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204	→ P5-1	P5-2 ←	210	→ P10-4	P10-5 ←	216	→ P12-6	P12-7 ←	223	→ P14-20	P14-19 ←
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202	→ P1-3	P4-1 ←	208	→ P8-3	P10-1 ←	214	→ P11-11	P11-12 ←	221	→ P14-16	P14-15 ←
201	→ P1-1	P1-2 ←	207	→ P8-1	P8-2 ←	213	→ P11-9	P11-10 ←	220	→ P14-14	P14-13 ←
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# 1 Chemical carcinogenesis and radiation carcinogenesis

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

## P1-1 Carcinogen 発がん物質

Chairperson: Takafumi Suzuki (Tohoku University Graduate School of Medicine)  
座長: 鈴木 隆史 (東北大学大学院医学系研究科)

### P-2001 Comparison of carcinogenicity of arsenicals on immortalized human bladder epithelial cells

Arpamas Vachiraarunwong<sup>1</sup>, Min Gi<sup>1,2</sup>, Shugo Suzuki<sup>3</sup>, Kana Shibano<sup>3</sup>, Guiya Qiu<sup>3</sup>, Runjie Guo<sup>3</sup>, Aroonrat Pharapirom<sup>2,3</sup>, Anna Kakehashi<sup>2</sup>, Masaki Fujioka<sup>2</sup>, Hideki Wanibuchi<sup>2</sup> (<sup>1</sup>Dept. Environmental Risk Assessment, Osaka Metropolitan Univ. Grad. Sch. Med., <sup>2</sup>Dept. Mol. Pathol., Osaka Metropolitan Univ. Grad. Sch. Med., <sup>3</sup>Dept. Biochem., Faculty Med., Chiang Mai Univ., Chiang Mai, Thailand)

### P-2002 Diphenylarsinic acid induced hepatocarcinogenesis via altered DNA methylation in a transplacental mouse model

Masaki Fujioka<sup>1</sup>, Min Gi<sup>2</sup>, Shugo Suzuki<sup>1</sup>, Yuji Oishi<sup>1</sup>, Arpamas Vachiraarunwong<sup>3</sup>, Guiyu Qiu<sup>1</sup>, Kana Shibano<sup>1</sup>, Anna Kakehashi<sup>1</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Osaka Metropolitan Univ. Grad. Sch. Med., Dept. Mol. Path., <sup>2</sup>Osaka Metropolitan Univ. Grad. Sch. Med., Dept. Env. Risk Assess.)

有機ヒ素化合物ジフェニルアルシン酸経胎盤ばく露マウスにおける肝発がん過程には DNA メチル化異常が関与する

藤岡 正喜<sup>1</sup>、魏 民<sup>2</sup>、鈴木 周五<sup>1</sup>、大石 裕司<sup>1</sup>、ワチラアルノウオン アルパマス<sup>3</sup>、邱 桂ギョク<sup>1</sup>、芝野 佳奈<sup>1</sup>、梯 アンナ<sup>1</sup>、鰐淵 英機<sup>1</sup> (<sup>1</sup>大阪公大院 医 分子病理学、<sup>2</sup>大阪公大院 医 環境リスク評価学)

### P-2003 Comparison of Arsenic Metabolism and Carcinogenicity between Humanized Liver and Wild-type Mice Exposed to Arsenite

Kana Shibano<sup>1</sup>, Min Gi<sup>2</sup>, Masaki Fujioka<sup>1</sup>, Arpamas Vachiraarunwong<sup>3</sup>, Shugo Suzuki<sup>1</sup>, Runjie Guo<sup>3</sup>, Guiyu Qiu<sup>1</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Osaka Metropolitan Univ. Grad. Sch. Med. Dept. Mol. Path., <sup>2</sup>Osaka Metropolitan Univ. Grad. Sch. Med. Dept. Env. Risk Assess.)

ヒト化肝臓マウスにおける無機ヒ素ばく露による尿中糞中代謝物の野生型動物との比較及び影響の検討

芝野 佳奈<sup>1</sup>、魏 民<sup>2</sup>、藤岡 正喜<sup>1</sup>、Arpamas Vachiraarunwong<sup>3</sup>、鈴木 周五<sup>1</sup>、郭 潤傑<sup>3</sup>、邱 桂ギョク<sup>1</sup>、鰐淵 英機<sup>1</sup> (<sup>1</sup>大阪公大院 医 分子病理学、<sup>2</sup>大阪公大院 医 環境リスク評価学)

### P-2004 Role of iron, oxygen and ferroptosis in tumor evolutionary biology Shinya Toyokuni<sup>1</sup>, Yingyi Kong<sup>1</sup>, Yaguang Luo<sup>1</sup>, Hao Zheng<sup>1</sup>, Yoshiro Motooka<sup>1</sup>, Tatsuhiko Imaoka<sup>2</sup>, Shinya Akatsuka<sup>1</sup> (<sup>1</sup>Nagoya Univ. Grad. Sch. Med., Dept. Pathol. Biol. Responses, <sup>2</sup>Dept. Radiat. Effects Res., Natl. Inst. Radiol. Sci., QST)

腫瘍進化生物学における鉄、酸素、フェロトーシスの役割

豊國 伸哉<sup>1</sup>、孔 穎怡<sup>1</sup>、羅 亜光<sup>1</sup>、鄭 好<sup>1</sup>、本岡 大社<sup>1</sup>、今岡 達彦<sup>2</sup>、赤塚 慎也<sup>1</sup> (<sup>1</sup>名古屋大・医・生体反応病理学、<sup>2</sup>量研・放医研・放射線影響)

### P-2005 Involvement of iron-sulphur cofactors in regulation of mammalian THP-1 macrophage iron homeostasis and redox status.

Qinying Lyu<sup>1</sup>, Shinya Toyokuni<sup>1</sup>, Yui Kouketsu<sup>2</sup> (<sup>1</sup>Nagoya University Graduate School of Medicine, <sup>2</sup>Nagoya University Graduate School of Environmental Studies)

哺乳類のマクロファージの鉄の恒常性と酸化還元状態の調節における鉄硫黄補因子の関与。

呂 沁穎<sup>1</sup>、豊國 伸哉<sup>1</sup>、瀧 佑衣<sup>2</sup> (<sup>1</sup>名古屋大学 医学系研究科、<sup>2</sup>名古屋大学 環境学研究科)

### P-2006 Ozone mediates tumor-selective cytotoxicity of cold atmospheric air plasma

Manami Suzuki<sup>1,2</sup>, Yushi Ochiai<sup>1</sup>, Hideki Nakayama<sup>2</sup>, Yoshihiro Suzuki<sup>1</sup> (<sup>1</sup>Res. Div. Priv. Res. Develop. Age. Plasma Chemi-Bio Labs., <sup>2</sup>Grad. Sch. Med. Sci., Kumamoto Univ.)

オゾンは低温大気圧プラズマ照射液(CAP)の腫瘍選択的障害作用のメディエーターである

鈴木 真奈美<sup>1,2</sup>、落合 祐之<sup>1</sup>、中山 秀樹<sup>2</sup>、鈴木 良弘<sup>1</sup> (<sup>1</sup>プラズマ化学生物学 研究開発、<sup>2</sup>熊本大 大学院)

### P-2007 Determination of the roles of carboxypeptidase XM1 in dimethylarsinic acid-induced rat bladder carcinogenesis

Tomoki Yamamoto<sup>1</sup>, Min Gi<sup>1,2</sup>, Syugo Suzuki<sup>1</sup>, Masaki Fujioka<sup>1</sup>, Runjie Guo<sup>3</sup>, Guiyu Qiu<sup>1</sup>, Arpamas Vachiraarunwong<sup>3</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Osaka Metropolitan Univ. Grad. Sch. Med., Dept. Mol. Path., <sup>2</sup>Osaka Metropolitan Univ. Grad. Sch. Med., Dept. Env. Risk Assess.)

DMA 誘発ラット膀胱発がんにおける carboxypeptidase XM1 の

役割の検討

山本 与毅<sup>1</sup>、魏 民<sup>1,2</sup>、鈴木 周五<sup>1</sup>、藤岡 正喜<sup>1</sup>、郭 潤傑<sup>2</sup>、邱 桂ギョク<sup>1</sup>、Arpamas Vachiraarunwong<sup>2</sup>、鰐淵 英機<sup>1</sup> (<sup>1</sup>大阪公立大・院・医・分子病理学、<sup>2</sup>大阪公立大・院・医・環境リスク評価学)

### P-2008 Analysis of guanine adducts formed by heated cooking oil

Hiroshi Kasai, Kazuaki Kawai (Univ. Occup. Environ. Health, IIES, Dept. Environ. Oncol.)

加熱油により生じるグアニン付加体の解析

葛西 宏、河井 一明 (産業医大・産生研・職業性腫瘍学)

### P-2009 Effective method for detection of antithyroid chemicals by histopathological and immunohistochemical analysis in rats

Hiroto Akane, Takeshi Toyoda, Yuji Ishii, Shinji Takasu, Kumiko Ogawa (Div. Path., Natl. Inst. Health Sci.)

ラットを用いた病理組織学的及び免疫組織化学的解析による抗甲状腺物質の効率的な検出

赤根 弘敏、豊田 武士、石井 雄二、高須 伸二、小川 久美子 (国立医薬品食品衛生研究所 病理部)

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E/J

## P1-2 Carcinogenesis in liver, kidney and lung 肝臓・腎臓・肺の発がん

Chairperson: Yoichiro Mitsushishi (Dept. of Respiratory Medicine., Grad. Sch. of Med., Juntendo Univ.)

座長: 光石 陽一郎 (順天堂大学大学院医学研究科呼吸器内科学)

### P-2010 Novel role of cell cycle genes in NAFLD disease progression and potential use of traditional Chinese medicine treatment

Junru Wen<sup>1,2</sup>, Vincent W. Keng<sup>1,3</sup>, Dorothy C. Kwan<sup>1</sup> (<sup>1</sup>Dept. of ABCT, HK PolyU, <sup>2</sup>The Second School of Clinical Medicine, GZUCM, <sup>3</sup>SKL of Chemical Biology and Drug Discovery, HK PolyU)

### P-2011 The molecular and cellular mechanisms for cancer initiation in rat liver

Kimihiko Satoh (Akita University of Nursing and Welfare, Department of Medical Welfare)

ラットの肝発がんイニシエーションの分子細胞機構

佐藤 公彦 (秋田看護福祉大学・医療福祉学科)

### P-2012 Dimethylarsinic acid (DMA) enhanced hepatocarcinogenesis via altered lipid metabolism in a transplacental mouse model

Shugo Suzuki<sup>1</sup>, Min Gi<sup>1,2</sup>, Masaki Fujioka<sup>1</sup>, Anna Kakehashi<sup>1</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Osaka Metropolitan Univ. Grad. Sch. Med., <sup>2</sup>Dept. Environmental Risk Assessment, Osaka Metropolitan Univ. Grad. Sch. Med.)

ジメチルアルシン酸の経胎盤ばく露による肝発がんには脂質代謝異常が関与する

鈴木 周五<sup>1</sup>、魏 民<sup>1,2</sup>、藤岡 正喜<sup>1</sup>、梯 アンナ<sup>1</sup>、鰐淵 英機<sup>1</sup> (<sup>1</sup>大阪公立大 院 医 分子病理学、<sup>2</sup>大阪公立大 院 医 環境リスク評価学)

### P-2013 Involvement of chromothripsis-like chromosome rearrangements in the acetamide-induced rat hepatocarcinogenesis

Yuji Ishii, Shinji Takasu, Kumiko Ogawa (Div. Pathol., Natl. Inst. Health Sci.)

アセトアミド誘発ラット肝腫瘍におけるクロモソリプシス様染色体再構成の関与

石井 雄二、高須 伸二、小川 久美子 (国立衛研・病理部)

### P-2014 The lung carcinogenicity of multi-walled carbon nanotubes and fullerene whiskers

Aya Naiki<sup>1</sup>, Hiroyuki Kato<sup>1</sup>, Anna Kakehashi<sup>2</sup>, Hiroyuki Tsuda<sup>1,3</sup>, Satoru Takahashi<sup>1</sup> (<sup>1</sup>Dept. Exp. Pathol. Tumor Biol., Nagoya City Univ., <sup>2</sup>Dept. Mol. Pathol., Osaka Metropolitan Univ. Grad. Sch. Med., <sup>3</sup>Nanotoxicology Lab Project, Nagoya City Univ.)

多層カーボンナノチューブとフラーレンウィスカーの肺発がん性の解析

内木 綾<sup>1</sup>、加藤 寛之<sup>1</sup>、梯 アンナ<sup>2</sup>、津田 洋幸<sup>1,3</sup>、高橋 智<sup>1</sup> (<sup>1</sup>名古屋市大・院・医・実験病態病理、<sup>2</sup>大阪公立大・院・医・分子病理学、<sup>3</sup>名古屋市大・津田特任教授研究室)

### P-2015 Evaluation of lung and mesothelial carcinogenicity of single-walled carbon nanotube in male Fisher 344 rats.

Asrafal N. Sheema<sup>1</sup>, Aya Naiki<sup>1</sup>, Anna Kakehashi<sup>2</sup>, Hiroyuki Kato<sup>1</sup>, Hiroyuki Tsuda<sup>1,3</sup>, Satoru Takahashi<sup>1</sup> (<sup>1</sup>Dept. Exp. Pathol. Tumor Biol., Nagoya City Univ., <sup>2</sup>Dept. Mol. Pathol., Osaka Metropolitan Univ. Grad. Sch. Med., <sup>3</sup>Nanotoxicology Lab Project, Nagoya City Univ.)

単層カーボンナノチューブの肺および中皮発がん性の解析

シーマ アシラフール ナハル<sup>1</sup>、内木 綾<sup>1</sup>、梯 アンナ<sup>2</sup>、加藤 寛之<sup>1</sup>、津田 洋幸<sup>1,3</sup>、高橋 智<sup>1</sup> (<sup>1</sup>名古屋市大・院・医・実験病態病理、<sup>2</sup>大阪公立大・院・医・分子病理学、<sup>3</sup>名古屋市大・津田特任教授研究室)

**P-2016 Repeated-dose 28-day oral administration of renal carcinogens induces  $\gamma$ -H2AX formation in the rat kidney**  
 Takeshi Toyoda, Hirotohi Akane, Kumiko Ogawa (Division of Pathology, National Institute of Health Sciences)  
 腎臓がん物質の28日間反復経口投与はラット腎臓に $\gamma$ -H2AX形成を誘導する  
 豊田 武士、赤根 弘敏、小川 久美子 (国立医薬品食品衛生研究所 病理部)

**P-2017 Elucidation of the carcinogenic mechanism of translocation renal cell carcinoma by CRISPR/Cas9 genome-wide screening**  
 Hidekazu Nishizawa<sup>1,2</sup>, Shintaro Funasaki<sup>2</sup>, Takanobu Motoshima<sup>1</sup>, Junji Yatsuda<sup>1</sup>, Masaya Baba<sup>2</sup>, Tomomi Kamba<sup>1</sup> (1)Dept. of Urology, Grad. School of Med. Sci., Kumamoto Univ., 2Laboratory of Cancer Metabolism, IRCMS, Kumamoto University)  
 Xp11.2転座腎細胞癌における発がん分子機構の解明  
 西澤 秀和<sup>1,2</sup>、舟崎 慎太郎<sup>2</sup>、元島 崇信<sup>1</sup>、矢津田 旬二<sup>1</sup>、馬場 理也<sup>2</sup>、神波 大己<sup>1</sup> (1)熊本大学生命科学研究部泌尿器科学講座、2熊本大学 IRCMS がん代謝研究室)

**P-2018 Genomic distribution of 8-oxoguanines in the kidney genome of ferric nitrilotriacetate-treated mice**  
 Shinya Akatsuka, Shinya Toyokuni (Dept. Pathol. Biol. Responses, Nagoya Univ., Grad. Sch. Med.)  
 マウス腎臓がんモデルにおける酸化DNA損傷のゲノム内分布  
 赤塚 慎也、豊國 伸哉 (名大・院医・生体反応病理学)

**P-2024 Strain differences in cellular dynamics in the mammary gland after radiation exposure**  
 Daisuke Iizuka, Chizuru Tsuruoka, Tatsuhiro Imaoka, Shizuko Kakinuma (Dept. Rad. Effects Res., NIRS, QST)  
 被ばくした乳腺における細胞動態の系統差について  
 飯塚 大輔、鶴岡 千鶴、今岡 達彦、柿沼 志津子 (量研 放医研 放射線影響)

**P-2025 Fibroblasts upregulate cancer stem cell-related genes in PCa cells independent of androgen sensitivity and AR dependency**  
 Chise Matsuda<sup>1</sup>, Kenichiro Ishii<sup>1,2</sup>, Yasuhisa Nakagawa<sup>3</sup>, Taku Shirai<sup>1</sup>, Yoshifumi Hirokawa<sup>1</sup>, Kazuhiro Iguchi<sup>4</sup>, Masatoshi Watanabe<sup>1</sup> (1)Dept. Oncologic Patho., Mie Univ. Grad. Sch. Med., Tsu, JAPAN, 2)Dept. Nursing, Nagoya Univ. Arts & Sci., Nagoya, JAPAN, 3)Dept. Med. Tech., Gifu Univ. Med. Sci., Seki, JAPAN, 4)Lab. Comm. Pharm., Gifu Pharm. Univ., Gifu, JAPAN)  
 線維芽細胞はPCa細胞におけるアンドロゲン感受性およびAR依存性とは関連なくがん幹細胞関連遺伝子発現を上昇させる  
 松田 知世<sup>1</sup>、石井 健一朗<sup>1,2</sup>、中川 泰久<sup>3</sup>、白井 拓<sup>1</sup>、広川 佳史<sup>1</sup>、井口 和弘<sup>4</sup>、渡邊 昌俊<sup>1</sup> (1)三重大・院医・腫瘍病理学、2名古屋学芸大・看護学部・看護学科、3岐医科大・保健科学部・臨床検査学科、4岐阜薬大・薬局薬学)

**P-2026 Tumor risk from radiation by using *Apc*<sup>Min/+</sup> mice**  
 Megumi Sasatani, Kenji Kamiya (Dept. Exp. Oncol., RIRBM, Hiroshima Univ.)

*Apc*<sup>Min/+</sup>マウスを用いた放射線発がんリスク  
 笹谷 めぐみ、神谷 研二 (広島大学 原医研)

**P-2027 Dynamics of Pax5 deficient cells in B-cell lymphomagenesis in gamma-irradiated B6C3F1 mice**  
 Hirotaka Tachibana<sup>1,2</sup>, Kazuhiro Daino<sup>1</sup>, Takamitsu Morioka<sup>1</sup>, Yi Shang<sup>1</sup>, Chizuru Tsuruoka<sup>1</sup>, Atsuko Ishikawa<sup>1</sup>, Yoshiya Shimada<sup>3</sup>, Shizuko Kakinuma<sup>1</sup> (1)Dept. Radiat. Effects Res., NIRS, QST, 2)SSRL, CRIEPI, 3)IES)  
 ガンマ線照射したB6C3F1マウスのBリンパ腫発生過程におけるPax5欠失細胞の動態  
 橋 拓孝<sup>1,2</sup>、臺野 和広<sup>1</sup>、森岡 孝満<sup>1</sup>、シャン イー<sup>1</sup>、鶴岡 千鶴<sup>1</sup>、石川 敦子<sup>1</sup>、島田 義也<sup>3</sup>、柿沼 志津子<sup>1</sup> (1)量研・放医研・放射線影響、2電中研・サステナブルシステム研究本部、3環境研)

#### 4 Oncogenes and tumor-suppressor genes

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

#### P1-3 Irradiation, carcinogenesis and DNA damage response 放射線と発がん・DNA損傷応答

Chairperson: Masamichi Ishiai (Central Radioisotope Division., National Cancer Center Research Institute)

座長: 石合 正道 (国立がん研究センター研究所 RI実験施設)

**P-2019 Detection of genotoxic reactions through direct analysis of DNA damage responses on chromatin fraction**  
 Katsuyoshi Horibata, Keiichi Sugiyama (Division of Genetics and Mutagenesis, National Institute of Health Sciences)  
 クロマチン分画でのDNA損傷応答解析による遺伝毒性反応の検出  
 堀端 克良、杉山 圭一 (国立医薬品食品衛生研究所 変異遺伝部)

**P-2020 The antitumor effect of talaporfin photodynamic therapy (PDT) combined with STING agonist**  
 Makiko Sasaki, Mamoru Tanaka, Yuki Kojima, Takaya Shimura, Eiji Kubota, Hiromi Kataoka (Department of Gastroenterology and Metabolism Nagoya City University)  
 タラポルフィンPDTとSTINGアゴニストの併用による抗腫瘍効果の検討  
 佐々木 禎子、田中 守、小島 悠揮、志村 貴也、久保田 英嗣、片岡 洋望 (名古屋大学 消化器・代謝内科学)

**P-2021 Synthetic lethal therapy in DNA damage repair-deficient cells: Therapeutic strategy for cholangiocarcinoma**  
 Rattanaporn Jaidee<sup>1,2</sup>, Piman Pocasap<sup>1,2</sup>, Veerapol Kukongviriyapan<sup>1,2</sup>, Laddawan Senggunprai<sup>1,2</sup>, Auemduan Prawn<sup>1,2</sup>, Apinya Jusakul<sup>1,2</sup>, Sarinya Kongpetch<sup>1,2</sup> (1)Dept. of Pharm., Faculty of Med., Khon Kaen Univ., 2)Cholangiocarcinoma Res. Inst., Khon Kaen Univ., 3)Centre for Res. and Dept. of Med. Diagnostic Lab.)

**P-2022 Analysis of early cellular dynamics leading to radiation carcinogenesis in rat mammary gland**  
 Kento Nagata<sup>1</sup>, Mayumi Nishimura<sup>1</sup>, Kazuhiro Daino<sup>1,2</sup>, Daisuke Iizuka<sup>1,2</sup>, Yukiko Nishimura<sup>1,2</sup>, Yuya Hattori<sup>3</sup>, Ritsuko Watanabe<sup>3</sup>, Akinari Yokoya<sup>3</sup>, Shizuko Kakinuma<sup>1,2</sup>, Tatsuhiro Imaoka<sup>1,2</sup> (1)Dept. of Radiat. Effect. Res., Natl. Inst. Radiol. Sci., 2)Natl. Inst. Quantum. Sci. Tech., 3)Natl. Inst. Tech. KOSEN. Kure College)  
 ラット乳腺における放射線発がんに至る初期細胞動態の解析  
 永田 健斗<sup>1</sup>、西村 まゆみ<sup>1</sup>、臺野 和広<sup>1,2</sup>、飯塚 大輔<sup>1,2</sup>、西村 由希子<sup>1,2</sup>、服部 佑哉<sup>3</sup>、渡邊 立子<sup>2</sup>、横谷 明徳<sup>2</sup>、柿沼 志津子<sup>1,2</sup>、今岡 達彦<sup>1,2</sup> (1)量研・放医研・放射線影響、2量研・量子生命研、3呉工業高等専門学校)

**P-2023 Effects of fractionated X-ray Irradiation on acquired radiation resistance and maintenance of osteosarcoma cells**  
 Hiroko Ikeda (Kindai Univ., Dept. of Life Sci.)  
 X線分割照射が骨肉腫細胞の放射線耐性獲得・維持に及ぼす影響  
 池田 裕子 (近畿大・生命科)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

#### P4-1 Oncogenes and tumor-suppressor genes (1) がん遺伝子・がん抑制遺伝子 (1)

Chairperson: Ayana Kon (Dept. Pathology and Tumor Biology, Kyoto University, Kyoto, Japan)

座長: 昆 彩奈 (京都大学・医学系・腫瘍生物学講座)

**P-2028 Detection of PARD6B gene as a candidate of driver gene in colorectal cancer**  
 Kosuke Hirose, Takaaki Masuda, Yuya Ono, Shohei Shibuta, Yuki Ando, Yasuo Tsuda, Yoshiyasu Nagao, Yusuke Yonemura, Koshi Mimori (Kyushu Univ. Beppu Hosp. Surg.)  
 大腸癌のドライバー遺伝子候補としてのPARD6B遺伝子の検出  
 廣瀬 皓介、増田 隆明、小野 裕也、渋谷 祥平、安東 由貴、津田 康雄、長尾 吉泰、米村 祐輔、三森 功士 (九州大学病院別府病院 外科)

**P-2029 Tumor necrosis factor superfamily member 4 is a candidate driver gene for hepatocellular carcinoma**  
 Kiyotaka Hosoda<sup>1,2</sup>, Takaaki Masuda<sup>1</sup>, Hideyuki Saito<sup>1</sup>, Yushi Motomura<sup>1</sup>, Yuki Ando<sup>1</sup>, Tadashi Abe<sup>1</sup>, Katsushi Dairaku<sup>1</sup>, Yusuke Nakano<sup>1</sup>, Yoshiki Hiraki<sup>1</sup>, Tomohiko Ikehara<sup>1,2</sup>, Yusuke Yonemura<sup>1</sup>, Yoshiyasu Nagao<sup>1</sup>, Yasuo Tsuda<sup>1</sup>, Kosuke Hirose<sup>1</sup>, Yuji Soejima<sup>3</sup>, Koshi Mimori<sup>1</sup> (1)Dept. Surg., Kyushu Univ. Beppu Hosp., 2)Dept. Surg., Shinshu Univ. Sch. Med.)  
 肝細胞癌新規ドライバー遺伝子 Tumor Necrosis Factor Superfamily Member 4 の同定と作用機序の解明  
 細田 清孝<sup>1,2</sup>、増田 隆明<sup>1</sup>、斎藤 秀幸<sup>1</sup>、本村 有史<sup>1</sup>、安東 由貴<sup>1</sup>、阿部 正<sup>1</sup>、大樂 勝司<sup>1</sup>、中野 祐輔<sup>1</sup>、平木 嘉樹<sup>1</sup>、池原 智彦<sup>1,2</sup>、米村 祐輔<sup>1</sup>、長尾 吉泰<sup>1</sup>、津田 康雄<sup>1</sup>、廣瀬 皓介<sup>1</sup>、副島 雄二<sup>2</sup>、三森 功士<sup>1</sup> (1)九州大学病院別府病院 外科、2. 信州大学 医学部 外科学教室)



- P-2030** **New approach to various cancers: CROX (Cluster Regulation of RUNX) method**  
 Yasuhiko Kamikubo<sup>1</sup>, Tatsuya Masuda<sup>1,2</sup> (<sup>1</sup>Chiba Cancer Ctr. Res. Inst. Div. Mol. Carcinogenesis, <sup>2</sup>Kyoto Grad. Sch. Med. Dept. Hum. Health. Sci.)  
 多彩な癌に対する新規攻略法：CROX 法  
 上久保 靖彦<sup>1</sup>、増田 達哉<sup>1,2</sup> (<sup>1</sup>千葉県がんセンター 発がん制御、<sup>2</sup>京大・院・医学・人間健康)
- P-2031** **Expression of the chemokine CXCL14 is a predictive biomarker for cetuximab-dependent tumor suppression**  
 Ruyuichiro Hata, Iyoko Kato, Shunichi Kurata (Kanagawa Dental University School of Dentistry)  
 抗癌剤のセツキシマブ(アービタックス)はケモカイン CXCL14 の発現を介して腫瘍抑制作用を示す  
 畑 りゅう一郎、加藤 伊陽子、倉田 俊一 (神奈川歯科大学 歯学部)
- P-2032** **Role of maspin in lung squamous cell carcinoma is altered depending on its subcellular localization.**  
 Tomohiko Sakabe<sup>1</sup>, Takahiro Matsushige<sup>2</sup>, Kohei Ikeda<sup>1</sup>, Karen Makishima<sup>1</sup>, Hirotochi Mochida<sup>1</sup>, Takayuki Shingu<sup>1</sup>, Kanac Ozaki<sup>1</sup>, Yoshihisa Umekita<sup>1</sup> (<sup>1</sup>Dept. of Path., Faculty of Med., Tottori Univ., <sup>2</sup>Dept. of Path., Tottori Univ. Hosp.)  
 肺扁平上皮癌における maspin の機能は、細胞内局在に依存して変化する  
 坂部 友彦<sup>1</sup>、松重 貴大<sup>2</sup>、池田 衡平<sup>1</sup>、牧嶋 かれん<sup>1</sup>、持田 洋利<sup>1</sup>、新宮 崇之<sup>1</sup>、尾崎 加苗<sup>1</sup>、梅北 善久<sup>1</sup> (<sup>1</sup>鳥大・医・病理学、<sup>2</sup>鳥大・医附属病院・病理診断科)
- P-2033** **LICAM mediates neuroendocrine phenotype acquisition in prostate cancer cells**  
 Anh D. Do<sup>1,2</sup>, Chihying Chiang<sup>1</sup>, Chialing Hsieh<sup>1,3</sup>, Shianying Sung<sup>1,3,4</sup> (<sup>1</sup>International Ph.D. Program Transl. Sci., Taipei Med. Univ., <sup>2</sup>Dept. Physiol. Pathophysiol. Immunol., Pham Ngoc Thach Univ. Med., <sup>3</sup>Ph.D. Program Transl. Med., Taipei Med. Univ., <sup>4</sup>Office Human Res., Taipei Med. Univ.)
- P-2034** **Analysis of primate-specific genes contributes to malignant cancer**  
 Tange Shoichiro<sup>1</sup>, Tomomi Hirano<sup>1</sup>, Masashi Idogawa<sup>1</sup>, Eishu Hirata<sup>2</sup>, Issei Imoto<sup>3</sup>, Takashi Tokino<sup>1</sup> (<sup>1</sup>Med. Genome Sci., Inst. Frontier Med., Sapporo Med. Univ., <sup>2</sup>Kanazawa Univ. Cancer Res. Inst. Div. Tumor Cell Biol., <sup>3</sup>Aichi Cancer Ctr. Res. Inst.)  
 予後不良の腫瘍と発現が相関する霊長類特異的遺伝子の解析  
 丹下 正一郎<sup>1</sup>、平野 朋美<sup>1</sup>、井戸川 雅史<sup>1</sup>、平田 英周<sup>2</sup>、井本 逸勢<sup>3</sup>、時野 隆至<sup>1</sup> (札幌医大・フロンティア研・ゲノム、<sup>2</sup>金沢大・がん研・腫瘍分子生物学、<sup>3</sup>愛知県がんセンター研)
- P-2035** **AHR-WLS complex correlates with poor prognosis in B-cell precursor acute lymphoblastic leukemia**  
 Chiung Y. Chiu<sup>1</sup>, Li T. Wang<sup>1</sup>, Shih H. Hsu<sup>2</sup> (<sup>1</sup>Department of Life Science, NTNU, <sup>2</sup>Graduate Institute of Medicine, College of Medicine, KMU)
- P-2036** **Clinical significance of ZNF707, a novel driver gene candidate for colorectal cancer**  
 Satoshi Higuchi<sup>1</sup>, Takaaki Masuda<sup>1</sup>, Yasuo Tsuda<sup>1</sup>, Yoshihiro Nagao<sup>1</sup>, Yusuke Yonemura<sup>1</sup>, Mamoru Uemura<sup>2</sup>, Hidetoshi Eguchi<sup>2</sup>, Yuichiro Doki<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept. of Surg, Kyushu Univ. Beppu Hosp., <sup>2</sup>Dept. of Gastroenterological Surg, Osaka Univ.)  
 大腸癌における新規ドライバー遺伝子 Zinc Finger Protein 707(ZNF707)の同定とその臨床的意義  
 樋口 智<sup>1</sup>、増田 隆明<sup>1</sup>、津田 康雄<sup>1</sup>、長尾 吉泰<sup>1</sup>、米村 祐輔<sup>1</sup>、植村 守<sup>2</sup>、江口 英利<sup>2</sup>、土岐 祐一郎<sup>2</sup>、三森 功士<sup>1</sup> (九州大学別府病院 外科、<sup>2</sup>大阪大学医学部消化器外科)

**P4-2 Oncogenes and tumor-suppressor genes (2)**  
 がん遺伝子・がん抑制遺伝子 (2)

Chairperson: Keiko Shinjo (Div. Cancer Biology, Nagoya Univ. Grad. Sch. of Med.)

座長：新城 恵子 (名古屋大学・医・腫瘍生物学)

- P-2037** **HCV core protein  $\xi$  ISX axis promotes chronic liver disease progression via metabolic remodeling and immune suppression**  
 Li T. Wang<sup>1</sup>, Shih H. Hsu<sup>2</sup> (<sup>1</sup>Department of Life Science, NTNU, <sup>2</sup>Graduate Institute of Medicine, College of Medicine, KMU)
- P-2038** **Identification of KBTBD2, a candidate driver gene of gastric cancer, and its clinical significance.**  
 Koto Kawata<sup>1,2</sup>, Takanari Tatsumi<sup>1</sup>, Takaaki Masuda<sup>1</sup>, Yuki Ando<sup>1</sup>, Kosuke Hirose<sup>1</sup>, Yasuo Tsuda<sup>1</sup>, Yoshihiro Nagao<sup>1</sup>, Yusuke Yonemura<sup>1</sup>, Tomoharu Yoshizumi<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept of Surg, Kyushu Univ Beppu Hosp, <sup>2</sup>Dept of Surg, Kyushu Univ)  
 胃癌新規ドライバー遺伝子候補 KBTBD2 の同定と臨床的意義  
 河田 古都<sup>1,2</sup>、巽 孝成<sup>1</sup>、増田 隆明<sup>1</sup>、安東 由貴<sup>1</sup>、廣瀬 皓介<sup>1</sup>、津田 康雄<sup>1</sup>、長尾 吉泰<sup>1</sup>、米村 祐輔<sup>1</sup>、吉住 朋晴<sup>2</sup>、三森 功士<sup>1</sup> (九州大学別府病院 外科、<sup>2</sup>九州大学大学院 消化器総合外科)
- P-2039** **Elucidation of the transcriptional regulation mechanism of the transcription factor Nrf2 involved in lung cancer**  
 Tsutomu Ohta (Dept. Phy. Therapy., Fac. Heal. Med. Sci., Tokoha Univ.)  
 肺がん発症に関する転写因子 Nrf2 の転写制御機構の解明  
 太田 力 (常葉大・保健医療・理学療法)
- P-2040** **TGF- $\beta$ /Smad3 promotes antioxidant and doxorubicin-resistance function**  
 Takashi Yokoyama<sup>1</sup>, Masao Saito<sup>2</sup>, Keiji Miyazawa<sup>1</sup> (<sup>1</sup>Dept. Biochem., Grad. Sch. of Med., Univ. of Yamanashi, <sup>2</sup>Ctr. for Med. Educ. & Sci., Univ. of Yamanashi)  
 TGF- $\beta$ /SMAD3 は抗酸化機能とドキシロピシジン耐性機能を亢進する  
 横山 隆志<sup>1</sup>、齋藤 正夫<sup>2</sup>、宮澤 恵二<sup>1</sup> (山梨大・医・生化学、<sup>2</sup>山梨大・医・総合医科学セ)
- P-2041** **Spermatogenic Leucine Zipper 1 Promotes Nanog Expression in Lung Cancer and Induces Lung Cancer Stem Cells.**  
 Wei T. Hsu<sup>1</sup>, Li T. Wang<sup>1</sup>, Shih H. Hsu<sup>2</sup> (<sup>1</sup>Department of Life Science, NTNU, <sup>2</sup>Graduate Institute of Medicine, College of Medicine, KMU)
- P-2042** **The expression of Ugene has a significant impact on the prognosis of patients with hepatocellular carcinoma**  
 Kai T. Chuang<sup>1</sup>, Shen N. Wang<sup>2</sup>, Shih H. Hsu<sup>3</sup>, Li T. Wang<sup>4</sup> (<sup>1</sup>Grad. of Med., KMU, <sup>2</sup>Div. of General & Digestive Surg., Dept. of Surg., KMUH, <sup>3</sup>Dept. of Med. Res., KMU, <sup>4</sup>Dept. of Life Science, NTNU)
- P-2043** **Vacuolar protein sorting 45(VPS45) is a candidate driver gene for hepatocellular carcinoma**  
 Takashi Ofuchi<sup>1,2</sup>, Takaaki Masuda<sup>1</sup>, Tomohiko Ikehara<sup>1</sup>, Kiyotaka Hosoda<sup>1</sup>, Chihiro Matsumoto<sup>1,2</sup>, Tadashi Abe<sup>1</sup>, Katsushi Dairaku<sup>1</sup>, Yusuke Nakano<sup>1</sup>, Kosuke Hirose<sup>1</sup>, Hideo Baba<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept. of Surg, Kyushu Univ. Beppu Hosp., <sup>2</sup>Dept. of Gastroenterological, Kumamoto Univ. Hosp.)  
 肝細胞癌新規ドライバー遺伝子 Vacuolar protein sorting 45(VPS45)の同定と作用機序の解明  
 大淵 昂<sup>1,2</sup>、増田 隆明<sup>1</sup>、池原 智彦<sup>1</sup>、細田 清孝<sup>1</sup>、松本 千尋<sup>1,2</sup>、阿部 正<sup>1</sup>、大柴 勝司<sup>1</sup>、中野 祐輔<sup>1</sup>、廣瀬 皓介<sup>1</sup>、馬場 秀夫<sup>2</sup>、三森 功士<sup>1</sup> (九州大学病院別府病院外科、<sup>2</sup>熊本大学病院消化器外科)
- P-2044** **Transcription Factor Spermatogenic Leucine Zipper 1 Regulates Macrophage Polarization in Tumor Microenvironment.**  
 Yu S. Huang<sup>1</sup>, Li T. Wang<sup>1</sup>, Shih H. Hsu<sup>2</sup> (<sup>1</sup>Department of Life Science, NTNU, <sup>2</sup>Graduate Institute of Medicine, College of Medicine, KMU)
- P-2045** **Sodium Channel Modifier 1 is a candidate driver gene for hepatocellular carcinoma.**  
 Ryosuke Yoshiga, Kiyotaka Hosoda, Takaaki Masuda, Yusuke Yonemura, Koshi Mimori (Dept. Surg., Kyushu Univ. Beppu Hosp.)  
 肝細胞癌新規ドライバー遺伝子 Sodium Channel Modifier 1 の同定と作用機序の解明  
 吉賀 亮輔、細田 清孝、増田 隆明、米村 祐輔、三森 功士 (九州大学病院 別府病院 外科)

### P4-3 Oncogenes and tumor-suppressor genes (3) がん遺伝子・がん抑制遺伝子 (3)

Chairperson: Jun-ya Kato (TCB, Biosci., NAIST)

座長: 加藤 順也 (奈良先端大・バイオ・腫瘍細胞生物学)

**P-2046 The cross-talk between FTH1 & PYCR1 plays a pivotal role in driving the progression of KRAS-mutated pancreatic cancer**  
Jimin Park<sup>1</sup>, Yuankai Qiu<sup>1,2</sup>, Yenhao Su<sup>3,5,6</sup>, Hsian Chen<sup>3,5,6</sup>, Alanyueh L. Lee<sup>7</sup>, Jungsu Chang<sup>1</sup>, Chengchin Kuo<sup>4</sup>, Chingfeng Chiu<sup>2,8,9</sup> (<sup>1</sup>Sch. of Nutrition & Health Sci., College of Nutrition, TMU, <sup>2</sup>Grad. Inst. of Metabolism & Obesity Sci., College of Nutrition, TMU, <sup>3</sup>Grad. Inst. of Clin. Med., College of Med., TMU, <sup>4</sup>Inst. of Cell. & System Med., NHRI, <sup>5</sup>Div. of General Surg., Shuang Ho Hosp., TMU, <sup>6</sup>Dept. of Surg., Sch. of Med., TMU, <sup>7</sup>Natl. Inst. of Cancer Res., NHRI, <sup>8</sup>Nutrition Res. Ctr., TMU, <sup>9</sup>TMU Res. Ctr. of Cancer Translational Med., TMU)

**P-2047 Proteasome 26S Subunit, Non-ATPase 12(PSMD12) on chromosome 17 is a candidate driver gene of lung adenocarcinoma (LUAD)**

Yuya Ono<sup>1,2</sup>, Takaaki Masuda<sup>1</sup>, Shohei Shibuta<sup>1,2</sup>, Kosuke Hirose<sup>1</sup>, Chihiro Matsumoto<sup>1</sup>, Yuki Miyata<sup>1</sup>, Kiyotaka Hosoda<sup>1</sup>, Katsuji Dairaku<sup>1</sup>, Yusuke Nakano<sup>1</sup>, Tadashi Abe<sup>1</sup>, Yasuo Tsuda<sup>1,2</sup>, Yoshiyasu Nagao<sup>1,2</sup>, Yusuke Yonemura<sup>1,2</sup>, Tomoyoshi Takenaka<sup>2</sup>, Tomoharu Yoshizumi<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Department of Surgery, Kyushu University, Beppu Hospital, <sup>2</sup>Department of Surgery and Science, Kyushu University)  
17番染色体に存在するプロテアソーム 26S サブユニット、非 ATP アーゼ 12(PSMD12)は肺腺癌の新規ドライバー遺伝子候補である  
小野 裕也<sup>1,2</sup>、増田 隆明<sup>1</sup>、渋谷 祥平<sup>1,2</sup>、廣瀬 皓介<sup>1</sup>、松本 千尋<sup>1</sup>、宮田 裕輝<sup>1</sup>、細田 清孝<sup>1</sup>、大樂 勝司<sup>1</sup>、中野 祐輔<sup>1</sup>、阿部 正<sup>1</sup>、津田 康雄<sup>1,2</sup>、長尾 吉泰<sup>1,2</sup>、米村 祐輔<sup>1,2</sup>、竹中 朋祐<sup>2</sup>、吉住 朋晴<sup>2</sup>、三森 功士<sup>1</sup> (九州大学病院別府病院外科、<sup>2</sup>九州大学大学院 消化器・総合外科)

**P-2048 Identification of candidate driver gene PDCD10 and selection of therapeutic drug candidates in ESCC.**

Yoshiki Hiraki<sup>1,2</sup>, Takaaki Masuda<sup>1</sup>, Yushi Motomura<sup>1,2</sup>, Katsushi Dairaku<sup>1</sup>, Tadashi Abe<sup>1</sup>, Yuki Ando<sup>1</sup>, Yusuke Nakano<sup>1</sup>, Kiyotaka Hosoda<sup>1</sup>, Takanari Tatsumi<sup>1</sup>, Satohiro Kai<sup>2</sup>, Yasuo Tsuda<sup>1</sup>, Yoshihiro Nagao<sup>1</sup>, Yusuke Yonemura<sup>1</sup>, Masakazu Hirakawa<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept of Surgery, Kyushu Univ Beppu Hospital, <sup>2</sup>Dept of Radiology, Kyushu Univ Beppu Hospital)  
食道癌における新規ドライバー遺伝子候補 PDCD10 の同定と治療薬候補の選定  
平木 嘉樹<sup>1,2</sup>、増田 隆明<sup>1</sup>、本村 有史<sup>1,2</sup>、大樂 勝司<sup>1</sup>、阿部 正<sup>1</sup>、安東 由貴<sup>1</sup>、中野 祐輔<sup>1</sup>、細田 清孝<sup>1</sup>、巽 孝成<sup>1</sup>、甲斐 聖広<sup>2</sup>、津田 康雄<sup>1</sup>、長尾 吉泰<sup>1</sup>、米村 祐輔<sup>1</sup>、平川 雅和<sup>2</sup>、三森 三森<sup>1</sup> (九州大学病院別府病院 外科、<sup>2</sup>九州大学病院別府病院 放射線科)

**P-2049 The contradictory role of nuclear transcription factor I B (NFIB) in different phases of hepatocellular carcinoma.**

Li Zhou<sup>1</sup>, Linhong Mao<sup>2</sup>, Zhihang Zhou<sup>1</sup>, Song He<sup>1</sup> (<sup>1</sup>The Hosp. of Chongqing Med. Univ., <sup>2</sup>Chengdu Second People's Hosp.)

