjima, Soon Hui Teoh, Noriko Kemuriyama, Shuji Ogawa, Atsusi Watanabe, Dai Nakae
Facul. Agricul, Graduate School of Tokyo Univ. Agricul

Poster Presentation  I -3

Day 1, January 25, Thursday  17:20 ~ 18:20  Poster Room (Shell Hall banquet room, 7F)
Chair: Mihoko Ono (Astellas Pharma Inc.) • Shinji Takasu (National Institute of Health Science)

P-11 Starvation-induced liver autophagy in aged mice
○ Seiichi Iizuka\textsuperscript{1)}, Miwa Nahata\textsuperscript{1)}, Hitomi Sekine\textsuperscript{1)}, Naoki Fujitsuka\textsuperscript{1)}, Hiroshi Takeda\textsuperscript{2,3)}
\textsuperscript{1)} Tsumura & Co.,
\textsuperscript{2)} Pathophysiology and Therapeutics, Faculty of Pharmaceutical Sciences, Hokkaido University,
\textsuperscript{3)} Hokkaido University Hospital Gastroenterological Medicine

P-12 * Multidirectional analyses of hepatic chronotoxicity induced by cadmium in mice
○ Hiroki Yoshioka\textsuperscript{1,2)}, Tsunemasa Nonogaki\textsuperscript{1)}, Yoshimi Ichimaru\textsuperscript{1)}, Katsumi Ohtani\textsuperscript{3)}, Masumi Suzuki\textsuperscript{2)}, Nobuhiko Miura\textsuperscript{3)}
\textsuperscript{1)} Kinjo Gakuin University, \textsuperscript{2)} Nagoya City University,
\textsuperscript{3)} Japan National Institute of Occupational Safety and Health

P-13 Analyses of mechanism on liver toxicity by CCA
○ Naofumi Takahashi\textsuperscript{1)}, Satoru Yamaguchi\textsuperscript{1)}, Ryoichi Ohtsuka\textsuperscript{1)}, Makio Takeda\textsuperscript{1)}, Yoshitaka Katoh\textsuperscript{1)}, Tsuyoshi Ito\textsuperscript{1)}, Aya Koyama\textsuperscript{1)}, Atsushi Shiga\textsuperscript{1)}, Yoshimasa Okazaki\textsuperscript{1)}, Toshinori Yoshida\textsuperscript{2)}, Takanori Harada\textsuperscript{1)}
\textsuperscript{1)} The Institute of Environmental Toxicology, \textsuperscript{2)} Tokyo Univ. Agricul. Technol.

P-14 * Time dependent cytoprotective phenomenon of lipopolysaccharide in TAA-induced acute liver injury in rats
○ Mohammad Rabiu Karim, Munmun Pervin, Mizuki Kuramochi, Takeshi Izawa, Mitsuru Kuwamura, Jyoji Yamate
Veterinary Pathology, Osaka Prefecture University
### Poster Presentation I -4

**Day 1, January 25, Thursday 17:20 ~ 18:20**  
**Poster Room (Shell Hall banquet room, 7F)**  
Chair: Shugo Suzuki (Nagoya City University Graduate School of Medical Sciences) • Noriko Tsuchiya (Shionogi&Co.,Ltd.)

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<td>High-throughput screening of the hypoxia pathway: examining promoter response and function</td>
<td>Masato Yonezawa, Shelley Force Aldred, Nathan Trinklein, Menghang Xia, Ruili Huang, Jim Hudson, Johanna Samuelsson</td>
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<td>Catch up growth and immune organ development in DOHaD study</td>
<td>Mai Todoroki, Mika Senuma, Fumiaki Kumagai, Yoshiaki Saito, Makiko Kuwagata</td>
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### Poster Presentation I -5

**Day 1, January 25, Thursday 17:20 ~ 18:20**  
**Poster Room (Shell Hall banquet room, 7F)**  
Chair: Kinji Kobayashi (Shin Nippon Biomedical Laboratories, Ltd.) • Saori Matsuo (Chugai Pharmaceutical Co.,Ltd.)