**P-2050 ISX/TWIST1 Complex- Induces Inflammation Activity mediating Hepatocellular Carcinoma Progression**

Li H. Ye<sup>1</sup>, Li T. Wang<sup>1</sup>, Shih H. Hsu<sup>2</sup> (<sup>1</sup>Department of Life Science, NTNU, <sup>2</sup>Graduate Institute of Medicine, College of Medicine, KMU)

**P-2051 Identification of URST4 as a prognostic biomarker and therapeutic target for breast cancer**

Hoa Nguyen<sup>1,2</sup>, Atsushi Takano<sup>1,2,3</sup>, Bayarbat Tsevegjav<sup>1,2</sup>, Regina Mbugua<sup>1,2</sup>, Yohei Miyagi<sup>4</sup>, Yataro Daigo<sup>1,2,3</sup> (<sup>1</sup>Dep. Med. Oncol. & Cancer Ctr., Shiga Univ. Med. Sci., <sup>2</sup>Ctr. for Advanced Med. against Cancer, Shiga Univ. of Med. Sci., <sup>3</sup>Ctr. for Antibody and Vaccine, Univ. of Tokyo, <sup>4</sup>Mol. Pathology & Genet. Div., Kanagawa Cancer Ctr.)  
乳癌の新規バイオマーカー、治療標的分子 URST4 の同定  
ゲン ホア<sup>1,2</sup>、高野 淳<sup>1,2,3</sup>、シエベグジャブ バヤルバット<sup>1,2</sup>、ンポガ レジナ<sup>1,2</sup>、宮城 洋平<sup>4</sup>、醍醐 弥太郎<sup>1,2,3</sup> (滋賀医大 臨床腫瘍学講座、<sup>2</sup>滋賀医大 先端がん研究センター、<sup>3</sup>東京大学医科研 抗体ワクチンセンター、<sup>4</sup>神奈川県立がんセンター)

**P-2052 Clathrin adaptors AP-1 and GGA2 regulate cell surface expression of EGFR for cell growth**

Takefumi Uemura<sup>1</sup>, Takehiro Suzuki<sup>2</sup>, Naoshi Dohmae<sup>2</sup>, Satoshi Waguri<sup>1</sup> (<sup>1</sup>Dept of Anat and Histol, Fukushima Med Univ, <sup>2</sup>RIKEN Center for Sustainable Resource Science)  
クラスリンアダプター AP-1 および GGA2 は EGFR の細胞膜発現と細胞増殖を調節する  
植村 武文<sup>1</sup>、鈴木 健裕<sup>2</sup>、堂前 直<sup>2</sup>、和栗 聡<sup>1</sup> (福島県立医科大学 医学部 解剖組織学講座、<sup>2</sup>理研 環境資源科学研究センター)

**P-2053 Interference with MEP50 inhibits HSP90 function and tumor development in NDRG2low adult T-cell leukemia**  
Tomonaga Ichikawa<sup>1</sup>, Kazuhiro Morishita<sup>2</sup>, Akihiro Nakamura<sup>1</sup>, Yutaka Horiuchi<sup>1</sup>, Takashi Murakami<sup>1</sup> (<sup>1</sup>Department of Microbiology, Saitama Medical University, <sup>2</sup>Frontier Science Research Center, University of Miyazaki)

MEP50 阻害は NDRG2 発現低下 ATL において HSP90A 活性を制御し腫瘍発症を抑制する  
市川 朝永<sup>1</sup>、森下 和広<sup>2</sup>、中村 彰宏<sup>1</sup>、堀内 大<sup>1</sup>、村上 孝<sup>1</sup> (埼玉医科大学微生物学、<sup>2</sup>宮崎大学フロンティア科学総合研究センター)

**P-2054 Suppression of CHK2 expression inhibits cell proliferation in malignant mesotheliomas harboring BAP1 mutation**

Haruka Inami<sup>1</sup>, Koya Suzuki<sup>1,2,3</sup>, Masaki Tange<sup>1</sup>, Tomohiro Akashi<sup>4</sup>, Norio Kaneda<sup>5</sup>, Tohru Maeda<sup>6</sup>, Takashi Miida<sup>2</sup>, Hiroshi Murakami<sup>7</sup>, Kenji Kadomatsu<sup>8</sup>, Yoshitaka Sekido<sup>9</sup>, Yuko Murakamitonami<sup>1,2</sup> (<sup>1</sup>Mol. Cancer Genet. Lab., Tokyo Univ. Tech. Grad Sch. Bionics, <sup>2</sup>Dept. Clin. Lab. Med., Juntendo Univ. Grad. Sch. Med., <sup>3</sup>Adv. Comp. Res. Org., Teikyo Univ., <sup>4</sup>Dept. Integrative Cellular Inform., Nagoya Univ. Grad. Sch. Med., <sup>5</sup>Fac. Pharm., Meijo Univ., <sup>6</sup>Col. Pharm., Kinjo Gakuin Univ., <sup>7</sup>Dept. Biol. Sci., Fac. Sci. Eng., Chuo Univ., <sup>8</sup>Dept. Biochem., Nagoya Univ. Grad. Sch. Med., <sup>9</sup>Div. Cancer Biol., Aichi Cancer Ctr. Res. Inst.)  
BAP1 変異悪性中皮腫細胞において、CHK2 の発現抑制により細胞増殖が抑制される  
稲見 陽香<sup>1</sup>、鈴木 浩也<sup>1,2,3</sup>、丹下 将希<sup>1</sup>、紅 朋浩<sup>4</sup>、金田 典雄<sup>5</sup>、前田 徹<sup>6</sup>、三井田 孝<sup>2</sup>、村上 浩士<sup>7</sup>、門松 健治<sup>8</sup>、関戸 好孝<sup>9</sup>、村上 (渡並) 優子<sup>1,2</sup> (東工大大院・バイオ・腫瘍分子遺伝、<sup>2</sup>順大院医・臨床検、<sup>3</sup>帝京大・先端研、<sup>4</sup>名大院医・システム生物、<sup>5</sup>名城大・薬、<sup>6</sup>金城学院大・薬、<sup>7</sup>中大院理工・生命、<sup>8</sup>名大院医・生化学、<sup>9</sup>愛知がんセンター)

## 5 Signal transduction and gene expression

### P5-1 Non-coding RNA (1) ノンコーディング RNA (1)

Chairperson: Yusuke Yamamoto (Lab. Integr. Oncol. Natl. Cancer Ctr. Res. Inst.)  
座長: 山本 雄介 (国立がん研究センター研究所病態情報学ユニット)

**P-2055 A Novel Mechanism of Inhibition of Gastric Cancer Progression by Skeletal Muscle-Derived Tumor Suppressor MicroRNAs**

Jun Kiuchi, Shuhei Komatsu, Takeshi Kubota, Takuma Ohashi, Taisuke Imamura, Keiji Nishibeppu, Yusuke Takashima, Hajime Kamiya, Hiroshi Arakawa, Yudai Nakabayashi, Ryo Ishida, Tomohiro Arita, Hiroki Shimizu, Hirotsuka Konishi, Atsushi Shiozaki, Eigo Otsuji (Div Digestive Surgery, Dep Surgery, Kyoto Pref Univ of Med)  
骨格筋由来癌抑制型マイクロ RNA による胃癌進展抑制機構の解明  
木内 純、小松 周平、窪田 健、大橋 拓馬、今村 泰輔、西別府 敬士、高嶋 祐助、神谷 肇、荒川 宏、中林 雄大、石田 怜、有田 智洋、清水 浩紀、小西 博貴、塩崎 敦、大辻 英吾 (京都府立医科大学 消化器外科)

**P-2056 Plasma microRNA profiles: identification of miR-218 as a novel biomarker for chemosensitivity in gastric cancer**

Ryo Ishida, Shuhei Komatsu, Keiji Nishibeppu, Takuma Ohashi, Taisuke Imamura, Jun Kiuchi, Hajime Kamiya, Hiroshi Arakawa, Hiroki Shimizu, Tomohiro Arita, Hirotsuka Konishi, Takeshi Kubota, Atsushi Shiozaki, Hitoshi Fujiwara, Eigo Otsuji (Division of Digestive Surgery Kyoto Prefectural University of Medicine)  
胃癌患者血中における抗がん剤感受性予測 microRNA の同定と核酸治療法の開発  
石田 怜、小松 周平、西別府 敬士、大橋 拓馬、今村 泰輔、木内 純、神谷 肇、荒川 宏、清水 浩紀、有田 智洋、小西 博貴、窪田 健、塩崎 敦、藤原 齊、大辻 英吾 (京都府立医科大学 外科 消化器外科)

**P-2057 Blood microRNA as early detection markers of pancreatic cancer: testing for replicability of miRNAs from meta-analysis**

Asahi Hishida<sup>1</sup>, Takashi Tamura<sup>1</sup>, Hiroya Yamada<sup>2</sup>, Yuji Toiyama<sup>3</sup>, Yoshinaga Okugawa<sup>3</sup>, Koji Tanaka<sup>4</sup> (<sup>1</sup>Dept. of Prev. Med., Nagoya Univ. Grad. Sch. Med., <sup>2</sup>Dept. of Hyg., Fujita Health Univ. Sch. Med., <sup>3</sup>Dept. of Gastrointest. Pediatr. Surg., Mie Univ. Grad. Sch. Med., <sup>4</sup>Dept. of Surg., Iga City General Hosp.)  
膵がん早期診断マーカーとしての血中マイクロ RNA - メタ解析により得られたマイクロ RNA の再現性検証  
菱田 朝陽<sup>1</sup>、田村 高志<sup>1</sup>、山田 宏哉<sup>2</sup>、岡山 裕二<sup>3</sup>、奥川 喜永<sup>3</sup>、田中 光司<sup>4</sup> (名古屋大 院医 予防医学、<sup>2</sup>藤田医大 医 衛生学、<sup>3</sup>三重大 院医 消化管小児外科、<sup>4</sup>伊賀市立上野総合市民病院 外科)



- P-2058 The function of lncRNA MALAT1 in pancreatic and colorectal cancer cell lines**  
 Nobuhiko Sugito, Yukihiko Akao (Uni. Grad. Sch., Drug, Med. Info. Sci., Gifu Univ.)  
 膵臓がんと大腸がんにおける MALAT1 の機能の解析  
 杉戸 信彦、赤尾 幸博 (岐阜大院 連合創薬医療情報研究科)
- P-2059 Role of anticancer drug resistance-related microRNA-31 in colorectal tumors**  
 Yoshihito Nakagawa<sup>1</sup>, Yukihiko Akao<sup>2</sup> (<sup>1</sup>Gastroenterology and Hepatology, Fujita Health Univ., <sup>2</sup>Drug Discovery and Medical Information Sciences, Gifu Univ.)  
 薬剤耐性関連 miR-31 の大腸腫瘍における役割  
 中川 義仁<sup>1</sup>、赤尾 幸博<sup>2</sup> (<sup>1</sup>藤田医大 消化器内科、<sup>2</sup>岐阜大 連合創薬医療情報研究科 創薬科学)
- P-2060 SAPK-regulated microRNA-X suppresses the expression of tumor suppressor miRNA in colorectal cancer**  
 Noriko Tokai, Takanori Nakamura, Mutsuhiro Takekawa (Dev. Cell Signal. Mol. Med., IMS, The Univ of Tokyo)  
 SAPK により発現制御されている miRNA-X は大腸癌において癌抑制 miRNA の発現を抑制する  
 渡海 紀子、中村 貴紀、武川 睦寛 (東大 医科研 分子シグナル制御)
- P-2061 NEAT1/SOD2 Axis Confers Sorafenib and Lenvatinib Resistance by Activating AKT in Hepatocellular Carcinoma**  
 Hiroyuki Tsuchiya<sup>1</sup>, Hiromi Sakaguchi<sup>2</sup>, Ririko Shinonaga<sup>1</sup>, Yutaka Kitagawa<sup>2</sup>, Kenji Yoshida<sup>2</sup> (<sup>1</sup>Div. Regen. Med. & Ther., Fac. Med., Tottori Univ., <sup>2</sup>Dept. Radiat. Oncol., Tottori Univ. Hosp.)  
 NEAT1 は SOD2 を介した AKT 活性化により肝細胞がんにもソラフェニブおよびレニパチニブ抵抗性を付与する  
 土谷 博之<sup>1</sup>、坂口 弘美<sup>2</sup>、篠永 りりこ<sup>1</sup>、北川 寛<sup>2</sup>、吉田 賢史<sup>2</sup> (<sup>1</sup>鳥大・医・再生医療学分野、<sup>2</sup>鳥大附病・放射線治療科)
- P-2062 lncRNA NEAT1 Confers Radioresistance to Hepatocellular Carcinoma by Inducing PINK1/Parkin-Mediated Mitophagy**  
 Hiromi Sakaguchi<sup>1</sup>, Hiroyuki Tsuchiya<sup>2</sup>, Ririko Shinonaga<sup>2</sup>, Yutaka Kitagawa<sup>1</sup>, Kenji Yoshida<sup>1</sup> (<sup>1</sup>Dept. Radiat. Oncol., Tottori Univ. Hosp., <sup>2</sup>Div. Regen. Med. & Ther., Fac. Med., Tottori Univ.)  
 lncRNA NEAT1 は PINK1/Parkin 誘導ミトファジーを介して肝細胞がんにも放射線抵抗性を付与する  
 坂口 弘美<sup>1</sup>、土谷 博之<sup>2</sup>、篠永 りりこ<sup>2</sup>、北川 寛<sup>1</sup>、吉田 賢史<sup>1</sup> (<sup>1</sup>鳥大附病・放射線治療科、<sup>2</sup>鳥大・医・再生医療学分野)

- 大・医・バイオバンク、<sup>4</sup>横浜国大院・理工、<sup>5</sup>横浜国大院・工学院)
- P-2066 MicroRNA expression profiling and their target genes of DU145 cells cultured in conditioned medium from adipocytes**  
 Hitoshi Nakano<sup>1,2</sup>, Eri Usugi<sup>2</sup>, Maiha Ishigaki<sup>1,2</sup>, Miki Usui<sup>1,3</sup>, Mizuki Nakahama<sup>4</sup>, Haruka Takahashi<sup>3</sup>, Chise Matsuda<sup>1</sup>, Hiroto Uasa<sup>1,3</sup>, Yoshifumi Hirokawa<sup>1</sup>, Kazutoshi Iijima<sup>5</sup>, Masatoshi Watanabe<sup>1,2,3</sup> (<sup>1</sup>Dept. Oncologic Path. Mie Univ. Grad. Sch. Med., <sup>2</sup>Biobank Ctr. Mie Univ. Hosp., <sup>3</sup>Path. Div. Mie Univ. Hosp., <sup>4</sup>Grad. Sch. Eng. Sci., Yokohama Natl. Univ., <sup>5</sup>Fac. Eng., Yokohama Natl. Univ.)  
 脂肪細胞から得られた条件培地で培養された前立腺癌細胞株 DU145 の microRNA プロファイリングとその標的遺伝子について  
 中野 仁嗣<sup>1,2</sup>、臼杵 恵梨<sup>2</sup>、石垣 舞葉<sup>1,2</sup>、臼井 美希<sup>1,3</sup>、中浜 美月<sup>4</sup>、高橋 遙<sup>4</sup>、松田 知世<sup>1</sup>、湯浅 博登<sup>1,3</sup>、広川 佳史<sup>1</sup>、飯島 一智<sup>5</sup>、渡邊 昌俊<sup>1,2,3</sup> (<sup>1</sup>三重大・院医・腫瘍病理学、<sup>2</sup>三重大・医・バイオバンクセンター、<sup>3</sup>三重大・医・病理部、<sup>4</sup>横浜国大院・理工、<sup>5</sup>横浜国大院・工学院)
- P-2067 Identification of long non-coding RNAs (lncRNAs) specific to ovarian high grade serous carcinoma (HGSC)**  
 Maki Okada, Shun Sato, Takuya Kajimura, Koutarou Sueoka, Norihiro Sugino (Department of obstetrics and gynecology, Yamaguchi university school of medicine)  
 卵巣高異型度漿液性腺癌に特異的な長鎖ノンコーディング RNA の同定  
 岡田 真希、佐藤 俊、梶邑 匠彌、末岡 幸太郎、杉野 法広 (山口大学大学院医学系研究科 産科婦人科)
- P-2068 MicroRNA-326 Negatively Regulates CD155 Expression in Lung Adenocarcinoma**  
 Shun Mizusaki, Yasuto Yoneshima, Takayuki Nakanishi, Eiji Iwama, Kentaro Tanaka, Isamu Okamoto (Department of Respiratory Medicine, Kyushu University)  
 肺腺癌において miR-326 は CD155 発現を抑制的に制御する  
 水崎 俊、米嶋 康臣、中西 喬之、若間 映二、田中 謙太郎、岡本 勇 (九州大学 呼吸器内科学)
- P-2069 Genome-wide screening of lncRNA based on CRISPR-dCAS-mediated gene activation and the roles in breast cancer cells**  
 Tomomi Hirano, Masashi Idogawa, Shoichiro Tange, Takashi Tokino (Med. Genome Sci., Res. Inst. Frontier Med., Sapporo Med. Univ.)  
 CRISPR-dCAS 転写活性化による網羅的な癌細胞株特異的な細胞増殖抑制性 lncRNA の同定とその乳癌細胞における役割  
 平野 朋美、井戸川 雅史、丹下 正一郎、時野 隆至 (札幌医大 フロントティア研 ゲノム医科学)

Room P	Sep. 22 (Fri.) 16:30-17:15	E/J
P5-2	Non-coding RNA (2) ノンコーディング RNA (2)	

Chairperson: Miho Suzuki (Div. Cancer Biol., Nagoya Univ. Grad. Sch. Med.)  
 座長: 鈴木 美穂 (名古屋大学・医・腫瘍生物)

- P-2063 MDM2-p53 signaling regulated by testis-specific lncRNA, LINC03074**  
 Saya Ito, Takashi Ueda, Ryota Ogura, Tomoyuki Sako, Yusuke Gabata, Osamu Ukimura (Kyoto Pref. Univ. Med., Dept. Urology)  
 精巣特異的 lncRNA である LINC03074 は MDM2-p53 シグナルを制御する  
 伊藤 紗弥、上田 崇、小倉 涼太、迫 智之、蒲田 勇介、浮村 理 (京都府立医大・泌尿器科)
- P-2064 Dual and Opposing Roles of Androgen Receptor/YAP/miRNAs axis in Prostate Cancer Metastasis**  
 Chieh Hsu<sup>1</sup>, Yingyu Kuo<sup>1</sup>, Chihpin Chuu<sup>1,2,3,4</sup> (<sup>1</sup>Inst. of Cell. & System Med., NHRI, Taiwan, <sup>2</sup>PhD Program for Aging, China Med. Univ., Taiwan, <sup>3</sup>Biotechnology Ctr. Natl. Chung Hsing Univ., Taiwan, <sup>4</sup>Dept. of Life Sci., Natl. Central Univ., Taiwan)

- P-2065 Conditioned medium of adipocytes affects microRNA profiles and prostate cancer cell behavior.**  
 Miki Usui<sup>1,2</sup>, Eri Usugi<sup>2</sup>, Maiha Ishigaki<sup>1,3</sup>, Hitoshi Nakano<sup>1,3</sup>, Mizuki Nakahama<sup>4</sup>, Haruka Takahashi<sup>3</sup>, Chise Matsuda<sup>1</sup>, Hiroto Yuasa<sup>1,2</sup>, Yoshifumi Hirokawa<sup>1</sup>, Kazutoshi Iijima<sup>5</sup>, Masatoshi Watanabe<sup>1,2,3</sup> (<sup>1</sup>Dept. Oncologic Path. Mie Univ. Grad. Sch. Med., <sup>2</sup>Path. Div. Mie Univ. Hosp., <sup>3</sup>Biobank Ctr. Mie Univ. Hosp., <sup>4</sup>Grad. Sch. Eng. Sci., Yokohama Natl. Univ., <sup>5</sup>Fac. Eng. Yokohama Natl. Univ.)  
 脂肪細胞から得られた条件培地により前立腺癌細胞の microRNA プロファイリングと挙動に影響を与える。  
 臼井 美希<sup>1,2</sup>、臼杵 恵梨<sup>3</sup>、石垣 舞葉<sup>1,3</sup>、中野 仁嗣<sup>1,3</sup>、中浜 美月<sup>4</sup>、高橋 遙<sup>4</sup>、松田 知世<sup>1</sup>、湯浅 博登<sup>1,2</sup>、広川 佳史<sup>1</sup>、飯島 一智<sup>5</sup>、渡邊 昌俊<sup>1,2,3</sup> (<sup>1</sup>三重大・院医・腫瘍病理学、<sup>2</sup>三重大・医・病理部、<sup>3</sup>三重

## 7 Cancer genome/genetics

Room P	Sep. 22 (Fri.) 12:50-13:35	E/J
P7-4	Cancer genomic medicine がんゲノム医療	

Chairperson: Masahito Kawazu (Div. Cell Therapy, Chiba Cancer Ctr. Res. Inst.)  
 座長: 河津 正人 (千葉がん)

- P-2070 CCAImmune: An Immuno-oncogenic prognostic and therapeutic characterization of cholangiocarcinoma**  
 Simran Venkatraman<sup>1</sup>, Brinda Balasubramanian<sup>1,2</sup>, Pisut Pongchaikul<sup>3,4</sup>, Ruitaiwan Tohtong<sup>1</sup>, Somchai Chutipongtanate<sup>5,6</sup> (<sup>1</sup>Dept. of Biochem., Mahidol Univ., <sup>2</sup>Div. of Cancer & Stem Cells, Sch. of Med. Univ. of Nottingham, <sup>3</sup>Inst. of Infection, Veterinary & Ecological Sci., Univ. of Liverpool, <sup>4</sup>Chakri Naruebodindra Med. Inst., Ramathibodi Hospital, Mahidol Univ., <sup>5</sup>Dept. of Pediatrics, Faculty of Med. Ramathibodi Hospital, Mahidol Univ., <sup>6</sup>Dept. of Clin. Epidemiology and Biostatistics, Ramathibodi Hospital, Mahidol Univ.)
- P-2071 Clinical Significance of Multi-cancer Gene Panel Testing of Brain Tumors: comparison with our hospital and C-CAT data**  
 Rika Aoyama<sup>1</sup>, Takashi Sakuma<sup>1,2</sup>, Kyouka Kawabata<sup>1</sup>, Saki Kanei<sup>1</sup>, Hinano Nishikubo<sup>1</sup>, Koji Maruo<sup>1,3</sup>, Yurie Yamamoto<sup>4</sup>, Tomohiro Sera<sup>1,2</sup>, Gen Tsujio<sup>1,2</sup>, Tatsunari Fukuoka<sup>1,2</sup>, Masakazu Yashiro<sup>1,2,3</sup> (<sup>1</sup>Molecular Oncology and Therapeutics, Osaka Metropolitan University, <sup>2</sup>Department of Gastroenterological Surgery, Osaka Metropolitan University, <sup>3</sup>Department of Clinical Genomics, Osaka Metropolitan University)  
 脳腫瘍に対するがん遺伝子パネルの臨床的有用性の検討: 大阪公立大学附属病院症例と C-CAT データ全国症例との比較  
 青山 里佳<sup>1</sup>、佐久間 崇<sup>1,2</sup>、川畑 杏佳<sup>1</sup>、兼井 咲希<sup>1</sup>、西窪 日菜乃<sup>1</sup>、丸尾 晃司<sup>1,2</sup>、山本 百合恵<sup>1</sup>、瀬川 知央<sup>1,2</sup>、辻尾 元<sup>1,2</sup>、福岡 達成<sup>1,2</sup>、八

代 正和<sup>1,2,3</sup> (1大阪公立大学大学院分子病態制御学、<sup>2</sup>大阪公立大学大学院消化器外科、<sup>3</sup>大阪公立大学大学院ゲノム診療科)

**P-2072 Molecular characteristic of Pulmonary Carcinoid in 8,000 Japanese cancer patients**

Naruoka Akane<sup>1</sup>, Masakuni Serizawa<sup>1</sup>, Takeshi Nagashima<sup>2,3</sup>, Keiichi Ohshima<sup>1,4</sup>, Keiichi Hatakeyama<sup>2</sup>, Sumiko Ohnami<sup>2</sup>, Shumpei Ohnami<sup>2</sup>, Yasue Horiuchi<sup>2</sup>, Kenichi Urakami<sup>2</sup>, Yasuto Akiyama<sup>5</sup>, Ken Yamaguchi<sup>2</sup> (1Drug Discovery and Development Div. Shizuoka Cancer Ctr. Res. Inst., 2Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res. Inst., 3SRL Inc., 4Med. Genetics Div. Shizuoka Cancer Ctr. Res. Inst., 5Cancer Multiomics Div. Shizuoka Cancer Ctr. Res. Inst., 6Immunotherapy Div. Shizuoka Cancer Ctr. Res. Inst., 7Shizuoka Cancer Center)

日本人がん患者 8,000 症例における肺カルチノイドの分子遺伝学的特徴

成岡 茜<sup>1</sup>、芹澤 昌邦<sup>1</sup>、長嶋 剛史<sup>2,3</sup>、大島 啓一<sup>1,4</sup>、畠山 敬一<sup>5</sup>、大浪 澄子<sup>2</sup>、大浪 俊平<sup>2</sup>、堀内 泰江<sup>2</sup>、浦上 研一<sup>2</sup>、秋山 靖人<sup>6</sup>、山口 建<sup>7</sup> (静岡がんセ・研・新規薬剤開発評価研究部、<sup>2</sup>静岡がんセ・研・診断技術開発研究部、<sup>3</sup>株式会社エスアールエル、<sup>4</sup>静岡がんセ・研・遺伝子診療研究部、<sup>5</sup>静岡がんセ・研・ゲノム解析研究部、<sup>6</sup>静岡がんセ・研・免疫治療研究部、<sup>7</sup>静岡がんセンター)

**P-2073 Tumor mutational burden and microsatellite instability in gynecologic cancers from C-CAT database**

Qian Xi<sup>1</sup>, Hidenori Kage<sup>2</sup>, Asami Matsunaga<sup>1</sup>, Akira Nishijima<sup>3</sup>, Kenbun Sone<sup>3</sup>, Katsutoshi Oda<sup>1</sup> (1Division of Integrative Genomics, The University of Tokyo, 2Next-Generation Precision Medicine Development Laboratory, The University of Tokyo, 3Department of Obstetrics and Gynecology, The University of Tokyo)

C-CAT データベースを用いた婦人科がんにおける腫瘍変異頻度とマイクロサテライト不安定性

シー ちえん<sup>1</sup>、鹿毛 秀宣<sup>2</sup>、松永 麻美<sup>1</sup>、西島 明<sup>3</sup>、曾根 献文<sup>3</sup>、織田 克利<sup>1</sup> (1東京大学医学系研究科統合ゲノム学、<sup>2</sup>東大次世代プレジジョンメディスン開発講座、<sup>3</sup>東京大学大学院医学系研究科産婦人科学講座)

**P-2074 Development of an interpretation and reporting system for multiple cancer genome tests including whole genome sequencing**

Maki Mizuguchi<sup>1</sup>, Masakuni Serizawa<sup>1</sup>, Nobuaki Mamesaya<sup>2</sup>, Hirotsugu Kenmotsu<sup>2</sup>, Kenichi Urakami<sup>1</sup> (Shizuoka Cancer Ctr. Res. Inst., 2Div. of Genomic Medicine Promotion, Shizuoka Cancer Ctr.)

全ゲノムシーケンシングを含む各種がんゲノム検査に対応可能な評価・報告書作成システムの開発

水口 魔己<sup>1</sup>、芹澤 昌邦<sup>1</sup>、豆鞆 伸昭<sup>2</sup>、鉤持 広知<sup>2</sup>、浦上 研一<sup>1</sup> (静岡がんセンター・研究所、<sup>2</sup>静岡がんセンター・ゲノム医療推進部)

**P-2075 Clinical application of blood monitoring using circulating tumor cells in metastatic gastric cancer**

Yasuaki Kimura, Koichi Suzuki, Sawako Tamaki, Ike Abe, Yuhei Endo, Kosuke Ichida, Yuta Muto, Masaaki Saito, Toshiki Rikiyama (Jichi Medical University, Saitama Medical Center, Department of Surgery)

切除不能胃癌における循環腫瘍細胞を用いた血液モニタリングの臨床有用性の検討

木村 恭彰、鈴木 浩一、田巻 佐和子、阿部 郁、遠藤 裕平、市田 晃佑、武藤 雄太、齋藤 正昭、力山 敏樹 (自治さいたま 一般・消化器外科)

**P-2076 Genetic characteristics of platinum-sensitive ovarian clear cell carcinoma**

Ryosuke Saito<sup>1</sup>, Yuichi Shoburu<sup>1</sup>, Akina Tsuda<sup>1</sup>, Takafumi Kuroda<sup>1</sup>, Motoaki Saito<sup>1</sup>, Hiroshi Tanabe<sup>1</sup>, Hirokuni Takano<sup>3</sup>, Kyosuke Yamada<sup>1</sup>, Aikou Okamoto<sup>1</sup>, Takashi Kohno<sup>2</sup> (1The Jikei University School of Medicine, 2Division of Genome Biology, National Cancer Center Research Institute)

プラチナ感受性卵巣明細胞の遺伝子学的背景について

齋藤 良介<sup>1</sup>、正古 悠一<sup>1</sup>、津田 明奈<sup>1</sup>、黒田 高史<sup>1</sup>、齋藤 元章<sup>1</sup>、田部 宏<sup>1</sup>、高野 浩邦<sup>1</sup>、山田 恭輔<sup>1</sup>、岡本 愛光<sup>1</sup>、河野 隆志<sup>2</sup> (1東京慈恵会医科大学 産婦人科学講座、<sup>2</sup>国立がん研究センターゲノム生物学研究分野)

**P-2077 Clinical usefulness of liquid biopsy-based targeted gene profile, FoundationOne Liquid CDx, in our hospital**

Saki Kanei, Rika Aoyama, Kyoka Kawabata, Hinano Nishikubo, Gen Tsujio, Koji Maruo, Takashi Sakuma, Yurie Yamamoto, Canfeng Fan, Masakazu Yashiro (OMU)

当院におけるがん遺伝子パネルリキッド検査“Foundation One Liquid CDx 検査”の有用性

兼井 咲希、青山 里佳、川畑 杏佳、西窪 日菜乃、辻尾 元、丸尾 晃司、佐久間 崇、山本 百合恵、範 燦鋒、八代 正和 (大阪公立大学 癌分子病態制御学)

**P-2078 Cancer Pathway Index, A new analytical method for cancer genome profiling test**

Chiho Nakashima<sup>1</sup>, Yukimasa Shiotsu<sup>2</sup>, Yasuhiro Kosakai<sup>2</sup>, Yohei Harada<sup>3</sup>, Hiroo Katsuya<sup>1</sup>, Masanori Nishi<sup>4</sup>, Akemi Sato<sup>5</sup>, Hideaki Nakamura<sup>6</sup>, Naoko Aragane<sup>1</sup> (1Division of Hematology, Respiratory Medicine and Oncology, Saga University, 2Onco-genome institute, 3Graduate School of medicine and faculty of medicine Kyoto University, 4Department of Pediatrics, Faculty of Medicine, Saga University, 5Department of Clinical Laboratory Medicine, Faculty of Medicine, 6Department of Transfusion Medicine, Saga University Hospital)

Cancer Pathway Index –包括的がんゲノムプロファイリング検査のための新規解析手法

中島 千穂<sup>1</sup>、塩津 行正<sup>2</sup>、小坂井 康宏<sup>2</sup>、原田 陽平<sup>3</sup>、勝屋 弘雄<sup>1</sup>、西 眞範<sup>4</sup>、佐藤 明美<sup>5</sup>、中村 秀明<sup>6</sup>、荒金 尚子<sup>1</sup> (1佐賀大学 医学部 血液・呼吸器・腫瘍内科、<sup>2</sup>がんゲノム研究所、<sup>3</sup>京都大学大学院 大規模医学 AI 講座、<sup>4</sup>佐賀大学 医学部 小児科学講座、<sup>5</sup>佐賀大学 医学部 臨床検査医学講座、<sup>6</sup>佐賀大学医学部附属病院 輸血部)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P7-5 Cancer genomic analysis**

がんゲノム解析

Chairperson: Miwako Kakiuchi (Dept. Prev. Med., Grad. Sch. Med., The Univ. of Tokyo)

座長: 垣内 美和子 (東大・医・衛生学)

**P-2079 Analysis of cancer-related transcriptional variants with long-read sequencers**

Masahito Kawazu, Takao Morinaga, Jason Lin (Chiba Cancer Ctr. Res. Inst. Div. Cell Therapy)

ロングリードシーケンサーを用いたがん関連転写バリエーションの探索  
河津 正人、盛永 敬郎、リン ジェイソン (千葉がん・研・細胞治療開発研究部)

**P-2080 Genetic analysis of multi-step carcinogenesis in the prostate.**

Kohsuke Hishiki<sup>1</sup>, Nobuyuki Kakiuchi<sup>2,3,4</sup>, Yuki Teramoto<sup>5</sup>, Yuki Kita<sup>6</sup>, Keisuke Kimura<sup>7</sup>, Koichi Watanabe<sup>2</sup>, Toshiyuki Yamanaka<sup>2</sup>, Kousuke Ieiri<sup>2</sup>, Hirona Maeda<sup>2,5</sup>, Tomomi Nishimura<sup>2</sup>, Yoshihiro Ishida<sup>2</sup>, Hiroko Tanaka<sup>7</sup>, Hideki Makishima<sup>2</sup>, Satoru Miyano<sup>7</sup>, Takashi Kobayashi<sup>6</sup>, Seishi Ogawa<sup>2,8,9</sup> (1Dept. of Urology, Grad.Sch. of Med. & Faculty of Med., Kyoto Univ., 2Dept. of Path. & Tumor Biol., Kyoto Univ., 3Dept. of Gastroenterology & Hepatology, Kyoto Univ., 4The Hakubi Center for Advanced Res., Kyoto Univ., 5Dept. of Diagnostic Pathology, Kyoto Univ., 6Dept. of Urology, Kyoto Univ., 7Dept. Integrated Analytics, M&D Data Sci., Tokyo Med. and Dent. Univ., 8WPI-ASHBi, Kyoto Univ., 9Dept. Med. Center for Hematology and Regenerative Med. Karolinska Inst.)

前立腺における多段階発癌の遺伝子解析

日紫喜 公輔<sup>1</sup>、垣内 伸之<sup>2,3,4</sup>、寺本 祐記<sup>5</sup>、北 悠希<sup>6</sup>、木村 啓佑<sup>2</sup>、渡部 光一<sup>2</sup>、山中 利之<sup>2</sup>、冢入 康輔<sup>2</sup>、前田 紘奈<sup>2,5</sup>、西村 友美<sup>2</sup>、石田 雄大<sup>2</sup>、田中 洋子<sup>7</sup>、牧島 秀樹<sup>2</sup>、宮野 悟<sup>2</sup>、小林 恭<sup>6</sup>、小川 誠司<sup>2,6,9</sup> (1京都大学大学院 医学研究科 泌尿器科、<sup>2</sup>京都大学 腫瘍生物学、<sup>3</sup>京都大学大学院 医学研究科 消化器内科、<sup>4</sup>京都大学 白眉センター、<sup>5</sup>京都大学 病理診断科、<sup>6</sup>京都大学 泌尿器科、<sup>7</sup>東京医科歯科大学 M&D データ科学センター、<sup>8</sup>京都大学 ヒト生物学高等研究拠点、<sup>9</sup>カロリンスカ Institute HERM)

**P-2081 Urinary exosome microRNA signatures as a noninvasive prognostic biomarker for metastatic prostate cancer**

Sun Shin<sup>1,3</sup>, Dokyong Kim<sup>2,3</sup>, Hyeon C. Park<sup>1,3</sup>, Songzi Zhang<sup>2,3</sup>, Minyoung Park<sup>2,3</sup>, Myeong W. Jo<sup>2,3</sup>, Jiyeon Park<sup>2,3</sup>, Junseong Park<sup>3</sup>, Yeun J. Chung<sup>1,2,3</sup> (1Dept. of Microbial, The Catholic Univ. of Korea, 2Dept. of Biomedicine and Health Sci., College of Med., 3Precision Med. Res. Ctr., The Catholic Univ. of Korea)

**P-2082 Identification of cancer cells expressing a novel laminin fusion gene and protein**

Ryo Kaneko<sup>1</sup>, Nobuaki Funahashi<sup>1</sup>, Yohei Miyagi<sup>2</sup>, Naohiko Koshikawa<sup>1</sup> (1Tokyo Inst. of Tech., 2Molecular Pathology and Genetics Division., Kanagawa Cancer Center Res Inst.)

新規ラミニン融合遺伝子を発現するがん細胞の同定

兼子 駿<sup>1</sup>、舟橋 伸昭<sup>1</sup>、宮城 洋平<sup>2</sup>、越川 直彦<sup>1</sup> (1東工大・生命理工学院、<sup>2</sup>神奈川県立がんセンター臨床研究所)



**P-2083** **Detection of characteristic copy number alterations for malignant pleural mesothelioma using digitalMLPA**

Yoshie Yoshikawa<sup>1</sup>, Kazue Yoneda<sup>2</sup>, Misato Kimura<sup>1</sup>, Masaki Ohmura<sup>1</sup>, Masaki Hashimoto<sup>3</sup>, Nobuyuki Kondo<sup>3</sup>, Ayuko Sato<sup>4</sup>, Seiki Hasegawa<sup>3</sup>, Tohru Tsujimura<sup>4</sup> (Dept. Genetics, Sch. Med., Hyogo Med. Univ., <sup>2</sup>Dept. Omics Med., Sch. Med., Hyogo Med. Univ., <sup>3</sup>Dept. Thoracic Surg., Sch. Med., Hyogo Med. Univ., <sup>4</sup>Dept. Mol. Path., Sch. Med., Hyogo Med. Univ.)

**デジタル MLPA を用いた胸膜中皮腫に特徴的なゲノムコピー数変化の検出**

吉川 良恵<sup>1</sup>、米田 和恵<sup>2</sup>、木村 美智<sup>1</sup>、大村谷 晶樹<sup>1</sup>、橋本 昌樹<sup>3</sup>、近藤 展行<sup>3</sup>、佐藤 鮎子<sup>4</sup>、長谷川 誠紀<sup>3</sup>、辻村 亨<sup>4</sup> (兵庫医大・医・遺伝学、<sup>2</sup>兵庫医大・医・疾患オミックス、<sup>3</sup>兵庫医大・医・呼吸器外科、<sup>4</sup>兵庫医大・医・分子病理)

**P-2084** **SNP in 5'-flanking region of MSX1 as a predictive marker candidate for platinum-based therapy of esophageal carcinoma**

Takahiro Mori<sup>1,2</sup>, Kazuko Ueno<sup>3</sup>, Yosuke Kawai<sup>3</sup>, Koichi Matsuda<sup>3</sup>, Nao Nishida<sup>4</sup>, Keigo Komine<sup>5</sup>, Sakae Saito<sup>6</sup>, Masao Nagasaki<sup>7</sup> (Department of Medical Oncology and Hematology, Okinawa Chubu Hospital, <sup>2</sup>Genome Medical Science Project, National Centr. for Global Health Medicine, <sup>3</sup>University of Tokyo, Graduate School of Frontier Science, <sup>4</sup>Department of Genomic Function and Diversity, TMDU, <sup>5</sup>Department of Medical Oncology, Tohoku University Hospital, <sup>6</sup>Tohoku University, Advanced Research Center for Innovations in Next-Generation Medicine, <sup>7</sup>Div. Biomedical Information Analysis, Medical Institute of Bioregulation, Kyushu University)

**MSX1 遺伝子の 5' 非翻訳領域の一塩基多型は食道癌白金系抗がん薬の効果予測因子候補**

森 隆弘<sup>1,2</sup>、植野 和子<sup>2</sup>、河合 洋介<sup>2</sup>、松田 浩一<sup>3</sup>、西田 奈央<sup>4</sup>、小峰 啓吾<sup>5</sup>、斎藤 さかえ<sup>6</sup>、長崎 正朗<sup>7</sup> (沖縄県立中部病院 腫瘍・血液内科、<sup>2</sup>国立国際医療研究センター ゲノム医科学、<sup>3</sup>東京大学 新領域、<sup>4</sup>東医歯大難研 ゲノム機能多様性、<sup>5</sup>東北大学病院 腫瘍内科、<sup>6</sup>東北大学 未来型医療創成センター、<sup>7</sup>九州大学 生防医研 パイオメディカル情報)

**P-2085** **Identification of synthetic lethal genes of hereditary breast cancer using CRISPR screening database**

Ichiroh Onishi<sup>1</sup>, Morito Kurata<sup>2</sup>, Kennichi Ohashi<sup>3</sup> (Department of Diagnostic Pathology, Tokyo Medical and Dental University Hospital, <sup>2</sup>Department of Comprehensive Pathology, Tokyo Medical and Dental University, <sup>3</sup>Department of Human Pathology, Tokyo Medical and Dental University)

**CRISPR screening データベースを用いた、遺伝性乳癌の新たな合成致死因子の探索**

大西 威一郎<sup>1</sup>、倉田 盛人<sup>2</sup>、大橋 健一<sup>3</sup> (東京医科歯科大学病院 病理部、<sup>2</sup>東京医科歯科大学大学院 包括病理学、<sup>3</sup>東京医科歯科大学大学院 人体病理学)

**P-2086** **Detecting DNA derived from circulating nucleosomes in colon cancer patients by silver nanoscale hexagonal column chips**

Tatsuya Kinjo<sup>1</sup>, Yukuro Sato<sup>2</sup>, Yoshihiro Miyagi<sup>1</sup>, Yasunori Uesato<sup>1</sup>, Shinichiro Ono<sup>1</sup>, Hiroyuki Karimata<sup>1</sup>, Mitsuhsa Takatsuki<sup>1</sup> (University of the Ryukyus, Department of Digestive and General Surgery, <sup>2</sup>Research Laboratory Center, University of the Ryukyus)

**銀ナノ錯体バイオチップを用いた大腸癌患者における循環ヌクレオーム由来 DNA の解析**

金城 達也<sup>1</sup>、佐藤 行人<sup>2</sup>、宮城 良浩<sup>1</sup>、上里 安範<sup>1</sup>、大野 慎一郎<sup>1</sup>、狩俣 弘幸<sup>1</sup>、高槻 光寿<sup>1</sup> (琉球大学 消化器/腫瘍外科、<sup>2</sup>琉球大学 附属実験実習機器センター)

**P-2088** **BARD1 suppresses the OLA1 polyubiquitination by Aurora A to regulate centrosome maturation**

Xingming Li<sup>1</sup>, Zhenzhou Fang<sup>1</sup>, Hinari Murooka<sup>1</sup>, Minori Watanabe<sup>1</sup>, Yuki Yoshino<sup>1</sup>, Takahiro Mori<sup>2</sup>, Natsuko Chiba<sup>1</sup> (Dept. Cancer Biol., IDAC, Tohoku Univ., <sup>2</sup>Dept. Medical Oncology and Hematology, Okinawa Chubu Hospital)

**BARD1 は Aurora A による OLA1 のユビキチン化を抑制して中心体成熟を制御する**

李 星明<sup>1</sup>、方 震宙<sup>1</sup>、室岡 妃南里<sup>1</sup>、渡邊 みのり<sup>1</sup>、吉野 優樹<sup>1</sup>、森 隆弘<sup>2</sup>、千葉 奈津子<sup>1</sup> (東北大・加齢研・腫瘍生物学、<sup>2</sup>沖縄県立中部病院 腫瘍・血液内科)

**P-2089** **Comprehensive genetic analysis for Gastric adenocarcinoma and proximal polyposis**

Chihiro Matsumoto<sup>1,2</sup>, Masaaki Iwatsuki<sup>2</sup>, Takaaki Masuda<sup>1</sup>, Koshi Mimori<sup>1</sup>, Hideo Baba<sup>2</sup> (Department of surgery, Kyushu University Beppu hospital, <sup>2</sup>Department of Gastroenterological Surgery, Kumamoto University)

**Gastric adenocarcinoma and proximal polyposis の網羅的ゲノム解析**

松本 千尋<sup>1,2</sup>、岩槻 政晃<sup>2</sup>、増田 隆明<sup>1</sup>、三森 功士<sup>1</sup>、馬場 秀夫<sup>2</sup> (九州大学病院別府病院、<sup>2</sup>熊本大学大学院消化器外科学)

**P-2090** **Gene polymorphism of SIRP $\alpha$ , a phagocytic checkpoint molecule, in hematopoietic tumors and immune thrombocytopenic purpura.**

Ayuka Hori, Nanami Gotoh, Takayuki Saitoh, Hiroshi Ohnishi (Gunma University Graduate School of Health Sciences)

**造血器腫瘍および免疫性血小板減少性紫斑病における貪食チェックポイント分子 SIRP $\alpha$  の遺伝子多型の解析**

堀 鮎香、後藤 七海、齋藤 貴之、大西 浩史 (群馬大学 大学院 保健学研究科)

**P-2091** **Tumor marker carcinoembryonic antigen, carbohydrate antigen 19-9 identifies loci and colorectal cancer risk**

Yun Qian<sup>1,2,3</sup>, Lu Wang<sup>2</sup>, Jia Liu<sup>1</sup>, Qian Shen<sup>1</sup>, Meng Zhu<sup>3</sup> (Dept. of NCDs, Wuxi CDC, <sup>2</sup>Wuxi CDC, <sup>3</sup>Dept. of Epi., Nanjing Med. Univ.)

**P-2092** **Whole-exome sequencing reveals new potential susceptibility gene for Japanese familial breast cancer**

Ili S. Abdullah<sup>1</sup>, Yosuke Matsushita<sup>1</sup>, Masato Komatsu<sup>1</sup>, Kazuma Kiyotani<sup>1</sup>, Yasuo Miyoshi<sup>2</sup>, Shozo Ohsumi<sup>3</sup>, Mitsunori Sasa<sup>1</sup>, Toyomasu Katagiri<sup>1,5</sup> (Div. of Genome Med., Inst. Adv. Med. Sci., Tokushima Univ., <sup>2</sup>Dept. of Breast and Endocrine Surg., Hyogo College of Med., <sup>3</sup>Dept. Breast Surg. Natl. Hosp. Org. Shikoku Cancer Ctr., <sup>4</sup>Dept. Surg., Tokushima Breast Care Clinic, <sup>5</sup>Natl. Inst. of Biomed. Innovation)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P7-7** **Hereditary cancer, genetics**  
遺伝性がん・遺伝学

Chairperson: Hitoshi Ichikawa (Dept. Clin. Genomics, Natl. Cancer Ctr. Res. Inst.)

座長：市川 仁 (国立がん研究セ・研・臨床ゲノム)

**P-2093** **Detection of germline findings in the FoundationOne Liquid CDx (F1L) test**

Satoyo Oda<sup>1,2</sup>, Takashi Kubo<sup>1</sup>, Kuniko Sunami<sup>1</sup>, Takafumi Koyama<sup>3</sup>, Kazuki Sudo<sup>4</sup>, Hourin Cho<sup>2</sup>, Noriko Tanabe<sup>2</sup>, Tomoko Watanabe<sup>2</sup>, Manami Matsukawa<sup>3</sup>, Mayuko Kitami<sup>1</sup>, Teruhiko Yoshida<sup>2</sup>, Noboru Yamamoto<sup>3</sup>, Makoto Hirata<sup>3</sup> (Dept. of Clin. Lab., Natl. Cancer Ctr. Hosp., <sup>2</sup>Dept. of Genet. Med. & Services, Natl. Cancer Ctr. Hosp., <sup>3</sup>Dept. of Exp. Therap., Natl. Cancer Ctr. Hosp., <sup>4</sup>Dept. of Med. Oncol., Natl. Cancer Ctr. Hosp.)

**FoundationOne LiquidCDx 検査における生殖細胞系列所見についての考察**

小田 智世<sup>1,2</sup>、久保 崇<sup>1</sup>、角南 久仁子<sup>1</sup>、小山 隆文<sup>3</sup>、須藤 一起<sup>4</sup>、張 萌琳<sup>2</sup>、田辺 記子<sup>2</sup>、渡辺 智子<sup>2</sup>、松川 愛美<sup>2</sup>、北見 蘭子<sup>1</sup>、吉田 輝彦<sup>2</sup>、山本 昇<sup>3</sup>、平田 真<sup>3</sup> (国立がん研究セ 中央病院 臨床検査科、<sup>2</sup>国立がん研究セ 中央病院 遺伝子診療部門、<sup>3</sup>国立がん研究セ 中央病院 先端医療科、<sup>4</sup>国立がん研究セ 中央病院 腫瘍内科)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P7-6** **Basic research and diagnostic development for hereditary cancer**  
遺伝性がんの特性と診断

Chairperson: Sana Yokoi (Division of Genetic Diagnostics, Chiba Cancer Center)  
座長：横井 左奈 (千葉県がんセンター遺伝子診断部)

**P-2087** **BRCA1-interacting protein OLA1 promotes DNA damage-induced centrosome amplification through the activation of PLK1**

Zhenzhou Fang, Risa Kobayashi, Tsechin Hsiao, Yuki Yoshino, Huicheng Qi, Natsuko Chiba (Dept. Cancer Biol., IDAC, Tohoku Univ.)

**BRCA1 結合分子 OLA1 は、PLK1 を活性化して DNA 損傷後の中心体数増加を促進する**

方 震宙、小林 利咲、蕭 澤欽、吉野 優樹、齊 匯成、千葉 奈津子 (東北大・加齢研・腫瘍生物学)



## 8 Cell death/immortalization

P-2094 **Elucidating the significance of an exonic rare variant in a FAP case showing aberrant splicing in exon15 of the APC gene**

Masahiro Gotoh<sup>1,2</sup>, Mineko Ushima<sup>1,2</sup>, Hideki Ishikawa<sup>3</sup>, Hiromi Sakamoto<sup>2,4</sup>, Noriko Tanabe<sup>2</sup>, Tomoko Watanabe<sup>2</sup>, Satoyo Oda<sup>2</sup>, Masayoshi Yamada<sup>2,5</sup>, Hourin Cho<sup>2,5</sup>, Kokichi Sugano<sup>2,6</sup>, Kouya Shirashi<sup>1</sup>, Makoto Hirata<sup>2</sup>, Teruhiko Yoshida<sup>1,2</sup> (1)Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., (2)Genetic Med. & Services, Natl. Cancer Ctr. Hosp., (3)Dept. of Mol-Targeting Prev, Kyoto Pref. Univ. of Med., (4)Dept. of Biobank Tissue Resources, Natl. Cancer Ctr. Res. Inst., (5)Endoscopy Div., Natl. Cancer Ctr. Hosp., (6)Dept. of Genetic Med., Kyoundo Hosp., Sasaki Found.)

**APC 遺伝子エクソン 15 の RNA スプライシング異常を認めた FAP 症例のエクソン内レパリアントの臨床的意義の解明**

後藤 政広<sup>1,2</sup>、牛尼 美年子<sup>1,2</sup>、石川 秀樹<sup>3</sup>、坂本 裕美<sup>2,4</sup>、田辺 記子<sup>2</sup>、渡辺 智子<sup>2</sup>、小田 智世<sup>2</sup>、山田 真善<sup>2,5</sup>、張 萌琳<sup>2,5</sup>、菅野 康吉<sup>2,6</sup>、白石 航也<sup>1</sup>、平田 真<sup>2</sup>、吉田 輝彦<sup>1,2</sup> (1)国立がん研究セ・研・臨床ゲノム解析、(2)国立がん研究セ・中央病・遺伝子診療、(3)京都府医大・分子標的予防医学、(4)国立がん研究セ・研・バイオバンク、(5)国立がん研究セ・中央病・内視鏡、(6)佐々木研・杏雲堂病・遺伝子診療)

P-2095 **Germline genetic analyses of the RB1 gene for the patients with retinoblastoma**

Tomoko Watanabe<sup>1</sup>, Mineko Ushima<sup>1,2</sup>, Noriko Tanabe<sup>1</sup>, Masahiro Gotoh<sup>1,2</sup>, Satoyo Oda<sup>1,3</sup>, Yoko Odaka<sup>1</sup>, Hiromi Sakamoto<sup>1,2</sup>, Hourin Cho<sup>1</sup>, Manami Matsukawa<sup>1</sup>, Tsuyuka Ohtsuki<sup>1</sup>, Makoto Hirata<sup>1,4</sup>, Kokichi Sugano<sup>1,3</sup>, Shigenobu Suzuki<sup>6</sup>, Teruhiko Yoshida<sup>1,2</sup> (1)Dept. of Genetic Med. & Services, Natl. Cancer Ctr. Hosp., (2)Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., (3)Dept. of Lab. Med., Natl. Cancer Ctr. Hosp., (4)Dept. of Mol. Pathol., Natl. Cancer Ctr. Res. Inst., (5)Dept. of Genet. Med., Kyoundo Hosp., Sasaki Found., (6)Dept. of Ophthal. Oncol., Natl. Cancer Ctr. Hosp.)

**網膜芽細胞腫患者における RB1 遺伝学的検査結果の検討**

渡辺 智子<sup>1</sup>、牛尼 美年子<sup>1,2</sup>、田辺 記子<sup>1,2</sup>、後藤 政広<sup>1,2</sup>、小田 智世<sup>1,3</sup>、小高 陽子<sup>2</sup>、坂本 裕美<sup>1,2</sup>、張 萌琳<sup>1</sup>、松川 愛未<sup>1</sup>、大槻 露華<sup>1</sup>、平田 真<sup>1,4</sup>、菅野 康吉<sup>1,5</sup>、鈴木 茂伸<sup>6</sup>、吉田 輝彦<sup>1,2</sup> (1)国立がん研究セ・中央病院・遺伝子診療、(2)国立がん研究セ・研・臨床ゲノム解析、(3)国立がん研究セ・中央病院・臨床検査科、(4)国立がん研究セ・研・分子病理、(5)佐々木研究所・杏雲堂病・遺伝子診療、(6)国立がん研究セ・中央病院・眼腫瘍科)

P-2096 **Characterization of clonal hematopoiesis (CH) associated findings in the FoundationOne Liquid CDx (FIL) test**

Manami Matsukawa<sup>1</sup>, Takashi Kubo<sup>2</sup>, Kuniko Sunami<sup>2</sup>, Takafumi Koyama<sup>3</sup>, Kazuki Sudo<sup>4</sup>, Horin Cho<sup>1</sup>, Mayuko Kitami<sup>2</sup>, Satoyo Oda<sup>2</sup>, Noriko Tanabe<sup>1</sup>, Tomoko Watanabe<sup>1</sup>, Teruhiko Yoshida<sup>1</sup>, Noboru Yamamoto<sup>3</sup>, Makoto Hirata<sup>1</sup> (1)Dept. of Genet. Med. & Services, Natl. Cancer Ctr. Hosp., (2)Dept. of Clin. Lab., Natl. Cancer Ctr. Hosp., (3)Dept. of Exp. Therap., Natl. Cancer Ctr. Hosp., (4)Dept. of Med. Oncol., Natl. Cancer Ctr. Hosp.)

**FoundationOne Liquid CDx 検査におけるクローン性造血関連所見についての考察**

松川 愛未<sup>1</sup>、久保 崇<sup>2</sup>、角南 久仁子<sup>2</sup>、小山 隆文<sup>3</sup>、須藤 一起<sup>4</sup>、張 萌琳<sup>1</sup>、北見 繭子<sup>2</sup>、小田 智世<sup>2</sup>、田辺 記子<sup>1</sup>、渡辺 智子<sup>1</sup>、吉田 輝彦<sup>1</sup>、山本 昇<sup>3</sup>、平田 真<sup>1</sup> (1)国立がん研究セ 中央病院 遺伝子診療部門、(2)国立がん研究セ 中央病院 臨床検査科、(3)国立がん研究セ 中央病院 先端医療科、(4)国立がん研究セ 中央病院 腫瘍内科)

P-2097 **Analysis of melanocortin type 1 receptor gene variants in pancreatic cancer cell lines derived from Japanese patients**

Mami Takahashi<sup>1</sup>, Fumiko Chiwaki<sup>2</sup>, Keisuke Matsusaki<sup>3</sup>, Nobuyoshi Hiraoka<sup>4</sup>, Fumitaka Takeshita<sup>2</sup>, Toshio Imai<sup>1</sup>, Hidetoshi Kassai<sup>1</sup>, Hiroki Sasaki<sup>3</sup> (1)Central Animal Div., Natl. Cancer Ctr. Res. Inst., (2)Dept. Translational Oncol., Natl. Cancer Ctr. Res. Inst., (3)Kanamecho Hosp., (4)Dep. Pathol., Natl. Cancer Ctr. Hosp., (5)Dept. Pharmacol. Therapeutics)

**日本人患者由来膵がん細胞株におけるメラノコルチン 1 型受容体遺伝子バリエーションに関する解析**

高橋 真美<sup>1</sup>、千脇 史子<sup>2</sup>、松崎 圭祐<sup>3</sup>、平岡 伸介<sup>4</sup>、竹下文隆<sup>2</sup>、今井 俊夫<sup>1</sup>、葛西 秀俊<sup>1</sup>、佐々木 博己<sup>5</sup> (1)国立がん研究セ・研・動物実験施設、(2)国立がん研究セ・研・創薬標的シーズ探索、(3)要町病院・腹水治療センター、(4)国立がん研究セ・中央病院・病理科、(5)国立がん研究セ・研・薬効試験部門)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

P8-1 **Cell death (1)**  
細胞死 (1)

Chairperson: Kohji Noguchi (Facult. Pharm. Sci., Tokyo Univ. Science.)

座長: 野口 耕司 (東京理大・薬)

P-2098 **A fluorene derivative inhibits human hepatocellular carcinoma cells by ROS-mediated apoptosis, anoikis, and autophagy**

Ritesh C. Urade<sup>1,2,3</sup>, Ritesh C. Urade<sup>1</sup>, Meng Y. Chang<sup>3</sup>, Chien C. Chiu<sup>3</sup> (1)Department of Biological Sciences, NSYSU, Kaohsiung, 804, Taiwan, (2)Department of Medicinal and Applied Chemistry, KMU, Kaohsiung 807, Taiwan, (3)Department of Biotechnology, KMU, Kaohsiung 807, Taiwan)

P-2099 **diTFPP enhances ceramide-induced death in HCC cells via ER stress and LAMP2 hypoglycosylation**

Chienchi Chiu (Department of Biotechnology, KMU, Kaohsiung 807, Taiwan)

P-2100 **A Fluorene Derivative, Induces Apoptosis and Ferroptosis to Overcome Sorafenib Resistance in Hepatocellular Carcinoma**

Yiching Tsai<sup>1</sup>, Chienchi Chiu<sup>1</sup>, Mengyang Chang<sup>3</sup>, Wentsan Chang<sup>3</sup> (1)Dept. of Biotechnology, Kaohsiung Medical University, (2)Dept. of Medicinal & Applied Chemistry, Kaohsiung Medical University, (3)Graduate Inst. of Med., College of Med., Kaohsiung Medical University)

P-2101 **Anticancer activity of damnacanthol extracted from the root of Morinda citrifolia on human cholangiocarcinoma cells**

Nipaporn Ngernyuang, Thararat Nuansanit (Chulabhorn International College of Medicine, Thammasat University)

P-2102 **Notch-1-derived cytotoxic peptides induce necrosis via lysosomal membrane permeabilization in leukemic cells.**

Ryota Uchimura, Masaki Makise, Akihiko Kuniyasu (Grad. Sch. of Pharm. Sci., Sojo Univ.)

Notch-1 由来細胞傷害性ペプチドは、白血球細胞においてリソソーム膜の透過を介したネクロシスを誘導する  
内村 亮太、牧瀬 正樹、國安 明彦 (崇城大院・薬)

P-2103 **CAPE combined with Cisplatin or Docetaxel inhibits the survival and proliferation of non-small cell lung cancer cells.**

Yuke Fu<sup>1</sup>, Likuo Kuo<sup>3</sup>, Chihpin Chuu<sup>1</sup> (1)Inst. of Cell. & System Med., Natl. Health Res. Inst., Taiwan., (2)Div. of Pulmonary & Critical Care Med., Dept. of Internal Med.)

P-2104 **Exploring therapeutic targets for colorectal cancer using synthetic lethality of MyD88 loss and Wnt pathway mutations**

Rie Kajino<sup>1</sup>, Teruaki Fujishita<sup>1</sup>, Makoto M. Taketo<sup>2</sup>, Masahiro Aoki<sup>1,3</sup> (1)Div. Pathophysiology, Aichi Cancer Ctr. Res. Inst., (2)Colon Cancer Pj, KUHP-iACT, Kyoto Univ., (3)Div. Cancer Physiology, Nagoya Univ. Grad. Sch. Med.)

**MyD88 の機能抑制と Wnt/ $\beta$ -catenin 経路変異との合成致死性を用いた大腸がん治療標的の探索**

梶野 理工<sup>1</sup>、藤下 晃章<sup>1</sup>、武藤 誠<sup>2</sup>、青木 正博<sup>1,3</sup> (1)愛知がん研・がん病態生理学、(2)京大病院・臨研セ・大腸がん P、(3)名古屋大・院・医・がん病態生理)

P-2105 **Syk regulates crosstalk of HIF-1 $\alpha$  and nuclear factor (erythroid-derived2)-like 2 for B cell survival**

Eunyi Moon (Sejong University)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

P8-2 **Cell death (2)**  
細胞死 (2)

Chairperson: Hiroyasu Nakano (Dept. Biochem. Toho Univ. Sch. Med.)

座長: 中野 裕康 (東邦大・医・生化学)

P-2106 **Ginger and its two active components exhibit anticancer effects in oral squamous cell carcinoma.**

Hyunji Kim, Dain Choi, Jihoon Kim, Sujung Choi, Sungdae Cho (Dept. of Oral Path., Sch. of Dent., SNU)

P-2107 **BCL2A1 plays an important role in evading apoptosis in renal cell carcinoma.**

Mayu Yagi<sup>1</sup>, Sei Naito<sup>1</sup>, Hiromi Ito<sup>1</sup>, Yuki Takai<sup>1</sup>, Masaki Ushijima<sup>2</sup>, Takafumi Narisawa<sup>1</sup>, Norihiko Tsuchiya<sup>1</sup> (1)Dept. of Urol., Yamagata Univ. Facul. of Med., (2)Dept. of Urol., Yamagata Pref. Shinjo Hosp.)

BCL2A1 は腎癌のアポトーシス回避において重要な役割を担う。

八木 真由<sup>1</sup>、内藤 整<sup>1</sup>、伊藤 裕美<sup>1</sup>、高井 優季<sup>1</sup>、牛島 正毅<sup>2</sup>、成澤 貴史<sup>1</sup>、土谷 順彦<sup>1</sup> (山形大学 医学部 腎泌尿器外科学講座、<sup>2</sup>山形県立新庄病院 泌尿器科)

- P-2108 Association of G6PD expression to ferroptosis resistance in human renal cell carcinoma**  
Mahiro Uozumi<sup>1</sup>, Sisca Ucche<sup>1</sup>, Soichiro Sasaki<sup>1</sup>, Hiroshi Kitamura<sup>2</sup>, Yoshihiro Hayakawa<sup>1</sup> (1Inst. of Natural Med., Univ. of Toyama, 2Dept. of Urology, Univ. of Toyama)  
ヒト腎細胞癌における G6PD 発現はフェロトーシス耐性と関連する  
魚住 茉紘<sup>1</sup>、Sisca Ucche<sup>1</sup>、佐々木 宗一郎<sup>1</sup>、北村 寛<sup>2</sup>、早川 芳弘<sup>1</sup> (1富山大・和漢研、2富山大・腎泌尿器科)
- P-2109 Heteronemin induces a cell death switch from apoptosis to ferroptosis and autophagy in oral cancer cells**  
Rovelyn P. Gallego, Chienchih Chiu, Chuntze Hung (Dept. of Biotechnology, Kaohsiung Medical University)
- P-2110 Diphenyl disulfide (DPDS) inhibits the PI3K/mTOR axis and involves autophagy overexpression and ferroptosis in melanoma**  
Ende Shu, Chienchih Chiu (Dept of Biotechnology, Kaohsiung Medical University, Taiwan)
- P-2111 The Mechanisms Underlying Cell Apoptosis Induction via TrkA Pathway In Breast Cancer Cells**  
Shiangching Kao<sup>1</sup>, Chienchih Chiu<sup>1</sup>, Yingting Lin<sup>2</sup> (1Dept. of Biotechnology, Kaohsiung Medical University, 2Dept. of Biotechnology, Kaohsiung Medical University)
- P-2112 Trial for Osteosarcoma Treatment by Non-apoptotic Cell Death Regulation**  
Yusuke Imagawa<sup>1,2,3</sup>, Keiko Takano<sup>1,2</sup>, Hironari Tamiya<sup>4,5</sup>, Shigeki Higashiyama<sup>1</sup>, Yoshihide Tsujimoto<sup>2</sup> (1Osaka Intl. Cancer Inst., Dept. of Oncol. Growth Regul., 2Osaka Intl. Cancer Inst., Dept. of Mol. Cell. Biol., 3Osaka Univ., Grad. Sch. of Pharm. Sci., Clin. Exp. Pathophysiol., 4Osaka Intl. Cancer Inst., Dept. of Orthopedic Surg., 5Osaka Intl. Cancer Inst., Dept. of Rehab.)  
非アポトーシス型細胞死制御による骨肉腫治療の試み  
今川 佑介<sup>1,2,3</sup>、高野 慶子<sup>1,2</sup>、田宮 大也<sup>4,5</sup>、東山 繁樹<sup>1</sup>、辻本 賀英<sup>2</sup> (1大阪国際がんセンター研究所 腫瘍増殖制御、2大阪国際がんセンター研究所 分子細胞生物、3大阪大薬 環境病因病態学、4大阪国際がんセンター 整形外科、5大阪国際がんセンター リハビリテーション)
- P-2113 Photodynamic therapy of hybrid liposomes including indocyanine green against metastatic breast cancer**  
Masaki Okumura, Yoko Matsumoto, Hideaki Ichihara (Div. Appl. Life Sci., Grad. Sch. Eng., Sojo Univ.)  
インドシアニングリーン含有ハイブリッド型リポソームの転移性乳がんに対する光線力学的療法  
奥村 マサキ、松本 陽子、市原 英明 (崇城大学・大学院・応用生命)
- P-2114 Asp isomerization in CADM1 shedding products is potentially involved in neurodegeneration induced by elevated pressure**  
Azusa Yoneshige<sup>1</sup>, Man Hagiwara<sup>1</sup>, Takumi Takata<sup>2</sup>, Akihiko Ito<sup>1</sup> (1Kindai Med. Path., 2Kyoto Univ. Res. Reactor Inst.)  
神経変性における神経接着分子 CADM1 異性化の関与  
米重 あづさ<sup>1</sup>、萩山 満<sup>1</sup>、高田 匠<sup>2</sup>、伊藤 彰彦<sup>1</sup> (1近畿大学・医・病理、2京都大学・複合研)

- P-2116 Synthetic lethality by inhibition of RNA dependent RNA polymerase activity and the Fanconi anemia/BRCA pathway**  
Mitsuhiro Machitani<sup>1</sup>, Akira Nomura<sup>1,2</sup>, Taro Yamashita<sup>3</sup>, Toshihide Ueno<sup>4</sup>, Akio Yamashita<sup>5</sup>, Toshiyasu Taniguchi<sup>6</sup>, Noriko Saitoh<sup>7</sup>, Shuichi Kaneko<sup>3</sup>, Yukinari Kato<sup>8,9</sup>, Hiroyuki Mano<sup>4</sup>, Kenkichi Masutomi<sup>1</sup> (1Div. Cancer Stem Cell, Natl. Cancer Ctr. Res. Inst., 2Dep. Orthopedic Surg., Tokai Univ. Sch. Med., 3Dep. Gastroenterol., Kanazawa Univ. Grad. Sch. Med. Sci., 4Div. Cell. Signal., Natl. Cancer Ctr. Res. Inst., 5Dep. Invest. Med., Grad. Sch. Med., Univ. Ryukyus, 6Dep. Mol. Life Sci., Tokai Univ. Sch. Med., 7Div. Cancer Biol., Cancer Inst. JFCR, 8Dep. Antibody Drug Dev., Tohoku Univ. Grad. Sch. Med., 9Dep. Mol. Pharmacol., Tohoku Univ. Grad. Sch. Med.)  
RdRP 活性と FANCA/BRCA 経路の阻害による合成致死  
町谷 充洋<sup>1</sup>、野村 祥<sup>1,2</sup>、山下 太郎<sup>3</sup>、上野 敏秀<sup>4</sup>、山下 暁朗<sup>5</sup>、谷口 俊恭<sup>6</sup>、齋藤 典子<sup>7</sup>、金子 周一<sup>3</sup>、加藤 幸成<sup>8,9</sup>、間野 博行<sup>4</sup>、増富 健吉<sup>1</sup> (1国立がん研セ・研・がん幹細胞、2東海大・医・整形外科、3金沢大院・医・消化器内科、4国立がん研セ・研・細胞情報学、5琉球大院・医・先進医療創成科学、6東海大・医・分子生命科学、7がん研・がん生物部、8東北大学院・医・抗体創薬、9東北大学院・医・分子薬理)
- P-2117 DNA damage-induced cellular senescence is regulated by 53BP1 accumulation in the nuclear foci and phase separation**  
Oda Tsukasa<sup>1</sup>, Nanami Gotoh<sup>2</sup>, Tetsuhiro Kasamatsu<sup>3</sup>, Hiroshi Handa<sup>3</sup>, Takayuki Saitoh<sup>3</sup>, Nobuo Sasaki<sup>1</sup> (1Mucosal Ecosystem Design, IMCR, Gunma Univ., 2Grad. Sch. of Health Sci, Gunma Univ., 3Grad. Sch. of Med, Gunma Univ.)  
DNA 損傷誘導性細胞老化は液-液相分離で形成される 53BP1 核内フォカスにより制御される  
小田 司<sup>1</sup>、後藤 七海<sup>2</sup>、笠松 哲光<sup>2</sup>、半田 寛<sup>3</sup>、齋藤 貴之<sup>2</sup>、佐々木 伸雄<sup>1</sup> (1群大 生調研 粘膜工コ、2群大院 保健学研究科 生体情報検査科学、3群大院 医学系研究科 血液内科)
- P-2118 The significance of p16 and p53 expression in stromal cells of squamous cell carcinoma**  
Yusuke Amano<sup>1</sup>, Atsushi Kihara<sup>1</sup>, Daisuke Matsubara<sup>2</sup>, Toshiro Niki<sup>1</sup> (1Dept. Pathol., Jichi Med. Univ., Sch., 2Dept. Diagnostic Pathol., Tsukuba Univ.)  
扁平上皮癌における腫瘍間質細胞の p16, p53 発現の意義  
天野 雄介<sup>1</sup>、木原 淳<sup>1</sup>、松原 大佑<sup>2</sup>、仁木 利郎<sup>1</sup> (1自治医大・医・統合病理、2筑波大・医・診断病理)
- P-2119 Associations of Combined Phenotypic Aging and Genetic Risk with Incident Cancer: A Prospective Cohort Study**  
Lijun Bian, Meng Zhu, Xia Zhu, Caiwang Yan, Guangfu Jin (Dept. of Epidemiology, Nanjing Med. Univ.)
- P-2120 Potential different aspects of CDK4/6 Inhibitor-induced Breast Cancer Senescence on Tumor Microenvironment**  
Donghyun Lee<sup>1,2</sup>, Imran Muhammad<sup>1,2</sup>, Youngwon Choi<sup>2,3</sup>, Taejun Park<sup>1,2</sup> (1Dept. of Biochem & Mol. Biol., Ajou Univ. Sch. of Med., 2Inflammaging Translational Res Ctr, Ajou Univ. Sch. of Med., 3Dept. of Hematology-Oncology, Ajou Univ. Hospital)
- P-2121 LOX has a possibility of being a therapeutic target through the mechanism of oncogene-induced cellular senescence.**  
Nao Muraki<sup>1</sup>, Nozomi Kawabe<sup>1</sup>, Ichidai Tanaka<sup>2</sup>, Noriaki Sunaga<sup>3</sup>, Mitsuo Sato<sup>1</sup> (1Dept. of Integrated Health Science, Nagoya University, 2Dept. of Respiratory Medicine, Nagoya University Graduate school of medicine, 3Dept. of Respiratory Medicine, Gunma University Graduate school of medicine)  
LOX は癌遺伝子誘導性細胞老化を機序とする治療標的としての可能性を持つ  
村木 那緒<sup>1</sup>、川邊 のぞみ<sup>1</sup>、田中 一大<sup>2</sup>、砂長 則明<sup>3</sup>、佐藤 光夫<sup>1</sup> (1名古屋大学大学院医学系研究科総合保健学、2名古屋大学大学院医学系研究科呼吸器内科学、3群馬大学大学院医学系研究科呼吸器内科学)
- P-2122 FGFR4 inhibitor BLU554 suppresses growth and invasion of pancreatic cancer cells and induces senescence**  
Fujiya Gomi<sup>1</sup>, Yuuki Shichi<sup>1</sup>, Seiichi Shinji<sup>2</sup>, Toshiyuki Ishiwata<sup>1</sup> (1Res. Team for Geriatric Pathol., Tokyo Met. Inst. Geriatr. Gerontol., 2Dep. Gastrointestinal and Hepato-Biliary-Pancreatic Surgery, Nippon Medical Sch.)  
FGFR4 阻害剤 BLU554 は膵癌細胞の増殖、浸潤を抑制し細胞老化を誘導する  
五味 不二也<sup>1</sup>、志智 優樹<sup>1</sup>、進士 誠一<sup>2</sup>、石渡 俊行<sup>1</sup> (1都健康長寿医療センター・研究所 老年病理、2日本医科大学・消化器外科)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

P8-3 Telomere / Senescence  
テロメア・老化

Chairperson: Tomonori Matsumoto (Dept of Mol. Microbiology, Res. Inst. for Microbial Diseases, Osaka Univ.)

座長: 松本 知訓 (大阪大・微生物病研・遺伝子生物学)

- P-2115 The regulatory mechanism of mTERT suppression effects in pancreatic cancer cells using human artificial chromosomes**  
Yu Sakano<sup>1,2</sup>, Takahito Ohira<sup>2,3</sup>, Takuki Yagyu<sup>1</sup>, Yoshiyuki Fujiwara<sup>1</sup>, Hiroyuki Kugoh<sup>2,3</sup> (1Div. of Gastrointestinal Surg., Fac. of Med., Tottori Univ., 2Div. of Chromosome Biomed. Eng., Fac. of Med., Tottori Univ., 3Chromosome Eng. Res. Ctr.)  
ヒト人工染色体を用いた膵がん細胞における mTert 抑制制御機構の解明  
坂野 悠<sup>1,2</sup>、大平 崇人<sup>2,3</sup>、柳生 拓輝<sup>1</sup>、藤原 義之<sup>1</sup>、久郷 裕之<sup>2,3</sup> (1鳥取大・医・消化器外科、2鳥取大・医・生命・染色体医工学講座、3鳥取大・染色体セ)



## 10 Invasion and metastasis

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

P10-1 Cell adhesion and invasion (1)  
細胞接着・浸潤 (1)Chairperson: Reiko Satow (Tokyo Univ. of Pharmacy and Life Sci.)  
座長: 佐藤 礼子 (東薬大・生命)

**P-2123 Elucidation of the multifaceted role of adipocyte on metastatic microenvironment using animal model and patient specimen**  
Shinya Sato<sup>1,2,3</sup>, Mitsuyo Yoshihara<sup>2</sup>, Yoshiyasu Nakamura<sup>1,2</sup>, Sadako Motomatsu<sup>1,2</sup>, Hiroko Tadokoro<sup>1</sup>, Rika Kasajima<sup>1</sup>, Yohei Miyagi<sup>1</sup>  
(<sup>1</sup>Kanagawa Cancer Ctr. Res. Inst. Mol. Path., <sup>2</sup>Kanagawa Cancer Ctr. Res. Inst. Morphological Lab., <sup>3</sup>Kanagawa Cancer Ctr. Div. Pathol)  
組織解析から明らかにする転移微小環境における脂肪細胞のがん進展に対する多面的機能  
佐藤 慎哉<sup>1,2,3</sup>、吉原 光代<sup>2</sup>、中村 圭靖<sup>1,2</sup>、本松 貞子<sup>1,2</sup>、田所 弘子<sup>1</sup>、笠島 理加<sup>1</sup>、宮城 洋平<sup>1</sup> (神奈川がんセンター・がん分子病態、<sup>2</sup>神奈川がんセンター・形態機能解析室、<sup>3</sup>神奈川がんセンター・病理)

**P-2124 Significance of Fascin-1, An Actin-binding protein, in Colorectal Cancer**  
Canfeng Fan, Qiang Wang, Takashi Sakuma, Koji Maruo, Gen Tsujio, Yurie Yamamoto, Tatsunari Fukuoka, Masakazu Yashiro (Osaka Metropolitan Univ. Grad. Sch. of Med.)  
結腸直腸癌におけるアクチン結合タンパク質 Fascin-1 の意義  
範 燦鋒、王 強、佐久間 崇、丸尾 晃司、辻尾 元、山本 百合恵、福岡 達成、八代 正和 (大阪公立大学 医学研究科 癌分子病態制御学)

**P-2125 AMIGO2-containing exosome-enhanced liver endothelial cell-cancer cell adhesion leads to tropism of liver metastasis**  
Izutsu Runa<sup>1</sup>, Mitsuhiro Osaki<sup>1,2</sup>, Hee K. Seong<sup>1</sup>, Futoshi Okada<sup>1,2</sup>  
(<sup>1</sup>Div. Exp. Pathol., Fac. Med., Tottori Univ., <sup>2</sup>Ctr. Chromo. Engng., Tottori Univ.)  
癌細胞由来 AMIGO2 包含エクソソームは肝内皮細胞特異的に癌細胞との接着を促進し胃および大腸癌の肝転移指向性に寄与する  
井筒 瑠奈<sup>1</sup>、尾崎 充彦<sup>1,2</sup>、ソン ヒギョン<sup>1</sup>、岡田 太<sup>1,2</sup> (鳥取大学 医学部 実験病理学分野、<sup>2</sup>鳥取大学 染色体工学研究センター)

**P-2126 Digitalized quantitative analysis of protein expression at the invasion front of human colorectal cancer**  
Daisuke Hoshi<sup>1</sup>, Ryosuke Kin<sup>2</sup>, Hideto Fujita<sup>2</sup>, Takeo Kosaka<sup>2,3</sup>, Hiroyuki Takamura<sup>2</sup>, Etsuko Kiyokawa<sup>1</sup> (<sup>1</sup>Dept. of Oncol. Pathol., Kanazawa Med. Univ., Sch. Med., <sup>2</sup>Dept. of Surgery, Kanazawa Med. Univ., Sch. Med., <sup>3</sup>Dept. of Surgery, Houju Memorial Hospital)  
画像解析技術を用いたヒト大腸癌浸潤端の蛋白質定量解析  
星 大輔<sup>1</sup>、金 了資<sup>2</sup>、藤田 秀人<sup>2</sup>、小坂 健夫<sup>2,3</sup>、高村 博之<sup>2</sup>、清川 悦子<sup>1</sup> (金沢医科大学・医・病理学 1、<sup>2</sup>金沢医科大学・医・一般・消化器外科学、<sup>3</sup>芳珠記念病院・一般・消化器外科)

**P-2127 Regulating integrin  $\alpha 5$  expression exhibit changes in functional capabilities in non-small cell lung cancer**  
Mirei Ka<sup>1</sup>, Yoko Matsumoto<sup>2</sup>, Takahiro Ando<sup>2</sup>, Qian Xi<sup>1</sup>, Takahiro Iida<sup>2</sup>, Natsuki Nakagawa<sup>2</sup>, Masakatsu Tokunaga<sup>2</sup>, Keita Maemura<sup>2</sup>, Kousuke Watanabe<sup>2</sup>, Masanori Kawakami<sup>2</sup>, Katsutoshi Oda<sup>1</sup>, Hidenori Kage<sup>3</sup>  
(<sup>1</sup>The Univ. of Tokyo, Div. of Integrative Genomics, <sup>2</sup>The Univ. of Tokyo, Dept. of Respiratory Medicine, <sup>3</sup>The Univ. of Tokyo, Next-Generation Precision Med. Development Lab.)  
非小細胞肺癌におけるインテグリン  $\alpha 5$  の発現と機能の解析  
何 美玲<sup>1</sup>、松本 容子<sup>2</sup>、安藤 孝浩<sup>2</sup>、シー チェン<sup>1</sup>、飯田 崇博<sup>2</sup>、中川 夏樹<sup>2</sup>、徳永 将勝<sup>2</sup>、前村 啓太<sup>2</sup>、渡邊 広祐<sup>2</sup>、川上 正敬<sup>2</sup>、織田 克利<sup>1</sup>、鹿毛 秀宣<sup>3</sup> (東京大学 統合ゲノム学、<sup>2</sup>東京大学 呼吸器内科、<sup>3</sup>東京大学 次世代プレシジョンメディシン)

**P-2128 CD44 is a key factor of invasion in oral cancer**  
Masakatsu Fukuda<sup>1</sup>, Hideaki Sakashita<sup>2</sup>, Kenjiro Bando<sup>1</sup> (<sup>1</sup>Meikai Univ. Sch. Dent., Biochem., <sup>2</sup>Meikai Univ. Sch. Dent., Oral Maxillofac. Surg.)  
CD44 は口腔癌における浸潤の鍵因子である  
福田 正勝<sup>1</sup>、坂下 英明<sup>2</sup>、坂東 健二郎<sup>1</sup> (明海大・歯・生化学、<sup>2</sup>明海大・歯・口外)

P10-2 Cell adhesion and invasion (2)  
細胞接着・浸潤 (2)Chairperson: Etsuko Kiyokawa (Dept Oncol Pathol&Kanazawa Med Univ)  
座長: 清川 悦子 (金沢医大・医・病理学 I)

**P-2129 Quantitative analysis of cancer cell invasion on 3D in vitro oral cancer models using optical coherence tomography**  
Kenta Haga<sup>1,2</sup>, Manabu Yamazaki<sup>2</sup>, Satoshi Maruyama<sup>3</sup>, Tastuya Abe<sup>3</sup>, Tadaharu Kabayashi<sup>1</sup>, Junichi Tanuma<sup>2,3</sup> (<sup>1</sup>Div. OMS, Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>2</sup>Div. Oral Pathol., Niigata Univ. Grad. Sch. Med. Dent. Sci., <sup>3</sup>Oral Path. Sec., Dept. Surg. Path., Niigata Univ. Hosp.)  
光干渉断層撮影を用いた 3 次元口腔癌モデルにおける癌浸潤の定量解析  
羽賀 健太<sup>1,2</sup>、山崎 学<sup>2</sup>、丸山 智<sup>3</sup>、阿部 達也<sup>3</sup>、小林 正治<sup>1</sup>、田沼 順一<sup>2,3</sup> (新潟大・大学院医歯学総合研究科・口腔再建、<sup>2</sup>新潟大・大学院医歯学総合研究科・口腔病理、<sup>3</sup>新潟大・医歯学総合病院・歯科病理検査室)

**P-2130 Angulin-1/LSR suppresses vasculogenic mimicry formation in human breast cancer T47D cells**  
Yuma Yoshioka, Minami Nakajima, Kento Mori, Simizu Siro (Dept. Appl. Chem., Fac. Sci. Tech., Keio Univ.)  
ヒト乳がん T47D 細胞における angulin-1/LSR は血管擬態形成を抑制する  
吉岡 佑馬、中島 みなみ、森 研人、清水 史郎 (慶大・理工・応化)

**P-2131 Spatial transcriptome analysis of invasive lobular carcinoma**  
Jun Nakayama<sup>1,2</sup>, Momoko Tokura<sup>1</sup>, Yusuke Yamamoto<sup>1</sup> (<sup>1</sup>Lab. of Integr. Oncol., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. of Oncogenesis and Growth Regulation, Osaka Int. Cancer Inst.)  
浸潤性小葉がんの空間トランスクリプトーム解析  
中山 淳<sup>1,2</sup>、都倉 桃子<sup>1</sup>、山本 雄介<sup>1</sup> (国立がん研究センター・病態情報、<sup>2</sup>大阪国際がんセンター・腫瘍増殖制御)

**P-2132 Ankrd1 promotes motility and invasion of renal cell carcinoma cells**  
Yuki Takai<sup>1</sup>, Sei Naito<sup>1</sup>, Hiromi Ito<sup>1</sup>, Shigemitsu Horie<sup>1</sup>, Masaki Ushijima<sup>2</sup>, Takafumi Narisawa<sup>1</sup>, Mayu Yagi<sup>1</sup>, Osamu Ichiyana<sup>3</sup>, Norihiko Tsuchiya<sup>1</sup> (<sup>1</sup>Dept. of Urol., Yamagata Univ., <sup>2</sup>Dept. of Urol., Yamagata Pref. Shinjo Hosp., <sup>3</sup>Dept. of Urol., Yamagata Pref. Kahoku Hosp.)  
Ankrd1 は腎癌細胞の遊走および浸潤を促進する  
高井 優季<sup>1</sup>、内藤 整<sup>1</sup>、伊藤 裕美<sup>1</sup>、堀江 繁光<sup>1</sup>、牛島 正毅<sup>2</sup>、成澤 貴史<sup>1</sup>、八木 真由<sup>1</sup>、一柳 統<sup>3</sup>、土谷 順彦<sup>1</sup> (山形大・医・腎泌尿器外科、<sup>2</sup>山形県立新庄病院・泌尿器、<sup>3</sup>山形県立河北病院・泌尿器)

**P-2133 Effective in vitro model to analyze invading cancer cells using cancer spheroid embedded in collagen gel**  
Mayumi Fujita<sup>1</sup>, Yuko Fujimori<sup>1</sup>, Kaori Imadome<sup>1</sup>, Misato Sunayama<sup>1</sup>, Tetsuro Sato<sup>2</sup>, Tomo Suga<sup>1</sup>, Satoshi Kamimura<sup>1</sup>, Ryoko Araki<sup>1</sup> (<sup>1</sup>QST, <sup>2</sup>KOKEN CO., LTD. Product Development Dept.3)  
がんスフェロイドのコラーゲンゲル浸潤モデルの構築  
藤田 真由美<sup>1</sup>、藤森 ゆう子<sup>1</sup>、今留 香織<sup>1</sup>、砂山 美里<sup>1</sup>、佐藤 哲郎<sup>2</sup>、菅 智<sup>1</sup>、上村 悟氏<sup>1</sup>、荒木 良子<sup>1</sup> (量研・量子生命科学研究所、<sup>2</sup>株式会社高研・第三開発部)

**P-2134 Role of GPNMB in acquisition of cellular motility**  
Yukari Okita, Mitsuyasu Kato (Dept. of Exp. Path., Inst. of Med., Univ. of Tsukuba)  
細胞運動性獲得における GPNMB の作用  
沖田 結花里、加藤 光保 (筑波大 医学 実験病理)

**P-2135 Acidic cancer microenvironment promotes lymphatic metastasis via the induction of Thy-1 in lymphatic endothelial cells**  
Akiya Ibe, Masako Nakanishi, Kurumi Higashimoto, Yasuteru Muragaki, Shogo Ehata (Dept. Pathol., Sch. Med., Wakayama Med. Univ.)  
癌の酸性微小環境はリンパ管内皮細胞の Thy-1 発現の誘導を介してリンパ行性転移を促進する  
井邊 晶也、中西 雅子、東本 胡桃、村垣 泰光、江幡 正悟 (和医大・医・病理)

P10-3

**Metastasis, invasion and angiogenesis**

転移・浸潤・血管新生

Chairperson: Masaki Hiramoto (Dept. Biochem. Tokyo Med. Univ.)

座長: 平本 正樹 (東京医大・生化学)

- P-2136** **Lysyl oxidase-like 4 exerts an atypical role in breast cancer progression that targets the cell-surface annexin A2**  
Yoni Komalasari<sup>1,2</sup>, Nahoko Tomonobu<sup>1</sup>, Rie Kinoshita<sup>1</sup>, Yuma Gohara<sup>1</sup>, Ken I. Yamamoto<sup>1</sup>, Hitoshi Murata<sup>1</sup>, Akira Yamauchi<sup>3</sup>, Futoshi Kuribayashi<sup>3</sup>, Yusuke Inoue<sup>4</sup>, Shinichi Toyooka<sup>5</sup>, Masakiyo Sakaguchi<sup>1</sup> (<sup>1</sup>Cell Biology Dept., Okayama Univ., <sup>2</sup>Faculty of Med., Udayana University, Bali, Indonesia, <sup>3</sup>Dept. of Biochem. Kawasaki Med. Sch., Kurashiki, Okayama, Japan, <sup>4</sup>Faculty of Sci. and Tech., Gunma Univ., <sup>5</sup>General Thoracic Surg., Breast, and Endocrinology Surg. Dept., Okayama Univ.,)
- P-2137** **CAMSAP2, a microtubule-binding protein, enhances non-small cell lung cancer metastasis**  
Yarisa Pongrakhananon, Natsaranyatrong Singharajkomron (Dept. of Pharmacology & Physiol., Faculty of Pharm. Sci., Chulalongkorn Univ.)
- P-2138** **Dysadherin/MMP9 axis enhances colorectal cancer metastasis via ECM remodeling**  
Choongjae Lee, Jangsoo Chun, Jeongseok Nam (School of Life Sciences, Gwangju Institute of Science and Technology)
- P-2139** **Apelin enhances prostate cancer migration by up-regulating  $\alpha\beta3$  integrin expression via p38/JNK signaling pathway**  
Shan C. Liu<sup>1</sup>, Xiu Y. He<sup>2</sup>, Chih H. Tang<sup>3,4,5</sup> (<sup>1</sup>China Medical University Beigang Hospital, Yunlin, Taiwan, <sup>2</sup>Graduate Institute of Biomedical Science, China Medical University, Taichung, Taiwan, <sup>3</sup>Department of Pharmacology, China Medical University, Taichung, Taiwan, <sup>4</sup>Chinese Medicine Research Center, China Medical University, Taichung, Taiwan, <sup>5</sup>Department of Biotechnology, Asia University, Taichung, Taiwan)
- P-2140** **Nerve growth factor increases human osteosarcoma metastasis by inhibiting miR-92a-1-5p expression**  
Tzu L. Tung, Chih Y. Lin (Translational Medicine Center, Shin-Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan.)
- P-2141** **Investigating endothelial ablation mechanisms in pancreatic ductal adenocarcinoma on endothelial cells**  
Suttunthip Jangiawechai<sup>1,2</sup>, Thaned Kangsamaksin<sup>2</sup>, Pagkapol Pongsawakul<sup>2</sup>, Nut Phueakphud<sup>2</sup> (<sup>1</sup>Department of Biology, Faculty of Science, Mahidol University, Bangkok 10400, <sup>2</sup>Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok 10400)
- P-2142** **Investigate the anti-angiogenic potential of RU1 in zebrafish**  
Mengyan Tsai<sup>1</sup>, Wangta Liu<sup>1</sup>, Chienchih Chiu<sup>1</sup>, Hsuehwei Chang<sup>3</sup>, Fangrong Chang<sup>2</sup> (<sup>1</sup>Dept. of Biotechnology, Kaohsiung Medical University, Kaohsiung, Taiwan, <sup>2</sup>Graduate Institute of Natural Products, Kaohsiung Medical University, Kaohsiung, Taiwan, <sup>3</sup>Dept. of Biomedical Sciences, Kaohsiung Medical University, Kaohsiung, Taiwan)

P10-4

**Metastasis related genes**

転移関連遺伝子

Chairperson: Takeharu Sakamoto (Dept. Can. Biol., Inst. Biomed. Sci., Kansai Med. Univ.)