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<td>Respiratory lesions induced in rats after inhalation exposed to Methyl Acrylate for 13 weeks.</td>
<td>Kenji Takanobu, Hideki Senoh, Yumi Umeda, Shigetoshi Aiso, Jun Kanno</td>
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<td>P-22</td>
<td>Nasal Cavity Neoplastic/Non-neoplastic lesion induced by 104-week whole body inhalation exposure to Methyl Acrylate in rats</td>
<td>Hideki Senoh, Kenji Takanobu, Yumi Umeda, Shigetoshi Aiso, Jun Kanno</td>
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</tbody>
</table>
P-23 * Myocardial damage induced in rats by a single dose of combretastatin A4 disodium phosphate
○ R Tochinai1, K Komatsu1, J Murakami1, Y Nagata1, M Ando1, C Hata1, T Suzuki1, S Kado1, T Kobayashi1, M Kuwahara2
1) Yakult Cent. Inst., 2) Dep. of Vet. PathophysiOL. and Anim. Health, The Univ. of Tokyo

Poster Presentation I -6
Day 1, January 25, Thursday 17:20 ~ 18:20 Poster Room (Shell Hall banquet room, 7F)
Chair: Chihiro Noguchi (TAISHO PHARMACEUTICAL CO., LTD.,) • Akihiro Hirata (Gifu University)

P-24 * Studies on the tumor-promoting activity of alpha-linolenic acid-enriched diacylglycerol oil
○ Hiroshi Honda1, Taisuke Kawamoto1, Yuko Doi2, Takuya Mori1, Shoji Matsumura1, Norio Imai2, Yukinori Mera2, Yuichi Ito1, Osamu Morita1
1) Kao Corporation, 2) DIMS Institute of Medical Science, Inc.

P-25 A 26-week Short-term Carcinogenesis Bioassay of Organic Germanium, poly-trans-[(2-carboxyethyl) germasesquioxane] (Ge-132) using rasH2 Mice
○ Yuko Doi1, Norio Imai1, Mayuko Suguro1, Mayumi Kawabe1, Isao Sato2
1) DIMS Institute of Medical Science, Inc., 2) Asai Germanium Research Institute Co., Ltd.

P-26 * Immunohistochemical examination of a tumor observed in the liver
○ Du Mu, Guo Hui, Zhang Yuexiang, Liu Xiangjiang, Zhang Weijuan, Ji Xiaoxia, Guo Maowu, Yasuhiro Hirouchi
JOINN Laboratories

 ○ Kenji Kumada, Takahiro Okuno, Min Gi, Masaki Fujioka, Nao Yukimatsu, Anna Kakehashi, Hideki Waniibuchi
Department of Molecular Pathology Osaka City University Medical School

P-28 Immunohistochemical characteristics of proliferative lesions in Wistar Hannover rat thymus
○ Yuki Tomonari, Junko Sato, Tetsuro Kurokaki, Ryosuke Kobayashi, Takuya Doi, Takeshi Kanno, Minoru Tsuchitani
LSIMedience Corporation, Pathology Department

Poster Presentation I -7
Day 1, January 25, Thursday 17:20 ~ 18:20 Poster Room (Shell Hall banquet room, 7F)
Chair: Hideshi Kaneko (TEIJIN PHARMA LIMITED) • Akiko Nakamura (JAPAN TOBACCO INC.)

P-29 Oral toxicity study of neonicotinoid pesticide dinofuran in CD-1 mice
○ Yukie Tada, Toyohito Tanaka, Kiyomi Ikushima, Toshinari Suzuki, Akiko Inomata, Takako Moriyasu
Tokyo Metropolitan Institute of Public Health
The 34th Annual Meeting of the Japanese Society of Toxicologic Pathology

P-30 * Comparison between MNU manufacturing facilities concerning the medium-term multi-organ carcinogenesis bioassay
○ Taiki Sugiyama, Kazunari Uda, Hitomi Higuchi, Yuko Doi, Akihiro Hagiwara, Yukinori Mera
DIMS Institute of Medical Science, Inc.

P-31 * The high incidence of amyloidosis in control ICR mice in carcinogenicity studies: Comparison to historical controls (2nd report)
○ Tsuyoshi Ito, Yoshitaka Katoh, Emi Makino, Aya Koyama, Naofumi Takahashi, Atsushi Shiga, Yoshimasa Okazaki, Takanori Harada
The Institute of Environmental Toxicology (IET)

P-32 * Comparative study of pathological characteristics of rat mesotheliomas induced by MWCNT and chrysotile
○ Motoki Hojo1), Yoshimitsu Sakamoto1), Yukio Yamamoto1), Yuko Hasegawa1), Shiho Murakami1), Ai Maeno1), Akihiko Hirose2), Dai Nakae3)

Poster Presentation I -8
Day 1, January 25, Thursday 17:20 ~ 18:20 Poster Room (Shell Hall banquet room, 7F)
Chair: Hiroaki Kawaguchi (Kagoshima University.) • Kimiaki Hirakawa (Shin Nippon Biomedical Laboratories, Ltd.)