座長: 坂本 毅治 (関西医大・生医研・がん生物学)

- P-2143** **A role of HOXA11-AS in OSCC metastasis**  
Chie Nakashima<sup>1,2</sup>, Rina Tani<sup>1</sup>, Shiori Mori<sup>1</sup>, Hitoshi Ohmori<sup>1</sup>, Kiyomu Fujii<sup>1</sup>, Shingo Kishi<sup>1</sup>, Kazuhiko Yamamoto<sup>2</sup>, Tadaaki Kirita<sup>2</sup>, Hiroki Kuniyasu<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Oral Maxillofacial Surg., Nara Med. Univ.)  
ヒト口腔扁平上皮癌の転移に対するHOXA11-ASの機能  
中嶋千恵<sup>1,2</sup>, 谷里奈<sup>1</sup>, 森汐莉<sup>1</sup>, 大森齊<sup>1</sup>, 藤井澄<sup>1</sup>, 岸真五<sup>1</sup>, 山本一彦<sup>2</sup>, 桐田忠昭<sup>2</sup>, 國安弘基<sup>1</sup> (1奈良県立医科大学 分子病理、2奈良県立医科大学 口腔外科)
- P-2144** **Lack of adipokine adipin suppresses breast cancer invasion and metastasis.**  
Takanori Hayashi<sup>1</sup>, Jumpei Yoshida<sup>1,2</sup>, Eiji Munetsuna<sup>1</sup>, Khaledian Behnoush<sup>1</sup>, Masao Maeda<sup>1</sup>, Masahiro Mizuno<sup>1</sup>, Kaori Ushida<sup>3</sup>, Kenji Kawada<sup>2</sup>, Naoya Asai<sup>3</sup>, Yohei Shimono<sup>1</sup> (<sup>1</sup>Dep. Biochem, Fujita Health Univ. Sch. Med., <sup>2</sup>Dep. Clinical Oncology, Fujita Health Univ. Sch. Med., <sup>3</sup>Dep. Pathology, Fujita Health Univ. Sch. Med.)
- P-2145** **Mitochondrial one-carbon metabolic enzyme MTHFD1L contributes to breast cancer lung metastasis**  
Hirokazu Kusunoki<sup>1</sup>, Tsunaki Hongu<sup>1</sup>, Tatsunori Nishimura<sup>1,2</sup>, Yasuo Takeuchi<sup>1</sup>, Koji Okamoto<sup>3</sup>, Noriko Gotoh<sup>1</sup> (<sup>1</sup>Div. of Cancer Cell Biol. Cancer Res. Inst, Kanazawa Univ., <sup>2</sup>Div. Cancer Biol., Nagoya Univ. Grad. Sch. of Med., <sup>3</sup>Advanced Comprehensive Res. Org. Teikyo Univ.)  
乳がん細胞はミトコンドリア内1炭素代謝酵素MTHFD1Lを用いて肺転移を起こす  
楠木啓主<sup>1</sup>, 本宮 網記<sup>1</sup>, 西村 建徳<sup>1,2</sup>, 竹内 康人<sup>1</sup>, 岡本 康司<sup>3</sup>, 後藤 典子<sup>1</sup> (1金沢大・がん研・分子病態、2名古屋大学 院医 腫瘍生物学、3帝京大学 先端総合研究所)
- P-2146** **Ets family proteins regulate the EMT transcription factors Snail and ZEB in cancer cells**  
Mai Ichikawa<sup>1,2</sup>, Arisa Kinouchi<sup>2,3</sup>, Kaname Sakamoto<sup>3</sup>, Shigeo Ohtake<sup>3</sup>, Keiji Miyazawa<sup>2</sup>, Masao Saitoh<sup>2</sup> (<sup>1</sup>Dept. Oral Maxillofacial Surg., The Univ. of Yamanashi, <sup>2</sup>Dept. Biochem2., Grad Sch. of Med. Univ. of Yamanashi, <sup>3</sup>Dept. Otolaryngology-Head & Neck Surg., Univ. of Yamanashi.)  
Ets ファミリータンパク質は、がん細胞のEMTに深く関与する  
市川舞<sup>1,2</sup>, 木内 有紗<sup>2,3</sup>, 坂本 要<sup>3</sup>, 大嶽 茂雄<sup>2</sup>, 宮澤 恵二<sup>2</sup>, 斉藤 正夫<sup>2</sup> (1山梨大 歯口外、2山梨大 院医 生化学2、3山梨大 院医 耳鼻咽喉・頭頸外)
- P-2147** **Nuclear PD-L1 facilitates disseminative activity by suppressing MCRIP1 in triple-negative breast cancer cells.**  
Yuma Gohara, Nahoko Tomonobu, Rie Kinoshita, Kenichi Yamamoto, Hitoshi Murata, Masakiyo Sakaguchi (Okayama University, Grad.Sch.Med.Dent.Pharm.Sci)  
核内PD-L1はMCRIP1を抑制することでトリプルネガティブ乳がん細胞の浸潤能を促進する  
合原 勇馬、友信 奈保子、木下 理恵、山本 建一、村田 等、阪口 政清 (岡山大・院・医歯薬学総合)
- P-2148** **Analysis of mechanisms promoting Blood metastasis using LLC-GFP(BM3) cells with high metastatic potential.**  
Shu Imai<sup>1</sup>, Hiroki Orihashi<sup>2</sup>, Kako Hanada<sup>1,2</sup>, Hideyo Hirai<sup>1</sup>, Fumiko Itoh<sup>1,2</sup> (<sup>1</sup>Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Tokyo University of Pharmacy and Life Sciences)  
血行性高転移株LLC-GFP(BM3)を利用した血行性転移促進メカニズムの解析  
今井 稔<sup>1</sup>, 渡橋 弘貴<sup>2</sup>, 花田 賀子<sup>1,2</sup>, 平位 秀世<sup>1</sup>, 伊東 史子<sup>1,2</sup> (1東京薬科大学生命科学部幹細胞制御学研究室、2東京薬科大学生命科学部心血管医科学研究室)
- P-2149** **Identification of CAF markers in CRC and its functional relevance**  
Keishi Yamashita (Kitasato University, School of Medicine, Division of Advanced Surgical Oncology)  
大腸癌のCAF マーカーとその意義  
山下 継史 (北里大学医学部 先進外科腫瘍学)
- P-2150** **LASP1, CERS6, and actin form ternary complex that promotes cancer cell migration**  
Siripan Limsirichaikul, Atsuko Niimi, Yasuyoshi Mizutani, Toshiyuki Takeuchi, Patinya Sawangsrri, Dat Q. Tran, Motoshi Suzuki (Dept. Mol. Oncol., Fujita Health Univ., Sch. Med.)  
リムシリチャイクン シリパン、新美 敦子、水谷 泰嘉、竹内 俊幸、Patinya Sawangsrri, Dat Q. Tran、鈴木 元 (藤田医科大・医・分子腫瘍学)
- P-2151** **A claudin that enhances invasion and metastatic abilities through MT1-MMP activation in human SCLC DMS273 cells**  
Shuichi Sakamoto<sup>1</sup>, Takahisa Takino<sup>2</sup>, Manabu Kawada<sup>3</sup>, Masanori Hatakeyama<sup>1,4</sup> (<sup>1</sup>Numazu branch, IMC, MCRF, <sup>2</sup>Inst. Liberal Arts & Sci, Kanazawa Univ., <sup>3</sup>Lab. of Oncology, IMC, MCRF, <sup>4</sup>Lab. of Microbial Carcinogenesis, IMC, MCRF)  
MT1-MMPの活性化を介してヒト小細胞肺がん細胞株DMS273の浸潤及び転移形成を促進するクローディン  
坂本 修一<sup>1</sup>, 滝野 隆久<sup>2</sup>, 川田 学<sup>3</sup>, 畠山 昌則<sup>1,4</sup> (1(公財)微生物化学研究会 微化研 沼津支所、2金沢 国際基幹教育院、3(公財)微生物化学研究会 微化研 第一生物、4(公財)微生物化学研究会 微化研 第三生物)



Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P10-5** ECM and angiogenesis  
細胞外マトリックスと血管新生

Chairperson: Akiko Kunita (Next-Gen. Precision Med. Dev. Lab, Grad.Sch.Med., Univ. Tokyo)

座長: 国田 朱子 (東大院・医・プレジジョンメディシン)

**P-2152** Insufficiency of HAI-1 upregulates MMP-9 expression and induces degradation of epidermal basement membrane

Makiko Kawaguchi, Takumi Kiwaki, Tsuyoshi Fukuxhima (Dept. of Path., Med., Univ. of Miyazaki)

HAI-1 機能不全はケラチノサイトの MMP-9 発現を誘導する  
川口 真紀子、木脇 拓道、福島 剛 (宮崎大・医・病理)**P-2153** Study on development hepatocellular carcinoma and its malignant progression via EGFR pathway induced by Lm-γ2 monomerNobuaki Funahashi<sup>1</sup>, Hikari Okada<sup>2</sup>, Taro Yamashita<sup>2</sup>, Naohiko Koshikawa<sup>1</sup> (Dept. of Life Sci. & Tech., Tokyo Inst. of Tech., <sup>1</sup>Inst. of Med., Pharm. & Health Sci., Kanazawa Univ.)Lm-γ2 単鎖により誘導される EGFR/AKT 経路を介した肝細胞がんの発症と悪性化に関する研究  
舟橋 伸昭<sup>1</sup>、岡田 光<sup>2</sup>、山下 太郎<sup>2</sup>、越川 直彦<sup>1</sup> (東工大 生命理工学院、<sup>2</sup>金沢大 大学院医薬保健学域 医学類)**P-2154** Iron regulates MT1-MMP-mediated MMP-2 activation and cell invasion.Takahisa Takino<sup>1</sup>, Risa Takatsuka<sup>2</sup>, Takeshi Suzuki<sup>2</sup> (Inst. Liberal Art & Sci., Kanazawa Univ., <sup>2</sup>Div. Functional Genomics, Cancer Res. Inst., Kanazawa Univ.)鉄は MT1-MMP による MMP-2 活性化を介して細胞浸潤を制御する。  
滝野 隆久<sup>1</sup>、高塚 理沙<sup>2</sup>、鈴木 健之<sup>2</sup> (金沢大 国基院、<sup>2</sup>金沢大・がん研・機能ゲノミクス)**P-2155** Role of MMP2 and MMP9 for vasculogenic mimicry

Emu Fukuoka, Ryota Kawahara, Kento Mori, Siro Simizu (Dept. Appl. Chem., Fac. Sci. Tech., Keio Univ.)

血管擬態形成における MMP2 および MMP9 の役割  
福岡 恵夢、川原 遼太、森 研人、清水 史郎 (慶大・理工・応化)**P-2156** Indole-3-carbinol suppresses the growth of human colon cancer cells by regulating migration and mitochondrial apoptosis

Tatsuki Takeshima, Taiki Nagano, Nanae Harashima (Div. Biometab. Chem., Univ. the Ryukyus Facult. Med.)

インドール-3-カルビノールは遊走とミトコンドリアアポトーシスを調節することで大腸がん細胞の増殖を抑制する  
武島 龍希、永野 泰希、原嶋 奈々江 (琉球大学・医・保・生体代謝学)**P-2157** SCG2 as a potential new target in sunitinib-resistant renal cells

Wataru Fukumoto, Hirofumi Yoshino, Junya Arima, Shuichi Tatarano, Hideki Enokida (Dent. of Urology, Kagoshima Univ.)

スニチニブ耐性腎細胞における潜在的な新しい標的としての SCG2  
福元 渉、吉野 裕史、有馬 純矢、鐘野 秀一、榎田 英樹 (鹿児島大学 泌尿器科分野)**P-2158** Targeting tumor endothelial cells by EGCG causes anti-inflammatory and anti-thrombotic effectsZi Jia<sup>1</sup>, Nako Maishi<sup>1</sup>, Hideki Takekawa<sup>1</sup>, Aya Matsuda<sup>1</sup>, Taisei Nakade<sup>2</sup>, Takashi Nakamura<sup>2</sup>, Hideyoshi Harashima<sup>2</sup>, Yasuhiro Hida<sup>3</sup>, Kyoko Hida<sup>1</sup> (Hokkaido Univ./Vascular Biol.& Mol. Pathol., <sup>2</sup>Hokkaido Univ./Mol. Design of Pharm., <sup>3</sup>Fujita Health Univ./Advanced Robotic & Endoscopic Surg.)腫瘍血管内皮細胞を標的とした EGCG 投与による抗炎症・抗血栓効果  
ジャズ<sup>1</sup>、間石 奈湖<sup>1</sup>、竹川 英輝<sup>1</sup>、松田 彩<sup>1</sup>、中出 泰誠<sup>2</sup>、中村 孝司<sup>2</sup>、原島 秀吉<sup>2</sup>、榎田 泰浩<sup>3</sup>、榎田 京子<sup>1</sup> (北大・院歯・血管生物分子病理学、<sup>2</sup>北大・院薬・薬剤分子設計学、<sup>3</sup>藤田医大・先端ロボット・内視鏡手術学)**P-2159** Notch signaling regulates vasculogenic mimicry and promotes cell morphogenesis in pancreatic ductal adenocarcinomaThaned Kangsakaksin<sup>1</sup>, Nontawat Benjakul<sup>2,3</sup>, Nattapa Prakobphol<sup>1</sup>, Komgrid Charngkaew<sup>2</sup>, Chayada Tangshewinsirikul<sup>4</sup>, Wirada Dulyaphat<sup>4</sup>, Jisunson Svasti<sup>1,5</sup> (Department of Biochemistry, Faculty of Science, Mahidol University, Thailand, <sup>2</sup>Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand, <sup>3</sup>Faculty of Medicine Vajira Hospital, Navamindradhiraj University, Thailand, <sup>4</sup>Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand, <sup>5</sup>Laboratory of Biochemistry, Chulabhorn Research Institute, Bangkok 10210, Thailand)

## 11 Characteristics of cancer cells

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P11-5** Cancer stem cells and heterogeneity (1)  
がん幹細胞・多様性 (1)

Chairperson: Tsuyoshi Osawa (RCAST, Univ. of Tokyo)

座長: 大澤 毅 (東大・先端研・ニュートラオミクス腫瘍)

**P-2160** Distinct but interchangeable subpopulations of colorectal cancer cells with different growth fates and drug sensitivity

Roberto Coppo, Jumpei Kondo, Kunishige Onuma, Masahiro Inoue (Dept. Clin. Bio-Resource Res. Dev. Grad. Sch. Med. Kyoto Univ.)

機能的な単一細胞解析による大腸癌内の相互転換可能な細胞亜集団の解明

コッポ ロベルト、近藤 純平、小沼 邦重、井上 正宏 (京大医・CLバイオリソース研究開発講座)

**P-2161** Acquired Vulnerability Screening Unveiled Novel Candidate Drug Targets in the Drug-Resistant Cholangiocarcinoma

Siwanon Jirawatnotai, Siwanon Jirawatnotai, Sunisa Prasopporn, Orawan Suppramote (Department of Pharmacology, Faculty of Medicine Siriraj Hospital, Mahidol University)

**P-2162** Circular extrachromosomal DNA promotes inter- and intratumoral heterogeneity in high-risk medulloblastomaOwen S. Chapman<sup>1,2</sup>, Sunita Sridhar<sup>3</sup>, Shanjing Wang<sup>2</sup>, Jill P. Mesirov<sup>2</sup>, Lukas Chavez<sup>2,3</sup> (Sanford Burnham Prebys Medical Discovery Institute, La Jolla, California, <sup>2</sup>School of Medicine, University of California San Diego, California, <sup>3</sup>Institute for Genomic Medicine, Rady Children's Hospital, San Diego, California)**P-2163** Calcium influx channels regulate cancer stem cells and osteoblastogenesis in multiple myelomaSudjit Luanpitpong<sup>1</sup>, Napachai Rodboon<sup>1</sup>, Surapol Issaragrisil<sup>1,2</sup> (Res. Div., Fac. of Med. Siriraj Hosp., Mahidol Univ., <sup>2</sup>Dept. of Med., Fac. of Med. Siriraj Hosp., Mahidol Univ.)**P-2164** PD-L1/RelB axis regulated the stemness of breast cancer cells

Hack S. Choi, Su L. Kim, Dong S. Lee (Dep. of biotech., Jeju National University)

**P-2165** Dysadherin influences cancer stemness and aggressiveness in hepatocellular carcinoma via FAK/YAP axis

Tacyoung Jang, Jangsoo Chun, Jeongseok Nam (School of Life Sciences, Gwangju Institute of Science and Technology)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P11-6** Cancer stem cells and heterogeneity (2)  
がん幹細胞・多様性 (2)

Chairperson: Mitsuhiro Machitani (Div. Cancer Stem Cell, Natl. Cancer Ctr. Res. Inst.)

座長: 町谷 充洋 (国立がん研セ・研・がん幹細胞)

**P-2166** Adipin-dependent adipocyte differentiation promotes the adipocyte-breast cancer stem cell interactions.Khaledian Behnouch<sup>1</sup>, Jumpei Yoshida<sup>1,3</sup>, Takanori Hayashi<sup>1</sup>, Masahiro Mizuno<sup>1</sup>, Kaori Ushida<sup>2</sup>, Masao Maeda<sup>1,2</sup>, Eiji Munetsuna<sup>1</sup>, Kenji Kawada<sup>3</sup>, Naoya Asai<sup>2</sup>, Yohei Shimono<sup>1</sup> (Dep. Biochem., Fujita Health Univ. Sch. Med., <sup>2</sup>Dep. Pathol., Fujita Health Univ. Sch. Med., <sup>3</sup>Dep. Med. Oncology, Fujita Health Univ. Sch. Med.)**P-2167** In vivo ERK MAPK signaling dynamics in the orthotopic xenograft model of human patient-derived pancreatic cancer cellsHoussam K. Alkousa<sup>1</sup>, Nobuyuki Kakiuchi<sup>2,3</sup>, Seishi Ogawa<sup>2,3,4</sup>, Hiroshi Seno<sup>2</sup>, Michiyuki Matsuda<sup>1,6</sup>, Toru Hiratsuka<sup>7</sup> (Grad. School of Biostudies, Kyoto Univ., <sup>2</sup>Dept. Path. & Tumor Biol, Kyoto Univ., <sup>3</sup>Inst. for the Advanced Study of Human Biology, Kyoto Univ., <sup>4</sup>Dept. Med. Center for Hematology & Regenerative Medicine, Karolinska Inst., <sup>5</sup>Dept. Gastroenterology & Hepatology, Grad. Sch. of Med., Kyoto Univ., <sup>6</sup>Dept Path & Biol Diseases, Grad Sch Med, Kyoto Univ., <sup>7</sup>Dept of Oncogenesis & Growth Regulation, Osaka International Cancer Inst)**P-2168** Neuromedin U signaling promote pro-tumor microenvironment in lung cancerShihmiao Li<sup>1,2</sup>, Chishuan Fan<sup>2</sup>, Wentzen Fang<sup>2</sup>, Fangyu Tsai<sup>2</sup>, Huiyu Jao<sup>2</sup>, Yawen Chen<sup>2</sup>, Kojiunn Liu<sup>2</sup>, Chao A. Hsiung<sup>2</sup>, Shihsheng Jiang<sup>2</sup> (Natl. Inst. of Infectious Diseases & Vaccinology, NHRI, Taiwan, <sup>2</sup>Natl. Inst. of Cancer Res., NHRI, Taiwan, <sup>3</sup>Inst. of Population Health Sci., NHRI, Taiwan)

**P-2169 Effect of Growth Factors on Priming Human Adipose-Derived Mesenchymal Stem Cells to Committed Preadipocytes**  
Tanakorn Tarapongpun<sup>1,2</sup>, Kouichi Tabu<sup>2</sup>, Yoshitaka Murota<sup>2</sup>, Tetsuya Taga<sup>2</sup> (<sup>1</sup>Div. of Head Neck & Breast surg., Mahidol Univ., <sup>2</sup>Dept. of Stem Cell Regulation, Tokyo Med. & Dent. Univ.)

**P-2170 Investigation of cancer stem cell generation by simulating hydrogel-based tumor microenvironment**  
Yuheng Nie<sup>1,2</sup>, Yanpeng Sun<sup>1,2</sup>, Masumi Tsuda<sup>1,2,3</sup>, Lei Wang<sup>1,3</sup>, Jianping Gong<sup>3,4</sup>, Shinya Tanaka<sup>1,3</sup> (<sup>1</sup>Dept. of Cancer Path., Faculty of Med., Hokkaido Univ., <sup>2</sup>Lab. of Path., Grad. Sch. of Life Sci., Hokkaido Univ., <sup>3</sup>Inst. for Chemical Reaction Design and Discovery (WPI-ICREDD), Hokkaido Univ., <sup>4</sup>Lab. of Soft & Wet Matter, Hokkaido Univ.)

ハイドロゲルで模倣した腫瘍微小環境でのがん幹細胞生成メカニズムの解析

聶宇恒<sup>1,2</sup>、孫雁鵬<sup>1,2</sup>、津田真寿美<sup>1,2,3</sup>、王磊<sup>1,3</sup>、グン 劍萍<sup>3,4</sup>、田中伸哉<sup>1,3</sup> (<sup>1</sup>北海道大学 医学研究院 腫瘍病理学分野、<sup>2</sup>北海道大学 生命科学 病理学教室、<sup>3</sup>北海道大学 化学反応創成研究拠点、<sup>4</sup>北海道大学 LSW 研究室)

**P-2171 Interferon-induced protein with tetratricopeptide repeats 5 (IFIT5) regulates the proliferation and migration of GBM**  
Yun J. Lai, Yu H. Hung, Ting C. Chen (Dept. of Life Sci., Natl. Taiwan Normal Univ.)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P11-7 Cancer stem cells and heterogeneity (3)**  
がん幹細胞・多様性 (3)

Chairperson: Satoshi Fujii (Dept. Mol. Path. Yokohama City Univ. Grad. Sch. Med.)

座長：藤井 誠志 (横浜市立大学大学院医学研究科・医学部 分子病理学)

**P-2172 Analysis of the effect of epigenetic abnormalities on cancer cell diversity**  
Kenichi Miyata<sup>1,2</sup>, Maruyama Reo<sup>1,2</sup> (<sup>1</sup>Project for Cancer Epigenomics, Cancer Inst., JFCR, <sup>2</sup>NEXT-Ganken Program, JFCR)

エピゲノム異常ががん細胞の多様性へ与える影響の解析  
宮田 憲一<sup>1,2</sup>、丸山 玲緒<sup>1,2</sup> (<sup>1</sup>がん研 がんエピゲノムプロジェクト、<sup>2</sup>がん研 NEXT-Ganken プログラム)

**P-2173 Analysis of the effect of stiffness of cancer microenvironment on stemness induction of cancer cells using hydrogels**  
Yanpeng Sun<sup>1,2</sup>, Yuheng Nie<sup>1,2</sup>, Masumi Tsuda<sup>1,2,3</sup>, Lei Wang<sup>1,3</sup>, Jianping Gong<sup>3,4</sup>, Shinya Tanaka<sup>1,3</sup> (<sup>1</sup>Dept. of Cancer Path., Faculty of Med., Hokkaido Univ., <sup>2</sup>Lab. of Path., Grad. Sch. of Life Sci., Hokkaido Univ., <sup>3</sup>Inst. for Chemical Reaction Design and Discovery, Hokkaido Univ., <sup>4</sup>LSW, Faculty of Advanced Life Sci, Hokkaido Univ.)

腫瘍微小環境の堅さががん幹細胞生成に与える影響の検討

孫雁鵬<sup>1,2</sup>、聶宇恒<sup>1,2</sup>、津田真寿美<sup>1,2,3</sup>、王磊<sup>1,3</sup>、グン 劍萍<sup>3,4</sup>、田中伸哉<sup>1,3</sup> (<sup>1</sup>北海道大学 医学研究院 腫瘍病理学分野、<sup>2</sup>北海道大学 生命科学 病理学教室、<sup>3</sup>北海道大学 化学反応創成研究拠点、<sup>4</sup>北海道大学 LSW 研究室)

**P-2174 The role of tumor vessel-derived factor in the maintenance of cancer stem cells**  
Yumiko Hayashi, Hiroyasu Kidoya (Dept. Integrative Vascular Biol, Univ. of Fukui.)

がん幹細胞の維持における腫瘍血管由来因子の役割

林 弓美子、木戸屋 浩康 (福井大学 医学系部門 血管統御学)

**P-2175 Analysis of gene expression regulation by methylation in differentiation into cranial and trunk NCCs derived from hiPSC**  
Kiyosuke Mukac<sup>1</sup>, Ritsuko Onuki<sup>1</sup>, Satoshi Yamashita<sup>2</sup>, Naoko Hattori<sup>3</sup>, Miki Ohira<sup>1</sup>, Masayuki Haruta<sup>1</sup>, Shunpei Satoh<sup>1</sup>, Hisanori Takenobu<sup>1</sup>, Kiyohiro Ando<sup>1</sup>, Toshikazu Ushijima<sup>3</sup>, Kenji Osafune<sup>4</sup>, Tatsutoshi Nakahata<sup>5</sup>, Takehiko Kamijo<sup>1</sup> (<sup>1</sup>Res. Inst. for Clin. Oncol., Saitama Cancer Ctr., <sup>2</sup>MIT., <sup>3</sup>Hoshi Uni., <sup>4</sup>CiRA, Kyoto Univ., <sup>5</sup>CIEA.)

hiPSC 細胞由来頭部および体幹部神経堤細胞への分化過程におけるメチル化による遺伝子発現制御の解析

迎 恭輔<sup>1</sup>、小貫 律子<sup>1</sup>、山下 聡<sup>2</sup>、服部 奈緒子<sup>3</sup>、大平 美紀<sup>1</sup>、春田 雅之<sup>1</sup>、佐藤 俊平<sup>1</sup>、竹信 尚典<sup>1</sup>、安藤 清宏<sup>1</sup>、牛島 俊和<sup>3</sup>、長船 健二<sup>4</sup>、中畑 龍俊<sup>5</sup>、上條 岳彦<sup>1</sup> (<sup>1</sup>埼玉がんセンター 臨床腫瘍研、<sup>2</sup>前橋工科大、<sup>3</sup>星薬科大学、<sup>4</sup>京大・iPS 細胞研、<sup>5</sup>美中研)

**P-2176 Biochemical characteristics of a cancer stem-like cell included in trace amounts within commercial cancer cell lines**

Yusuke Ohta<sup>1</sup>, Shiori Yanai<sup>2</sup>, Kyosuke Kuroda<sup>2</sup>, Wakana Takeuchi<sup>3</sup>, Takao Nomura<sup>1,2</sup>, Katsumi Maenaka<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Pharm. Sci., Hokkaido Univ., <sup>2</sup>Grad. Sch. Life. Sci., Hokkaido Univ.)

癌細胞中に微量含まれる癌幹細胞様細胞株の生化学的特性の検討  
太田 悠介<sup>1</sup>、梁井 史織<sup>2</sup>、黒田 京佑<sup>2</sup>、竹内 若菜<sup>2</sup>、野村 尚生<sup>1,2</sup>、前仲 勝実<sup>1,2</sup> (<sup>1</sup>北海道大・院・薬、<sup>2</sup>北海道大・院・生命)

**P-2177 Investigation of aberrant LEF1 expression in tumor-promoting cancer-associated fibroblasts**

Hiroya Okazaki<sup>1</sup>, Yang Shi<sup>2</sup>, Mizuki Sakimoto<sup>3</sup>, Yu Koyama<sup>1,2</sup>, Zixu Wang<sup>2</sup>, Akane Isizuka<sup>3</sup>, Yoshihiro Mezawa<sup>2</sup>, Kazunori Kajino<sup>3</sup>, Akira Katakura<sup>1</sup>, Takehiro Yasukawa<sup>2</sup>, Akira Orimo<sup>2</sup> (<sup>1</sup>Dept. Oral Pathobiological Sci. & Surg., Tokyo Dent. College, <sup>2</sup>Dept. Path. & Oncology, Juntendo Univ.)

がん関連線維芽細胞 CAFs で見出した転写因子 LEF1 の異常発現が引き起こすがん悪性化促進メカニズムの研究

岡崎 寛弥<sup>1</sup>、施 陽<sup>2</sup>、咲本 瑞来<sup>2</sup>、小山 侑<sup>1,2</sup>、王子 旭<sup>2</sup>、石塚 朱音<sup>2</sup>、目澤 義弘<sup>2</sup>、梶野 一徳<sup>2</sup>、片倉 朗<sup>2</sup>、安川 武宏<sup>2</sup>、折茂 彰<sup>2</sup> (<sup>1</sup>東京歯科大 口腔病態外科学、<sup>2</sup>順天堂大 病理・腫瘍学)

**P-2178 Morphological study of the affinity between cancer stem-like cells and dead cancer cells in the tumor microenvironment**

Jiro Fujimoto (Global Med. Sci. Lab.)

腫瘍微小環境におけるがん幹細胞様細胞とがん死細胞の親和性に関する形態学的検討について

藤本 二郎 (グローバル メディカル サイェンス ラボ)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P11-8 Cancer stem cells and heterogeneity (4)**  
がん幹細胞・多様性 (4)

Chairperson: Hiroshi Yokozaki (Div. Pathol., Dept. Pathol, Kobe Univ. Grad. Sch. Med.)

座長：横崎 宏 (神戸大・院医・病理学)

**P-2179  $\gamma$ -Glutamylcyclotransferase enhances cancer stem cell phenotype and metastasis in breast cancer**

Hiroaki Sakai<sup>1</sup>, Takanori Hayashi<sup>1</sup>, Munetsugu Hirata<sup>2</sup>, Yasuyoshi Mizutani<sup>3</sup>, Seiji Okada<sup>4</sup>, Yuko Kijima<sup>3</sup>, Motoshi Suzuki<sup>3</sup>, Yohei Shimono<sup>1</sup> (<sup>1</sup>Dep. Biochem., Fujita Health Univ. Sch. Med., <sup>2</sup>Dep. Breast Surgery, Fujita Health Univ. Sch. Med., <sup>3</sup>Dep. Mol. Oncology, Fujita Health Univ. Sch. Med., <sup>4</sup>Joint Res. Ctr. for Human Retrovirus Infection, Kumamoto Univ.)

$\gamma$ -グルタミル転移酵素は乳がんのがん幹細胞性形質と転移を増加させる。

酒井 啓聡<sup>1</sup>、林 孝典<sup>1</sup>、平田 宗嗣<sup>2</sup>、水谷 泰嘉<sup>3</sup>、岡田 誠治<sup>4</sup>、喜島 祐子<sup>3</sup>、鈴木 元<sup>3</sup>、下野 洋平<sup>1</sup> (<sup>1</sup>藤田医大・医・生化、<sup>2</sup>藤田医大・医・乳腺外、<sup>3</sup>藤田医大・医・分子腫瘍、<sup>4</sup>熊本大・ヒトレトロウイルス学研究センター)

**P-2180 Mutation analysis of breast cancer stem cell population at a single-cell level**

Tsunaki Hongu<sup>1</sup>, Hirokazu Kusunoki<sup>1</sup>, Tasunori Nishimura<sup>1</sup>, Masao Yano<sup>2</sup>, Satoko Ishikawa<sup>3</sup>, Masafumi Inokuchi<sup>3</sup>, Tetsuo Ota<sup>3</sup>, Masahiko Tanabe<sup>4</sup>, Keiichiro Tada<sup>5</sup>, Tomoe Nakagawa<sup>6</sup>, Arinobu Tojo<sup>7</sup>, Masahiro Nakagawa<sup>8</sup>, Yutaka Suzuki<sup>8</sup>, Seishi Ogawa<sup>6</sup>, Noriko Gotoh<sup>1</sup> (<sup>1</sup>Div. of Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Dept. of Surgery, Minami-machida Hosp., <sup>3</sup>Dept. of Breast Oncol., Kanazawa Univ. Hosp., <sup>4</sup>Dept. Breast & Endocrine Surgery, Grad. Sch. Med., Univ. of Tokyo, <sup>5</sup>Dept. of Breast & Endocrine Surgery, Nihon Univ., <sup>6</sup>Dept. Pathol & Tumor Biol., Grad. Sch. Med., Kyoto Univ., <sup>7</sup>Tokyo Med. & Dent. Univ., <sup>8</sup>Grad. Sch. of Front. Biosci., Univ. of Tokyo)

乳がん幹細胞群における 1 細胞ゲノム変異解析

本宮 綱紀<sup>1</sup>、楠木 啓一<sup>1</sup>、西村 建徳<sup>1</sup>、矢野 正雄<sup>2</sup>、石川 聡子<sup>3</sup>、井口 雅史<sup>3</sup>、太田 哲生<sup>3</sup>、田辺 真彦<sup>4</sup>、多田 敬一郎<sup>5</sup>、中川 智恵<sup>6</sup>、東條 有伸<sup>7</sup>、中川 正宏<sup>6</sup>、鈴木 稜<sup>8</sup>、小川 誠司<sup>6</sup>、後藤 典子<sup>1</sup> (<sup>1</sup>金沢大・がん研・分子病態、<sup>2</sup>南町田病院・外科、<sup>3</sup>金沢大病院・乳腺外科、<sup>4</sup>東京大・医・乳腺内分泌外科、<sup>5</sup>日本大・乳腺内分泌外科、<sup>6</sup>京都大・医・腫瘍生物学、<sup>7</sup>東京医歯大・東京大 新学術創成科学)

**P-2181 Differentiation of cancer stem cells into tumor associated myoepithelial cell developing ductal carcinoma in situ**

Masaharu Seno<sup>1</sup>, Said M. Afify<sup>2</sup> (<sup>1</sup>Dept. Cancer Stem Cell Eng., Okayama Univ., <sup>2</sup>Lombardi Comprehensive Cancer Ctr., Georgetown Univ.)

非浸潤性乳がん発生におけるがん幹細胞のがん関連筋上皮細胞への分化

妹尾 昌治<sup>1</sup>、アフィフィ サイド<sup>2</sup> (<sup>1</sup>岡山 大ヘルスシステム統合科)



学、<sup>2</sup>ジョージタウン大 ロンバルディ総合がんセンター

**P-2182 Heterogeneity of cancer stem-like cells in invasion of reconstituted triple-negative breast cancer cell populations**

Rei Takahashi<sup>1,2</sup>, Sana Inoue<sup>1</sup>, Ayako Senota<sup>3</sup>, Kiyotsugu Yoshikawa<sup>1</sup> (<sup>1</sup>Faculty of Pharmaceutical Sciences, Doshisha Womens College of Liberal Arts, <sup>2</sup>Graduate School, Pharmaceutical Sciences, Doshisha Womens College of Liberal Arts)

再構成されたトリプルネガティブ乳がん細胞集団の浸潤におけるがん幹細胞様細胞の不均一性

高橋 玲<sup>1,2</sup>、井上 沙奈<sup>1</sup>、瀬ノ田 采子<sup>3</sup>、吉川 清次<sup>1</sup> (<sup>1</sup>同志社女子大学薬学部 医療薬学科、<sup>2</sup>同志社女子大学 大学院薬学研究科)

**P-2183 Clinico-pathological features of Kinesin family member C1 in pancreatic ductal adenocarcinoma**

Akira Ishikawa<sup>1</sup>, Takafumi Fukui<sup>1</sup>, Aya Kido<sup>1</sup>, Narutaka Katsuya<sup>1</sup>, Kazuya Kuraoka<sup>2</sup>, Kazuhiro Senitani<sup>1</sup>, Naohide Oue<sup>1</sup>, Wataru Yasui<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Hiroshima Univ., <sup>2</sup>Dept. Diag. Pathol., Kure Med. Ctr.)

膵臓における Kinesin family member C1 発現の臨床病理学的特徴

石川 洗<sup>1</sup>、福井 嵩史<sup>1</sup>、城戸 綾<sup>1</sup>、勝矢 脩高<sup>1</sup>、倉岡 和矢<sup>2</sup>、仙谷 和弘<sup>1</sup>、大上 直秀<sup>1</sup>、安井 弥<sup>1</sup> (<sup>1</sup>広島大学・医系・分子病理、<sup>2</sup>呉医療セ・病理)

**P-2184 PKC $\lambda$  involves to the regulation for asymmetric cell division of pancreatic cancer stem cells**

Takahiro Kasai<sup>1</sup>, Shoma Tamori<sup>1</sup>, Yuta Takasaki<sup>1</sup>, Kazunori Sasaki<sup>2</sup>, Shigeo Ohno<sup>2</sup>, Kazunori Akimoto<sup>1</sup> (<sup>1</sup>Pharm., Tokyo Univ. of Sci., <sup>2</sup>Inst. Disease of Old Age, Juntendo Univ. Sch. of Med)

PKC $\lambda$  は ALDH1 陽性膵臓がん幹細胞の非対称分裂制御に関与する  
葛西 隆広<sup>1</sup>、多森 翔馬<sup>1</sup>、高崎 湧太<sup>1</sup>、佐々木 和教<sup>2</sup>、大野 茂男<sup>2</sup>、秋本 和憲<sup>1</sup> (<sup>1</sup>東京理科大学、<sup>2</sup>順天堂大・老人性疾患病態治療セ)

**P-2185 Hydrogel PCDME creates pancreatic cancer stem cells in OXPPOS metabolic state with TXNIP elevation**

Lei Wang<sup>1,2</sup>, Yuma Aoki<sup>3</sup>, Masumi Tsuda<sup>1,2</sup>, Yoshitaka Oda<sup>2</sup>, Shinya Tanaka<sup>1,2</sup> (<sup>1</sup>Institute for Chemical Reaction Design and Discovery, Hokkaido University, <sup>2</sup>Department of Cancer Pathology, Faculty of Medicine, Hokkaido University, <sup>3</sup>Department of Gastroenterological Surgery II, Hokkaido University)

ハイドロゲル PCDME は、TXNIP 上昇を伴う OXPPOS 代謝状態の膵臓癌幹細胞を誘導する

王 磊<sup>1,2</sup>、青木 佑磨<sup>3</sup>、津田 真寿美<sup>1,2</sup>、小田 義崇<sup>2</sup>、田中 伸哉<sup>1,2</sup> (<sup>1</sup>北海道大学化学反応創成研究拠点 ICReDD、<sup>2</sup>北海道大学医学研究院腫瘍病理学教室、<sup>3</sup>北海道大学医学研究院消化器外科 II 教室)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P11-9 Cancer stem cells and heterogeneity (5)**  
がん幹細胞・多様性 (5)

Chairperson: Chitose Oneyama (Aichi Cancer Ctr. Res. Inst.)

座長: 小根山 千歳 (愛知がんセンター)

**P-2186 Tumor microenvironment factor regulates malignant properties through transcription networks in glioblastoma**

Masahiko Kobayashi, Yongwei Jing, Atsushi Hirao (Cancer Res. Inst., Kanazawa Univ.)

腫瘍微小環境因子による転写因子ネットワークを介した膠芽腫間葉系形質の制御

小林 昌彦、Yongwei Jing、平尾 敦 (金沢大学・がん進展制御研究所)

**P-2187  $\gamma$ -glutamylcyclotransferase knockdown inhibits proliferation of glioblastoma stem cells**

Kozue Nose<sup>1</sup>, Masaya Mori<sup>1</sup>, Chiami Moyama<sup>1</sup>, Hiromi Ii<sup>1</sup>, Mitsugu Fujita<sup>2</sup>, Susumu Nakata<sup>1</sup> (<sup>1</sup>Lab. of Clinical Oncology, Kyoto Pharm. Univ., <sup>2</sup>Faculty of Med, Kindai Univ.)

$\gamma$ -glutamylcyclotransferase (GGCT) ノックダウンは膠芽腫幹細胞の増殖を抑制する。

野瀬 梢、森 昌也<sup>1</sup>、茂山 千愛美<sup>1</sup>、飯居 宏美<sup>1</sup>、藤田 貢<sup>2</sup>、中田 晋<sup>1</sup> (<sup>1</sup>京都薬大 臨床腫瘍学分野、<sup>2</sup>近畿大医)

**P-2188 Involvement of Desert hedgehog in the Anti-proliferative activity by GGCT knockdown in murine glioblastoma stem cells**

Masaya Mori<sup>1</sup>, Ayako Shimada<sup>1</sup>, Keiko Taniguchi<sup>2</sup>, Chiami Moyama<sup>1</sup>, Mitsugu Fujita<sup>3</sup>, Hiromi Ii<sup>1</sup>, Susumu Nakata<sup>1</sup> (<sup>1</sup>Dept. of Clinical Oncology, Kyoto Pharmaceutical University, <sup>2</sup>Department of Drug Discovery Medicine, Kyoto Prefectural University of Medicine, <sup>3</sup>Faculty of Med, Kindai Univ)

マウス膠芽腫幹細胞における GGCT ノックダウンによる細胞増殖抑

制に対する Desert hedgehog の関与

森 昌也<sup>1</sup>、嶋田 絢子<sup>1</sup>、谷口 恵香<sup>2</sup>、茂山 千愛美<sup>1</sup>、藤田 貢<sup>3</sup>、飯居 宏美<sup>1</sup>、中田 晋<sup>1</sup> (<sup>1</sup>京都薬科大学・臨床腫瘍学分野、<sup>2</sup>京都府立医大・院医・創薬医学、<sup>3</sup>近畿大医)

**P-2189 AMIGO2 expression regulates cancer stem cell-like properties in human cancer cells**

Heekyung Seong<sup>1</sup>, Runa Izutsu<sup>1</sup>, Mitsuhiro Osaki<sup>1,2</sup>, Futoshi Okada<sup>1,2</sup> (<sup>1</sup>Div. Exp. Pathol., Fac. Med., Tottori Univ., <sup>2</sup>Chromosome Engineering Research Center, Tottori Univ.)

AMIGO2 発現によるヒト癌細胞の癌幹細胞様形質の制御

ソン ヒギョン<sup>1</sup>、井筒 瑠奈<sup>1</sup>、尾崎 彦彦<sup>1,2</sup>、岡田 太<sup>1,2</sup> (<sup>1</sup>鳥取大学大学院 医学系研究科 実験病理学、<sup>2</sup>鳥取大・染色体工学研究センター)

**P-2190 Mesenchymal heterogeneity in AFP-producing gastric carcinoma; analysis by spatial transcriptomics.**

Kazuhiro Ohsawa<sup>1,2</sup>, Genta Nagae<sup>1</sup>, Akiko Kunita<sup>2</sup>, Tetsuo Ushiku<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Sci. Div., RCAST, UTokyo, <sup>2</sup>Dept. Path., Grad. Sch. Med., UTokyo)

空間トランスクリプトミクスによる AFP 産生胃癌における腫瘍間質多様性の解析

大澤 一太<sup>1,2</sup>、永江 玄太<sup>1</sup>、国田 朱子<sup>2</sup>、牛久 哲男<sup>2</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>先端研・ゲノムサイエンス&メディシン、<sup>2</sup>東大・病因・病理学)

**P-2191 Extrachromosomal DNA contributes to intratumoral heterogeneity of RTKs in gastric cancer through dynamic regulation**

Kazuki Kanayama<sup>1</sup>, Hiroshi Imai<sup>2</sup>, Chise Matsuda<sup>3</sup>, Eri Usugi<sup>3</sup>, Yoshifumi Hirokawa<sup>3</sup>, Masatoshi Watanabe<sup>3</sup> (<sup>1</sup>Suzuka Univ., Med. Sci., <sup>2</sup>Path. Div., Mie Univ. Hosp., <sup>3</sup>Dept. Oncol. Path., Mie Univ. Grad. Sch. Med.)

Extrachromosomal DNA は動的調節を介して胃癌での受容体型チロシンキナーゼ発現の腫瘍内不均一性に寄与する

金山 和樹<sup>1</sup>、今井 裕<sup>2</sup>、松田 知世<sup>3</sup>、臼杵 恵梨<sup>3</sup>、広川 佳史<sup>3</sup>、渡邊 昌俊<sup>3</sup> (<sup>1</sup>鈴鹿医療科学大学 保健衛生学部、<sup>2</sup>三重大学医学部附属病院 病理診断科、<sup>3</sup>三重大学大学院医学系研究科 腫瘍病理学)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P11-10 Cancer stem cells and heterogeneity (6)**  
がん幹細胞・多様性 (6)

Chairperson: Masamitsu Tanaka (Mol Med & Biochem. Akita Univ Sch Med)

座長: 田中 正光 (秋田大・医・分子生化学講座)

**P-2192 Screening of compounds targeting colorectal cancer stemness**

Yanqing Niu<sup>1,2</sup>, Teruaki Fujishita<sup>1</sup>, Makoto Taketo<sup>3</sup>, Masahiro Aoki<sup>1,2</sup> (<sup>1</sup>Div. Pathophysiol., Aichi Cancer Ctr. Res. Inst., <sup>2</sup>Div. Cancer Physiol., Nagoya Univ. Grad. Sch. Med., <sup>3</sup>Colon Cancer Pj, KUHP-iACT, Kyoto Univ.)

大腸がん幹細胞を標的とする化合物のスクリーニング

牛 燕清<sup>1,2</sup>、藤下 晃章<sup>1</sup>、武藤 誠<sup>3</sup>、青木 正博<sup>1,2</sup> (<sup>1</sup>愛知県がんセンター 研・がん病態生理、<sup>2</sup>名古屋大・医・がん病態生理、<sup>3</sup>京大病院・臨研セ・大腸がん P)

**P-2193 Immune evasion from natural killer cells in hepatoma cancer stem-like cells**

Yuta Kimura<sup>1</sup>, Ryouichi Tsunedomi<sup>1</sup>, Kiyoshi Yoshimura<sup>2</sup>, Mitsuo Nishiyama<sup>1</sup>, Masao Nakajima<sup>1</sup>, Hiroto Matsui<sup>1</sup>, Yoshitaro Shindo<sup>1</sup>, Yukio Tokumitsu<sup>1</sup>, Yusaku Watanabe<sup>1</sup>, Shinobu Tomochika<sup>1</sup>, Michihisa Iida<sup>1</sup>, Nobuaki Suzuki<sup>1</sup>, Shigeru Takeda<sup>1</sup>, Tatsuya Ioka<sup>3</sup>, Hiroaki Nagano<sup>1</sup> (<sup>1</sup>Dept. of Gastroenterological, Breast and Endocrine Surg., Yamaguchi Univ., <sup>2</sup>Showa Univ. Clin. Res. Inst. for Clin. Pharm. and Therap., <sup>3</sup>Oncology ctr., Yamaguchi Univ. Hosp.)