P-33 A 90-day oral toxicity study of vanillin propylene glycol acetal (vanillin PGA) in rats
○ Takanori Yamada1,2), Kohei Matsushita1), Takeshi Toyoda1), Tomomi Morikawa1), Miwa Takahashi1), Kaoru Inoue1), Kumiko Ogawa1)

P-34 * 13-week subchronic toxicity study of isoeugenol methyl ether in F344 rats
○ Jun-ichi Akagi, Young-Man Cho, Yasuko Mizuta, Kumiko Ogawa

P-35 * Characteristic pathological changes in nuclei of ADC drug-treated animals
○ Mingshu Huang, Toko Ohira, Liang He, Jingjing Mao, Jianyan Yan, Tiantian Cui, Minbo Hou, Hua Li, Jing Ma
National Shanghai Center for New Drug Safety Evaluation and Research

P-36 Investigation on carcinogenicity study of prescription drugs -Part I-
○ Jihei Nishimura1), Mizuho Nonaka1), Misaki Naota1), Satoshi Tsunoda1), Yukie Saegusa1), Hiroshi Doguchi1), Hiroshi Onodera1), Osamu Fueki1), Kazutoshi Shinoda1), Kumiko Ogawa2), Akiyoshi Nishikawa2)
1) PMDA, 2) NIH
**Poster Presentation I -9**

**Day 1, January 25, Thursday  17:20 ~ 18:20**  
**Poster Room (Shell Hall banquet room, 7F)**  
**Chair:** Satoshi Suzuki (Taiho Pharmaceutical Co.,Ltd.) • Tomonari Nishimura (Asubio Pharma Co.,Ltd.)

P-37 *  
**Time course study on histopathological changes of the peripheral nerve in experimental autoimmune neuritis rats**  
○ Emi Tomikawa, Mayu Mutsuga, Kojiro Hara, Chihiro Kaneko, Tomoya Miyoshi, Naoko Imura, Yuku Togashi, Ryoji Hayashi

Pharmaceutical Research Laboratories, Toray Industries, Inc.

P-38 *  
**Histopathological examination of ocular lesions in leptin receptor-knockout medaka**  
○ Shin-ichi Chisada1, Ayano Hirako2, Akihiko Sugiyama2

1) School of Medicine, Kyorin University, 2) Faculty of Agriculture, Tottori University

P-39  
**Inhibition of atherosclerosis in ApoE-knockout mice by mangosteen extracts and the mechanism analysis**  
○ Masa-Aki Shihata1, Mariko Harada-Shiba2, Eiko Shibata2, Kentaro Maemura3, Yoichi Kondo3


P-40  
**Protective effects of Japanese soybean paste (miso) on SHRSP**  
○ H Watanabe1, M Sasatani2, K Satoh2, Y Miyasaka2, M Yoshizumi1


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**Poster Presentation I -10**

**Day 1, January 25, Thursday  17:20 ~ 18:20**  
**Poster Room (Shell Hall banquet room, 7F)**  
**Chair:** Takeshi Izawa (Osaka Prefecture University) • Kousei Inui (Ishihara Sangyo Kaisha,Ltd.)

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P-41 *  
**Inhibitory Effects of Mead Acid Supplementation on Green Tea Extract-Induced Hepatotoxicity**  
○ A Takenouchi1, Y Emoto2, Y Kinoshita3, K Hamazaki4, A Tsubura5, K Yoshizawa6

1) Mukogawa Women’s Univ., 2) Kansai Med. Univ., 3) Wakayama Med. Univ. Hospital, 4) Public Health-Univ.of Toyama, 5) Pref Osaka Saiseikai Izuo Hospital

P-42 *  
**Damage associated molecular patterns (DAMPs) and the related signals in thioacetamide (TAA)-injected rat liver injury**  
○ Mizuki Kuramochi, Takeshi Izawa, Munmun Pervin, Mohammad Rabiol Karim, Mitsuru Kuwamura, Jyoji Yamate

Veterinary Pathology, Osaka Prefecture University

P-43 *  
**Histopathological Analysis of Young and Aged Female SDT Fatty Rats**  
○ Soon Hui Teoh1, Katsuhiro Miyajima2, Takeshi Ohta3, Masami Shinohara3, Kinuko Uno1, Noriko Kemuriyama2, Dai Nakae2

P-44 * The effects of SLE therapeutic medication and histopathological examination on LPS-induced early nephritis develop model in NZB/W F1 mice
  ○ Tomomi Kanehara, Yasuhiro Ohshima, Jun Imai, Shiori Murase, Tadashi Itoh, Hitoshi Kimura
  Nihon BioResearch Inc.

P-45 Effect of NaCl supplementation on renal complications in SDT fatty rat
  ○ Katsuhiro Miyajima1,2), Takeshi Ohta3), Masami Shinohara3), Hinako Iwasaki1), Soon Hui Teoh2), Kinuko Uno2), Noriko Kemuriyama1), Dai Nakae1,2)

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**Poster Presentation I -11**

Day 1, January 25, Thursday 17:20 ~ 18:20 Poster Room (Shell Hall banquet room, 7F)
Chair: Tomo Sasaki (Maruho Co.,Ltd.) • Atsushi Watanabe (Asahi Kasei Medical Co.,Ltd.)

P-46 Development of canine model with large cartilage defects on femoral condyles
  ○ M. Tasaki1), T. Hirai1), M. Akiyama1), Y. Itou1), K. Nakazawa1), Y. Harada2), K. Nagano3), H. Hagiwara1)

P-47 * Histopathology of inflammatory response through ERs in allergic dermatitis mice model
  ○ Aya Koyama, Risako Tajiki, Yuko Watanabe, Tomoki Fukuyama, Yoshitaka Katoh, Emi Makino, Tsuyoshi Ito, Naofumi Takahashi, Atsushi Shiga, Yoshimasa Okazaki, Takanori Harada
  The Institute of Environmental Toxicology

P-48 The world’s leading rat resource center: the National BioResource Project-Rat
  ○ Miyuu Tanaka, Arata Honda, Birger Voigt, Yuki Neoda, Kazumi Hagiwara, Zong-hu Cui, Ryoma Tachibana, Tomomi Nagao, Satoshi Nakanishi, Ken-ichi Yamasaki, Takashi Kuramoto, Masahide Asano
  Kyoto University

P-49 A 13-week repeated oral dose toxicity study of 2-furanmethanethiol in F344 rats.
  ○ Liang Shi1,3), Yuji Ishii1), Shinji Takasu1), Takuma Tsuchiya1), Aki Kijima1), Kumiko Ogawa1), Akiyoshi Nishikawa2), Takashi Umemura1)

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**Poster Presentation II -1**

Day 2, January 26, Friday 13:10 ~ 14:10 Poster Room (Shell Hall banquet room, 7F)
Chair: Takashi Kotera (Nippon Shinyaku Co.,Ltd.) • Junko Shinozuka (Chugai Pharmaceutical Co.,Ltd.)

P-50 * An immunohistochemical study to differentiate cardiomyocyte necrosis
  ○ Yuichi Takai, Hitoshi Kandori, Takeshi Watanabe
  Drug Safety Research and Evaluation, Research, Takeda Pharmaceutical Company Limited
P-51 Quantitative evaluation of organelles using image analysis software ImageJ — Stomach surface mucous cell alteration of PGE2 treated mouse —
○ Kanata Ibi, Tohru Kihara, Yumi Kangawa, Toshiyuki Shibanushi, Hiroyuki Takabe, Kazuto Hashimoto
Kaken Pharmaceutical Co., Ltd.

P-52 Adjuvant effects of transcutaneously exposed cholera toxin and its B subunit in skin sensitization model
○ Young-Man Cho, Yasuko Mizuta, Jun-ichi Akagi, Takeshi Toyoda, Kumiko Ogawa
Division of Pathology, National Institute of Health Sciences

P-53 Contribution of toxicologic pathologists to choosing appropriate histopathological findings as endpoints for benchmark dose (BMD) approach in toxicological evaluation of chemicals
○ Midori Yoshida1, Takashi Umemura2
1) Food Safety Commission of Japan, Cabinet Office, 2) Yamazaki Gakuen University

P-54 An approach for assessing mild irritants in the Bovine Corneal Opacity and Permeability Test (BCOP test) includes a histopathological examination
○ Kouta Itoh, Masatoshi Furukawa, Chihiro Endoh, Masao Matsuura
SAFETY RESEARCH INSTITUTE FOR CHEMICAL COMPOUNDS CO., LTD

Poster Presentation II-2

Day 2, January 26, Friday 13:10 ~ 14:10 Poster Room (Shell Hall banquet room, 7F)
Chair: Mami Kouchi (Sumitomo Dainippon Pharma Co., Ltd. Preclinical Research Unit) • Takahisa Noto (Santen Pharmaceutical Co., Ltd)

P-55* Histopathological changes of autonomic nerves induced by Paclitaxel in rats
○ Kenji Nakamura, Yu Yokoo, Moutou Ou, Koji Shimouchi, Atsuko Murai, Kengo Namiki, Masanori Kuribayashi, Hiroyuki Yanagi
Safety Research Laboratories, Discovery and Research, ONO Pharmaceutical Co., Ltd.