肝癌幹細胞様細胞における NK 細胞からの免疫逃避

木村 祐大<sup>1</sup>、恒富 亮一<sup>1</sup>、吉村 清<sup>2</sup>、西山 光郎<sup>1</sup>、中島 正夫<sup>1</sup>、松井 洋人<sup>1</sup>、新藤 芳太郎<sup>1</sup>、徳光 幸生<sup>1</sup>、渡邊 裕策<sup>1</sup>、友近 忍<sup>1</sup>、飯田 通久<sup>1</sup>、鈴木 伸明<sup>1</sup>、武田 茂<sup>1</sup>、井岡 達也<sup>3</sup>、永野 浩昭<sup>1</sup> (<sup>1</sup>山口大学大学院 消化器・腫瘍外科学、<sup>2</sup>昭和大学臨床薬理研究所 臨床免疫腫瘍学、<sup>3</sup>山口大学医学部附属病院 腫瘍センター)

**P-2194 CCTC $\beta$  binding factor (CTCF) is necessary for development and maintenance of CALM $\beta$ AF10 $\beta$  induced leukemia.**

Yoko Kuroki, Yukiko Aikawa, Kazutsune Yamagata, Issay Kitabayashi (NCC Division of Hematological malignancy)

転写因子 CCTC $\beta$  binding factor (CTCF) は、融合遺伝子 CALM $\beta$ AF10 $\beta$  誘導の白血病の進展と維持に必須である。

黒木 瑤子、相川 祐規子、山形 和恒、北林 一生 (国がん 造血器腫瘍分野)

**P-2195 Genetic analysis of differentiated and anaplastic thyroid carcinoma in the same patient**

Nao Saito<sup>1</sup>, Soji Toda<sup>2</sup>, Rika Kasajima<sup>3</sup>, Katsuhiko Masudo<sup>2</sup>, Hiroyuki Iwasaki<sup>2</sup>, Daisuke Hoshino<sup>1</sup> (<sup>1</sup>Dept. Cancer Biol., Kanagawa Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Endocrine Surg., Kanagawa Cancer Ctr., <sup>3</sup>Div. Mol. Path. and Genetics, Kanagawa Cancer Ctr. Res. Inst.)

同一患者における甲状腺分化癌および未分化癌の遺伝子解析  
齋藤 菜緒<sup>1</sup>、戸田 宗治<sup>2</sup>、笠島 理加<sup>3</sup>、益戸 功彦<sup>2</sup>、岩崎 博幸<sup>2</sup>、星野 大輔<sup>1</sup> (<sup>1</sup>神奈川県がんセンター臨床研・がん生物、<sup>2</sup>神奈川県がんセンター内分  
泌外科、<sup>3</sup>神奈川県がんセンター臨床研・がん分子病態)

**P-2196 Impact of dietary fatty acid on intestinal tumorigenesis**

Kazuaki Nakata<sup>1</sup>, Kazuhiko Yamada<sup>2</sup>, Norihiro Kokudo<sup>2</sup>, Yuki Kawamura<sup>1</sup> (<sup>1</sup>Research Institute National Center for Global Health and Medicine, <sup>2</sup>National Center for Global Health and Medicine)

腸管腫瘍形成に及ぼす食事性脂肪酸の影響

中田 一彰<sup>1</sup>、山田 和彦<sup>2</sup>、國土 典宏<sup>2</sup>、河村 由紀<sup>1</sup> (<sup>1</sup>国立国際医療研究センター 研究所、<sup>2</sup>国立国際医療研究センター病院 外科)

**P-2197 Differential effects on mitochondrial quality control and skeletal muscle differentiation in medium-chain fatty acids.**

Nishida Ryoichi<sup>1,2</sup>, Shiori Mori<sup>1</sup>, Takuya Mori<sup>1</sup>, Shota Nukaga<sup>1</sup>, Isao Kawahara<sup>1</sup>, Yoshihiro Miyagawa<sup>1</sup>, Kei Goto<sup>1</sup>, Hitoshi Ohmori<sup>1</sup>, Shingo Kishi<sup>3</sup>, Rina Tani<sup>1</sup>, Hiroki Kuniyasu<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Reha., Takanohara Central Hospital, <sup>3</sup>Nozaki Tokusuyuki Hospital.)

中鎖脂肪酸におけるミトコンドリア品質管理と骨格筋分化への作用の差異

西田 亮一<sup>1,2</sup>、森 汐莉<sup>1</sup>、森 拓也<sup>1</sup>、額賀 翔太<sup>1</sup>、川原 勲<sup>1</sup>、宮川 良博<sup>1</sup>、後藤 桂<sup>1</sup>、大森 齊<sup>1</sup>、岸 真五<sup>3</sup>、谷 里奈<sup>1</sup>、國安 弘基<sup>1</sup> (<sup>1</sup>奈良県立医科大学分子病理学教室、<sup>2</sup>高の原中央病院 リハビリテーション科、<sup>3</sup>野崎徳洲会病院)

**P-2198 Synthetic peptide alternatives for growth factors and their effects on cultured cells**

Masahiko Katayama, Kosuke Minamihata (PeptiGrowth Inc.)

完全化学合成法による各種成長因代替ペプチドの各種培養細胞に与える機能解析

片山 政彦、南畑 孝介 (ペプチグロース株式会社)

山本 百合恵、杉本 敦史、辻尾 元、丸尾 晃司、八代 正和 (大阪公立大学 癌分子病態制御学)

**P-2202 Proteomics of serum extracellular vesicles identifies a novel SCLC biomarker**

Makoto Yamamoto<sup>1</sup>, Yasuhiko Suga<sup>2</sup>, Yoshito Takeda<sup>1</sup>, Daisuke Nakatsubo<sup>1</sup>, Satoshi Tanizaki<sup>1</sup>, Takatoshi Enomoto<sup>1</sup>, Hanako Yoshimura<sup>3</sup>, Reina Hara<sup>3</sup>, Takahiro Kawasaki<sup>1</sup>, Takayuki Shiroyama<sup>1</sup>, Kotaro Miyake<sup>1</sup>, Jun Adachi<sup>3</sup>, Yohei Kamijo<sup>4</sup>, Ryusuke Sawada<sup>4</sup>, Yoshihiro Yamanishi<sup>4</sup>, Atushi Kumanogo<sup>1</sup> (<sup>1</sup>Graduate School of Medicine, Osaka University, <sup>2</sup>Osaka Keisei Hospital, <sup>3</sup>National institutes of Biomedical innovation, Health and Nutrition, <sup>4</sup>Kyushu institute of technology)

血清エクソソームの最新プロテオミクスによる小細胞肺癌の新規バイオマーカーの探索

山本 真<sup>1</sup>、菅 泰彦<sup>2</sup>、武田 吉人<sup>1</sup>、中坪 大亮<sup>1</sup>、谷崎 智史<sup>1</sup>、榎本 貴俊<sup>1</sup>、吉村 華子<sup>1</sup>、原 伶奈<sup>1</sup>、川崎 貴裕<sup>1</sup>、白山 敬之<sup>1</sup>、三宅 浩太郎<sup>1</sup>、足立 淳<sup>3</sup>、上條 陽平<sup>4</sup>、澤田 隆介<sup>4</sup>、山西 芳裕<sup>4</sup>、熊ノ郷 淳<sup>1</sup> (<sup>1</sup>大阪大学大学院医学系研究科呼吸器免疫内科、<sup>2</sup>大阪警察病院 呼吸器内科、<sup>3</sup>医薬基盤研・健康・栄養研究所、<sup>4</sup>九州工業大学大学院情報工学研究科)

**P-2203 Function Analysis of Extracellular Vesicles Released from GD2-positive Cells in Human Melanomas**

Farhana Yesmin<sup>1,2</sup>, Robiul H. Bhuiyan<sup>1</sup>, Yuhsuke Ohmi<sup>1</sup>, Abul M. Hasnat<sup>1</sup>, Kei Kaneko<sup>1</sup>, Orié Tajima<sup>1</sup>, Keiko Furukawa<sup>1</sup>, Koichi Furukawa<sup>1,2</sup> (<sup>1</sup>Dept. of Biomed. Sci., Chubu Univ., <sup>2</sup>Dept. of Mol. Biochem, Nagoya Univ. Grad. Sch. of Med.)

**P-2204 Luminescence-based drug screening for identifying exosome release modulators in cancer therapy**

Taasang Son<sup>1,2</sup>, Kiyoon Kwon<sup>1</sup>, Jae H. Kim<sup>1</sup>, Tae S. Han<sup>1,2</sup> (<sup>1</sup>Korea Res. Inst. of Biosci. and Biotech. (KRIBB), <sup>2</sup>Univ. of Sci. and Tech. (UST))

**P-2205 Therapeutic potential of extracellular vesicles from adipose-derived stem cells in ovarian cancer**

Hironori Suzuki<sup>1</sup>, Akira Yokoi<sup>1,2</sup>, Kaname Uno<sup>1</sup>, Kosuke Yoshida<sup>1,2</sup>, Eri Inami<sup>1</sup>, Masami Kitagawa<sup>1</sup>, Kazuhiro Suzuki<sup>1</sup>, Yukari Nagao<sup>1</sup>, Yusuke Yamamoto<sup>3</sup>, Hiroaki Kajiyama<sup>1</sup> (<sup>1</sup>Dept. Obst. & Gynecol., Nagoya Univ. Grad. Sch. of Med., <sup>2</sup>Inst. Adv. Res., Nagoya Univ., <sup>3</sup>Natl. Cancer Ctr. Res. Inst.)

卵巣癌における新規治療法としての脂肪由来間葉系幹細胞エクソソームの可能性

鈴木 公基<sup>1</sup>、横井 暁<sup>1,2</sup>、宇野 枢<sup>1</sup>、吉田 康将<sup>1,2</sup>、稲見 恵理<sup>1</sup>、北川 雅美<sup>1</sup>、鈴木 一弘<sup>1</sup>、長尾 有佳里<sup>1</sup>、山本 雄介<sup>3</sup>、梶山 広明<sup>1</sup> (<sup>1</sup>名古屋大学医学部 産婦人科、<sup>2</sup>名古屋大学 高等研究院、<sup>3</sup>国立がんセンター 研究所)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

P11-11

**Regulation of tumor properties by extracellular vesicles (1)**

細胞外小胞によるがん特性制御 (1)

Chairperson: Yuki Yamamoto (Dept. of Cell. & Mol. Biol., Grad. Sch. Biomed. & Health Sci., Hiroshima Univ.)

座長: 山本 佑樹 (広島大院・医系科学・細胞分子生物)

**P-2199 Extracellular vesicle associated microRNAs related to lymphovascular invasion in early stage lung adenocarcinoma**

Yoshihisa Shimada<sup>1</sup>, Yusuke Yoshioka<sup>2</sup>, Yujin Kudo<sup>1</sup>, Jun Matsubayashi<sup>3</sup>, Tatsuo Ohira<sup>1</sup>, Takahiro Ochiya<sup>3</sup>, Norihiko Ikeda<sup>1</sup> (<sup>1</sup>Department of Thoracic Surgery, Tokyo Medical University, <sup>2</sup>Department of molecular and cellular medicine, Tokyo Medical University, <sup>3</sup>Department of Anatomic Pathology, Tokyo Medical University)

細胞外小胞由来マイクロRNA シーケンス解析による早期肺腺癌脈管浸潤関連遺伝子の探索

嶋田 善久<sup>1</sup>、吉岡 祐亮<sup>2</sup>、工藤 勇人<sup>1</sup>、松林 純<sup>3</sup>、大平 達夫<sup>1</sup>、落谷 孝広<sup>2</sup>、池田 徳彦<sup>1</sup> (<sup>1</sup>東京医科大学呼吸器甲状腺外科、<sup>2</sup>東京医科大学分子細胞治療研究部門、<sup>3</sup>東京医科大学病理診断科)

**P-2200 Regucalcin containing extracellular vesicles suppress tumor development by controlling the polarization of macrophage.**

Naomi Tominaga<sup>1</sup>, Kana Tominaga<sup>1</sup>, Yuuta Miyagi<sup>1</sup>, Saki Horie<sup>1</sup>, Tomiyasu Murata<sup>2</sup>, Masayoshi Yamaguchi<sup>3</sup> (<sup>1</sup>Yamaguchi Univ. Grad. Sch. of Med., <sup>2</sup>Meijo Univ. Grad. Sch. of Pharm., Mol., <sup>3</sup>Univ. of Hawaii Cancer Ctr.)

レギュカルチンを含む前立腺がん由来細胞外小胞はマクロファージの極性を制御して腫瘍の増殖を抑制する。

富永 直臣<sup>1</sup>、富永 香菜<sup>1</sup>、宮城 雄太<sup>1</sup>、堀江 咲希<sup>1</sup>、村田 富安<sup>2</sup>、山口 正義<sup>3</sup> (<sup>1</sup>山口大学 大学院医学系研究科、<sup>2</sup>名城大学 大学院薬学系研究科、<sup>3</sup>ハワイ大学がんセンター)

**P-2201 EMMPRIN From Peritoneal Mesothelial Cells Might Stimulate The Malignant Progression of Diffuse-Type Gastric Cancer**

Yurie Yamamoto, Atsushi Sugimoto, Gen Tsujio, Koji Maruo, Masakazu Yashiro (Osaka Metropolitan University Graduate school of Medicine)

腹膜中皮細胞から産生される EMMPRIN はびまん型胃癌細胞の悪性度を促進する

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

P11-12

**Regulation of tumor properties by extracellular vesicles (2)**

細胞外小胞によるがん特性制御 (2)

Chairperson: Yusuke Yoshioka (Dept. Mol. Cell. Med., Inst. Med. Sci, Tokyo Med. Univ.)

座長: 吉岡 祐亮 (東京医大・医総研・分子細胞)

**P-2206 Function analysis of EVs released from glycolipid-modified melanomas**

Kei Kaneko<sup>1</sup>, Yuhsuke Ohmi<sup>2</sup>, Mariko Kambe<sup>1</sup>, Akiko Tsuchida<sup>3</sup>, Yesmin Farhana<sup>3</sup>, Hasnat Mohammad<sup>3</sup>, Mizutani Momoka<sup>4</sup>, Yokoi Kitaura<sup>2</sup>, Takako Ito<sup>2</sup>, Bhuiyan Robiul<sup>2</sup>, Yuki Ohkawa<sup>6</sup>, Orié Tajima<sup>1</sup>, Koichi Furukawa<sup>1,4</sup>, Keiko Furukawa<sup>1</sup> (<sup>1</sup>Dept. Biomed. Sci., Chubu Univ. Coll. Life Health Sci., <sup>2</sup>Dept. of Clin. Eng., Chubu Univ. Coll. Life Health Sci., <sup>3</sup>Laboratory of Glyco-Bioengineering, The Noguchi Institute., <sup>4</sup>Dep. Biochem. II, Nagoya Univ. Grad. Sch. Med., <sup>5</sup>Dept. Biochem. & Mol. Biol. Univ. of Chittagong, Bangladesh., <sup>6</sup>Dept. of Glyco-Oncology and Molecular Biochemistry, Osaka International Cancer Institute.)

糖脂質リモデリングメラノーマ細胞から分泌される EV の機能解析

金子 慶<sup>1</sup>、大海 雄介<sup>2</sup>、神戸 眞理子<sup>1</sup>、土田 明子<sup>3</sup>、ファーハナイエスミン<sup>4</sup>、モハマドハスナット<sup>3</sup>、水谷 百花<sup>1</sup>、北浦 洋子<sup>2</sup>、伊藤 多佳子<sup>2</sup>、ブイヤンロビウル<sup>2</sup>、大川 祐樹<sup>6</sup>、田島 織絵<sup>1</sup>、古川 鋼一<sup>1,4</sup>、古川 圭子<sup>1</sup> (<sup>1</sup>中部大・生命健康科学・生命医科学、<sup>2</sup>中部大・生命健康科学・臨床工学、<sup>3</sup>野口研究所・糖鎖生物研究室、<sup>4</sup>名大・院医・分子細胞化学、<sup>5</sup>チッタゴン大・生化学分子生物学、<sup>6</sup>大阪国際がんセンター・糖鎖オンコロジー部)



## 12 Cancer immunity

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

P12-4 Immune checkpoint inhibitor therapy (1)  
免疫チェックポイント阻害剤と免疫治療 (1)

Chairperson: Kota Itahashi (Div. Cancer Immunol., Res. Inst. /EPOC, Natl. Cancer Ctr.)

座長: 板橋 耕太 (国立がん研究センター 腫瘍免疫研究分野)

## P-2213 Improving Immunogenicity of colorectal cancer with a Novel Immune Adjuvant to overcome Resistance of ICI

Masao Nakajima<sup>1</sup>, Ryouichi Tsunedomi<sup>1</sup>, Shinobu Tomochika<sup>1</sup>, Yusaku Watanabe<sup>1</sup>, Yukio Tokumitsu<sup>1</sup>, Yoshitaro Shindo<sup>1</sup>, Hiroto Matsui<sup>1</sup>, Yuta Kimura<sup>1</sup>, Tsunenori Yamamoto<sup>1</sup>, Michihisa Iida<sup>1</sup>, Nobuaki Suzuki<sup>1</sup>, Shigeru Takeda<sup>1</sup>, Tatsuya Ioka<sup>2</sup>, Koji Tamada<sup>3</sup>, Hiroaki Nagano<sup>1</sup> (Dept. of Gastroenterological and Breast and Endocrine Surg. Yamaguchi Univ., <sup>2</sup>Yamaguchi Univ. Hosp. Cancer Ctr., <sup>3</sup>Yamaguchi Univ. Grad. Sch. of Med. Dept. of Immunol.)大腸癌に対する免疫チェックポイント阻害剤治療抵抗性改善を目的とした新規免疫アジュバント製剤による腫瘍免疫原性の向上  
中島 正夫<sup>1</sup>、恒富 亮一<sup>1</sup>、友近 忍<sup>1</sup>、渡邊 裕策<sup>1</sup>、徳光 幸生<sup>1</sup>、新藤 芳太郎<sup>1</sup>、松井 洋人<sup>1</sup>、木村 裕太<sup>1</sup>、山本 常則<sup>1</sup>、飯田 通久<sup>1</sup>、鈴木 伸明<sup>1</sup>、武田 茂<sup>1</sup>、井岡 達也<sup>2</sup>、玉田 耕治<sup>3</sup>、永野 浩昭<sup>1</sup> (山口大学大学院消化器・腫瘍外科学、<sup>2</sup>山口大学医学部付属病院 腫瘍センター、<sup>3</sup>山口大学医学部免疫学講座)

## P-2214 Construction of Anticancer Immune Environment by Liposome-encapsulated Progesterone conjugated with anti-PD-L1 antibody

Yoshie Kametani<sup>1</sup>, Ryoji Ito<sup>2</sup>, Shino Oshima<sup>1</sup>, Yoshiyuki Manabe<sup>3</sup>, Yusuke Ohno<sup>2</sup>, Keita Ito<sup>3</sup>, Banri Tsuda<sup>4</sup>, Hirofumi Kashiwagi<sup>5</sup>, Yumiko Goto<sup>6</sup>, Atsushi Yasuda<sup>7</sup>, Toshiro Seki<sup>7</sup>, Koichi Fukase<sup>3</sup>, Mikio Mikami<sup>2</sup>, Kiyoshi Ando<sup>8</sup>, Hitoshi Ishimoto<sup>3</sup>, Takashi Shiina<sup>1</sup> (Department of Molecular Life Science, Tokai University School of Medicine, <sup>2</sup>Central Institute for Experimental Animals, <sup>3</sup>Department of Chemistry, Graduate School of Science, Osaka University, <sup>4</sup>Department of Palliative Medicine, Tokai University School of Medicine, <sup>5</sup>Department of Obstetrics and Gynecology, Tokai University Medical School, <sup>6</sup>Department of Clinical Genetics, Tokai University Hospital, <sup>7</sup>Department of Internal Medicine, Tokai University School of Medicine, <sup>8</sup>Department of Hematology and Oncology, Tokai University School of Medicine)

リボソーム封入プロゲステロン抗PD-L1 コンジュゲートによる抗腫瘍免疫環境の構築

亀谷 美恵<sup>1</sup>、伊藤 亮治<sup>2</sup>、大島 志乃<sup>1</sup>、真鍋 良幸<sup>3</sup>、大野 裕介<sup>2</sup>、伊藤 啓太<sup>3</sup>、津田 万里<sup>4</sup>、柏木 寛史<sup>5</sup>、後藤 優美子<sup>6</sup>、安田 敦<sup>7</sup>、關 敏郎<sup>7</sup>、深瀬 浩一<sup>3</sup>、三上 幹男<sup>3</sup>、安藤 潔<sup>3</sup>、石本 人士<sup>3</sup>、椎名 隆<sup>1</sup> (東海大学・医学部・分子生命科学、<sup>2</sup>実験動物中央研究所、<sup>3</sup>大阪大学大学院理学研究科化学専攻、<sup>4</sup>東海大学医学部緩和ケア緩和ケア内科、<sup>5</sup>東海大学医学部産婦人科、<sup>6</sup>東海大学医学部附属病院遺伝子診療科、<sup>7</sup>東海大学医学部腎代謝内科学、<sup>8</sup>東海大学血液腫瘍内科学)

## P-2215 HIF1A-targeting therapy augmented the antitumor effects of PD-L1 blockade via enhancing the tumor-derived CXCL10/11.

Yohei Yabuki<sup>1</sup>, Atsushi Mitsuhashi<sup>1</sup>, Hirokazu Ogino<sup>1</sup>, Na T. Nguyen<sup>1</sup>, Hiroto Yoneda<sup>1</sup>, Ryouhiko Ozaki<sup>1</sup>, Yuki Tsukazaki<sup>1</sup>, Masaki Hanibuchi<sup>1</sup>, Hiroshi Nokihara<sup>3</sup>, Yasuhiko Nishioka<sup>1</sup> (Departments of Respiratory Medicine and Rheumatology, Tokushima University, <sup>2</sup>Department of Community Medicine for Respiriology Hematology Metabolism Tokushima University, <sup>3</sup>Center Hospital of National Center for Global Health and Medicine)

HIF1A 阻害による腫瘍細胞由来 CXCL10/11 制御を介した抗 PD-L1 抗体への耐性克服

矢暮 洋平<sup>1</sup>、三橋 惇志<sup>1</sup>、荻野 広和<sup>1</sup>、Na T. Nguyen<sup>1</sup>、米田 浩人<sup>1</sup>、尾崎 領彦<sup>1</sup>、塚崎 佑貴<sup>1</sup>、埴浦 昌毅<sup>2</sup>、軒原 浩<sup>2</sup>、西岡 安彦<sup>1</sup> (徳島大学大学院 呼吸器・膠原病内科学分野、<sup>2</sup>徳島大学地域呼吸器・血液・代謝内科学分野、<sup>3</sup>国立国際医療研究センター病院 呼吸器内科)

## P-2216 Combination therapy with immune checkpoint inhibitor and anticancer drugs by lymphatic drug delivery system (LDDS)

Nao Tanaka<sup>1</sup>, Radhika Mishra<sup>1</sup>, Ariunbuyan Sukhbaatar<sup>1,2,3</sup>, Shiro Mori<sup>1,2,3</sup>, Tetsuya Kodama<sup>1,2</sup> (Dept. of Biomed. Engineering for cancer, Tohoku Univ., <sup>2</sup>Biomed. Engineering Cancer Res. Center, Tohoku Univ., <sup>3</sup>Div. of Oral and Maxillofacial Oncology, Tohoku Univ.)

リンパ行性薬剤送達法 (LDDS) による免疫チェックポイント阻害薬と抗がん剤の併用療法

田中 菜生<sup>1</sup>、ミシユラ ラディカ<sup>1</sup>、スフパートル アリウンブヤン<sup>1,2,3</sup>、森 士朗<sup>1,2,3</sup>、小玉 哲也<sup>1,2</sup> (東北大学 腫瘍工医学、<sup>2</sup>東北大学 がん医学工センター、<sup>3</sup>東北大学 顎顔面口腔腫瘍外科学分野)

## P-2207 Extracellular vesicles secreted from 4T1.2 cells induce acidification and glycolytic reprogramming in lung

Haruka Sato<sup>1</sup>, Toma Matsui<sup>1</sup>, Yuki Toda<sup>1</sup>, Anna Mosnikova<sup>2</sup>, Oleg A. Andreev<sup>2</sup>, Shigekuni Hosogi<sup>1</sup>, Yana K. Reshetnyak<sup>2</sup>, Eishi Ashihara<sup>1</sup> (Lab. of Clin. and Translational Physiol., Kyoto Pharm. Univ., <sup>2</sup>Physics Dept., Univ. of Rhode Island)

4T1.2 より分泌される細胞外小胞は糖代謝リプログラミングにより肺組織酸性化を誘導する

佐藤 晴夏<sup>1</sup>、松井 透磨<sup>1</sup>、戸田 侑紀<sup>1</sup>、Anna Mosnikova<sup>2</sup>、Oleg A. Andreev<sup>2</sup>、細木 誠之<sup>1</sup>、Yana K. Reshetnyak<sup>2</sup>、芦原 英司<sup>1</sup> (京都薬科大学病態生理学分野、<sup>2</sup>Physics Dept., Univ. of Rhode Island)

## P-2208 Function Analysis of Glioma Cell-derived Exosomes in the Enhancement of Malignant Properties of Gliomas

Mohammad A. Hasnar<sup>1</sup>, Li Qi<sup>1</sup>, Yuhusuke Ohmi<sup>2</sup>, Yukika Sugiura<sup>2</sup>, Farhana Yesmin<sup>1</sup>, Robiul Bhuiyan<sup>1</sup>, Kei Kaneko<sup>1</sup>, Momoka Mizutani<sup>1</sup>, Yoshiyuki Kawamoto<sup>1</sup>, Keiko Furukawa<sup>1</sup>, Koichi Furukawa<sup>1,3</sup> (Dept of Biomed Sci, Faculty of Life & Health Sci, Chubu Univ., <sup>2</sup>Dept of Clin Engineering, Faculty of Life & Health Sci, Chubu Univ., <sup>3</sup>Dept of Mol Biochem, Nagoya Univ. Grad Sch of Med)

神経腫瘍の悪性特性増強における神経膠腫細胞由来エクソソームの機能解析

はすなつともはまんど<sup>1</sup>、李 奇<sup>1</sup>、大海 雄介<sup>2</sup>、杉浦 幸佳<sup>2</sup>、イエスミン ファーハナ<sup>1</sup>、ブイヤン ロビウル<sup>1</sup>、金子 慶<sup>1</sup>、水谷 百花<sup>1</sup>、川本 善之<sup>1</sup>、古川 圭子<sup>1</sup>、古川 鋼一<sup>1,3</sup> (中部大学生命健康科学部生命医科学科、<sup>2</sup>中部大学生命健康科学部臨床工学科、<sup>3</sup>名古屋大学大学院医学系研究科分子生物化学)

## P-2209 Potential therapeutic and diagnostic target of exosomal miR-1 and MYO15A in renal cell carcinoma.

Junya Arima, Hirohumi Yoshino, Wataru Fukumoto, Takashi Sakaguchi, Shuichi Tatarano, Hideki Enokida (Dept. of Urology, Kagoshima Univ.)

腎細胞癌由来のエクソソーム miR-1 および MYO15A の診断治療的可能性

有馬 純矢、吉野 裕史、福元 渉、坂口 大、鐘野 秀一、榎田 英樹 (鹿児島大学 泌尿器科学分野)

## P-2210 Effects of OMVs from periodontal pathogens on the tumor microenvironment.

Sakura Minami<sup>1,2</sup>, Yusuke Yoshioka<sup>2</sup>, Daichi Chikazu<sup>1</sup>, Takahiro Ochiya<sup>2</sup> (Dept. of Oral & Maxillofacial Surg., Tokyo Med. Univ., <sup>2</sup>Dept. of Mol. & Cell. Med., Inst. of Med. Sci., Tokyo Med. Univ.)

歯周病菌由来 OMV によるがん微小環境への影響

南 咲良<sup>1,2</sup>、吉岡 祐亮<sup>2</sup>、近津 大地<sup>1</sup>、落谷 孝広<sup>2</sup> (東京医大・口腔外科、<sup>2</sup>東京医大・医総研・分子細胞治療)

## P-2211 Bone metastatic mammary tumor cell-derived extracellular vesicles promote mature osteoclast longevity

Norihisa Uehara<sup>1</sup>, Yukari Kyumoto<sup>1</sup>, Yoshikazu Mikami<sup>2</sup>, Soichiro Sonoda<sup>1</sup>, Takayoshi Yamaza<sup>1</sup>, Toshio Kukita<sup>1</sup> (Dept. Oral Anat., Kyushu Univ. Grad. Sch. Dent. Sci., <sup>2</sup>Div. Microsc. Anat., Niigata Univ. Grad. Sch. Med. & Dent. Sci.)

骨転移性乳癌細胞由来細胞外小胞に内包される miR-92a-3p は成熟破骨細胞の生存を促進する

上原 範久<sup>1</sup>、久本 由香里<sup>1</sup>、三上 剛和<sup>2</sup>、園田 聡一郎<sup>1</sup>、山座 孝義<sup>1</sup>、久木田 敏夫<sup>1</sup> (九大院 歯学研究院 分子口腔解剖学分野、<sup>2</sup>新潟大院 医歯学総合研究科 顕微解剖学)

## P-2212 Exosomal RNAs secreted from pancreatic cancer cell lines might be a good candidate of biomarkers of PC patients

Yuhan Rong, Noritoshi Kobayashi, Yasushi Ichikawa (Yokohama City Univ. Grad. Sch. of Med. Dept. of Oncology)

膵癌細胞系由来のエクソソーム RNA は膵癌患者のバイオマーカーの候補となる可能性がある

栄 雨かん、小林 規俊、市川 靖史 (横浜市立大学 医学研究科 がん総合医科学)

## P12-5

Immune checkpoint inhibitor therapy (2)  
免疫チェックポイント阻害剤と免疫治療 (2)

Chairperson: Hidemitsu Kitamura (Dept. Biomed. Eng., Sci. & Eng., Toyo Univ.)  
座長: 北村 秀光 (東洋大・理工・生体医工学)

P-2217 **Evaluation of the treatment with direct lymph node administration of anti-CTLA-4 antibody combined with radiotherapy**

Koki Takagi<sup>1</sup>, Radhika Mishra<sup>1</sup>, Ariunbuyan Sukhbaatar<sup>1,2,3</sup>, Shiro Mori<sup>1,2,3</sup>, Tetsuya Kodama<sup>1,2</sup> (<sup>1</sup>Dept. of Biomed. Engineering for cancer, Tohoku Univ., <sup>2</sup>Biomed. Engineering Cancer Res. Center, Tohoku Univ., <sup>3</sup>Div. of Oral and Maxillofacial Oncology, Tohoku Univ.)

抗 CTLA-4 抗体のリンパ節直接投与と放射線療法の併用による治療の評価

高木 洗樹<sup>1</sup>、ミシュラ ラディカ<sup>1</sup>、スフバートル アリウンブヤン<sup>1,2,3</sup>、森 士朗<sup>1,2,3</sup>、小玉 哲也<sup>1,2</sup> (<sup>1</sup>東北大学腫瘍医工学、<sup>2</sup>東北大学がん医工学センター、<sup>3</sup>東北大学顎顔面口腔腫瘍外科学分野)

P-2218 **The effect Wogonin on PD-L1 expression and lipid content in Bladder cancer**

Tzuyang Chuang<sup>1,2,3</sup>, Wenlong Huang<sup>1,4</sup>, Shuyi Yang<sup>1,4</sup>, Jingsiang Jhang<sup>1,4</sup>, Chiachou Yeh<sup>3</sup>, Michael W. Chan<sup>1,2,3</sup> (<sup>1</sup>Dept. of Biomed. Sci., Natl. Chung Cheng Univ., Taiwan, <sup>2</sup>Epigenomics & Human Disease Res. Ctr., Natl. Chung Cheng Univ., Taiwan, <sup>3</sup>CIRAS, Natl. Chung Cheng Univ., Taiwan, <sup>4</sup>Dept. Chinese Med., Buddhist Dalin Tzu Chi General Hosp., Taiwan)

P-2219 **The efficacy of anti-PD-1 antibody for IVLBCL in humanized immune system mouse model**

Mika Takai<sup>1,2</sup>, Kazuyuki Shimada<sup>1</sup>, Hitoshi Kiyoi<sup>1</sup> (<sup>1</sup>Dept. of Hematol. & Oncol., Nagoya Univ. Grad. Sch. of Med., <sup>2</sup>Otsuka Pharm. Co., Ltd)

ヒト化マウスモデルを用いた抗 PD-1 抗体の IVLBCL に対する抗腫瘍効果

高井 美佳<sup>1,2</sup>、島田 和之<sup>1</sup>、清井 仁<sup>1</sup> (<sup>1</sup>名古屋大学血液・腫瘍内科学、<sup>2</sup>大塚製薬株式会社)

P-2220 **Preclinical model to counter antidrug antibodies to programmed cell death-1 blockade**

Marco A. Develasco<sup>1</sup>, Yurie Kura<sup>1</sup>, Kazutoshi Fujita<sup>2</sup>, Mituhisa Nishimoto<sup>2</sup>, Kazuko Sakai<sup>1</sup>, Kazuhiro Yoshimura<sup>2</sup>, Masahiro Nozawa<sup>2</sup>, Scott A. Hammond<sup>3</sup>, Simon J. Dovedi<sup>3</sup>, Barry R. Davies<sup>3</sup>, Kazuto Nishio<sup>1</sup>, Hirotsugu Uemura<sup>1</sup> (<sup>1</sup>Dept. of Genome Biol. Kindai Univ. Faculty of Med., <sup>2</sup>Dept. of Urol. Kindai Univ. Faculty of Med., <sup>3</sup>Early Oncology, AstraZeneca, Cambridge, UK)

前臨床腫瘍マウスモデルにおける PD-L1 に対する抗薬物抗体の制御について

デベラスコ マルコ<sup>1</sup>、倉 由史恵<sup>1</sup>、藤田 和利<sup>2</sup>、西本 光寿<sup>2</sup>、坂井 和子<sup>1</sup>、吉村 一宏<sup>2</sup>、野澤 昌弘<sup>2</sup>、ハモンド スコット<sup>3</sup>、ドベディ シモン<sup>3</sup>、デービス バリー<sup>3</sup>、西尾 和人<sup>1</sup>、植村 天受<sup>1</sup> (<sup>1</sup>近畿大学医学部ゲノム生物学教室、<sup>2</sup>近畿大学医学部泌尿器科学教室、<sup>3</sup>アストラゼネカ)

P-2221 **Increasing MHC class I expression is crucial for antitumor immunity among IFN $\gamma$  signaling pathways**

Katsushige Kawase<sup>1,2</sup>, Shusuke Kawashima<sup>1,3</sup>, Joji Nagasaki<sup>1,4</sup>, Takashi Inozume<sup>1,3,5</sup>, Masahito Kawazu<sup>1</sup>, Toyoyuki Hanazawa<sup>2</sup>, Yosuke Togashi<sup>1,4</sup> (<sup>1</sup>Div. Cell Therapy, Chiba Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Otolaryngology-Head&Neck Surg., Grad. Sch. Med., Chiba Univ., <sup>3</sup>Dept. Dermatology, Grad. Sch. Med., Chiba Univ., <sup>4</sup>Dept. Tumor Microenvironment, Okayama Univ., <sup>5</sup>Dept. Dermatology, Yamanashi Univ.)

抗腫瘍免疫におけるインターフェロン $\gamma$ の役割と主要組織適合性遺伝子複合体の発現の重要性

川瀬 勝隆<sup>1,2</sup>、川島 秀介<sup>1,3</sup>、長崎 謙慈<sup>1,4</sup>、猪爪 隆史<sup>1,3,5</sup>、河津 正人<sup>1</sup>、花澤 豊行<sup>2</sup>、富樫 庸介<sup>1,4</sup> (<sup>1</sup>千葉県がんセンター・研・細胞治療、<sup>2</sup>千葉大・耳鼻咽喉科頭頸部腫瘍学、<sup>3</sup>千葉大・皮膚科、<sup>4</sup>岡山大学・医・腫瘍微小環境学、<sup>5</sup>山梨大・皮膚科)

P-2222 **Transcriptional regulation of T cell exhaustion in immune checkpoint blockade resistance at single-cell resolution**

Tzuyang Tseng<sup>1</sup>, Chialang Hsu<sup>2,3,4,5</sup>, Daliang Ou<sup>2,6</sup>, Chiun Hsu<sup>2,7</sup>, Hsuancheng Huang<sup>8</sup>, Hsuehfen Juan<sup>1,5,9,10</sup> (<sup>1</sup>Grad. Inst. of Biomed. Electronics & Bioinformatics, Natl. Taiwan Univ., <sup>2</sup>Grad. Inst. of Oncology, Natl. Taiwan Univ., <sup>3</sup>Dept. of Med. Res., Natl. Taiwan Univ. Hosp., <sup>4</sup>Grad. Inst. of Med. Genomics & Proteomics, Natl. Taiwan Univ., <sup>5</sup>Center for Computational & Systems Biol., Natl. Taiwan Univ., <sup>6</sup>YongLin Inst. of Health, Natl. Taiwan Univ., <sup>7</sup>Dept. of Med. Oncology, Natl. Taiwan Univ. Cancer Center, <sup>8</sup>Inst. of Biomed. Informatics, Natl. Yang Ming Chao Tung Univ., <sup>9</sup>Dept. of Life Science, Natl. Taiwan Univ., <sup>10</sup>Inst. of Mol. & Cell. Biol. Natl. Taiwan Univ.)

P-2223 **Withdrawn**

P-2224 **Elucidation of the immunosuppressive mechanism in liver cancer**

Yuna Tamura, Kazuhisa Murai, Masao Honda (Kanazawa University Graduate School of Medical Sciences)

肝がんにおける免疫抑制メカニズムの解明

田村 優奈、村居 和寿、本多 政夫 (金沢大学大学院医薬保健学総合研究所)

P-2225 **Siglec-7 is an inhibitory receptor for VSIG4 that regulates an immune checkpoint in NK cells**

Miko Komiya, Mai Mizusawa, Yumi Tsuboi, Yutaka Kasai, Takeshi Ito, Yoshinori Murakami (Div. Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

Siglec-7はVSIG4に対する抑制性受容体であり、NK細胞の免疫チェックポイントを制御する

小宮 みこ、水澤 舞、坪井 裕見、笠井 優、伊東 剛、村上 善則 (東大・医科研・人癌)

P-2226 **Anti-tumor effects of CTLA-4 blockade are disturbed by activated CTLA-4-independent immunosuppression of Treg cells**

Tomofumi Watanabe<sup>1</sup>, Takamasa Ishino<sup>2,3</sup>, Youki Ueda<sup>2</sup>, Joji Nagasaki<sup>2,4</sup>, Yuki Maruyama<sup>1</sup>, Tatsushi Kawada<sup>1</sup>, Takuya Sadahira<sup>1</sup>, Takehiro Iwata<sup>1</sup>, Satoshi Katayama<sup>1</sup>, Shingo Nishimura<sup>1</sup>, Kohei Edamura<sup>1</sup>, Tomoko Kobayashi<sup>1</sup>, Yasuyuki Kobayashi<sup>1</sup>, Hiromichi Dansako<sup>2</sup>, Motoo Araki<sup>1</sup>, Yosuke Togashi<sup>2</sup> (<sup>1</sup>Okayama Univ. Hosp. Dept. of Urology, <sup>2</sup>Okayama Univ. Dept. of Tumor microenvironment, <sup>3</sup>Chiba Univ. Dept. of Gastroenterology, <sup>4</sup>Osaka Metropolitan Univ. Dept. of Hematology)

CTLA-4の単純な阻害はTreg細胞のCTLA-4以外の免疫抑制機構の活性化を引き起こす

渡部 智文<sup>1</sup>、石野 貴雅<sup>2,3</sup>、上田 優輝<sup>2</sup>、長崎 謙慈<sup>2,4</sup>、丸山 雄樹<sup>1</sup>、河田 達志<sup>1</sup>、定平 卓也<sup>1</sup>、岩田 健宏<sup>1</sup>、片山 聡<sup>1</sup>、西村 慎吾<sup>1</sup>、枝村 康平<sup>1</sup>、小林 知子<sup>1</sup>、小林 泰之<sup>1</sup>、團迫 浩方<sup>2</sup>、荒木 元朗<sup>1</sup>、富樫 庸介<sup>2</sup> (<sup>1</sup>岡山大学病院 泌尿器科、<sup>2</sup>岡山大学学術研究院 腫瘍微小環境学分野、<sup>3</sup>千葉大学 消化器内科、<sup>4</sup>大阪公立大学 血液内科)

P-2227 **Investigating Circadian Rhythmic PD-L1 Expression in Glioblastoma**

Natthaphong Jakkrawat<sup>1</sup>, Nut Phuekphud<sup>1,2</sup>, Patompon Wongtrakongate<sup>2</sup>, Pagkapol Pongsawakul<sup>1</sup>, Thaned Kangsamaksin<sup>2</sup> (<sup>1</sup>Department of Biology, Faculty of Science, Mahidol University, <sup>2</sup>Department of Biochemistry, Faculty of Science, Mahidol University)

P-2228 **Plasma soluble PD-1/PD-L1 for prediction of prognosis in NSCLC patients treated with immune checkpoint inhibitors**

Hidetomo Himuro<sup>1</sup>, Yoshiro Nakahara<sup>3,4</sup>, Yuka Igarashi<sup>1,2</sup>, Taku Kouro<sup>1,2</sup>, Shuji Murakami<sup>3</sup>, Feifei Wei<sup>1,2</sup>, Shun Horaguchi<sup>1,2,6</sup>, Kayoko Tsuji<sup>1,2</sup>, Yasunobu Mano<sup>1,2</sup>, Haruhiro Saito<sup>3</sup>, Koichi Azuma<sup>5</sup>, Tetsuro Sasada<sup>1,2</sup> (<sup>1</sup>Research Institute, Kanagawa Cancer Center, <sup>2</sup>Cancer Vaccine and Immunotherapy Center, Kanagawa Cancer Center, <sup>3</sup>Department of Respiratory Medicine, Kanagawa Cancer Center, <sup>4</sup>Department of Respiratory Medicine, Kitasato University School of Medicine, <sup>5</sup>Division of Respiriology, Kurume University School of Medicine, <sup>6</sup>Department of Pediatric Surgery, Nihon University School of Medicine)

血漿中の可溶性PD-1およびPD-L1による非小細胞肺癌患者に対する免疫チェックポイント阻害剤の効果予測

氷室 秀知<sup>1</sup>、中原 善朗<sup>3,4</sup>、五十嵐 友香<sup>1,2</sup>、紅露 拓<sup>1,2</sup>、村上 修司<sup>3</sup>、魏 菲非<sup>1,2,6</sup>、洞口 俊<sup>1,2,6</sup>、辻 嘉代子<sup>1,2</sup>、眞野 恭伸<sup>1,2</sup>、齋藤 春洋<sup>3</sup>、東 公一<sup>5</sup>、笹田 哲朗<sup>1,2</sup> (<sup>1</sup>神奈川県立がんセンター臨床研究所がん免疫、<sup>2</sup>神奈川県立がんセンター免疫療法科、<sup>3</sup>神奈川県立がんセンター呼吸器内科、<sup>4</sup>北里大学医学部呼吸器内科、<sup>5</sup>久留米大学医学部呼吸



器内科、<sup>6</sup>日本大学医学部 小児外科)**P-2229 B cell differentiation by combined immune checkpoint blockade is associated with tumor suppression and adverse events**

Koki Uehara<sup>1</sup>, Kenro Tanoue<sup>2</sup>, Kyoko Yamaguchi<sup>2</sup>, Hirofumi Ohmura<sup>2</sup>, Mamoru Ito<sup>2</sup>, Kenji Tsuchihashi<sup>2</sup>, Shingo Tamura<sup>3</sup>, Taichi Isobe<sup>4</sup>, Hidetaka Yamamoto<sup>5</sup>, Yoshinao Oda<sup>5</sup>, Koichi Akashi<sup>1</sup>, Eishi Baba<sup>4</sup>  
 (<sup>1</sup>Department of Medicine and Biosystemic Science, Kyushu University, <sup>2</sup>Department of Hematology, Oncology and Cardiovascular Medicine, Kyushu University Hospital, <sup>3</sup>Department of Medical Oncology, National Hospital Organization Kyushu Medical Center, <sup>4</sup>Department of Oncology and Social Medicine, Kyushu University, <sup>5</sup>Department of Anatomic Pathology, Kyushu University)

免疫チェックポイント阻害薬併用療法によるB細胞の分化と抗腫瘍効果ならびに有害事象との関連性について

上原 康輝<sup>1</sup>、田ノ上 純郎<sup>2</sup>、山口 享子<sup>2</sup>、大村 洋文<sup>2</sup>、伊東 守<sup>2</sup>、土橋 賢司<sup>2</sup>、田村 真吾<sup>3</sup>、磯部 大地<sup>4</sup>、山元 英崇<sup>5</sup>、小田 義直<sup>5</sup>、赤司 浩一<sup>1</sup>、馬場 英司<sup>4</sup> (九州大学大学院医学研究院病態修復内科、<sup>2</sup>九州大学病院 血液腫瘍心血管内科、<sup>3</sup>九州医療センター 腫瘍内科、<sup>4</sup>九州大学大学院医学研究院連携社会医学分野、<sup>5</sup>九州大学大学院医学系学府形態機能病理学)

**P-2230 Cancer derived blood exosomes are potential predictive biomarkers for NSCLC patients treated with anti-PD-1 antibody**

Shigeki Ohta<sup>1</sup>, Tomonar Kinoshita<sup>2</sup>, Seiki Wakui<sup>3</sup>, Chihaya Maeda<sup>2</sup>, Yuichiro Hayashi<sup>4,5</sup>, Aya Misawa<sup>1</sup>, Ryosuke Satomi<sup>6</sup>, Shinnosuke Ikemura<sup>7</sup>, Kenzo Soejima<sup>7</sup>, Tomonori Yaguchi<sup>8</sup>, Hiroshi Kagamu<sup>9</sup>, Yutaka Kawakami<sup>1</sup> (<sup>1</sup>IUHW Sch. of Med., Immunology, <sup>2</sup>Keio Univ. Sch. Med., Div. General Thoracic Surgery, <sup>3</sup>JSR Corporation, JSR-Keio University Medical and Chemical Innovation Ctr., <sup>4</sup>IUHW Sch. of Med., Dept. Pathology, <sup>5</sup>Keio Univ. Sch. Med., Dept. Pathology, <sup>6</sup>National Hospital Organization, Tokyo Medicine Ctr., Dept. Pulmonary Med., <sup>7</sup>Keio Univ. Sch. Med., Dept. Pulmonary Med., <sup>8</sup>Kyoto Univ. Sch. Med., Cancer Immunotherapy and Immunobiology Ctr., <sup>9</sup>Saitama Medical Univ., Int. Med. Ctr., Dept. Respiratory Med.)