P-56* Cellular identification of MT+ cells increased in the hippocampal dentate gyrus and cerebellum by developmental exposure to T-2 toxin in mice
○ Kota Nakajima1,2, Yuko Ito1,2, Yasunori Masubuchi1,2, Toshinori Yoshida1, Makoto Shibutani1

P-57 Neuroprotection on the disruptive hippocampal neurogenesis induced by developmental hypothyroidism in rats
○ Yasunori Masubuchi1,2, Kota Nakajima1,2, Yuko Ito1,2, Mihoko Koyanagi3, Shim-mo Hayashi3, Toshinori Yoshida1, Makoto Shibutani1
1) LVP, TUAT, 2) UGSVS, Gifu Univ., 3) San-Ei Gen F.I.I., Inc

P-58* Histological features of the eye in the juvenile white rabbit
○ Yoshinori Yamagiwa, Shingo Nemoto, Hideyuki Sakaki, Masaaki Kurata
Research and Development Division, Senju Pharmaceutical Co., Ltd.
P-59 Classification of Lung Cancer Types from Cytological Images Using Deep Convolutional Neural Networks
○ Tetsuya Tsukamoto, Yuka Kiriyama, Atsushi Teramoto
  1Dept Diag Path, Fujita Health Univ Sch Med, 2Dept Diag Path, Narita Memorial Hosp,
  3Fac Radiol Tech, Sch Health Sci, Fujita Health Univ

P-60 * Cardiac lesions in cynomolgus monkey with food restriction
○ Saori Matsuo, Nozomi Fujisawa, Tomochika Matsushita, Shuji Hayashi, Junko Shinozuka, Akio Miyoshi, Masami Suzuki, Atsuhiko Kato
  1Chugai Pharmaceutical Co., Ltd., 2Forerunner Pharma Research Co., Ltd

P-61 * Expression analysis of AKAP13 and ROCK inhibition assay in mouse DSS-induced colitis
○ Y Kangawa, T Yoshida, H Murayama, K Ibi, T Kihara, K Kuzutani, M Koyanagi, SM Hayashi, M Shibutani

P-62 Historical Data for the Histopathology on the Kidneys in Juvenile Crl:CD(SD) rats
○ Saki Inoue, Hirofumi Hatakeyama, Yoshihiro Takei, Jun Watanabe, Haruko Koizumi, Tetsuyu Kajimura, Akihito Shimo, Shin-ichi Sato, Hijiri Iwata
  1Ina Research Inc., 2LunaPath LLC.

P-63 * Historical Data for the Histopathology on the Skin in Juvenile Crl:CD(SD) Rats
○ Jun Watanabe, Hirofumi Hatakeyama, Yoshihiro Takei, Saki Inoue, Haruko Koizumi, Tetsuyu Kajimura, Akihito Shimo, Shin-ichi Sato, Hijiri Iwata
  1Ina Research Inc., 2LunaPath LLC.

P-64 * Spontaneous lesions spectrum in male and female F344 gpt delta rats in two years breeding
○ Kohei Matsushita, Aki Kijima, Yuji Ishii, Shinji Takasu, Ken Kuroda, Takehiko Nohmi, Kumiko Ogawa, Takashi Umemura

P-65 * Histopathological features of female genitals in IS/Kyo rats up to 30 weeks of age — Relationship with a decline of the pregnancy and the implantation rate —
○ Hiromu Okano, Yuko Yamaguchi, Saori Igura, Isamu Suzuki, Tsubasa Saito, Toru Hoshiya
  Pathology Department, BoZo Research Center Inc.
P-66 * Background data of atypical residual bodies in the testes of Crl:CD1(ICR) mice
○ Chisato Hayakawa, Masayuki Kimura, Yusuke Kuroda, Seigo Hayashi, Kazuya Takeuchi, Satoshi Furukawa
Biological Research Laboratories, Nissan Chemical Industries, Ltd.

P-67 Histological development of Leydig cells in microminipigs
○ Akihisa Kangawa, Masayoshi Otake, Satoko Euya, Masatoshi Shibata
Shizuoka Prefectural Research Institute of Animal Industry, Swine and Poultry Research Center

P-68 * Classification of spermatogenesis cycle for evaluation of testicular toxicity in Göttingen Minipigs
○ Naoaki Yamada, Yumi Wako, Hiroko Kokoshima, Takuya Doi, Takeshi Kanno, Minoru Tsuchitani
LSI Medience Corporation, Nonclinical Research Center, Pathology Department

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**Poster Presentation Ⅱ-5**

Day 2, January 26, Friday 13:10 ~ 14:10  
Poster Room (Shell Hall banquet room, 7F)  
Chair: Kiyokazu Ozaki (Setsunan University) • Yutaka Nakahara (Astellas Pharma Inc.)

P-69 Granulomatous meningitis in a beagle dog showing neurological signs by compound administration
○ Hikaru Mitori¹, Naoto Horai², Satoru Kajikawa¹, Mihoko Ono¹

P-70 * A spontaneous intrathoracic carcinosarcoma in a Sprague-Dawley rat: a case report
○ Kei Kijima, Miki Suehiro, Shino Ito, Aisuke Nii
Central Research Lab., Seikagaku Co.

P-71 * A spontaneous tubular adenocarcinoma (well differentiated type) in the jejunum of young SD rat
○ Yoshiji Asaoka, Koichi Masuno, Kae Fujisawa, Yutaka Tonomura, Minako Tajiri, Yuki Kato, Emi Kashiwagi, Noriko Tsuchiya, Mikinori Torii, Motonobu Ueno
Research Laboratory for Development, Shionogi & Co, Ltd

P-72 Cecal hamartoma in the dog with cecocolic intussusception
○ Mihoko Ono, Miwa Takahashi, Yutaka Nakahara, Kenjiro Tsubota, Masahiro Matsumoto
Drug Safety Research Labs., Astellas Pharma Inc.

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**Poster Presentation Ⅱ-6**

Day 2, January 26, Friday 13:10 ~ 14:10  
Poster Room (Shell Hall banquet room, 7F)  
Chair: Kaoru Toyosawa (Sumika Chemical Analysis Service, Ltd.) • Yuko Yamaguchi (BOZO Research Center Inc.)

P-73 A case of acute hemorrhagic gastritis with necrotic arteritis in mini pig
○ Hiro Eda, Hirotoshi Akane, Atsuko Ichikawa, Shigekazu Shimizu, Hiroyuki Komatsu, Yasuki Akie
CMIC Pharma Science Co., Ltd.
P-74  Method for Sequential Cerebrospinal Fluid Collection from Diurnal Microminipigs
○ Hiroaki Kawaguchi1, Masaharu Abe1, Miharu Ushikai1, Sayumi Oi2, Airo Yukawa2, Tetsuya Yoshikawa1, Hiroyuki Izumi2, Akihide Tanimoto1, Masahisa Horiuchi1
1Kagoshima University, 2Shin Nippon Biomedical Laboratories, Ltd.

P-75 * Segmental aplasia of uterine horn in two RccHan:WIST rats
○ Yukako Shimotsuma, Shuji Takeda, Keiko Ogata, Masahiko Kushida
Environmental Health Science Laboratory, Sumitomo Chemical Co., Ltd.

P-76 * Histopathological Investigation of Mammary Tumor in a Young Male SD Rat
○ Shota Yoshida, Hideki Tanaka, Fumiko Ninomiya, Kenji Matsubara, Hiromi Yamamoto, Satoshi Suzuki, Fumi Morita, Kazuo Hakoi
Discovery and Preclinical Research Division, Taiho Pharmaceutical Co., Ltd.

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Poster Presentation II -7

Day 2, January 26, Friday 13:10 ~ 14:10  Poster Room (Shell Hall banquet room, 7F)
Chair:  Tetsuro Kurotaki (LSI Medience Corporation) ・ Izumi Matsumoto (Sumitomo Dainippon Pharma Co.,Ltd.)

P-77 * Cutaneous hemangiosarcoma with pulmonary metastasis in a young adult Wistar rat
○ Shino Suzuki, Rie Takagi, Kazuya Hirai, Junya Hirata, Yukiko Takeuchi-Kashimoto, Mie Watanabe-Akanuma
Kureha Corporation, Safety Research Center

P-78  Dedifferentiated liposarcoma of retroperitoneum spontaneously occurred in aged SD rat.
○ Tomoharu Naito1,2, Tsuyoshi Saito1, Tamami Higuchi1, Akira Inomata1, Takuo Hayashi1, Atsuko Yamauchi1, Sayaka Kemmochi1, Chihaya Kakinuma1,2, Takashi Yao2
1FujiFilm Co., 2Dept Human Pathology, School of Medicine, Juntendo Univ

P-79 Subcutaneous tumor in a NOG mouse
○ Hirotoshi Akane, Hiro Eda, Atsuko Ichikawa, Shigekazu Shimizu, Hiroyuki Komatsu, Yasuki Akie
CMIC Pharma Science Co., Ltd.

P-80 Hydropic degeneration with hyaline droplet of the acinar cell in the sublingual gland in a beagle dog
○ Takafumi Oshikata, Mikio Mitsuishi, Masao Hamamura
LSI Medience Corporation
**Poster Presentation II-8**

**Day 2, January 26, Friday  13:10 ~ 14:10  Poster Room (Shell Hall banquet room, 7F)**

**Chair:** Tsuyoshi Yoshikawa (Otsuka Pharmaceutical Co., Ltd.) • Takeshi Watanabe (Takeda Phaemaceutical Company Limited.)