非小細胞性肺がん抗PD-1抗体治療患者における効果予測バイオマーカーとしての癌由来血中エクソソーム

大多 茂樹<sup>1</sup>、木下 智成<sup>2</sup>、和久井 世紀<sup>3</sup>、前田 智早<sup>2</sup>、林 雄一郎<sup>4,5</sup>、三沢 彩<sup>1</sup>、里見 良輔<sup>6</sup>、池村 辰之介<sup>7</sup>、副島 研造<sup>7</sup>、谷口 智憲<sup>8</sup>、各務 博<sup>9</sup>、河上 裕<sup>1</sup> (国際医療福祉大・医学部・免疫学、<sup>2</sup>慶應大・医・呼吸器外科、<sup>3</sup>JSR株式会社・JKiC、<sup>4</sup>国際医療福祉大・医・病理診断科、<sup>5</sup>慶應大・医・病理学、<sup>6</sup>東京医療センター、<sup>7</sup>慶應大・医・呼吸器内科、<sup>8</sup>京大・医・がん免疫総合研究センター、<sup>9</sup>埼玉医科大・国際医療センター・呼吸器内科)

**P-2233 Ectopic ATP synthase stimulates the secretion of extracellular vesicles in cancer cells**

Yichun Kao<sup>1</sup>, Yiwen Chang<sup>1</sup>, Charles P. Lai<sup>2</sup>, Naiwen Chang<sup>3</sup>, Chenhao Huang<sup>4</sup>, Chiensheng Chen<sup>5</sup>, Hsuancheng Huang<sup>6</sup>, Hsuehfen Juan<sup>1,3,4,7</sup>  
 (<sup>1</sup>Department of Life Science, National Taiwan University, <sup>2</sup>Institute of Atomic and Molecular Sciences, Academia Sinica, <sup>3</sup>Institute of Molecular and Cellular Biology, National Taiwan University, <sup>4</sup>Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University, <sup>5</sup>Department of Food Safety / Hygiene and Risk Management, NCKU, <sup>6</sup>Institute of Biomedical Informatics, National Yang Ming Chiao Tung University, <sup>7</sup>Center for Computational and Systems Biology, National Taiwan University.)

**P-2234 Analysis of RCAS1 biological function in murine fibroblast**

Takuya Nishinakagawa<sup>1</sup>, Mai Hazekawa<sup>2</sup> (<sup>1</sup>Dept. Immuno. Mol. Pharm., Sci., Fukuoka Univ., <sup>2</sup>Dept. Drug Deliv., Pharm., Sci., Fukuoka Univ.)

腫瘍関連抗原 RCAS1 の生物学的機能解析

西中川 拓也<sup>1</sup>、樋川 舞<sup>2</sup> (福岡大・薬・免疫・分子治療学、<sup>2</sup>福岡大・薬・薬物送達学)

**P-2235 CD47 promotes peripheral T cell survival by preventing dendritic cell-mediated T cell necroptosis**

Satomi Komori<sup>1</sup>, Tania Afroj<sup>1</sup>, Tomoko Takai<sup>1</sup>, Okechi S. Oduori<sup>1</sup>, Takenori Kotani<sup>2</sup>, Yoji Murata<sup>2</sup>, Takashi Matozaki<sup>1</sup>, Yasuyuki Saito<sup>2</sup>  
 (<sup>1</sup>Div. Biosignal Reg., Kobe Univ. Grad. Sch. Med., <sup>2</sup>Div. Mol. & Cell. Signal., Kobe Univ. Grad. Sch. Med.)

樹状細胞は膜型分子 CD47 を介して末梢組織 T 細胞の生存を制御する

小森 里美<sup>1</sup>、Tania Afroj<sup>1</sup>、高井 智子<sup>1</sup>、Okechi S. Oduori<sup>1</sup>、小谷 武徳<sup>2</sup>、村田 陽二<sup>2</sup>、的崎 尚<sup>1</sup>、齋藤 泰之<sup>2</sup> (神戸大・院医・生体シグナル制御学、<sup>2</sup>神戸大・院医・シグナル統合学)

**P-2236 Characteristics of tolerogenic dendritic cells in multiple myeloma microenvironment**

Mariko Ishibashi<sup>1</sup>, Hideto Tamura<sup>2</sup> (<sup>1</sup>Dept. of Microbiology and Immunology, Nippon Medical School, <sup>2</sup>Div. of Hematology, Dokkyo Medical University Saitama Medical Center)

多発性骨髄腫の腫瘍微小環境下における抑制型樹状細胞の特性

石橋 真理子<sup>1</sup>、田村 秀人<sup>2</sup> (日本医科大学 微生物学・免疫学、<sup>2</sup>獨協医科大学埼玉医療センター 血液内科)

**P-2237 Combined phospholipids adjuvant augments anti-tumor immune responses through activated tumor-associated dendritic cells**

Hu Xin<sup>1</sup>, Hiroshi Hirano<sup>1</sup>, Kenichiro Hasumi<sup>2</sup>, Masayuki Fujino<sup>1,2</sup>, Xiaokang Li<sup>1</sup> (<sup>1</sup>Division of Transplantation Immunology, NCCHD, <sup>2</sup>National Institute of Infectious Diseases, <sup>3</sup>Hasumi International Research Foundation)

複合リン脂質アジュバントの活性化腫瘍関連樹状細胞を介して抗腫瘍免疫応答を増強する効果

胡 キン<sup>1</sup>、平野 啓<sup>1</sup>、連見 賢一郎<sup>3</sup>、藤野 真之<sup>1,2</sup>、李 小康<sup>1</sup> (国立成育医療研究センター 移植免疫研究室、<sup>2</sup>国立感染症研究所、<sup>3</sup>連見国際研究財団)

**P-2238 The relevance between the variation of glycolysis and the polarization in Kupffer cells of non-alcoholic steatohepatitis**

Yosuke Inomata<sup>1</sup>, Kohei Taniguchi<sup>2</sup>, Shigenori Suzuki<sup>1</sup>, Jun Arima<sup>1</sup>, Yuko Ito<sup>1</sup>, Sangwoong Lee<sup>1</sup> (<sup>1</sup>Osaka Med. and Pharm. Univ. Dep. of Gen. Surgery, <sup>2</sup>Osaka Med. and Pharm. Univ. Div. of TR)

NASH における Kupffer 細胞内糖代謝経路変化と分極化の関連性  
 猪俣 陽介<sup>1</sup>、谷口 高平<sup>2</sup>、鈴木 重徳<sup>1</sup>、有馬 純<sup>1</sup>、伊藤 裕子<sup>1</sup>、李 相雄<sup>1</sup> (大阪医薬大・医・消化器外科、<sup>2</sup>大阪医薬大 TR 部門)

**P-2239 Immunological features in NRF2-activated cancers**

Kento Iida<sup>1</sup>, Madoka Kawaguchi<sup>1</sup>, Keito Okazaki<sup>1</sup>, Haruna Takeda<sup>1</sup>, Shigeyuki Shichino<sup>2</sup>, Kazuki Hayasaka<sup>1,3</sup>, Chikara Sakai<sup>1,3</sup>, Yoshinori Okada<sup>3</sup>, Takashi Suzuki<sup>4</sup>, Shohei Murakami<sup>1</sup>, Hozumi Motohashi<sup>1</sup>  
 (<sup>1</sup>IDAC Tohoku Univ. Dep. of Gene Exp. Reg., <sup>2</sup>Div. of Mol. Reg. of Inf. and Immune Dis., <sup>3</sup>IDAC Tohoku Univ. Dep. of Th. Surg., <sup>4</sup>Tohoku Univ. Dep. of Anat. Path.)

NRF2 活性化癌における抗腫瘍免疫応答の特徴

飯田 謙人<sup>1</sup>、河口 まどか<sup>1</sup>、岡崎 慶斗<sup>1</sup>、武田 遥奈<sup>1</sup>、七野 成之<sup>2</sup>、早坂 一希<sup>1,3</sup>、酒井 勁<sup>1,3</sup>、岡田 克典<sup>3</sup>、鈴木 貴<sup>4</sup>、村上 昌平<sup>1</sup>、本橋 ほづみ<sup>1</sup> (東北大・加齢研・遺伝子発現制御、<sup>2</sup>東京理科大・炎症・免疫難病制御、<sup>3</sup>東北大・加齢研・呼吸器外科、<sup>4</sup>東北大・医・病理診断学)

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**Tumor antigens and antigen-presenting cells for immune regulation**

抗腫瘍免疫を制御する腫瘍抗原・抗原提示細胞

Chairperson: Hitomi Nishinakamura (National Cancer Center Japan)

座長: 西中村 瞳 (国立がん研究センター研究所)

**P-2231 Tumor-associated antigen-specific immune responses in healthy young individuals**

Kyohei Takata<sup>1</sup>, Mayu Ohue<sup>1</sup>, Soyoko Morimoto<sup>2</sup>, Jun Nakata<sup>1</sup>, Sumiyuki Nishida<sup>3</sup>, Fumihiko Fujiki<sup>4</sup>, Yoshihiro Oka<sup>2</sup>, Haruo Sugiyama<sup>2</sup>, Yusuke Oji<sup>1</sup> (<sup>1</sup>Osaka Univ. Grad.Sch.Med. Clin. Lab.Biomed. Sci., <sup>2</sup>Osaka Univ. Grad.Sch.Med. Cancer Stem Biol., <sup>3</sup>Osaka Univ. Grad.Sch.Med. Res.Med.Clin.Immunol., <sup>4</sup>Osaka Univ. Grad.Sch.Med. Cancer Immunother., <sup>5</sup>Osaka Univ. Grad.Sch.Med. Cancer Immunol.)

若年健康者は腫瘍関連抗原特異的免疫応答を持つ

高田 恭平<sup>1</sup>、大植 麻由<sup>1</sup>、森本 創世子<sup>2</sup>、中田 潤<sup>1</sup>、西田 純幸<sup>3</sup>、藤木 文博<sup>4</sup>、岡 芳弘<sup>2</sup>、杉山 治夫<sup>5</sup>、尾路 祐介<sup>1</sup> (大阪大・院医・生体病態情報、<sup>2</sup>大阪大・院医・癌幹、<sup>3</sup>大阪大・院医・呼吸器内科、<sup>4</sup>大阪大・院医・がんワク、<sup>5</sup>大阪大・院医・癌免疫)

**P-2232 Size of CD8<sup>+</sup> infiltrating T cells is a prognostic marker for esophageal squamous cell carcinoma.**

Kengo Shigehara, Toshihiko Torigoe, Yoshihiko Hirohashi (SMU Path Ist.)

食道扁平上皮癌に浸潤する CD8<sup>+</sup>T 細胞の大きさは予後に影響する  
 重原 研吾、鳥越 俊彦、廣橋 良彦 (札医 第一病理)

P12-7

## Identification of epitopes and antibodies for tumor associated antigens

腫瘍関連抗原エピトープ同定・抗体の開発

Chairperson: Takayuki Kanaseki (Dept. of Pathology, Sapporo Medical University)

座長: 金関 貴幸 (札幌医科大学 病理学第一講座)

## P-2240 Development of anti-EphB4 monoclonal antibodies for breast cancer

Ren Nanamiya, Hiroyuki Suzuki, Mika K. Kaneko, Yukinari Kato (Dept. Antibody Drug Development, Tohoku University Grad. Sch. of Med.)

乳がんを標的としたEphB4に対する高感度モノクローナル抗体の開発  
七宮 蓮、鈴木 裕之、金子 美華、加藤 幸成 (東北大院・医・抗体創薬)

## P-2241 Development of a Novel Anti-CD44v10 Monoclonal Antibody for Oral Squamous Cell Carcinomas

Kenichiro Ishikawa, Hiroyuki Suzuki, Tomohiro Tanaka, Mika Kaneko, Yukinari Kato (Dept. Antibody Drug Development, Tohoku Univ. Grad. Sch. Med.)

口腔がんを標的とした抗CD44v10モノクローナル抗体の開発  
石川 健一朗、鈴木 裕之、田中 智大、金子 美華、加藤 幸成 (東北大学・院医・抗体創薬)

## P-2242 Identification of 10 common cancer antigens covering various solid tumors and overcoming cancer heterogeneity

Kazumasa Takenouchi<sup>1</sup>, Tetsuya Nakatsura<sup>1</sup>, Toshihiro Suzuki<sup>1</sup>, Manami Shimomura<sup>1</sup>, Nobuo Tsukamoto<sup>1</sup>, Kazunobu Ohnuki<sup>1</sup>, Masatake Taniguchi<sup>1</sup>, Takashi Okayama<sup>2</sup>, Jyun Kataoka<sup>3</sup>, Yusuke Ito<sup>4</sup> (<sup>1</sup>Med., <sup>2</sup>Surg., <sup>3</sup>Surg., <sup>4</sup>Surg.)免疫組織化学的解析による、様々な固形がんをカバーし、がんの不均一性をも克服することを目指した10種類の共通がん抗原の同定  
竹之内 一政<sup>1</sup>、中面 哲也<sup>1</sup>、鈴木 利宙<sup>1</sup>、下村 真菜美<sup>1</sup>、塚本 信夫<sup>1</sup>、大貫 和信<sup>1</sup>、谷口 理文<sup>1</sup>、岡山 卓史<sup>2</sup>、片岡 淳<sup>3</sup>、伊藤 裕介<sup>4</sup> (1国立がん研究センター 免疫療法開発分野、2国立がん研究センター 東病院 胃外科、3国立がん研究センター 東病院 大腸外科、4国立がん研究センター 東病院 頭頸部外科)

## P-2243 Completely HLA-class-I mono-allelic B-LCLs for MHC-stabilization assay of epitopes derived from cancer driver mutations

Akira Iizuka<sup>1</sup>, Yasufumi Kikuchi<sup>1</sup>, Keiichi Ohshima<sup>2</sup>, Takeshi Nagashima<sup>3,4</sup>, Kenichi Urakami<sup>3</sup>, Ken Yamaguchi<sup>3</sup>, Yasuto Akiyama<sup>1</sup> (<sup>1</sup>Immunother. Div., Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>Medical Genetics Div., Shizuoka Cancer Ctr. Res. Inst., <sup>3</sup>Drug Discovery and Development Div., Shizuoka Cancer Ctr. Res. Inst., <sup>4</sup>SRL inc., <sup>5</sup>Shizuoka Cancer Ctr.)完全単一HLA-クラスIアレル発現遺伝子改変B-LCLを用いた癌ドライバ変異由来エピトープのin vitro評価  
飯塚 明<sup>1</sup>、菊地 康文<sup>1</sup>、大島 啓二<sup>2</sup>、長嶋 剛史<sup>3,4</sup>、浦上 研一<sup>3</sup>、山口 建<sup>3</sup>、秋山 靖人<sup>1</sup> (1. 静岡がんセ・研・免疫治療、2静岡がんセ・研・遺伝子診療、3静岡がんセ・研・診断技術開発、4株式会社スエールエル、5静岡がんセ)

## P-2244 Direct identification of immunogenic neoantigens for personalized immunotherapy

Serina Tokita<sup>1,2</sup>, Takayuki Kanaseki<sup>1,2</sup>, Toshihiko Torigoe<sup>1,2</sup> (<sup>1</sup>Dept. Pathol., Sapporo Med. Univ., <sup>2</sup>Joint Research Center for Immunoproteogenomics, Sapporo Med. Univ.)免疫原性ネオアンチゲンの新しい検出技術と個別化免疫治療の可能性  
時田 芹奈<sup>1,2</sup>、金関 貴幸<sup>1,2</sup>、鳥越 俊彦<sup>1,2</sup> (1札幌医大・医・第一病理、2札幌医大・免疫プロテオゲノミクス共同研究拠点)

## P-2245 Identification of acral melanoma antigens using tumor-reactive T cell receptors as probes

Kenji Murata<sup>1,2</sup>, Tomoyuki Minowa<sup>2,3</sup>, Toshiya Handa<sup>2,3</sup>, Toshihiko Torigoe<sup>2</sup> (<sup>1</sup>Sapporo Med. Univ. Res. Inst. Frontier Med., <sup>2</sup>Sapporo Med. Univ. Dept. Path., <sup>3</sup>Sapporo Med. Univ. Dept. Dermatology)

腫瘍反応性TCRをプローブとした末端黒子型悪性黒色腫由来抗原の探索

村田 憲治<sup>1,2</sup>、箕輪 智幸<sup>2,3</sup>、半田 稔也<sup>2,3</sup>、鳥越 俊彦<sup>2</sup> (1札幌医大 医学部 フロンティア病態情報学、2札幌医科大学 医学部 病理学第一講座、3札幌医科大学 医学部 皮膚科学講座)

## P-2246 Single-cell analysis of tumor-infiltrating B lymphocytes reveals distinct autoreactivity profile.

Mikiya Takata, Hiroto Katoh, Daisuke Komura, Shumpei Ishikawa (Dept. Preventive Medicine, Univ. Tokyo)

シングルセル解析による腫瘍浸潤Bリンパ球の自己反応性プロファイ

## ルの同定

高田 幹也、加藤 洋人、河村 大輔、石川 俊平 (東大・院医・衛生学)

## 14 Cancer basic, diagnosis and treatment

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## Lung cancer (1)

肺がん (1)

Chairperson: Hidenori Kage (The University of Tokyo)

座長: 鹿毛 秀宣 (東京大学)

## P-2247 Monocytes promote post-operative recurrence in lung cancer mouse model.

Yo Kawaguchi, Keiko Ueda, Yoko Kataoka, Yasuhiko Ohshio, Jun Hanaoka (Div of General Thoracic Surg, Shiga Univ of Med Sci)

単球を介した肺がん術後再発メカニズムの解明とその治療応用  
川口 庸、上田 桂子、片岡 瑛子、大塩 恭彦、花岡 淳 (滋賀医科大学 呼吸器外科)

## P-2248 The significance of SPP1 in lung adenocarcinoma and its impact as a marker for protumor tumor-associated macrophages

Yoshihiro Komohara<sup>1</sup>, Eri Matsubara<sup>1,2</sup>, Yusuke Shinchi<sup>2</sup>, Hiromu Yano<sup>1</sup>, Yukio Fujiwara<sup>1</sup>, Makoto Suzuki<sup>2</sup> (<sup>1</sup>Kumamoto University, <sup>2</sup>Kumamoto University)肺腺癌におけるSPP1発現の意義と腫瘍随伴マクロファージの役割  
孤原 義弘<sup>1</sup>、松原 恵理<sup>1,2</sup>、新地 祐介<sup>2</sup>、矢野 浩夢<sup>1</sup>、藤原 章雄<sup>1</sup>、鈴木 実<sup>2</sup> (1熊本大学細胞病理学、2熊本大学 呼吸器乳癌外科学)

## P-2249 The clinical significance of PD-1-positive peripheral blood mononuclear cells in patients with non-small-cell lung cancer

Koji Teramoto<sup>1,2</sup>, Tomoyuki Igarashi<sup>3</sup>, Hidetoshi Sumimoto<sup>1,2</sup>, Yataro Daigo<sup>1,2,4</sup> (<sup>1</sup>1 Dep. Med. Oncol. Cancer Ctr., Shiga Univ. Med. Sci., <sup>2</sup>2 Ctr. Advanced Med. against Cancer, Shiga Univ. Med. Sci., <sup>3</sup>3 Dep. Surg., Shiga Univ. Med. Sci., <sup>4</sup>4 Inst. Med. Sci., Univ. of Tokyo)非小細胞肺癌における末梢血中のPD-1陽性細胞の臨床的意義  
寺本 晃治<sup>1,2</sup>、五十嵐 知之<sup>3</sup>、住本 秀敏<sup>1,2</sup>、醍醐 弥太郎<sup>1,2,4</sup> (1滋賀医大・医・臨床腫瘍学、2滋賀医大・先端がん研究セ、3滋賀医大・医・呼吸器外科、4東大・医科研)

## P-2250 Combination therapy with anti-programmed cell death 1 antibody plus angiokinase inhibitor against malignant mesothelioma

Akio Tada<sup>1</sup>, Toshiyuki Minami<sup>1,2</sup>, Taiichi Otsuki<sup>1,2</sup>, Kozo Kuribayashi<sup>1,2</sup>, Takashi Kijima<sup>1,2</sup> (<sup>1</sup>Department of Respiratory Medicine and Hematology, Hyogo Medical University, <sup>2</sup>Department of Thoracic Oncology, Hyogo Medical University)腫瘍関連マクロファージの制御を介した悪性胸膜中皮腫に対する抗PD-1抗体と血管新生阻害薬併用療法の抗腫瘍効果  
多田 陽郎<sup>1</sup>、南 俊行<sup>1,2</sup>、大嶋 泰一郎<sup>1,2</sup>、栗林 康造<sup>1,2</sup>、木島 貴志<sup>1,2</sup> (1兵庫医科大学 医学部 呼吸器・血液内科学、2兵庫医科大学 医学部 胸部腫瘍学特定講座)

## P-2251 CAF promotes pleural dissemination through spheroid formation and upregulation of CCN1 expression

Ken Suzawa<sup>1</sup>, Naoki Matsuda<sup>1</sup>, Shuta Tomida<sup>2</sup>, Thu Yinmin<sup>1</sup>, Kazuhiko Shien<sup>1</sup>, Hiromasa Yamamoto<sup>1</sup>, Shinichi Toyooka<sup>1</sup> (<sup>1</sup>Dept of Thoracic Surg, Okayama Univ., <sup>2</sup>Center for Comprehensive Genomic Medicine, Okayama Univ. Hosp.)がん関連線維芽細胞は肺がんスフェロイド形成およびCCN1発現を誘導し胸膜播種進展を促進する  
諏澤 憲<sup>1</sup>、松田 直樹<sup>1</sup>、富田 秀太<sup>2</sup>、インミン トウ<sup>1</sup>、枝園 和彦<sup>1</sup>、山本 寛齊<sup>1</sup>、豊岡 伸一<sup>1</sup> (1岡山大学大学院 呼吸器・乳腺内分泌外科、2岡山大学病院 ゲノム医療総合推進センター)

## P-2252 Development and external validation of a lung cancer risk score for ever and never smokers in China

Zhimin Ma<sup>1,2</sup>, Xia Zhu<sup>1</sup>, Chen Ji<sup>1</sup>, Ci Song<sup>1</sup>, Juncheng Dai<sup>1</sup>, Guangfu Jin<sup>1</sup>, Hongxia Ma<sup>1</sup>, Meng Zhu<sup>1</sup> (<sup>1</sup>Department of Epidemiology, Nanjing Medical University, China, <sup>2</sup>Department of Epidemiology, Southeast University, China)

## P-2253 Peptides Derived from CXCL12 Based on In Silico Analysis Alleviates CXCL12 Induced A549 Progression

Zhiyun Lim<sup>1</sup>, Shinnjong Jiang<sup>1,2</sup> (<sup>1</sup>Biomed. Sci., Sch. of Med., Tzu Chi Univ., <sup>2</sup>Dept. of Biochem., Sch. of Med., Tzu Chi Univ.)



**P-2254 Targeting KIFC1 to combat small cell lung cancer potentially through inhibition of supernumerary centrosome clustering**  
Natsuki Nakagawa<sup>1</sup>, Masakatsu Tokunaga<sup>1</sup>, Takahiro Iida<sup>2</sup>, Mirei Ka<sup>3</sup>, Takahiro Ando<sup>4</sup>, Keita Maemura<sup>1</sup>, Kosuke Watanabe<sup>3</sup>, Hidenori Kage<sup>3</sup>, Masanori Kawakami<sup>1</sup> (<sup>1</sup>Department of Respiratory Medicine, The University of Tokyo, <sup>2</sup>Department of Thoracic Surgery, The University of Tokyo, <sup>3</sup>Next-Generation Precision Medicine Development Laboratory, The University of Tokyo, <sup>4</sup>Department of Clinical Laboratory, The University of Tokyo Hospital)

KIFC1を標的とした過剰中心体収束阻害による小細胞肺癌に対する治療戦略の可能性

中川 夏樹<sup>1</sup>、徳永 将勝<sup>1</sup>、飯田 崇博<sup>2</sup>、何 美鈴<sup>3</sup>、安藤 孝浩<sup>1</sup>、前村 啓太<sup>1</sup>、渡邊 広祐<sup>3</sup>、鹿毛 秀宣<sup>3</sup>、川上 正敏<sup>1</sup> (東京大学 呼吸器内科、<sup>2</sup>東京大学 呼吸器外科、<sup>3</sup>東京大学次世代プレジジョンメディスン講座、<sup>4</sup>東京大学医学部付属病院 検査部)

**P-2255 Cholecystokinin B receptor as a potential therapeutic target in neuroendocrine-type small cell lung cancer**

Masakatsu Tokunaga<sup>1</sup>, Natsuki Nakagawa<sup>1</sup>, Takahiro Iida<sup>2</sup>, Mirei Ka<sup>3</sup>, Takahiro Ando<sup>4</sup>, Keita Maemura<sup>1</sup>, Kosuke Watanabe<sup>3</sup>, Hidenori Kage<sup>3</sup>, Masanori Kawakami<sup>1</sup> (<sup>1</sup>Department of Respiratory Medicine, The University of Tokyo, <sup>2</sup>Department of Thoracic Surgery, The University of Tokyo, <sup>3</sup>Department of Clinical Laboratory, The University of Tokyo, <sup>4</sup>Next-Generation Precision Medicine Development Laboratory, The University of Tokyo, <sup>5</sup>Division of Integrative Genomics, The University of Tokyo)

神経内分泌タイプの小細胞肺癌におけるコレシストキニンB受容体の治療標的としての可能性

徳永 将勝<sup>1</sup>、中川 夏樹<sup>1</sup>、飯田 崇博<sup>2</sup>、何 美鈴<sup>5</sup>、安藤 孝浩<sup>1</sup>、前村 啓太<sup>1</sup>、渡邊 広祐<sup>3</sup>、鹿毛 秀宣<sup>4</sup>、川上 正敏<sup>1</sup> (東京大学医学部呼吸器内科、<sup>2</sup>東京大学医学部呼吸器外科、<sup>3</sup>東京大学医学部検査部、<sup>4</sup>東京大学次世代プレジジョンメディスン開発、<sup>5</sup>東京大学統合ゲノム学)

**P-2258 The tumor microenvironment and its role in NRF2-Activated Non-Small Cell Lung Cancers NRF2**

Kawaguchi Madoka<sup>1</sup>, Keito Okazaki<sup>1</sup>, Haruna Takeda<sup>1</sup>, Shigeyuki Shichino<sup>2</sup>, Kazuki Hayasaka<sup>1,3</sup>, Chikara Sakai<sup>1,3</sup>, Yoshinori Okada<sup>3</sup>, Takashi Suzuki<sup>4</sup>, Hiroki Sekine<sup>5</sup>, Hozumi Motohashi<sup>1</sup> (<sup>1</sup>Dept. Gene Expression Regulation ADAC, Tohoku Univ., <sup>2</sup>Div.Molecular Regulation of Inflammatory and Immune Diseases, <sup>3</sup>Dept. Thoracic Surgery ADAC, Tohoku Univ., <sup>4</sup>Dept. Anatomic Pathology Tohoku Univ. Graduate School of Medicine)

NRF2 活性化がんにおける腫瘍微小環境の役割の理解

河口 まどか<sup>1</sup>、岡崎 慶斗<sup>1</sup>、武田 遥奈<sup>1</sup>、七野 成之<sup>2</sup>、早坂 一希<sup>1,3</sup>、酒井 勁<sup>1,3</sup>、岡田 克典<sup>3</sup>、鈴木 貴<sup>4</sup>、関根 弘樹<sup>1</sup>、本橋 ほづみ<sup>1</sup> (東北大学加齢医学研究所遺伝子発現制御分野、<sup>2</sup>東京理科大学研究推進機構生命医学科学研究所、<sup>3</sup>東北大学加齢医学研究所呼吸器外科学分野、<sup>4</sup>東北大学医学系研究科病理診断学)

**P-2259 YBX1 is a tuner to suppress PD-L1 expression in lung cancer**

Yasuyoshi Mizutani<sup>1</sup>, Toshiyuki Takeuchi<sup>1</sup>, Atsuko Niimi<sup>1</sup>, Siripan Limsirichaikul<sup>1</sup>, Patinya Sawangsrri<sup>1</sup>, Dat Q. Tran<sup>1</sup>, Kenichi Inada<sup>2</sup>, Tetsuya Tsukamoto<sup>2</sup>, Masashi Kondo<sup>3</sup>, Motoshi Suzuki<sup>1</sup> (<sup>1</sup>Dept. Mol. Oncol., Fujita Health Univ. Sch. Med., <sup>2</sup>Dept. Diagnostic Pathol., Fujita Health Univ. Sch. Med., <sup>3</sup>Dept. Resp. Med., Fujita Health Univ. Sch. Med.)

YBX1は肺がんにおいてPD-L1発現を抑制するチューナーである

水谷 泰嘉<sup>1</sup>、竹内 俊幸<sup>1</sup>、新美 敦子<sup>1</sup>、Siripan Limsirichaikul<sup>1</sup>、Patinya Sawangsrri<sup>1</sup>、Dat Q. Tran<sup>1</sup>、稲田 健一<sup>2</sup>、塚本 徹哉<sup>2</sup>、近藤 征史<sup>3</sup>、鈴木 元<sup>1</sup> (藤田医科大学・医・分子腫瘍、<sup>2</sup>藤田医科大学・医・病理診断、<sup>3</sup>藤田医科大学・医・呼吸器内科)

**P-2260 Dipeptidyl peptidase 4-positive cancer-associated fibroblasts enhance lung adenocarcinoma growth**

Chihiro Inoue<sup>1</sup>, Yasuhiro Miki<sup>1</sup>, Ryoko Koyama<sup>2</sup>, Yoshinori Okada<sup>3</sup>, Hironobu Sasano<sup>4</sup>, Takashi Suzuki<sup>1</sup> (<sup>1</sup>Dept. Anatomic Pathol., Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Dept. Pathol., NHO, Sendai Med. Ctr., <sup>3</sup>Dept. Thorac. Surg., IDAC, Tohoku Univ.)

肺腺癌におけるDPP4陽性癌関連線維芽細胞による癌細胞増殖促進作用に関する検討

井上 千裕<sup>1</sup>、三木 康宏<sup>1</sup>、小山 涼子<sup>2</sup>、岡田 克典<sup>3</sup>、笹野 公伸<sup>1</sup>、鈴木 貴<sup>1</sup> (東北大学 院医 病理診断学、<sup>2</sup>国立病院機構仙台医療センター 病理診断科、<sup>3</sup>東北大学 加齢研 呼吸器外科)

**P-2261 Low-density lipoprotein receptor related protein 11 (LRP11) contributes to poor prognosis in lung adenocarcinoma**

Takumi Kiwaki, Makiko Kawaguchi, Hiroaki Kataoka, Tsuyoshi Fukushima (Dept. of Path., Med., Univ. of Miyazaki)

LRP11は肺腺癌の予後不良と関連する

木脇 拓道、川口 真紀子、片岡 寛章、福島 剛 (宮崎大・医・病理)

**P-2262 Infiltration of CD8 positive cells into ED-SCLC determines the prognosis of patients received chemo-immunotherapy.**

Naoki Shijubou<sup>1</sup>, Terufumi Kubo<sup>2</sup>, Kenta Sasaki<sup>2</sup>, Toshiyuki Sumi<sup>3</sup>, Yoshihiko Hirohashi<sup>2</sup>, Toshihiko Toriogoe<sup>2</sup> (<sup>1</sup>Department of Respiratory Medicine and Allergy Sapporo Medical University, <sup>2</sup>Department of Pathology, Sapporo Medical University, <sup>3</sup>Department of Respiratory Medicine, Hakodate Goryoukaku Hospital)

CD8陽性細胞の浸潤の有無は、化学療法と免疫チェックポイント阻害薬を施行した進展型小細胞肺癌の予後を規定する。

四十坊 直貴<sup>1</sup>、久保 輝文<sup>2</sup>、佐々木 健太<sup>2</sup>、角 俊行<sup>3</sup>、廣橋 良彦<sup>2</sup>、鳥越 俊彦<sup>2</sup> (札幌医科大学 呼吸器アレルギー内科、<sup>2</sup>札幌医科大学 病理学第一講座、<sup>3</sup>函館五稜郭病院 呼吸器内科)

**P-2263 Further study on a novel signature based on tumor-specific amino acid metabolism genes associated with OS prognosis**

Huihui Xiang<sup>1</sup>, Rika Kasajima<sup>1</sup>, Tetsuro Sasada<sup>2</sup>, Yohei Miyagi<sup>1</sup> (<sup>1</sup>Molecular Pathology & Genetics Division, Kanagawa Ca Ctr Res Inst., <sup>2</sup>Division of Cancer Immunotherapy, Kanagawa Ca Ctr Res Inst.)

患者のOS予後に関連する腫瘍特異的アミノ酸代謝遺伝子に基づく新規シグネチャーの再検討

項 慧慧<sup>1</sup>、笠島 理加<sup>1</sup>、笹田 哲朗<sup>2</sup>、宮城 洋平<sup>1</sup> (神奈川県がんせ・臨床研・がん分子病態学、<sup>2</sup>神奈川県がんせ・臨床研・がん免疫)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P14-9 Lung cancer (2)**  
肺がん (2)

Chairperson: Hiroaki Ozasa (Respiratory Med., Kyoto Univ.)

座長: 小笹 裕晃 (京都大学 呼吸器内科)

**P-2256 The effect of third SARS-CoV-2 vaccination on lung cancer patients receiving anticancer drug therapy.**

Yasutaka Kato<sup>1</sup>, Susumu Suzuki<sup>2</sup>, Ikuko Okubo<sup>3</sup>, Shunpei Yamanaka<sup>3</sup>, Daisuke Inukai<sup>3</sup>, Hiromu Nakamura<sup>3</sup>, Tetsuya Ogawa<sup>3</sup>, Satsuki Murakami<sup>4</sup>, Ichiro Hanamura<sup>5</sup>, Akiyoshi Takami<sup>6</sup>, Kenta Iwasaki<sup>6</sup>, Yuko Miwa<sup>6</sup>, Takaki Kobayashi<sup>7</sup>, Sachiko A. Takamura<sup>8</sup>, Hiroshige Mikamo<sup>9</sup>, Akihito Kubo<sup>4</sup> (<sup>1</sup>Dept. Resp. Med. and Allergol., Aichi Med. Univ., <sup>2</sup>Res. creation support ctr., Aichi Med. Univ., <sup>3</sup>Dept. Otorhinolaryngology, Aichi Med. Univ., <sup>4</sup>Dept. Clin. Oncol., Aichi Med. Univ., <sup>5</sup>Dept. Hematol., Aichi Med. Univ., <sup>6</sup>Dept. Renal Dis. Transplant Immunol., Aichi Med. Univ., <sup>7</sup>Dept. Renal transplant. Surg., Aichi Med. Univ., <sup>8</sup>Dept. Microbiol. Immunol., Aichi Med. Univ., <sup>9</sup>Dept. Clin. Infect. Dis., Aichi Med. Univ.)

抗癌剤療法を受けている肺癌患者に対する3回目のSARS-CoV-2ワクチン接種の効果。

加藤 康孝<sup>1</sup>、鈴木 進<sup>2</sup>、大久保 井久子<sup>2</sup>、山中 俊平<sup>3</sup>、犬飼 大輔<sup>3</sup>、中村 宏舞<sup>3</sup>、小川 徹也<sup>3</sup>、村上 五月<sup>4</sup>、花村 一朗<sup>5</sup>、高見 昭良<sup>5</sup>、岩崎 研太<sup>6</sup>、三輪 祐子<sup>6</sup>、小林 孝彰<sup>7</sup>、高村 祥子<sup>8</sup>、三嶋 廣繁<sup>9</sup>、久保 昭仁<sup>4</sup> (愛知医科大学 呼吸器・アレルギー内科、<sup>2</sup>愛知医科大学 研究創出支援センター、<sup>3</sup>愛知医科大学 耳鼻咽喉科・頭頸部外科学、<sup>4</sup>愛知医科大学 臨床腫瘍センター、<sup>5</sup>愛知医科大学 血液内科、<sup>6</sup>愛知医科大学 腎疾患・移植免疫学、<sup>7</sup>愛知医科大学 腎移植外科、<sup>8</sup>愛知医科大学 感染・免疫学、<sup>9</sup>愛知医科大学 感染症科)

**P-2257 Investigation of the effect of CA9 expression on FDG accumulation and prognosis in non-small cell lung cancer.**

Satoshi Suzuki, Ryuichi Ito, Masakazu Yashiro (Osaka Metropolitan University of Med. Mol. Oncology & Therap.)

非小細胞肺癌においてCA9発現がFDG集積および予後に及ぼす影響の検討

鈴木 智詞、伊藤 龍一、八代 正和 (大阪公立大学 医学部 癌分子病態制御学)

**P14-10 Ovarian Cancer (1)**  
 卵巣がん (1)

Chairperson: Satoru Kyo (Dept. of Obstet. Gynecol. Shimane Univ. Faculty of Medicine)

座長: 京 哲 (島根大学医学部産科婦人科)

**P-2264 Wogonin inhibits ovarian cancer cell via regulating AMPK-TET-5hmC axis**

 Wen L. Huang<sup>1</sup>, Ru I. Lin<sup>1</sup>, Yu M. Chuang<sup>4,5,6</sup>, Shu Y. Yang<sup>1,3</sup>, Jing S. Jhang<sup>2</sup>, Chia C. Yeh<sup>2</sup>, Michael W. Chan<sup>4,5,6</sup> (<sup>1</sup>Dept. of Chinese Med., Buddhist Dalin Tzu Chi Hosp., Taiwan, <sup>2</sup>Buddhist Sanyi Tzu Chi Chinese Med. Hosp., Taiwan, <sup>3</sup>Sch. of Post-Baccalaureate Chinese Med., Tzu Chi Univ., Hualien, Taiwan, <sup>4</sup>Dept. of Biomed. Sci., Natl. Chung Cheng Univ., Taiwan, <sup>5</sup>Epigenomics & Human Disease Res. Ctr., Natl. Chung Cheng Univ., Taiwan, <sup>6</sup>CIRAS, Natl. Chung Cheng Univ., Taiwan)

**P-2265 Prognostic impact of HIF2A that could be a therapeutic target in ovarian clear cell carcinoma**

Mengxin Jiang, Ken Yamaguchi, Sachiko Kitamura, Koji Yamanoi, Mana Taki, Ryusuke Murakami, Junzo Hamanishi, Masaki Mandai (Kyoto Univ. OB&amp;Gynecol. Grad)

HIF2A は卵巣明細胞癌の治療標的になる可能性がある

姜 夢心、山口 建、北村 幸子、山ノ井 康二、滝 真奈、村上 隆介、濱西 潤三、万代 昌紀 (京都大学医学研究科産科婦人科)

**P-2266 Establishment and characterization of reversibly immortalized ovarian epithelial cell lines using Sendai virus**

 Masayo Okawa<sup>1</sup>, Hiroaki Komatsu<sup>1,2</sup>, Hikino Kohei<sup>1</sup>, Yuki Iida<sup>1</sup> (<sup>1</sup>Tottori University, <sup>2</sup>Tottori University Chromosome Engineering Research Center)

センダイウイルスを用いた卵巣上皮細胞の不死化細胞株の樹立と性状解析

 大川 雅世<sup>1</sup>、小松 宏彰<sup>1,2</sup>、曳野 耕平<sup>1</sup>、飯田 祐基<sup>1</sup> (鳥取大学、<sup>2</sup>鳥取大学染色体工学研究センター)

**P-2267 Effects of treatment with antibody drugs and tumor immunity in an inbred mouse model of ovarian clear cell carcinoma**

Chiho Miyagawa, Kosuke Murakami, Yoko Kashima, Noriomi Matsumura (Kindai University Faculty of Medicine)

卵巣明細胞癌マウスモデルの腫瘍免疫の解析および抗体薬の治療効果に関する検討

宮川 知保、村上 幸祐、加嶋 洋子、松村 謙臣 (近畿大学 医学部産科婦人科学教室)

**P-2268 Malignant phenotypes of ovarian clear cell carcinoma cells induced under oxygen and long chain fatty acid starvation**

 Shiro Koizume<sup>1</sup>, Yoshiyasu Nakamura<sup>1</sup>, Mitsuyo Yoshihara<sup>1</sup>, Etsuko Miyagi<sup>2</sup>, Yohei Miyagi<sup>1</sup> (<sup>1</sup>Kanagawa Cancer Ctr. Res. Inst., <sup>2</sup>Yokohama City Univ. Sch. Med. OBGY)

酸素、長鎖脂肪酸供給欠乏により誘起される卵巣明細胞がん細胞の悪性形質

 小井 詔 史朗<sup>1</sup>、中村 圭 靖<sup>1</sup>、吉原 光 代<sup>1</sup>、宮城 悦 子<sup>2</sup>、宮城 洋 平<sup>1</sup> (神奈川がんセンター、<sup>2</sup>横浜市大・医・産科婦人科)

**P-2269 Identification of biomarkers associated to poor prognosis in high-grade serous carcinoma using novel mouse models**

 Keiyo Imaeda<sup>1</sup>, Kenta Masuda<sup>1</sup>, Shimpei Nagai<sup>1</sup>, Tomohiro Tamura<sup>2</sup>, Eiji Sugihara<sup>3</sup>, Juntaro Yamasaki<sup>3</sup>, Yuji Otsuki<sup>3</sup>, Hiroyuki Nobusue<sup>3</sup>, Tatsuyuki Chiyoda<sup>1</sup>, Yusuke Kobayashi<sup>1</sup>, Kouji Banno<sup>1</sup>, Daisuke Aoki<sup>4</sup>, Wataru Yamagami<sup>1</sup>, Hideyuki Saya<sup>3</sup>, Osamu Nagano<sup>3</sup> (<sup>1</sup>Dept. Obst. Gynecol., Keio Univ. Sch. Med., <sup>2</sup>Keio Univ. Sch. Med., <sup>3</sup>Div. Gene Reg., Cancer Center, Fujita Health Uni. Sch. Med., <sup>4</sup>International Uni. Health & Welfare)

新規マウスモデルを用いた高異型度漿液性癌の予後不良に関連するバイオマーカーの同定

 今枝 慶 蓉<sup>1</sup>、増田 健 太<sup>1</sup>、永井 晋 平<sup>1</sup>、田村 友 宏<sup>2</sup>、杉原 英 志<sup>3</sup>、山崎 淳 太郎<sup>3</sup>、大槻 雄 士<sup>3</sup>、信末 博 行<sup>3</sup>、千代田 達 幸<sup>1</sup>、小林 佑 介<sup>1</sup>、阪 埜 浩 司<sup>1</sup>、青木 大 輔<sup>4</sup>、山上 巨<sup>1</sup>、佐谷 秀 行<sup>3</sup>、永野 修<sup>3</sup> (慶應義塾大学医学部産科婦人科学教室、<sup>2</sup>慶應義塾大学医学部、<sup>3</sup>藤田医科大学がん医療研究センター、<sup>4</sup>国際医療福祉大学)

**P14-11 Ovarian Cancer (2)**  
 卵巣がん (2)

Chairperson: KENBUN SONE (Department of Obstetrics and Gynecology)

座長: 曾根 献文 (東京大学医学部産科婦人科)

**P-2270 A potential tumor-promoting role of glycosyltransferase POMGnT1 in high-grade serous ovarian cancer**

 Toshihiko Takeiwa<sup>1</sup>, Rieko Imae<sup>2</sup>, Hiroshi Many<sup>3</sup>, Kazuhiro Ikeda<sup>3</sup>, Kuniko Horie<sup>3</sup>, Satoshi Inoue<sup>1,3</sup> (<sup>1</sup>Dept. Systems Aging Sci. & Med., Tokyo Metropol. Inst. Geriatr. Gerontol., <sup>2</sup>Dept. Mol. Glycobiol., Tokyo Metropol. Inst. Geriatr. Gerontol., <sup>3</sup>Div. Systems Med. & Gene Therapy, RCGM, Saitama Med. Univ.)

高異型度漿液性卵巣がんにおける糖転移酵素 POMGnT1 の腫瘍促進因子としての役割

 竹岩 俊彦<sup>1</sup>、今江 理恵子<sup>2</sup>、萬谷 博<sup>2</sup>、池田 和博<sup>3</sup>、堀江 公仁子<sup>3</sup>、井上 聡<sup>1,3</sup> (東京都健康長寿医療セ・システム加齢、<sup>2</sup>東京都健康長寿医療セ・分子機構、<sup>3</sup>埼玉医大・ゲノム・ゲノム応用)

**P-2271 Analysis of interactions between carcinoma cells and tumor-associated macrophages in the progression of ovarian cancer**

 Keitaro Yamanaka<sup>1,2</sup>, Shuichi Tsukamoto<sup>1</sup>, Takashi Nakanishi<sup>1,3</sup>, Nobuaki Ishihara<sup>4,5</sup>, Yuki Azumi<sup>1,3</sup>, Shoji Miyako<sup>1,3</sup>, Satoshi Urakami<sup>1,5</sup>, Takayuki Kodama<sup>1</sup>, Mari Nishio<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Yuichiro Komai<sup>1</sup>, Yoshito Terai<sup>2</sup>, Hiroshi Yokozaki<sup>1</sup> (<sup>1</sup>Div. Pathol., Dept. Pathol., Kobe Univ., Grad. Sch. Med., <sup>2</sup>Div. Obstet. Gynecol., Kobe Univ., Grad. Sch. Med., <sup>3</sup>Div. Gastro-intestinal Surg., Dept. Surg., Kobe Univ., Grad. Sch. Med., <sup>4</sup>Div. Hepato-Biliary-Pancreatic Surg., Dept. Surg., Kobe Univ., Grad. Sch. Med., <sup>5</sup>Div. Gastroenterology., Dept. Intern. Med., Kobe Univ., Grad. Sch. Med.)