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**P-81** Exocrine pancreatic injury induced by Caerulein in rats

○ Hideki Tanaka, Shota Yoshida, Fumiko Ninomiya, Mitsuhiro Fujieda, Norifumi Matsushita, Kenji Matsubara, Hiromi Yamamoto, Satoshi Suzuki, Fumio Morita, Kazuo Hakoi

Discovery and Preclinical Research Division, Taiho Pharmaceutical Co., Ltd.

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**P-82** Vehicle exhaust particulates accumulate in lysosomes and are lysed by lysozyme

○ Nodoka Koga, Akira Onodera, Katsutoshi Yayama, Akira Yokoyama, Rei Imamura, Chiaki Tanigawa, Tomoki Ohmoto, Masaki Inoue, Shinichi Tsunoda, Yuichi Kawai

Fac. Pharmaceut. Sci., Kobegakuin Univ.

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**P-83** Effect of vehicle exhaust particulates on the immune response in nasopharyngeal-associated lymphoreticular tissues

○ Akira Yokoyama, Akira Onodera, Katsutoshi Yayama, Rei Imamura, Chiaki Tanigawa, Tomoki Ohmoto, Masaki Inoue, Shinichi Tsunoda, Yuichi Kawai

Fac. Pharmaceut. Sci., Kobegakuin Univ.

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**P-84** Urban aerosols suppress proliferation of nasal epithelial cells

○ Chiaki Tanigawa, Akira Onodera, Katsutoshi Yayama, Akira Yokoyama, Rei Imamura, Tomoki Ohmoto, Nodoka Koga, Masaki Inoue, Shinichi Tsunoda, Yuichi Kawai

Fac. Pharmaceut. Sci., Kobegakuin Univ.

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**P-85** Effect of gender on upper airway immunity to vehicle exhaust particulates in aged mice

○ Rei Imamura, Akira Onodera, Katsutoshi Yayama, Akira Yokoyama, Nodoka Koga, Chiaki Tanigawa, Tomoki Ohmoto, Masaki Inoue, Shinichi Tsunoda, Yuichi Kawai

Fac. Pharmaceut. Sci., Kobegakuin Univ.

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**Poster Presentation II-9**

**Day 2, January 26, Friday  13:10 ~ 14:10  Poster Room (Shell Hall banquet room, 7F)**

**Chair:** Noriaki Ishigami (ONO pharmaceutical Co., Ltd.) • Satomi Nishikawa (Mitsubishi Tanabe Pharma Corporation)

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**P-86** Effects of nasal epithelial cells treated with vehicle exhaust particulates on lymphocyte composition in vitro

○ Tomoki Ohmoto, Akira Onodera, Katsutoshi Yayama, Rei Imamura, Chiaki Tanigawa, Nodoka Koga, Masaki Inoue, Shinichi Tsunoda, Yuichi Kawai

Fac. Pharmaceut. Sci., Kobegakuin Univ.

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**P-87** Structural optimization of TNFR1 antagonist by single-chain modification

○ Natsuki Osaki1, Masaki Inoue1,2, Masahiro Kunishige1, Midori Miki1, Akira Onodera1, Yuichi Kawai1, Haruhiko Kamada2,3, Yasuo Tsutsumi3, Shin-ichi Tsunoda1,2

P-88 * Structural optimization of TNFR1 antagonist using site-specific PEGylation
○ Masahiro Kunishige¹, Masaki Inoue¹,², Natsuki Osaki¹, Midori Miki¹, Akira Onodera¹, Yuichi Kawai¹, Haruhiko Kamada²,³, Yasuo Tsutsumi³, Shin-ichi Tsunoda¹,²

P-89 * Function of TNFR2 signaling as a regulatory T cell regulator
○ Midori Miki¹, Masaki Inoue¹,², Natsuki Osaki¹, Masahiro Kunishige¹, Akira Onodera¹, Yuichi Kawai¹, Daisuke Ando²,³, Haruhiko Kamada²,³, Yasuo Tsutsumi³, Shin-ichi Tsunoda¹,²

Poster Presentation Ⅱ-10
Day 2, January 26, Friday 13:10 ~ 14:10 Poster Room (Shell Hall banquet room, 7F)
Chair: Yoshimasa Okazaki (The Institute of Environmental Toxicology(IET)) • Katsuhiro Miyajima (Tokyo University of Agriculture)

P-90 Difference in toxic response of an anti-desmoglein-3 ADCC antibody in mouse due to target expression and physiological characteristics of organs
○ Etsuko Fujii¹,², Kenji Taniguchi¹, Atsuhiro Kato¹, Masami Suzuki¹,²
¹Forerunner Pharma Research, Co., Ltd., ²Research Division, Chugai Pharmaceutical Co., Ltd.