腫瘍関連マクロファージとの相互作用による卵巣癌の進展機構の解析

 山中 啓太郎<sup>1,2</sup>、塚本 修一<sup>1</sup>、中西 崇<sup>1,3</sup>、石原 伸朗<sup>1,4</sup>、安積 佑樹<sup>1,3</sup>、都 鍾智<sup>1,3</sup>、浦上 聡<sup>1,5</sup>、児玉 貴之<sup>1</sup>、西尾 真理<sup>1</sup>、重岡 学<sup>1</sup>、狛 雄一朗<sup>1</sup>、寺井 義人<sup>2</sup>、横崎 宏<sup>1</sup> (神戸大・院医・病理学、<sup>2</sup>神戸大・院医・産科婦人科学、<sup>3</sup>神戸大・院医・食道胃腸外科学、<sup>4</sup>神戸大・院医・肝胆膵外科学、<sup>5</sup>神戸大・院医・消化器内科学)

**P-2272 Functional analysis of downregulation of electron transport pathway component UQCRH in ovarian cancer**

 Mizuki Nishikawa<sup>1,2</sup>, Masako Nakanishi<sup>2</sup>, Ibu Matsuzaki<sup>1</sup>, Shinichi Murata<sup>1</sup>, Shogo Ehata<sup>1</sup> (<sup>1</sup>Dept. Human Pathol., Wakayama Med. Univ., <sup>2</sup>Dept. Pathol., Sch. Med., Wakayama Med. Univ.)

卵巣がんにおける電子伝達系構成因子 UQCRH の発現低下の機能解析

 西川 瑞希<sup>1,2</sup>、中西 雅子<sup>2</sup>、松崎 生 笛<sup>1</sup>、村田 晋 一<sup>1</sup>、江幡 正 悟<sup>2</sup> (和歌山県立医科大学 人体病理学教室、<sup>2</sup>和歌山県立医科大学 医学部病理学講座)

**P-2273 Cancer-associated mesothelial cells that phagocytize apoptotic ovarian cancer cells may suppress anti-cancer immunity**

 Yoshihiro Koya<sup>1,2</sup>, Kazuhisa Kitami<sup>3</sup>, Masato Yoshihara<sup>1</sup>, Mai Sugiyama<sup>1,2</sup>, Kaname Uno<sup>4</sup>, Kazumasa Mogi<sup>4,5</sup>, Shohei Iyoshi<sup>4</sup>, Hiroki Fujimoto<sup>3</sup>, Emiri Miyamoto<sup>3</sup>, Akihiro Nawa<sup>1,2</sup>, Hiroaki Kajiyama<sup>1</sup> (Bell Research Center, Nagoya Univ. Sch. Med., <sup>2</sup>Bell Research Center Reproduction and Cancer, Kishokai Med. Co., <sup>3</sup>Dept. Ob. & Gynecol., Kitasato Univ., Grad. Sch. Med., <sup>4</sup>Dept. Ob. & Gynecol., Nagoya Univ., Grad. Sch. Med., <sup>5</sup>Dept. Ob. & Gynecol., Ogaki Municipal Hosp.)

アポトーシスを起こした卵巣癌細胞を貪食した癌関連中皮細胞が宿主抗腫瘍免疫を抑制する可能性

 小屋 美 博<sup>1,2</sup>、北見 和 久<sup>3</sup>、吉原 雅 人<sup>4</sup>、杉山 麻 衣<sup>1,2</sup>、宇野 枢<sup>4</sup>、茂木 一 将<sup>4,5</sup>、伊 吉 祥 平<sup>4</sup>、藤本 裕 基<sup>4</sup>、宮本 給 美<sup>4</sup>、那波 明 宏<sup>1,2</sup>、梶山 広 明<sup>4</sup> (名古屋大・医・ペルリサーチセンター、<sup>2</sup>(医) 葵鐘会・研究開発課、<sup>3</sup>北里大・医・産科婦人科、<sup>4</sup>名古屋大・医・産科婦人科、<sup>5</sup>大垣市民病院・産科婦人科)

**P-2274 A study of combination therapy with histone methylase EZH2 inhibitor and PARP inhibitor in ovarian mucinous carcinoma**

 Ryuta Hachijo<sup>1</sup>, Kenbun Sone<sup>1</sup>, Aya Ishizaka<sup>1</sup>, Eri Suzuki<sup>1</sup>, Minami Hayashi<sup>1</sup>, Saki Tanimoto<sup>1</sup>, Saki Tsuchimochi<sup>1</sup>, Natsumi Tsuboyama<sup>1</sup>, Yusuke Toyohara<sup>1</sup>, Tomohiko Fukuda<sup>1</sup>, Ayumi Taguchi<sup>1</sup>, Katsutoshi Oda<sup>2</sup>, Yutaka Osuga<sup>1</sup> (<sup>1</sup>Dept. Obstetrics & Gynecol., The Univ. of Tokyo, <sup>2</sup>Dept. Integrated genomics, The Univ. of Tokyo)

卵巣粘液性癌におけるヒストンメチル化酵素 EZH2 阻害剤と PARP 阻害剤併用療法の検討

 八條 隆 決<sup>1</sup>、曾根 献 文<sup>1</sup>、石坂 彩<sup>1</sup>、鈴木 瑛 梨<sup>1</sup>、林 陽 美<sup>1</sup>、谷本 早 紀<sup>1</sup>、土持 早 希<sup>1</sup>、坪山 な つ み<sup>1</sup>、豊原 佑 典<sup>1</sup>、福田 友 彦<sup>1</sup>、田口 歩<sup>1</sup>、織田 克 利<sup>2</sup>、大須賀 稔<sup>1</sup> (東京大・院医・産科婦人科学、<sup>2</sup>東京大・院医・統合ゲノム学)



**P14-12 Endometrial cancer / cervical cancer**  
 子宮体がん・子宮頸がん

Chairperson: Noriomi Matsumura (Kindai University Department of Obstetrics and Gynecology)

座長: 松村 謙臣 (近畿大学産婦人科)

**P-2275 EXOSC5 Maintains Cancer Stem Cell Activity In Endometrial Cancer By Regulating The NTN4/integrinβ1 Signalling Axis**  
 Yuhao Huang<sup>1</sup>, Wenwei Chang<sup>3</sup>, Hsueh Lee<sup>1,2</sup> (1)Program in Mol. Med., NYCU & Academia Sinica, Taipei, Taiwan, (2)Inst. of Anatomy & Cell Biol., NYCU, Taipei, Taiwan, (3)Dept. of Biomed. Sci., CSMU, Taichung, Taiwan)

**P-2276 Predictors for progestin therapy of endometrial proliferative diseases.**

 Yuko Sugiyama<sup>1,2</sup>, Osamu Gotoh<sup>3</sup>, Tonooka Akiko<sup>4</sup>, Tetsuo Noda<sup>3</sup>, Seiichi Mori<sup>3</sup> (1)JFCR. Ariake Hosp. Dept. Cytopath., (2)JFCR. Ariake Hosp. Dept. Gynecol., (3)JFCR. CPM Ctr., (4)JFCR. Cancer Inst. Dept. Path.)

子宮内膜増殖性病変に対する妊孕性温存黄体ホルモン療法の治療効果予測に関する研究

 杉山 裕子<sup>1,2</sup>、後藤 理<sup>3</sup>、外岡 暁子<sup>4</sup>、野田 哲生<sup>3</sup>、森 誠一<sup>3</sup> (1)がん研有明病院 細胞診断部、(2)がん研有明病院 婦人科、(3)がん研 CPMセンター、(4)がん研がん研究所 病理部)

**P-2277 Withdrawn**

**P-2278 Tumor microenvironment-based stratification and biomarker exploration in serous uterine corpus endometrial carcinoma**

 Shunpei Satoh<sup>1</sup>, Miki Ohira<sup>1</sup>, Koji Horie<sup>2</sup>, Takehiko Kamijo<sup>1</sup> (1)Res. Inst. for Clin. Oncol., Saitama Cancer Ctr., (2)Dept. Gynecol., Saitama Cancer Ctr.)

漿液性子宮体がんにおける腫瘍微小環境に基づいた層別化と生物学的マーカーの探索

 佐藤 俊平<sup>1</sup>、大平 美紀<sup>1</sup>、堀江 弘二<sup>2</sup>、上條 岳彦<sup>1</sup> (1)埼玉がんせ・研、(2)埼玉がんせ・婦人科)

**P-2279 TWSG1, a BMP antagonist, could be a new biomarker in endometrial cancer.**

 Eri Suzuki<sup>1</sup>, Tomohiko Fukuda<sup>1</sup>, Yuri Jonouchi<sup>1</sup>, Sayuri Fukaya<sup>1</sup>, Daisuke Yoshimoto<sup>1</sup>, Aya Ishizaka<sup>1</sup>, Ryuta Hachijo<sup>1</sup>, Natsumi Tsuboyama<sup>1</sup>, Saki Tanimoto<sup>1</sup>, Ayumi Taguchi<sup>1</sup>, Kenbun Sone<sup>1</sup>, Katsutoshi Oda<sup>2</sup>, Yutaka Osuga<sup>1</sup> (1)Dept. Obstetrics & Gynecol., The Univ. of Tokyo, (2)Dept. Integrated genomics, The Univ. of Tokyo)

子宮体癌において BMP アンタゴニストの TWSG1 は新規バイオマーカーになり得る

 鈴木 瑛梨<sup>1</sup>、福田 友彦<sup>1</sup>、城之内 友梨<sup>1</sup>、深谷 小百合<sup>1</sup>、良元 大介<sup>1</sup>、石坂 彩<sup>1</sup>、八條 隆汰<sup>1</sup>、坪山 なつみ<sup>1</sup>、谷本 早紀<sup>1</sup>、田口 歩<sup>1</sup>、曾根 敬文<sup>1</sup>、織田 克利<sup>2</sup>、大須賀 穰<sup>1</sup> (1)東京大・院医・産婦人科学、(2)東京大・院医・統合ゲノム学)

**P-2280 Anti-tumor effects of Wnt/β-Catenin signaling in endometrial cancer with CTNBN1 and PIK3CA co-mutations**

 Takehiro Nakao<sup>1</sup>, Hitoshi Saito<sup>1</sup>, Ryo Kamata<sup>1</sup>, Gaku Yamamoto<sup>1</sup>, Toyohiro Yamauchi<sup>1</sup>, Tomoko Yamamori<sup>1</sup>, Misato Kamii<sup>1</sup>, Chiaki Mashima<sup>1</sup>, Toru Mukohara<sup>2</sup>, Akihiro Ohashi<sup>1</sup> (1)National Cancer Center Exploratory Oncology Research & Clinical Trial Center, (2)National Cancer Center Hospital East Department of Medical Oncology)

CTNBN1・PIK3CA 共存遺伝子変異を持つ子宮体癌における Wnt/β-Catenin シグナルの抗腫瘍効果

 仲尾 岳大<sup>1</sup>、齋藤 仁志<sup>1</sup>、鎌田 諒<sup>1</sup>、山本 岳<sup>1</sup>、山内 豊大<sup>1</sup>、山盛 智子<sup>1</sup>、上井 美里<sup>1</sup>、眞島 千晶<sup>1</sup>、向原 徹<sup>2</sup>、大橋 紹宏<sup>1</sup> (1)国立がん研究センター先端医療開発センター、(2)国立がん研究センター病院腫瘍内科)

**P-2281 Study on the role of LICAM in endometrial cancer**

 Hiroyuki Kurosu<sup>1,2</sup>, Hiroshi Asano<sup>1</sup>, Kazuya Hamada<sup>2</sup>, Shugo Tanaka<sup>2</sup>, Issei Kawakita<sup>2</sup>, Kentaro Kumagai<sup>2</sup>, Hidemichi Watari<sup>1</sup>, Koji Taniguchi<sup>2</sup> (1)Dept. of Obstet. & Gynecol. Hokkaido Univ. Grad. Sch. of Med., (2)Dept. of Path. Hokkaido Univ. Grad. Sch. of Med.)

子宮体癌における L1CAM の役割の解明

 黒須 博之<sup>1,2</sup>、朝野 拓史<sup>1</sup>、浜田 和也<sup>2</sup>、田中 秀五<sup>2</sup>、河北 一誠<sup>2</sup>、熊谷 健太郎<sup>2</sup>、渡利 英道<sup>1</sup>、谷口 浩二<sup>2</sup> (1)北海道大・院・医・産婦人科学教室、(2)北海道大・院・医・統合病理学教室)

**P-2282 Two cases of uterine small cell neuroendocrine carcinoma with endocervical adenocarcinoma component and SSTR2 expression**  
 Masamichi Bamba<sup>1</sup>, Suzuko Moritani<sup>2</sup>, Toshikazu Kato<sup>3</sup>, Tomo Namura<sup>1</sup>, Masanori Shiohara<sup>1</sup>, Kenji Isogawa<sup>2</sup>, Mao Uemura<sup>4</sup>, Shiro Wakinoue<sup>4</sup>, Hiroko Yomo<sup>4</sup>, Tetsuya Nakagawa<sup>4</sup>, Tetsuya Katsumori<sup>3</sup>, Ryoji Kushima<sup>2</sup> (1)Saiseikai Shiga Hosp., Dept. Diagn. Pathol., (2)Shiga Univ. Med. Sci. Hosp., Dept. Diagn. Pathol., (3)Nagahama Red Cross Hosp., Div. Pathol., (4)Saiseikai Shiga Hosp., Dept. Obstet. Gynecol., (5)Saiseikai Shiga Hosp., Dept. Radiol.)

 頸部腺癌成分と SSTR2 発現を伴う子宮小細胞神経内分泌癌の 2 症例  
 馬場 正道<sup>1</sup>、森谷 鈴子<sup>2</sup>、加藤 寿一<sup>3</sup>、苗村 智<sup>1</sup>、塩原 正規<sup>1</sup>、五十川 賢司<sup>2</sup>、上村 真央<sup>4</sup>、脇ノ上 史朗<sup>4</sup>、四方 寛子<sup>4</sup>、中川 哲也<sup>4</sup>、勝盛 哲也<sup>5</sup>、九嶋 亮治<sup>2</sup> (1)済生会滋賀県病院 病理診断科、(2)滋賀医大病院 病理診断科、(3)長浜赤十字病院 病理部、(4)済生会滋賀県病院 産婦人科、(5)済生会滋賀県病院 放射線科)

**P14-13 Kidney cancer**  
 腎がん

Chairperson: Yusuke Sato (Dept. Urol., Grad. Sch. Med., Univ. Tokyo)

座長: 佐藤 悠佑 (東京大学大学院医学系研究科泌尿器外科学講座)

**P-2283 Fucosylated pro-haptoglobin predicts clinical response to immune checkpoint inhibitor in metastatic renal cell carcinoma**

 Taigo Kato<sup>1</sup>, Koichi Morishita<sup>2</sup>, Eisuke Tomiyama<sup>1</sup>, Kazutoshi Fujita<sup>3</sup>, Yu Ishizuya<sup>1</sup>, Yoshiyuki Yamamoto<sup>1</sup>, Koji Hatano<sup>1</sup>, Atsunari Kawashima<sup>1</sup>, Eiji Miyoshi<sup>2</sup>, Norio Nonomura<sup>1</sup> (1)Department of Urology, Osaka University Graduate School of Medicine, (2)Department of Molecular Biochemistry and Clinical Investigation, Osaka University, (3)Department of Urology, Kindai University Graduate School of Medicine)

フコシル化プロハプトグロビンは腎癌免疫チェックポイント阻害薬奏効の予測マーカーとなる

 加藤 大悟<sup>1</sup>、森下 康一<sup>2</sup>、富山 栄輔<sup>1</sup>、藤田 和利<sup>3</sup>、石津谷 祐<sup>1</sup>、山本 致之<sup>1</sup>、波多野 浩士<sup>1</sup>、河嶋 厚成<sup>1</sup>、三善 英知<sup>2</sup>、野々村 祝夫<sup>1</sup> (1)大阪大学大学院医学系研究科泌尿器科、(2)大阪大学大学院医学系研究科分子生化学、(3)近畿大学医学部泌尿器科)

**P-2284 Critical involvement of PRELID2 in regulating mitochondrial homeostasis for renal carcinogenesis**

 Renpei Kato<sup>1</sup>, Shigekatsu Maekawa<sup>1</sup>, Yoichiro Kato<sup>1</sup>, Mitsugu Kanehira<sup>1</sup>, Ryo Takata<sup>1</sup>, Yosuke Matsushita<sup>2</sup>, Tetsuro Yoshimaru<sup>2</sup>, Tomoya Fukawa<sup>3</sup>, Toyomasa Katagiri<sup>2</sup>, Wataru Obara<sup>1</sup> (1)Dept. of Urology, Iwate Med. Sch. of Med., (2)Div. Genome Med., Inst. Genome Res., Tokushima Univ., (3)Dept. of Urology, Tokushima Univ. Grad. Sch.)

 腎癌の癌化における新規癌特異分子 PRELID2 の分子機能の解明  
 加藤 廉平<sup>1</sup>、前川 滋克<sup>1</sup>、加藤 陽一郎<sup>1</sup>、兼平 貢<sup>1</sup>、高田 亮<sup>1</sup>、松下 洋輔<sup>2</sup>、吉丸 哲郎<sup>2</sup>、布川 朋也<sup>2</sup>、片桐 豊雅<sup>2</sup>、小原 航<sup>1</sup> (1)岩手医科大学・医・泌尿器科、(2)徳島大学・先端酵素学研・ゲノム制御学分野、(3)徳島大学・医・泌尿器科学分野)

**P-2285 Novel blood biomarkers for renal cell carcinoma using bacterial-derived DNA in serum extracellular vesicles**

 Uemura Toshihiro<sup>1</sup>, Atsunari Kawashima<sup>1</sup>, Kentaro Jingushi<sup>2</sup>, Takuro Saito<sup>3</sup>, Sassi Nesrine<sup>1</sup>, Yutong Liu<sup>1</sup>, Akihiro Yoshimura<sup>4</sup>, Yohei Okuda<sup>1</sup>, Toshiki Oka<sup>1</sup>, Akinaru Yamamoto<sup>1</sup>, Yu Ishizuya<sup>1</sup>, Yoshiyuki Yamamoto<sup>1</sup>, Taigo Kato<sup>1</sup>, Koji Hatano<sup>1</sup>, Kazutake Tsujikawa<sup>2</sup>, Norio Nonomura<sup>1</sup> (1)Osaka Univ. Urol., (2)Osaka Univ. Mol. Cell. Physiol., (3)Osaka Univ. Gastrointestinal Surg.)

血清細胞外ベシクル中の細菌由来 DNA を利用した腎細胞癌の新規血液バイオマーカーの開発

 植村 俊彦<sup>1</sup>、河嶋 厚成<sup>1</sup>、神宮司 健太郎<sup>2</sup>、西塔 拓郎<sup>3</sup>、ネスリン サッシ<sup>1</sup>、リュウ ヨクトウ<sup>1</sup>、吉村 明洋<sup>1</sup>、奥田 洋平<sup>1</sup>、岡 利樹<sup>1</sup>、山本 顕生<sup>1</sup>、石津谷 祐<sup>1</sup>、山本 致之<sup>1</sup>、加藤 大悟<sup>1</sup>、波多野 浩士<sup>1</sup>、辻川 和文<sup>2</sup>、野々村 祝夫<sup>1</sup> (1)大阪大・院医・泌尿器科、(2)大阪大・院医・細胞生理学分野、(3)大阪大・院医・消化器外科)

**P-2286 Metabolites of VEGFR/TKI and ICI responders in primary ccRCC specimens**

 Sei Naito<sup>1</sup>, Hiromi Ito, Takafumi Narisawa, Shigemitsu Horie, Shinta Suenaga, Yuki Takai, Mayu Yagi, Norihiko Tsuchiya (Department of Urology, Yamagata University Faculty of Medicine)

淡明細胞型腎癌における VEGFR/TKI、ICI レスポンダーの原発巣腫瘍内代謝物

内藤 整、伊藤 裕美、成澤 貴史、堀江 繁光、末永 信太、高井 優季、八木 真由、土谷 順彦 (山形大学医学部泌尿器外科講座)

**P-2287 In vitro investigation of CD74 and CTNNA1 in clear cell renal cell carcinoma.**  
Takafumi Narisawa, Shinta Suenaga, Shigemitsu Horie, Yuki Takai, Masaki Ushijima, Mayu Yagi, Hiroimi Ito, Sei Naito, Norihiko Tsuchiya (Department of Urology, Faculty of medicine, Yamagata University.)  
淡明細胞型腎細胞癌における CD74 と CTNNA1 の意義についての検討  
成澤 貴史、末永 信太、堀江 繁光、高井 優季、牛島 正毅、八木 真由、伊藤 裕美、内藤 整、土谷 順彦 (山形大学医学部 腎泌尿器外科科学講座)

**P-2288 Risk of postoperative recurrence and prediction of drug response in localized clear cell renal cell carcinoma**  
Osamu Ichihyanagi<sup>1,2</sup>, Sei Naito<sup>3</sup>, Hiroimi Ito<sup>3</sup>, Takafumi Narisawa<sup>2</sup>, Mayu Yagi<sup>2</sup>, Yuki Takai<sup>2</sup>, Hidenori Kanno<sup>2</sup>, Norihiko Tsuchiya<sup>2</sup> (1)Dept. of Urol., 2)Dept. of Urol., Yamagata Univ. Facul. of Med.)  
限局性淡明型腎細胞癌における術後再発リスクと抗腫瘍剤効果予測の検討  
一柳 統<sup>1,2</sup>、内藤 整<sup>2</sup>、伊藤 裕美<sup>2</sup>、成澤 貴史<sup>2</sup>、八木 真由<sup>2</sup>、高井 優季<sup>2</sup>、菅野 秀典<sup>2</sup>、土谷 順彦<sup>2</sup> (1)Yamagata Pref. Kahoku Hosp., 2)山形大学医学部 腎泌尿器外科科学講座)

**P-2289 ELOVL2/ELOVL5 as promoters of renal cancer progression through cellular movement regulation**  
Shotaro Sakka, Shuya Kandori, Satoshi Nitta, Yoshiyuki Nagumo, Hiroyuki Nishiyama (The Department of Urology, University of Tsukuba Hospital)  
細胞運動制御による腎臓がん進行促進因子としての ELOVL2/ELOVL5  
目 翔太郎、神島 周也、新田 聡、南雲 義之、西山 博之 (筑波大学附属病院腎泌尿器外科)

Room P Sep. 22 (Fri.) 12:50-13:35 E/J  
**P14-14 Urothelial cancer**  
尿路上皮がん

Chairperson: Tohru Nakagawa (Dept. Urology, Teikyo Univ. Sch. Med.)  
座長: 中川 徹 (帝京大学・医・泌尿器科)

**P-2290 High platelet-to-lymphocyte ratio-induced pathogenesis is linked to efficacy of pembrolizumab in urothelial carcinomas**  
Kiyohiro Ando<sup>1</sup>, Ryo Kurashina<sup>2</sup>, Masaharu Inoue<sup>2</sup>, Riko Maruyama<sup>2</sup>, Kouki Mitani<sup>2</sup>, Hisanori Takenobu<sup>1</sup>, Masayuki Haruta<sup>1</sup>, Ritsuko Onuki<sup>1</sup>, Toshihiko Iizuka<sup>3</sup>, Noriko Moto<sup>3</sup>, Yoh Matsuoka<sup>2</sup>, Hiroaki Kanda<sup>3</sup>, Takehiko Kamijo<sup>4</sup>, Yukio Kageyama<sup>2</sup> (1)Res. Inst. Clin. Oncol., Saitama Cacer Ctr., 2)Dept. Urology, Saitama Cacer Ctr., 3)Dept. Pathology, Saitama Cancer Ctr.)  
尿路上皮がん患者におけるペムブロリズマブ抵抗性と血小板/リンパ球比高値を示す腫瘍環境との関連  
安藤 清宏<sup>1</sup>、倉科 凌<sup>2</sup>、井上 雅晴<sup>2</sup>、丸山 理子<sup>2</sup>、三谷 康輝<sup>2</sup>、竹信 尚典<sup>1</sup>、春田 雅之<sup>1</sup>、小貫 律子<sup>1</sup>、飯塚 利彦<sup>3</sup>、元井 紀子<sup>3</sup>、松岡 陽<sup>2</sup>、神田 浩明<sup>3</sup>、上條 岳彦<sup>3</sup>、影山 幸雄<sup>2</sup> (1)埼玉県立がんセンター 臨床腫瘍研究所、2)埼玉県立がんセンター 泌尿器科、3)埼玉県立がんセンター 病理診断科)

**P-2291 Development of a novel gene expression scoring system for intravesical recurrence in NMIBC after transurethral resection**  
Uemura Motohide<sup>1,2</sup>, Emina Kayama<sup>1</sup>, Kei Yaginuma<sup>1</sup>, Satoru Meguro<sup>1</sup>, Akifumi Onagi<sup>1</sup>, Seiji Hoshi<sup>1</sup>, Tomoyuki Koguchi<sup>1</sup>, Soichiro Ogawa<sup>1</sup>, Yoshiyuki Kojima<sup>1</sup> (1)Department of Urology, Fukushima Medical University, 2)Department of Urology, Iwase General Hospital)  
筋層非浸潤性膀胱癌における術後再発を予測する新規の遺伝子スコアリングシステムの開発  
植村 元秀<sup>1,2</sup>、かやま えみな<sup>1</sup>、やぎぬま けい<sup>1</sup>、めぐろ さとる<sup>1</sup>、おなぎ あきふみ<sup>1</sup>、ほし せいじ<sup>1</sup>、こぐち ともゆき<sup>1</sup>、おがわ そういちろう<sup>1</sup>、こじま よしゆき<sup>1</sup> (1)福島県立医科大学 泌尿器科、2)公立岩瀬病院 泌尿器科)

**P-2292 IDH2 inhibitor restores cytotoxic effect of chemo agents in chemo-resistant UC by suppressing metabolic rewiring**  
Keisuke Shigetani<sup>1</sup>, Takeo Kosaka<sup>1</sup>, Masanori Hasegawa<sup>2</sup>, Yota Yasumizu<sup>1</sup>, Nobuyuki Tanaka<sup>1</sup>, Toshikazu Takeda<sup>1</sup>, Kazuhiro Matsumoto<sup>1</sup>, Ryuichi Mizuno<sup>1</sup>, Hiroshi Asanuma<sup>1</sup>, Eiji Kikuchi<sup>3</sup>, Akira Miyajima<sup>2</sup>, Mototsugu Oya<sup>1</sup> (1)Department of Urology, Keio University School of Medicine, Tokyo, Japan, 2)Department of Urology, Tokai University School of Medicine, Tokyo, Japan, 3)Department of Urology, St. Marianna University School of Medicine)  
化学療法体利尿路上皮癌における IDH2 蛋白阻害薬の抗腫瘍効果の検討  
茂田 啓介<sup>1</sup>、小坂 威雄<sup>1</sup>、長谷川 政徳<sup>2</sup>、安水 洋太<sup>1</sup>、田中 伸之<sup>1</sup>、武

田 利和<sup>1</sup>、松本 一宏<sup>1</sup>、水野 隆一<sup>1</sup>、浅沼 宏<sup>1</sup>、菊地 栄次<sup>3</sup>、宮嶋 哲<sup>2</sup>、大家 基嗣<sup>1</sup> (1)慶應義塾大学医学部泌尿器科学教室、2)東海大学医学部 腎泌尿器科学教室、3)聖マリアンナ医科大学 腎泌尿器外科)

**P-2293 Cancer cell-selective VEGFA gene disruption by hCas9 under the control of midkine promoter**  
Wataru Matsunaga<sup>1</sup>, Akinobu Gotoh<sup>2</sup> (1)Joint-use Research Facilities, Hyogo Medical University, 2)Department of Education for Medical Research Base, Hyogo Medical University)  
ミドカインプロモーター制御下の hCas9 によるがん細胞選択的な VEGFA 遺伝子破壊  
松永 渉<sup>1</sup>、後藤 章暢<sup>2</sup> (1)兵庫医科大学 共同利用研究施設、2)兵庫医科大学 医学部 研究基盤教育学)

**P-2294 Tumor-Associated Macrophages enhances migration and invasion of bladder cancer via secretion of CCL20**  
Ryunosuke Nakagawa, Kouji Izumi, Ren Toriumi, Shuhei Aoyama, Taiki Kamijima, Tomoyuki Makino, Renato Naito, Suguru Kadomoto, Hiroaki Iwamoto, Hiroshi Yaegashi, Atsushi Mizokami (Kanazawa University Department of Urology)  
腫瘍関連マクロファージは CCL20 の分泌により膀胱癌の遊走能及び浸潤能を亢進する  
中川 竜之介<sup>1</sup>、泉 浩二<sup>1</sup>、鳥海 蓮<sup>1</sup>、青山 周平<sup>1</sup>、神島 泰樹<sup>1</sup>、牧野 友幸<sup>1</sup>、内藤 伶奈人<sup>1</sup>、門本 卓<sup>1</sup>、岩本 大旭<sup>1</sup>、八重樫 洋<sup>1</sup>、溝上 敦 (金沢大学 泌尿器科)

**P-2295 Novel non-transgenic mouse model mimicking multiple aspects of human upper tract urothelial carcinoma**  
Akinaru Yamamoto<sup>1</sup>, Atsunari Kawashima<sup>1</sup>, Kentaro Jingushi<sup>2</sup>, Yuichi Motoyama<sup>3</sup>, Satoshi Nojima<sup>3</sup>, Sassi Nesrine<sup>4</sup>, Yuki Horibe<sup>1</sup>, Toshiaki Oka<sup>1</sup>, Toshihiro Uemura<sup>1</sup>, Gaku Yamamichi<sup>1</sup>, Yu Ishizuya<sup>1</sup>, Yoshiyuki Yamamoto<sup>1</sup>, Taigo Kato<sup>1</sup>, Koji Hatano<sup>1</sup>, Kazutake Tsujikawa<sup>1</sup>, Norio Nonomura<sup>1</sup> (1)Osaka Univ. Urol., 2)Osaka Univ. Mol Cell Physiol, 3)Osaka Univ. Path.)  
ヒト上部尿路上皮癌を多側面から模倣する新規の非遺伝子改変モデルマウス  
山本 顕生<sup>1</sup>、河嶋 厚成<sup>1</sup>、神宮司 健太郎<sup>2</sup>、本山 雄一<sup>3</sup>、野島 聡<sup>3</sup>、ネスリン サッシ<sup>4</sup>、堀部 祐輝<sup>1</sup>、岡 利樹<sup>1</sup>、植村 俊彦<sup>1</sup>、山道 岳<sup>1</sup>、石津 谷 祐<sup>1</sup>、山本 致之<sup>1</sup>、加藤 大悟<sup>1</sup>、波多野 浩士<sup>1</sup>、辻川 和文<sup>2</sup>、野々村 祝夫<sup>1</sup> (1)大阪大・院医 泌尿器科、2)大阪大・院医 細胞生理学分野、3)大阪大・院医 病態病理)

**P-2296 Naringin enhances anti-cancer immune responses via CD169-positive macrophages in draining lymph node.**  
Toshiki Anami<sup>1,2</sup>, Yukio Fujiwara<sup>2</sup>, Cheng Pan<sup>2</sup>, Takanobu Motoshima<sup>1</sup>, Junji Yatsuda<sup>1</sup>, Yoshihiro Komohara<sup>2</sup>, Tomomi Kamba<sup>1</sup> (1)Dept. of Urology, Grad. Sch. of Med. Sci., Kumamoto Univ., 2)Dept. of CellPath, Grad. Sch. of Med. Sci., Kumamoto Univ.)  
ナリンジンの CD169 陽性リンパ節マクロファージを介した抗腫瘍免疫賦活化の検討  
穴見 俊樹<sup>1,2</sup>、藤原 章雄<sup>2</sup>、潘 程<sup>2</sup>、元島 崇信<sup>1</sup>、矢津田 旬二<sup>1</sup>、菰原 義弘<sup>2</sup>、神波 大己<sup>1</sup> (1)熊本大学生命科学研究部泌尿器科学講座、2)熊本大学生命科学研究部細胞病理学講座)

**P-2297 A microRNA-138/EIF4EBP1/FOXC1 axis regulates the proliferation and invasion of urothelial carcinoma**  
Tomomi Fujii<sup>1</sup>, Tomoko Uchiyama<sup>1</sup>, Shou Sasaki<sup>1</sup>, Maiko Takeda<sup>1</sup>, Makito Miyake<sup>2</sup> (1)Dept. Diag. Path., Nara Med. Univ., Sch. Med., 2)Dept. Urol., Nara Med. Univ., Sch. Med.)  
尿路上皮癌の浸潤増殖能に関わる miRNA-138/EIF4EBP1/FOXC1 の機能解析  
藤井 智美<sup>1</sup>、内山 智子<sup>1</sup>、佐々木 翔<sup>1</sup>、武田 麻衣子<sup>1</sup>、三宅 牧人<sup>2</sup> (1)奈良医大・医・病理診断、2)奈良医大・医・泌尿器科)

**P-2298 Recurrence monitoring for non-muscle invasive bladder cancer using urinary cell-free DNA**  
Shohei Nagakawa, Masaki Shiota, Shigehihiro Tsukahara, Takashi Matsumoto, Keisuke Monji, Junichi Inokuchi, Masatoshi Eto (Department of Urology, Graduate School of Medical Sciences, Kyushu University)  
尿中 cell-free DNA を用いた非筋層浸潤性膀胱癌に対する再発モニタリング  
永川 祥平<sup>1</sup>、塩田 真己<sup>1</sup>、塚原 茂大<sup>1</sup>、松元 崇<sup>1</sup>、門司 恵介<sup>1</sup>、猪口 淳一<sup>1</sup>、江藤 正俊 (九州大学大学院医学研究院 泌尿器科学分野)



P14-15 Prostate cancer  
前立腺がん

Chairperson: Hiroshi Fukuhara (Dep. Urol., Kyorin Univ., Sch. Med.)  
座長: 福原 浩 (杏林大・医・泌)

- P-2299 Endothelial-mesenchymal transition in cancer microenvironment promotes neuroendocrine differentiation of prostate cancer**  
Takumi Kageyama<sup>1</sup>, Manabu Kato<sup>2</sup>, Sho Sekito<sup>1,3</sup>, Yusuke Sugino<sup>1</sup>, Takeshi Sasaki<sup>1</sup>, Satoru Masui<sup>1</sup>, Kohei Nishikawa<sup>1</sup>, Yasuhiro Murakawa<sup>3</sup>, Takahiro Inoue<sup>1</sup> (<sup>1</sup>Nephro-Urologic Surgery and Andrology, Mie Univ., <sup>2</sup>Urology, Aichi Cancer Center Hosp., <sup>3</sup>ASHBi, Kyoto Univ.)  
前立腺微小環境における内皮間葉転換が前立腺がんの神経内分泌に及ぼす影響  
景山 拓海<sup>1</sup>, 加藤 学<sup>2</sup>, 関戸 翔<sup>1,3</sup>, 杉野 友亮<sup>1</sup>, 佐々木 豪<sup>1</sup>, 舛井 寛<sup>1</sup>, 西川 晃平<sup>1</sup>, 村川 泰裕<sup>3</sup>, 井上 貴博<sup>1</sup> (<sup>1</sup>三重大学 腎泌尿器外科, <sup>2</sup>愛知県がんセンター 泌尿器科, <sup>3</sup>京都大学 ヒト生物学高等研究拠点)

- P-2300 Association between COMT expression and therapeutic efficacy of Androgen receptor-axis targeted in Prostate cancer**  
Kenta Ishikawa<sup>1</sup>, Shigekatsu Maekawa<sup>1</sup>, Ryo Takara<sup>1</sup>, Ryo Sugimoto<sup>2</sup>, Masakazu Abe<sup>1</sup>, Daiki Ikarashi<sup>1</sup>, Tomohiko Matsuura<sup>1</sup>, Renpei Kato<sup>1</sup>, Yoichiro Kato<sup>3</sup>, Mitsugu Kanehira<sup>1</sup>, Jun Sugimura<sup>1</sup>, Takaya Abe<sup>1</sup>, Tamotsu Sugai<sup>2</sup>, Wataru Obara<sup>1</sup> (<sup>1</sup>Urology Dept., Iwate Med. Univ., <sup>2</sup>Pathology Dept., Iwate Med. Univ.)  
前立腺癌における COMT (Catechol-O-methyltransferase) 発現と新規アンドロゲン受容体標的薬の奏効期間との関連の検討  
石川 健太<sup>1</sup>, 前川 滋克<sup>1</sup>, 高田 亮<sup>1</sup>, 杉本 亮<sup>2</sup>, 阿部 正和<sup>1</sup>, 五十嵐 大樹<sup>1</sup>, 松浦 朋彦<sup>1</sup>, 加藤 廉平<sup>1</sup>, 加藤 陽一郎<sup>1</sup>, 兼平 貢<sup>1</sup>, 杉村 淳<sup>1</sup>, 阿部 貴弥<sup>1</sup>, 菅井 有<sup>2</sup>, 小原 航<sup>1</sup> (<sup>1</sup>岩手医科大学 泌尿器科学講座, <sup>2</sup>岩手医科大学 病理診断学講座)

- P-2301 Prostate cancer organoids enables us to genetic engineering human-derived cellular models**  
Takuro Sunada, Takayuki Goto, Kensuke Hikami, Tomohiro Fukui, Takayuki Sumiyoshi, Shusuke Akamatsu, Takashi Kobayashi (Kyoto University)  
去勢前立腺癌患者由来異種移植ゼノグラフト由来オルガノイドを用いた遺伝子編集とその応用  
砂田 拓郎, 後藤 崇之, 樋上 健介, 福井 智洋, 住吉 崇幸, 赤松 秀輔, 小林 恭 (京都大学 泌尿器科)

- P-2302 Metastatic prostate cancer cells educate osteoclasts and regulate osteoblast activity through extracellular vesicles.**  
Takaaki Tamura<sup>1</sup>, Tomofumi Yamamoto<sup>1</sup>, Akiko Kogure<sup>1</sup>, Yusuke Yoshioka<sup>1</sup>, Shinichi Sakamoto<sup>2</sup>, Tomohiko Ichikawa<sup>2</sup>, Takahiro Ochiya<sup>1</sup> (<sup>1</sup>Dept. Mol. Cell. Med. Inst. Med. Sci. Tokyo Med. Univ., <sup>2</sup>Chiba Univ. Dept. Urol.)  
転移性前立腺癌細胞に教育された成熟破骨細胞は細胞外小胞を介して骨芽細胞活性を調節する。  
田村 貴明<sup>1</sup>, 山元 智史<sup>1</sup>, 木暮 暁子<sup>1</sup>, 吉岡 祐亮<sup>1</sup>, 坂本 信一<sup>2</sup>, 市川 智彦<sup>2</sup>, 落谷 孝広<sup>1</sup> (<sup>1</sup>東医 医総研 分子細胞治療, <sup>2</sup>千葉 医 泌)

- P-2303 Systemic inflammation as a link between prostate cancer, colorectal cancer, and ulcerative colitis**  
Yurie Kura<sup>1</sup>, Marco A. Develasco<sup>1</sup>, Kazuko Sakai<sup>1</sup>, Kazutoshi Fujita<sup>2</sup>, Syogo Adomi<sup>2</sup>, Yasunori Mori<sup>2</sup>, Takafumi Minami<sup>2</sup>, Masahiro Nozawa<sup>2</sup>, Kazuhiro Yoshimura<sup>2</sup>, Kazuto Nishio<sup>1</sup>, Hirotsugu Uemura<sup>2</sup> (<sup>1</sup>Dept. of Genome Biol. Kindai Univ. Faculty of Med., <sup>2</sup>Dept. of Urol. Kindai Univ. Faculty of Med.)  
前立腺癌と大腸癌そして潰瘍性大腸炎の関連性の探索  
倉 由史恵<sup>1</sup>, デベラスコ マルコ<sup>1</sup>, 坂井 和子<sup>1</sup>, 藤田 和利<sup>2</sup>, 安富 正悟<sup>2</sup>, 森 康範<sup>2</sup>, 南 高文<sup>2</sup>, 野澤 昌弘<sup>2</sup>, 吉村 一宏<sup>2</sup>, 西尾 和人<sup>1</sup>, 植村 天受<sup>2</sup> (<sup>1</sup>近畿大学医学部ゲノム生物学教室, <sup>2</sup>近畿大学医学部泌尿器科学教室)

- P-2304 GSH induces taxane resistance in castration-resistant prostate cancer.**  
Shuhei Aoyama, Kouji Izumi, Yoshiki Kouketsu, Ren Toriumi, Ryunosuke Nakagawa, Taiki Kamizima, Tomoyuki Makino, Renato Naito, Suguru Kadomoto, Hiroaki Iwamoto, Hiroshi Yaegashi, Shohei Kawaguchi, Kazuyoshi Shigehara, Takahiro Nohara, Atsushi Mizokami (Dept. of Urology, Kanazawa Univ Grad Sch. of Med. Sci.)  
去勢抵抗性前立腺癌において、GSH がタキサン耐性を誘導する。  
青山 周平, 泉 浩二, 瀧藤 佳樹, 鳥海 蓮, 中川 竜之介, 神島 泰樹, 牧野 友幸, 内藤 伶奈人, 門本 卓, 岩本 大旭, 八重樫 洋, 川口 昌平, 重原 一慶, 野原 隆弘, 溝上 敦 (金沢大学大学院医学系研究科集学的治療学)

- P-2305 *microRNA-15b-5p*/ Muscarinic receptors/ YAP signaling Contributes to Castration-resistant Growth of Prostate Cancer**  
Yusuke Goto<sup>1</sup>, Shunichi Asai<sup>2</sup>, Shinichi Sakamoto<sup>1</sup>, Hirotaaka Shibata<sup>1</sup>, Yasutaka Yamada<sup>1</sup>, Tomokazu Sazuka<sup>1</sup>, Yusuke Imamura<sup>1</sup>, Naohiko Seki<sup>2</sup>, Tomohiko Ichikawa<sup>1</sup> (<sup>1</sup>Dept. of Urology, Chiba Univ. Grad. Sch. of Med., <sup>2</sup>Dept. of Functional Genomics, Chiba Univ. Grad. Sch. of Med.)  
*microRNA-15b-5p*/ ムスカリン受容体/ YAP シグナルは前立腺癌の去勢抵抗性増殖に寄与する  
五島 悠介<sup>1</sup>, 浅井 俊一<sup>2</sup>, 坂本 信一<sup>1</sup>, 柴田 裕貴<sup>1</sup>, 山田 康隆<sup>1</sup>, 佐塚 智和<sup>1</sup>, 今村 有佑<sup>1</sup>, 関 直彦<sup>2</sup>, 市川 智彦<sup>1</sup> (<sup>1</sup>千葉大学大学院 医学研究 泌尿器科学, <sup>2</sup>千葉大学大学院 医学研究 機能ゲノム学)

- P-2306 Histopathological analysis of cancer-adipocyte interaction in the extraprostatic extension-positive prostate cancer**  
Mitsuyuki Koizumi<sup>1,2</sup>, Shinya Sato<sup>3,4,5</sup> (<sup>1</sup>Kanagawa Prefectural Ashigarakami Hosp. Dept. Urology, <sup>2</sup>Kanagawa Cancer Ctr. Dept. Urology, <sup>3</sup>Kanagawa Cancer Ctr. Res. Inst. Morphological Information Analysis Lab., <sup>4</sup>Kanagawa Cancer Ctr. Res. Inst. Molecular Pathol and Genetics Div., <sup>5</sup>Kanagawa Cancer Ctr. Dept. Pathology)  
EPE 陽性前立腺癌症例におけるがん-脂肪相互作用の病理組織学的検討  
小泉 充之<sup>1,2</sup>, 佐藤 慎哉<sup>3,4,5</sup> (<sup>1</sup>神奈川県立足柄上病院 泌尿器科, <sup>2</sup>神奈川県立がんセンター 泌尿器科, <sup>3</sup>神奈川県立がんセンター 形態情報解析室, <sup>4</sup>神奈川県立がんセンター がん分子病態学, <sup>5</sup>神奈川県立がんセンター 病理診断科)

P14-16 Therapeutic approaches for urologic cancers  
泌尿器腫瘍治療

Chairperson: Mariko Tabata (Dept. Uro., IMSUT Hosp. Inst. Med. Sci., Univ. Tokyo)  
座長: 田畑 真梨子 (東京大学医科学研究所附属病院泌尿器科)

- P-2307 Targeting glutamine addiction with potent drug combination therapy for renal cell carcinoma**  
Akihiro Takeuchi<sup>1,2,3</sup>, Yoshinari Muto<sup>1,2,3</sup>, Aya Yoshimura<sup>4</sup>, Takashi Watanabe<sup>5</sup>, Hisano Yanagi<sup>5</sup>, Eiji Sugihara<sup>2</sup>, Kenji Zennami<sup>1,2</sup>, Hideyuki Saya<sup>2</sup>, Ryoichi Shiroki<sup>2</sup>, Makoto Sumitomo<sup>1,2,3</sup> (<sup>1</sup>Department of Urology School of Medicine, Fujita Health University, <sup>2</sup>Fujita Cancer Center, Fujita Health University, <sup>3</sup>Department of Medical Research for Intractable Disease, Fujita Health University, <sup>4</sup>Medical Research Center for Animal Models, FHHU, <sup>5</sup>Department of Clinical Oncology School of Medicine, Fujita Health University)  
グルタミンリシスを標的とした新規腎細胞癌治療の検討  
竹内 章人<sup>1,2,3</sup>, 武東 義成<sup>1,2,3</sup>, 吉村 文<sup>4</sup>, 渡辺 崇<sup>5</sup>, 柳 久乃<sup>5</sup>, 杉原 英志<sup>2</sup>, 全並 賢二<sup>2</sup>, 佐谷 秀行<sup>2</sup>, 白木 良一<sup>1,2</sup>, 住友 誠<sup>1,2,3</sup> (藤田医科大学医学部, 腎泌尿器科学講座, <sup>2</sup>藤田医科大学, がん医療研究センター, <sup>3</sup>藤田医科大学, 難治疾患細胞制御学, <sup>4</sup>藤田医科大学病態モデル医学研究センター, <sup>5</sup>藤田医科大学医学部 臨床腫瘍科)
- P-2308 DNA methylation as a therapeutic target in RB1-deficient and neuroendocrine prostate cancer**  
Yasutaka Yamada<sup>1,2</sup>, Tomokazu Sazuka<sup>1</sup>, Yusuke Imamura<sup>1</sup>, Shinichi Sakamoto<sup>1</sup>, Himisha Beltran<sup>2</sup>, Tomohiko Ichikawa<sup>1</sup> (<sup>1</sup>Department of Urology, Chiba University Graduate School of Medicine, <sup>2</sup>DFCI, HMS)  
DNA メチル化を標的とした進行前立腺癌に対する治療戦略  
山田 康隆<sup>1,2</sup>, 佐塚 智和<sup>1</sup>, 今村 有佑<sup>1</sup>, 坂本 信一<sup>1</sup>, Himisha Beltran<sup>2</sup>, 市川 智彦<sup>1</sup> (<sup>1</sup>千葉大学医学部附属病院 泌尿器科, <sup>2</sup>Dana-Farber Cancer Institute)

- P-2309 Therapeutic strategies focused on lipid metabolism in clear cell renal cell carcinoma.**  
Hiromi Yano<sup>1</sup>, Yukio Fujiwara<sup>1</sup>, Toshiki Anami<sup>2</sup>, Takano Motoshima<sup>2</sup>, Yoshihiro Komohara<sup>1</sup> (<sup>1</sup>Dept. Cell Pathol., Grad. Sch. Med., Kumamoto Univ., <sup>2</sup>Dept. Urol., Grad. Sch. Med., Kumamoto Univ.)  
淡明細胞型腎細胞癌の脂質代謝に着目した治療戦略  
矢野 浩夢<sup>1</sup>, 藤原 章雄<sup>1</sup>, 穴見 俊樹<sup>2</sup>, 元島 崇信<sup>2</sup>, 菟原 義弘<sup>1</sup> (熊本大・院医・細胞病理学, <sup>2</sup>熊本大・院医・泌尿器科学)

- P-2310 Investigation of new therapeutic agents for FGFR inhibitor resistant urothelial cancer**  
Tatsuhiro Sawada, Seiji Arai, Akira Ohtsu, Yusuke Tsuji, Yuta Maeno, Mai Kato, Yoshitaka Sekine, Kazuhiro Suzuki (Dept. of Urol., Gunma Univ. Grad. Sch. of Med.)  
尿路上皮癌に対する FGFR 阻害薬の耐性獲得後の新規治療薬の検討  
澤田 達宏, 新井 誠二, 大津 晃, 辻 裕亮, 前野 佑太, 加藤 舞, 関根 芳岳, 鈴木 和浩 (群馬大学大学院医学系研究科 泌尿器科学)

**P-2311 Evaluation of Enhanced Effect of Immune Checkpoint Inhibitor Therapy in Combination with Photodynamic Therapy**  
Shinkuro Yamamoto<sup>1</sup>, Hideo Fukuhara<sup>1,2</sup>, Shunichiro Ogura<sup>2,3</sup>, Keiji Inoue<sup>1,2</sup> (<sup>1</sup>Department of Urology, Kochi Medical School, <sup>2</sup>Center for Photodynamic Medicine, Kochi Medical School Hospital, <sup>3</sup>School of Life Science and Technology, Tokyo Institute of Technology)

光線力学的治療法併用による免疫チェックポイント阻害療法増強効果の検証

山本 新九郎<sup>1</sup>、福原 秀雄<sup>1,2</sup>、小倉 俊一郎<sup>2,3</sup>、井上 啓史<sup>1,2</sup> (<sup>1</sup>高知大学医学部 泌尿器科学講座、<sup>2</sup>高知大学医学部 光線医療センター、<sup>3</sup>東京工業大学 生命理工学院)

**P-2312 NEUROD1 positive neuroendocrine prostate cancer acquires Cisplatin resistance.**

Yota Yasumizu, Takeo Kosaka, Hiroshi Hongo, Yuto Baba, Mototsugu Oya (Department of Urology, Keio University School of Medicine)

NEUROD1 陽性前立腺癌はシスプラチン抵抗性を獲得する。

安水 洋太、小坂 威雄、本郷 周、馬場 優人、大家 基嗣 (慶應義塾大学 医学部 泌尿器科)

**P-2313 Antitumor effects of rare sugar D-allose in prostate cancer cells**

Xia Zhang<sup>1</sup>, Rikiya Taoka<sup>1</sup>, Mikio Sugimoto<sup>1</sup>, Dage Liu<sup>2</sup> (<sup>1</sup>Univ., Med., Dept. of Urology, <sup>2</sup>Dept. of Thoracic Surg., Faculty of Med., Kagawa Univ.)