P-91 The Role of the Toxicologic Pathologist in Drug Discovery and Development
○ Norimitsu Shirai¹, Lindsay Tomlinson²
¹Pfizer Drug Safety R & D, Pathology, Groton, CT, USA, ²Pfizer Drug Safety R & D, Pathology, Cambridge, MA, USA

P-92 Responses to FDA SEND data -Part III- 
○ Hirofumi Hatakeyama¹, Shin-ichi Horikawa¹, Junichi Sakurai¹, Haruko Koizumi¹, Akihito Shimoi¹, Shin-ichi Sato¹, Hijiri Iwata², Takayuki Anzai³
¹Ina Research Inc., ²LunaPath LLC., ³Showa University School of Medicine

P-93 A consideration on pathology peer review and pathology phase report
○ Hijiri Iwata¹, Takayuki Anzai², Yuji Oishi³
¹LunaPath L.C.C., ²Showa University School of Medicine, ³Osaka City University

Poster Presentation Ⅱ-11
Day 2, January 26, Friday 13:10 ~ 14:10 Poster Room (Shell Hall banquet room, 7F)
Chair: Yoko Sugimoto (Nippon Boehringer Ingelheim Co.,Ltd.) • Yuki Tomonari (LSI Medience Corporation)

P-94 Immunohistochemical characterization of lung proliferative lesions in rats intratracheally given MWCNT
○ Yoshimitsu Sakamoto¹, Motoki Hojo¹, Tosinari Suzuki¹, Akiko Inomata¹, Akihiko Hirose², Dai Nakae³
P-95* Comparative Pulmonary toxicity of DWCNT and MWCNT-7 in Rats
○ Ahmed M. El-Gazzar1,2,7, Mohamed Abdelgied1,2,8, David B. Alexander1, William T. Alexander1, Takamasa Numano1, Masaaki Iigo1, Aya Naiki2, Hirotugu Takase3, Akihiro Hirose4, Yuhji Taquahashi5, Jun Kannno6, Satoru Takahashi2, Ashraf Mohamed Nazem9, Osama Saeid Elokle7, Hiroyuki Tsuda1
1) Nanotoxicology Project, Nagoya City University, Nagoya, Japan., 2) Dept Exp Pathology and Tumor Biology, Nagoya City University Grad School Med Sciences, Nagoya, Japan., 3) Nagoya City University Graduate School Med Sciences, Nagoya, Japan., 4) Div Risk Assessment, NIH, Tokyo, Japan., 5) Div Cellular and Molecular Toxicology, NIH, Tokyo, Japan., 6) Japan Industrial Safety and Health Association, Japan Bioassay Research Center, Kanagawa, Japan., 7) Dept Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Alexandria University, Alexandria, Egypt., 8) Dept Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Beni Suef University, Beni Suef, Egypt., 9) Dept Food Hygiene, Faculty of Veterinary Medicine, Alexandria University, Alexandria, Egypt.

P-96 Dynamics of stem, progenitor, and differentiated cells in the regenerative process of gastrointestinal ulcer in mice
○ Akihiro Hirata1, Kengo Namiki2, Atsuko Murai2, Hiroyuki Tomita3, Akira Hara3, Hiroki Sakai3, Tokuma Yanai4

P-97* Comprehensive gene expression analysis for two different types of GST-P positive foci in terms of their kinetics after cessation of carcinogen treatment
○ Shinji Takasu1, Yuji Ishii1, Aki Kijima1, Kumiko Ogawa1, Takashi Umemura1,2
1) Div. of Pathol, NIH, 2) Faculty of Anim. Sci. Technology, Yamazaki Gakuen Univ.

P-98* Potassium octatitanate fiber (K2O•8TiO2) fiber is a potent inducer of lung and pleural injury in male Fischer 344 rats: A comparative study of titanium dioxide nano particles
○ Mohamed Abdelgied1,2,3, Ahmed M. El-Gazzar1,2,4, David B. Alexander1, William T. Alexander1, Takamasa Numano1, Masaaki Iigo1, Aya Naiki2, Hirotugu Takase3, Khaled Abbas Abdou3, Akihiro Hirose4, Yuhji Taquahashi7, Jun Kannno8, Satoru Takahashi2, Hiroyuki Tsuda1
1) Nano toxicology Project, Nagoya City University, Nagoya, Japan., 2) Dept Experimental Pathology and Tumor Biology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan., 3) Dept Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Beni Suef University, Beni Suef, Egypt., 4) Dept Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Alexandria University, Alexandria, Egypt., 5) Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan., 6) Div Risk Assessment, NIH, Tokyo, Japan., 7) Div Cellular and Molecular Toxicology, NIH, Tokyo, Japan., 8) Japan Industrial Safety and Health Association, Japan Bioassay Research Center, Kanagawa, Japan.