希少糖D-アロースの前立腺がんに対する抗腫瘍効果

張 霞<sup>1</sup>、田岡 利宜也<sup>1</sup>、杉元 幹史<sup>1</sup>、劉 大華<sup>2</sup> (<sup>1</sup>香川大・医・泌尿器科学、<sup>2</sup>香川大・医・呼吸器外科)

大学院 顎顔面疾患制御学分野、<sup>2</sup>鹿児島大学病院口腔顎顔面センター 口腔外科、<sup>3</sup>東北大学病院歯科顎口腔外科、<sup>4</sup>東北大学大学院口腔腫瘍外科学分野、<sup>5</sup>鹿児島大学医先進治療科学専攻 腫瘍学講座)

**P-2318 Prediction of treatment response by ctDNA monitoring in recurrent metastatic head and neck cancer**

Ryunosuke Kogo<sup>1</sup>, Tomomi Manako<sup>1</sup>, Hayato Hiraki<sup>2</sup>, Satoshi Nishizuka<sup>2</sup>, Syoichiro Tange<sup>3</sup>, Masashi Idogawa<sup>3</sup>, Takashi Tokino<sup>3</sup>, Takashi Nakagawa<sup>1</sup> (<sup>1</sup>Dept. Otorhinolaryngology-Head & Neck Surgery, Kyushu Univ., <sup>2</sup>DBRD, Iwate Med. Univ. Inst. Biomed. Sci., <sup>3</sup>Med. Genome Sci. Inst. Frontier Med. Sapporo Med. Univ.)

再発転移頭頸部癌における ctDNA モニタリングによる治療効果予測

古後 龍之介<sup>1</sup>、真子 知美<sup>1</sup>、開 勇人<sup>2</sup>、西塚 哲<sup>2</sup>、丹下 正一郎<sup>3</sup>、井戸川 雅史<sup>3</sup>、時野 隆至<sup>3</sup>、中川 尚志<sup>1</sup> (九州大・耳鼻咽喉・頭頸部外科、<sup>2</sup>若手医大・医歯薬総合・医療開発、<sup>3</sup>札幌医大・フロンティア研・ゲノム医科学)

**P-2319 Glioblastoma cell death induced by cold atmospheric air plasma through an iron-dependent pathway.**

Yushi Ochiai, Manami Suzuki, Yoshihiro Suzuki (Res. Div. Priv. Res. Develop. Age. Plasma. Chemi-Bio Labs.)

低温大気圧空気プラズマによる鉄依存性経路を介したグリオブラストーマ細胞死

落合 祐之、鈴木 真奈美、鈴木 良弘 (プラズマ化学生物学学研 研究開発)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P14-18 Diagnosis and treatment of head and neck cancer**

頭頸部がんの診断・治療

Chairperson: Hideki Nakayama (Dept. Oral & Maxillofac. Surg., Fac. Life Sci., Kumamoto Univ.)

座長：中山 秀樹 (熊大・院・生命科学・歯口外)

**P-2320 Taxonomy and anticancer mechanism of *Streptomyces niphimycinicus* sp. nov. against nasopharyngeal carcinoma**

Yiyang Huang<sup>1,3</sup>, Wenjin Hu<sup>4,5,6,7,8,9</sup>, Shushi Huang<sup>4,5</sup>, Jiemei Chu<sup>2</sup>, Yushan Liang<sup>1</sup>, Zhanhua Tao<sup>4,5</sup>, Guiwen Wang<sup>4,5</sup>, Junlian Zhuang<sup>4,5</sup>, Zhe Zhang<sup>1,3</sup>, Xiaoying Zhou<sup>2</sup>, Xinli Pan<sup>4,5</sup> (<sup>1</sup>Dept. Otolaryngology-Head&Neck Surgery, GXMU, <sup>2</sup>Life Science Institute, GXMU, <sup>3</sup>Key Laboratory of Early Prevention&Treatment for Regional High-Frequency Tumor, GXMU, <sup>4</sup>Guangxi Key Laboratory of Marine Natural Products&Combinatorial Biosynthesis Chemistry, GXAS, <sup>5</sup>Institute of Eco-Environmental Research, GXAS, <sup>6</sup>National Engineering Research Center for Non-Food, GXAS, <sup>7</sup>State Key Laboratory of Non-Food Biomass and Enzyme Technology, GXAS, <sup>8</sup>Guangxi Key Laboratory of Biorefinery, GXAS, <sup>9</sup>Guangxi Biomass Engineering Technology Research Center, GXAS)

**P-2321 ATGL inhibits the malignant biological behavior of NPC by modulating lipid-droplets mediating inflammation**

Shiyue Tang<sup>1</sup>, Limei Li<sup>3</sup>, Wensheng Wen<sup>1</sup>, Xiaoying Zhou<sup>2</sup>, Yiyang Huang<sup>1,3</sup>, Rang Zhao<sup>2,3</sup> (<sup>1</sup>Dept. Otolaryngology-Head&Neck Surgery, GXMU, <sup>2</sup>Life Science Institute, GXMU, <sup>3</sup>Key Laboratory of High-Incidence-Tumor Prevention & Treatment, Ministry of Education, GXMU)

**P-2322 MiR-378a-5p/CPT1A-mediate fatty acid oxidation regulates tumor progression in Oral Cancer**

Cih Y. Fang<sup>1,2</sup>, Horng D. Wang<sup>3</sup>, Jenn R. Hsiao<sup>3</sup>, Shine G. Shiah<sup>1</sup> (<sup>1</sup>Natl. Inst. of Cancer Res. NHRI, Miaoli, Taiwan, <sup>2</sup>Inst. of Biotech. NTHU, Hsinchu, Taiwan, <sup>3</sup>Dept. of Otolaryngology, NCKU. hosp. College of Med. Tainan, Taiwan)

**P-2323 LAT1 expressed in head and neck squamous cell carcinoma is a novel therapeutic target**

Yohei Kawasaki<sup>1</sup>, Hitomi Suzuki<sup>1</sup>, Yasufumi Omori<sup>2</sup> (<sup>1</sup>Dept. Otorhinolaryngology, Head and Neck Surgery, Akita University, <sup>2</sup>Dept. Molecular and Tumor Pathology, Akita University)

頭頸部扁平上皮癌に発現する LAT1 は新たな治療標的となる  
川崎 洋平<sup>1</sup>、鈴木 仁美<sup>1</sup>、大森 泰文<sup>2</sup> (秋田大学・院医・耳鼻咽喉科・頭頸部外科、<sup>2</sup>秋田大学・院医・分子病態学・腫瘍病態学)

**P-2324 Amplification of the nuclear import receptor KPNA7 is associated with poor overall survival in head and neck cancer**

Thao Nguyen, Kaori Shima, Yudai Shimojukkoku, Yuka Kajiya, Tomonori Sasahira (Dep. of Mol. Oral Pathol. Oncol.)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P14-17 Head and neck cancer**

頭頸部がん

Chairperson: Mizuo Ando (Otolaryngology-Head and Neck Surgery, Okayama University)

座長：安藤 瑞生 (岡山大学 耳鼻咽喉・頭頸部外科)

**P-2314 Loss of pathological biphasic structure is a poor prognostic factor in adenoid cystic carcinoma**

Kenya Kobayashi<sup>1</sup>, Taisuke Mori<sup>2</sup>, Suguru Miyata<sup>3</sup>, Toyoyuki Hanazawa<sup>3</sup>, Yuki Saito<sup>1</sup>, Mizuo Ando<sup>4</sup>, Masahito Kawazu<sup>5</sup> (<sup>1</sup>Dept of Otolaryngology, H&N surgery, The University of Tokyo., <sup>2</sup>Dept of Pathology, National Cancer Center Hosp., <sup>3</sup>Dept of Otolaryngology, H&N surgery, Chiba University., <sup>4</sup>Dept of Otolaryngology, H&N surgery, Okayama University., <sup>5</sup>Div of Cell Therapy, Chiba Cancer Ctr, Research Inst.)

病理学的な二相性構造の消失は腺様嚢胞癌の予後不良因子である

小林 謙也<sup>1</sup>、森 泰昌<sup>2</sup>、宮田 卓<sup>3</sup>、花澤 豊行<sup>3</sup>、齋藤 祐毅<sup>1</sup>、安藤 瑞生<sup>4</sup>、河津 正人<sup>5</sup> (東京大学 耳鼻咽喉科 頭頸部外科、<sup>2</sup>国立がんセンター中央病院 病理診断科、<sup>3</sup>千葉大学 耳鼻咽喉科 頭頸部外科、<sup>4</sup>岡山大学 耳鼻咽喉科 頭頸部外科、<sup>5</sup>千葉がんセンター 細胞治療開発研究部)

**P-2315 Relationship between CX3CL1 and lymph node metastasis in oral cancer**

Hotaka Kawai<sup>1</sup>, Eain Htooshe<sup>1</sup>, Masaaki Nakayama<sup>2</sup>, Toshiaki Ohara<sup>3</sup>, Hitoshi Nagatsuka<sup>1</sup> (<sup>1</sup>Department of Oral Pathology and Medicine, Okayama University., <sup>2</sup>Department of Oral Microbiology, Okayama University., <sup>3</sup>Department of Pathology and Experimental Medicine, Okayama University.)

口腔癌における CX3CL1 とリンパ節転移の関係

河合 穂高<sup>1</sup>、トゥ シュエイン<sup>1</sup>、中山 真彰<sup>2</sup>、大原 利章<sup>3</sup>、長塚 仁<sup>1</sup> (岡山大学学術研究院医歯薬学域口腔病理学、<sup>2</sup>岡山大学学術研究院医歯薬学域口腔微生物、<sup>3</sup>岡山大学学術研究院医歯薬学域免疫病理)

**P-2316 Withdrawn**

**P-2317 Diagnostic/prediction method for primary/late neck lymph node metastasis in OSCC by serum miRNAs.**

Yutaro Higashi<sup>1,2,3,4</sup>, Tsuyoshi Sugiura<sup>1,2,3,4</sup>, Kodai Nakamura<sup>1</sup>, Norihumi Hamada<sup>1</sup>, Seiya Yokoyama<sup>1</sup>, Kota Yamasiro<sup>1</sup>, Kazuki Mori<sup>1</sup>, Mika Tani<sup>1</sup>, Yusaku Noma<sup>1</sup>, Ryota Takaoka<sup>1</sup> (<sup>1</sup>Dept of Maxillofacial Disease Control, Graduate School, Kagoshima University., <sup>2</sup>Kagoshima University Hospital. Oral and Maxillofacial Center. Oral surgery., <sup>3</sup>Tohoku University Hospital. Oral and Maxillofacial surgery. Miyagi. Japan, <sup>4</sup>Division of Oral and Facial Oncology and Surgery, Tohoku University, <sup>5</sup>Dep. of Pathology, Field of Oncology, Kagoshima University)

血清 miRNA による口腔癌頸部リンパ節転移診断と後発転移予測法

東 友太郎<sup>1,3</sup>、杉浦 剛<sup>1,2,3,4</sup>、中村 康大<sup>1</sup>、濱田 倫史<sup>1</sup>、横山 勢也<sup>3</sup>、山城 康太<sup>1</sup>、森 和樹<sup>1</sup>、谷 美香<sup>1</sup>、野間 優作<sup>1</sup>、高岡 亮太<sup>1</sup> (鹿児島大学)



**P-2325 Establishment of PDX model of oral cancer and PDX-derived cell lines, and usefulness of anti-HER2 antibody therapy.**

Yuki Seki<sup>1</sup>, Ryusyo Kariya<sup>3</sup>, Ryoji Yoshida<sup>2</sup>, Kenta Kawahara<sup>2</sup>, Masatoshi Hirayama<sup>2</sup>, Nozomu Takahashi<sup>2</sup>, Masashi Nakamoto<sup>2</sup>, Hisashi Takeshita<sup>2</sup>, Seiji Okada<sup>3</sup>, Hideki Nakayama<sup>2</sup> (<sup>1</sup>Grad. Sch. Med. Sci., Kumamoto Univ., <sup>2</sup>Dept. Oral & Maxillofac. Surg., Fac. Life Sci., Kumamoto Univ., <sup>3</sup>Div. Hematopoiesis. Joint Research Center. Human Retrovirus Infection. Kumamoto Univ.)

**口腔がん PDX モデル、PDX 由来細胞株の樹立および抗 HER2 抗体療法の有用性の検討**

関 祐紀<sup>1</sup>、刈谷 龍昇<sup>3</sup>、吉田 遼司<sup>2</sup>、川原 健太<sup>2</sup>、平山 真敏<sup>2</sup>、高橋 望<sup>2</sup>、中元 雅史<sup>2</sup>、竹下 尚志<sup>2</sup>、岡田 誠治<sup>3</sup>、中山 秀樹<sup>2</sup> (<sup>1</sup>熊本大・大学院医学教育部、<sup>2</sup>熊本大・大学院生命科学・歯科口腔外科講座、<sup>3</sup>ヒトレトロウイルス学共同研究センター)

**P-2326 Investigating the usefulness of the risk score for late metastasis in cT1-2N0 tongue cancer**

Junki Inoue, Ryoji Yoshida, Keisuke Yamana, Junki Sakata, Toru Oyama, Kohei Ishikawa, Yuki Seki, Kosuke Shinohara, Nozomu Takahashi, Masatoshi Hirayama, Hisashi Takahashi, Kenta Kawahara, Akiyuki Hirose, Hideki Nakayama (Dept. Oral & Maxillofacial Surg., Kumamoto)

**cT1-2N0 舌癌における後発転移リスクスコアの有用性の検討**

井上 淳真、吉田 遼司、山名 啓介、坂田 純基、大山 徹、石川 紘平、関 祐紀、篠原 光佑、高橋 望、平山 真敏、竹下 尚志、川原 健太、廣末 晃之、中山 秀樹 (熊本大学大学院 歯科口腔外科学講座)

**P-2327 Establishment of a Novel RNA Therapeutic Approach for Oral Cancer Using miR-223**

Ri Sho<sup>1</sup>, Xuhong Zhang<sup>2</sup>, Kuniaki Chida<sup>3</sup>, Tsukasa Ito<sup>3</sup>, Hirohiko Tachibana<sup>3</sup>, Masayoshi Souri<sup>1</sup>, Tsuneo Konta<sup>1</sup> (<sup>1</sup>Dept. Pub. Health Hygiene, Yamagata Univ. Grad. Sch. Med. Sci., <sup>2</sup>Dept. Biochem. Mol. Biol., Yamagata Univ. Grad. Sch. Med. Sci., <sup>3</sup>Dept. Otolaryngology, Head & Neck Surg. Yamagata Univ., <sup>4</sup>Yuhki Dental Clinic, Yamagata)

**miR-223 を用いた口腔がんに対する新規 RNA ベース治療法の確立に関する研究**

邵 力<sup>1</sup>、張 旭紅<sup>2</sup>、千田 邦明<sup>3</sup>、伊藤 吏<sup>3</sup>、橘 寛彦<sup>4</sup>、惣宇利 正善<sup>1</sup>、今田 恒夫<sup>1</sup> (<sup>1</sup>山形大・院医・公衆衛生 & 衛生、<sup>2</sup>山形大・院医・生化学 & 分子生物、<sup>3</sup>山形大・医・耳鼻咽喉・頭頸部外科、<sup>4</sup>山形市結城歯科医院)

**P-2328 Serum CXCL13 as a novel biomarker in oral squamous cell carcinoma**

Shin Tojo, Nobuyuki Kuribayashi, Kohichi Nakashiro, Sayaka Kojima, Norihiko Tokuzen, Hiroyuki Goda, Daisuke Uchida (Dept. Oral. Max. Surg., Ehime Grad. Univ., Sch. Med.)

**口腔扁平上皮癌における新規腫瘍マーカー CXCL13 の有用性**  
東條 晋、栗林 伸行、中城 公一、児島 さやか、徳善 紀彦、合田 啓之、内田 大亮 (愛媛大 院医 口腔顎顔面外科学講座)

**腫瘍間質の AEBP1 発現は口腔扁平上皮がんの進展を促進する**  
関口 翔平<sup>1,2</sup>、岡崎 史佳<sup>1,2</sup>、萬 顕<sup>1,3</sup>、山本 英一郎<sup>1,4</sup>、新沼 猛<sup>1</sup>、高澤 啓<sup>5</sup>、畠中 袖衣<sup>1,2</sup>、北嶋 洋史<sup>1</sup>、甲斐 正広<sup>1</sup>、小山内 誠<sup>2</sup>、廣橋 良彦<sup>6</sup>、鳥越 俊彦<sup>6</sup>、小島 隆<sup>7</sup>、高野 賢一<sup>3</sup>、宮崎 晃巨<sup>2</sup>、鈴木 拓<sup>1</sup> (<sup>1</sup>札幌医大・医・分子生物、<sup>2</sup>札幌医大・医・口腔外科、<sup>3</sup>札幌医大・医・耳鼻咽喉科、<sup>4</sup>札幌医大・医・消化器内科、<sup>5</sup>札幌医大・医・病理学第二、<sup>6</sup>札幌医大・医・病理学第一、<sup>7</sup>札幌医大・フロンティア医学・細胞科学)

**P-2331 AEBP1 is a negative regulator of skeletal muscle cell differentiation**

Fumika Okazaki<sup>1,2</sup>, Shohei Sekiguchi<sup>1,2</sup>, Akira Yorozu<sup>1,3</sup>, Takeshi Niinuma<sup>1</sup>, Hiroshi Kitajima<sup>1</sup>, Eiichiro Yamamoto<sup>1</sup>, Masahiro Kai<sup>1</sup>, Kenichi Takano<sup>3</sup>, Akihiro Miyazaki<sup>2</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Dept. Mol. Biol., Sapporo Med. Univ. Sch. Med., <sup>2</sup>Dept. Oral Surg., Sapporo Med. Univ. Sch. Med., <sup>3</sup>Dept. Otolaryngol.-Head and Neck Surg., Sapporo Med. Univ. Sch. Med.)

**AEBP1 は骨格筋細胞分化の抑制因子である**

岡崎 史佳<sup>1,2</sup>、関口 翔平<sup>1,2</sup>、萬 顕<sup>1,3</sup>、新沼 猛<sup>1</sup>、山本 英一郎<sup>1</sup>、甲斐 正広<sup>1</sup>、高野 賢一<sup>3</sup>、宮崎 晃巨<sup>2</sup>、鈴木 拓<sup>1</sup> (<sup>1</sup>札幌医大・医・分子生物、<sup>2</sup>札幌医大・口腔外科、<sup>3</sup>札幌医大・医・耳鼻咽喉科)

**P-2332 The role of TGFBI in partial-EMT induction of head and neck squamous cell carcinoma**

Motoharu Sarubo<sup>1</sup>, Akira Moromizato<sup>1</sup>, Azusa Yamada<sup>1</sup>, Wenhua Shao<sup>2</sup>, Shengjian Jin<sup>1</sup>, Yasuhiro Mouri<sup>1</sup>, Yasusei Kudo<sup>1</sup> (<sup>1</sup>Tokushima Univ. Grad. Sch. Biomed. Sci. Oral Biosci., <sup>2</sup>Tokushima Univ. Grad. Sch. Dept. Mol. Path.)

**頭頸部扁平上皮癌の partial-EMT における TGFBI の役割**

猿棒 元陽<sup>1</sup>、諸見里 昭<sup>1</sup>、山田 梓紗<sup>1</sup>、邵 文華<sup>2</sup>、金 晟劍<sup>2</sup>、毛利 安宏<sup>1</sup>、工藤 保誠<sup>1</sup> (<sup>1</sup>徳島大学大学院 口腔生命科学分野、<sup>2</sup>徳島大学大学院 分子病理学分野)

**P-2333 IGFBP3 promotes radiosensitivity of OSCC via appositional feedback of NF-κB/IL-6/ROS signaling**

Ssu H. Wang<sup>1</sup>, Yu L. Chen<sup>1</sup>, Shih H. Huang<sup>1</sup>, Jenn R. Hsiao<sup>2</sup>, Fang Y. Tsai<sup>1</sup>, Shih S. Jiang<sup>1</sup>, Hui J. Tsai<sup>1</sup>, Ya W. Chen<sup>1</sup> (<sup>1</sup>Natl. Inst. of Cancer Res. NHRI. Miaoli, ROC, <sup>2</sup>Dept. of Otolaryngology, Natl. Cheng Kung Univ. Hosp. Tainan, ROC, <sup>3</sup>Natl. Inst. of Cancer Res. NHRI. Tainan, ROC)

**P-2334 Calcium dynamics and mitochondrial morphology in oral cancer as a mechanism of cisplatin resistance**

Kosuke Shinohara<sup>1,2</sup>, Kenta Kawahara<sup>2</sup>, Mayumi Hirayama<sup>2,3</sup>, Asuka Iwamoto<sup>2</sup>, Yusei Todoroki<sup>1,2</sup>, Manami Suzuki<sup>1,4</sup>, Akiyuki Hirose<sup>2</sup>, Ryoji Yoshida<sup>2</sup>, Yoshihiro Suzuki<sup>4</sup>, Hideki Nakayama<sup>2</sup> (<sup>1</sup>Grad. Sch. Med. Sci., Kumamoto Univ., <sup>2</sup>Dept. Oral & Maxillofac. Surg., Fac. Life Sci., Kumamoto Univ., <sup>3</sup>IRCMS, Kumamoto Univ., <sup>4</sup>Dept. Res & Dev. Plasma ChemBio Lab., Tochigi)

**シスプラチン耐性機構としての口腔癌のカルシウム動態とミトコンドリア形態**

篠原 光佑<sup>1,2</sup>、川原 健太<sup>2</sup>、平山 真弓<sup>2,3</sup>、岩本 明日香<sup>2</sup>、轟 祐誠<sup>1,2</sup>、鈴木 真奈美<sup>1,4</sup>、廣末 晃之<sup>2</sup>、吉田 遼司<sup>2</sup>、鈴木 良弘<sup>4</sup>、中山 秀樹<sup>2</sup> (<sup>1</sup>熊本大・大学院医学教育部、<sup>2</sup>熊本大・生命科学・歯科口腔外科学講座、<sup>3</sup>熊本大・国際先端医学研究機構、<sup>4</sup>(一社)プラズマ化学生物学研究所)

**P-2335 Promotion of iron-mediated cell death ferroptosis enhances radiosensitivity in oral squamous cell carcinoma.**

Kohei Ishikawa<sup>1,2</sup>, Yuichiro Matsuoka<sup>3</sup>, Ryoji Yoshida<sup>1</sup>, Kenta Kawahara<sup>1</sup>, Masatoshi Hirayama<sup>1</sup>, Nozomu Takahashi<sup>1</sup>, Toru Oyama<sup>1</sup>, Ryuta Kubo<sup>1</sup>, Junki Inoue<sup>1</sup>, Kosuke Shinohara<sup>1</sup>, Yuuki Seki<sup>1</sup>, Hideki Nakayama<sup>1</sup> (<sup>1</sup>Department of Oral and Maxillofacial Surgery, Kumamoto Univ., <sup>2</sup>Department of Dentistry, Japan Self-Defense Forces Kumamoto Hosp., <sup>3</sup>Department of Oral and Maxillofacial Surgery, Turuta Hosp.)

**口腔扁平上皮癌における鉄介在性細胞死フェロトーシスの促進は放射線感受性を高める**

石川 紘平<sup>1,2</sup>、松岡 祐一郎<sup>3</sup>、吉田 遼司<sup>1</sup>、川原 健太<sup>1</sup>、平山 真敏<sup>1</sup>、高橋 望<sup>1</sup>、大山 徹<sup>1</sup>、久保 隆太<sup>1</sup>、井上 淳真<sup>1</sup>、篠原 光佑<sup>1</sup>、関 祐紀<sup>1</sup>、中山 秀樹<sup>1</sup> (<sup>1</sup>熊本大学 歯科口腔外科、<sup>2</sup>自衛隊熊本病院 歯科、<sup>3</sup>鶴田病院 歯科口腔外科)

**P-2336 Role of microRNA-375-3p in lymph node metastasis of oral squamous cell carcinoma**

Masato Saika, Kohichi Nakashiro, Norihiko Tokuzen, Hiroyuki Shirai, Daisuke Uchida (Dept. Oral. Max. Surg., Ehime Grad. Univ., Sch. Med)

**口腔扁平上皮癌リンパ節転移における microRNA-375-3p の役割**  
雑賀 将斗、中城 公一、徳善 紀彦、白井 博之、内田 大亮 (愛媛大 院医 口腔顎顔面外科学講座)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

**P14-19 Head and neck cancer and microenvironment (1)**  
頭頸部がんと微小環境 (1)

Chairperson: Yasusei Kudo (Dept. Oral Bioscience, Tokushima Univ. Grad. Sch. of Biomed. Sci.)

座長: 工藤 保誠 (徳島大学・院医歯薬・口腔生命科学)

**P-2329 High expression of CD80 promotes cell growth and stemness of oral squamous cell carcinoma cells**

Shih H. Huang<sup>1</sup>, Yu L. Chen<sup>1</sup>, Jui Y. Cheng<sup>1</sup>, Po Y. Chen<sup>1</sup>, Hsin T. Huang<sup>1</sup>, Ssu H. Wang<sup>1</sup>, Ko J. Liu<sup>1</sup>, Tsung H. Chuang<sup>1</sup>, Yu W. Su<sup>1</sup>, Ya W. Chen<sup>1,2</sup> (<sup>1</sup>Natl. Inst. of Cancer Res. NHRI. Miaoli, ROC, <sup>2</sup>Natl. Inst. of Cancer Res. NHRI. Tainan, ROC, <sup>3</sup>Natl. Inst. of Immunol. Res. Ctr. NHRI. Miaoli, ROC, <sup>4</sup>Grad. Inst. of Biomed. Sci. CMU. Taichung, ROC)

**P-2330 Stromal expression of AEBP1 promotes progression of oral squamous cell carcinoma**

Shohei Sekiguchi<sup>1,2</sup>, Fumika Okazaki<sup>1,2</sup>, Akira Yorozu<sup>1,3</sup>, Eiichiro Yamamoto<sup>1,4</sup>, Takeshi Niinuma<sup>1</sup>, Akira Takasawa<sup>5</sup>, Yui Hatanaka<sup>1,2</sup>, Hiroshi Kitajima<sup>1</sup>, Masahiro Kai<sup>1</sup>, Makoto Osanai<sup>5</sup>, Yoshihiko Hirohashi<sup>6</sup>, Toshihiko Torigoe<sup>6</sup>, Takashi Kojima<sup>7</sup>, Kenichi Takano<sup>3</sup>, Akihiro Miyazaki<sup>2</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Dept. Mol. Biol., Sapporo Med. Univ. Sch. Med., <sup>2</sup>Dept. Oral Surg., Sapporo Med. Univ. Sch. Med., <sup>3</sup>Dept. Otolaryngol., Sapporo Med. Univ. Sch. Med., <sup>4</sup>Dept. Gastroenterol Hepatol., Sapporo Med. Univ. Sch. Med., <sup>5</sup>2nd Dept. Path., Sapporo Med. Univ. Sch. Med., <sup>6</sup>1st Dept. Path., Sapporo Med. Univ. Sch. Med., <sup>7</sup>Dept. Cell Sci., Frontier Med., Sapporo Med. Univ. Sch. Med.)

**P-2337 CXCL12 is expressed by skeletal muscle cells in tongue oral squamous cell carcinoma**  
 Akira Yorozu<sup>1,2</sup>, Shohei Sekiguchi<sup>1,3</sup>, Akira Takasawa<sup>4</sup>, Fumika Okazaki<sup>1,3</sup>, Takeshi Niinuma<sup>1</sup>, Hiroshi Kitajima<sup>1</sup>, Eiichiro Yamamoto<sup>1</sup>, Masahiro Kai<sup>1</sup>, Makoto Osanai<sup>4</sup>, Akihiro Miyazaki<sup>3</sup>, Kenichi Takano<sup>3</sup>, Hiromu Suzuki<sup>1</sup> (1Dept. Mol. Biol., Sapporo Med. Univ. Sch. Med., 2Dept. Otolaryngol.-Head and Neck Surg., Sapporo Med. Univ. Sch. Med., 3Dept. Oral Surg., Sapporo Med. Univ. Sch. Med., 4Dept. Path., Sapporo Med. Univ. Sch. Med.)

口腔扁平上皮がん組織中の骨格筋細胞におけるCXCL12発現  
 萬頭<sup>1,2</sup>、関口翔平<sup>1,3</sup>、高澤啓<sup>4</sup>、岡崎史佳<sup>1,3</sup>、新沼猛<sup>1</sup>、北嶋洋志<sup>1</sup>、山本英一郎<sup>1</sup>、甲斐正広<sup>1</sup>、小山内誠<sup>4</sup>、宮崎晃巨<sup>3</sup>、高野賢一<sup>2</sup>、鈴木拓<sup>1</sup> (札幌大・分子生物学講座、札幌大・耳鼻咽喉科・頭頸部外科学講座、札幌大・口腔外科学講座、札幌大・病理学講座)

Room P Sep. 22 (Fri.) 12:50-13:35 E/J  
**P14-20 Head and neck cancer and microenvironment (2)**  
 頭頸部がんと微小環境 (2)

Chairperson: Narikazu Uzawa (Dept. of oral & maxillofacial oncology and surgery, Graduate School of Dentistry, Osaka Univ.)

座長: 鶴澤成一 (大阪大学 大学院歯学研究科 顎口腔腫瘍外科学講座)

**P-2338 Neutrophil-to-lymphocyte ratio as an early marker of outcomes in patients with oral cancer treated with nivolumab**  
 Hidetake Tachinami<sup>1</sup>, Kei Tomihara<sup>2</sup>, Shinichi Yamada<sup>1</sup>, Tomofumi Naruse<sup>3</sup>, Souichi Yamamoto<sup>4</sup>, Akihiro Miyazaki<sup>5</sup>, Ryuji Hayashi<sup>6</sup>, Makoto Noguchi<sup>1</sup> (1Dept. Oral. Maxillofac. Surg. Toyama Univ., 2Div. Oral. Maxillofac. Surg. Niigata Univ., 3Dept. of Clin Oral Oncology, Nagasaki Univ., 4Dept. of Oral Oncology, Hiroshima University., 5Dept Oral. Maxillofac. Surg. Sapporo Medical Univ., 6Dept. Clinical Oncology., Toyama Univ.)

口腔扁平上皮癌に対するニボルマブの効果予測における好中球・リンパ球比 (NLR) の有用性に関する検討

立浪秀剛<sup>1</sup>、富原圭<sup>2</sup>、山田慎一<sup>1</sup>、嶋瀬智史<sup>3</sup>、柳本惣市<sup>4</sup>、宮崎晃巨<sup>5</sup>、林龍二<sup>6</sup>、野口誠<sup>1</sup> (1富山大・歯科口腔外科、2新潟大・歯科口腔外科、3長崎大・口腔腫瘍外科、4広島大・口腔腫瘍外科、5札幌医大・歯科・口腔外科学講座、6富山大・臨床腫瘍部)

**P-2339 LPS from periodontal pathogen *P. gingivalis* enhances interplay of tongue cancer cell with macrophage via TLR4**  
 Manabu Shigoeke<sup>1</sup>, Rikuya Torigoe<sup>1,2</sup>, Hiroki Yokoo<sup>1,2</sup>, Masaki Omori<sup>1,3</sup>, Shuichi Tsukamoto<sup>1</sup>, Takashi Nakanishi<sup>1,2</sup>, Keitaro Yamanaka<sup>1,4</sup>, Nobuaki Ishihara<sup>1,3</sup>, Yuki Azumi<sup>1,2</sup>, Shoji Miyako<sup>1,2</sup>, Satoshi Urakami<sup>1,5</sup>, Takayuki Kodama<sup>1</sup>, Mari Nishio<sup>1</sup>, Yuichiro Koma<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> (1Div. Pathol., Dept. Pathol., Kobe Univ., Grad. Sch. Med., 2Div. Gastrointestinal Surg., Dept. Surg., Kobe Univ., Grad. Sch. Med., 3Div. Hepato-Biliary-Pancreatic Surg., Dept. Surg., Kobe Univ., Grad. Sch. Med., 4Div. Obstet. Gynecol., Kobe Univ., Grad. Sch. Med., 5Div. Gastroenterol., Dept. Intern., Kobe Univ., Grad. Sch. Med.)

歯周病原菌 *P. gingivalis* 由来 LPS は舌癌細胞の TLR4 を介してマクロファージとの相互作用を増強する

重岡学<sup>1</sup>、鳥越陸矢<sup>1,2</sup>、横尾拓樹<sup>1,2</sup>、大森将貴<sup>1,3</sup>、塚本修一<sup>1</sup>、中西崇<sup>1,2</sup>、山中啓太郎<sup>1,4</sup>、石原伸朗<sup>1,3</sup>、安積佑樹<sup>1,2</sup>、都鍾智<sup>1,2</sup>、浦上聡<sup>1,5</sup>、児玉貴之<sup>1</sup>、西尾真理<sup>1</sup>、食道胃腸外科学、<sup>2</sup>神戸大・院医・肝臓腸外科学、<sup>3</sup>神戸大・院医・産科婦人科学、<sup>4</sup>神戸大・院医・消化器内科学)

**P-2340 Novel immunotherapy target of oral cancer stem cells and application to peptide vaccine**  
 Sho Miyamoto<sup>1</sup>, Takashi Sasaya<sup>1,2</sup>, Kazuhiro Ogi<sup>1</sup>, Akihiro Miyazaki<sup>1</sup>, Yoshihiko Hirohashi<sup>1</sup>, Takayuki Kanaseki<sup>2</sup>, Tomohide Tsukahara<sup>2</sup>, Toshihiko Torigoe<sup>2</sup> (1Department of Oral Surgery, Sapporo Medical University School of Medicine, 2Department of Pathology, Sapporo Medical University School of Medicine)  
 新規口腔がん幹細胞特異的抗原とペプチドワクチンへの応用  
 宮本昇<sup>1</sup>、笹和聖<sup>1,2</sup>、荻和弘<sup>1</sup>、宮崎晃巨<sup>1</sup>、廣橋良彦<sup>2</sup>、金岡貴幸<sup>2</sup>、塚原智英<sup>2</sup>、鳥越俊彦<sup>2</sup> (札幌医科大学医学部口腔外科学講座、札幌医科大学医学部病理学第一講座)

**P-2341 Personal immune profiles in tongue SCC -Comprehensive immune parameters and risk prediction-**  
 Pissacha Daroonpan<sup>1</sup>, Ryo Ouchi<sup>1,2</sup>, Naoto Nishii<sup>3</sup>, Fumihiko Tsushima<sup>3</sup>, Hiroyuki Harada<sup>3</sup>, Miyuki Azuma<sup>1</sup> (1Dept. of Mol. Immunol., TMDU, 2Dept. of Oral & Maxillofacial Surg., Univ. of Toyama, 3Dept. of Oral & Maxillofacial Surg. Oncology, TMDU)

**P-2342 Transcriptional analysis of sphingosine kinase 1 inhibitor PF543 induced autophagy in oral squamous cell carcinoma cells**  
 Masakazu Hamada, Kyoko Nishiyama, Narikazu Uzawa (Dept of Oral Maxillofacial Oncology and Surgery Osaka Univ)

スフィンゴシンキナーゼ 1 阻害剤 PF-543 による口腔扁平上皮癌細胞のオートファジー誘導のトランスクリプトーム解析  
 濱田 正和、西山 今日子、鶴澤成一 (阪大・院歯・顎口腔腫瘍外科学)

**P-2343 Alternative splicing in head and neck squamous cell carcinoma: public database exploration and long-read sequencing**  
 Tatsuya Abe<sup>1</sup>, Yiwei Ling<sup>2</sup>, Shujiro Okuda<sup>2</sup>, Manabu Yamazaki<sup>1</sup>, Satoshi Maruyama<sup>3</sup>, Junichi Tanuma<sup>1</sup> (1Div. Oral Pathol., Niigata Univ. Grad. Sch. Med. & Dent. Sci., 2Div. Bioinform., Niigata Univ. Grad. Sch. Med. & Dent. Sci., 3Oral Pathol. Sect., Dept. Surg. Pathol., Niigata Univ. Hosp.)

頭頸部扁平上皮癌における特異的選択的スプライシングの探索: データベース解析とロングリードシーケンシング

阿部達也<sup>1</sup>、凌一暉<sup>2</sup>、奥田修二郎<sup>2</sup>、山崎学<sup>1</sup>、丸山智<sup>3</sup>、田沼順一<sup>1</sup> (1新潟大・医歯学総合研究科・口腔病理、2新潟大・医歯学総合研究科・バイオインフォ、3新潟大病院・病理検査室(歯科))

**P-2344 The role of deubiquitinating enzyme, OTUB1 in head and neck squamous cell carcinoma (HNSCC) progression**  
 Shengjian Jin<sup>1</sup>, Takaaki Tsunematsu<sup>2</sup>, Taigo Horiguchi<sup>1</sup>, Yasuhiro Mouri<sup>1</sup>, Wenhua Shao<sup>1</sup>, Keiko Miyoshi<sup>1</sup>, Noriko Mizusawa<sup>1</sup>, Hiroko Hagita<sup>1</sup>, Motoharu Sarubo<sup>1</sup>, Kayo Yoshida<sup>3</sup>, Kaya Yoshida<sup>3</sup>, Natsumi Fujiwara<sup>3</sup>, Kazumi Ozaki<sup>3</sup>, Naozumi Ishimaru<sup>2</sup>, Yasusei Kudo<sup>1</sup> (1Tokushima Univ. Dept. Oral Biosci., 2Tokushima Univ. Oral Molecular Pathology, 3Tokushima Univ. Oral Healthcare Promotion, 4Tokushima Univ. Oral Healthcare Education)

頭頸部扁平上皮癌 (HNSCC) の進行における脱ユビキチン化酵素 OTUB1 の役割

金晟健<sup>1</sup>、常松貴明<sup>2</sup>、堀口大吾<sup>1</sup>、毛利安宏<sup>1</sup>、邵文華<sup>1</sup>、三好圭子<sup>1</sup>、水澤典子<sup>1</sup>、萩田浩子<sup>1</sup>、猿棒元陽<sup>1</sup>、吉田佳世<sup>3</sup>、吉田賀弥<sup>4</sup>、藤原奈津美<sup>3</sup>、尾崎和美<sup>3</sup>、石丸直澄<sup>3</sup>、工藤保誠<sup>1</sup> (1徳島大学 口腔生命科学分野、2徳島大学 口腔分子病態学分野、3徳島大学 口腔保健支援学分野、4徳島大学 口腔保健教育学分野)

**P-2345 Inhibition of engraftment and proliferation of oral cancer cells and extension of survival period by exercise**  
 Takuya Yoshimura, Yuka Hirano, Hajime Suzuki, Hirota Takayama, Hiroko Migita, Takayuki Ishida, Kiyohide Ishihata (Dept. Oral & Maxillofacial Surg. Kagoshima Univ.)

運動による口腔癌細胞の生着・増殖抑制および生存期間の延長  
 吉村卓也、平野憂花、鈴木甫、高山大生、右田裕乃、石田喬之、石畑清秀 (鹿児島大学 口腔顎顔面外科)

**P-2346 Comparative analysis of the characteristics of oropharyngeal cancer affected by HPV status.**  
 Kazuki Hayashi<sup>1,2</sup>, Tomonori Matsumoto<sup>1</sup>, Yoshiyuki Harada<sup>1</sup>, Tomonori Matsuura<sup>1</sup>, Masami Suzuki<sup>1</sup>, Takahito Fukusumi<sup>2</sup>, Hidenori Inohara<sup>3</sup>, Eiji Hara<sup>1</sup> (1Osaka Univ. Res. Inst. for Microbial Diseases, 2Osaka Univ. Faculty of Med. ENT & Head and Neck Surg.)

HPV ステータスの違いに規定される中咽頭癌細胞特性の比較検討  
 林計企<sup>1,2</sup>、松本知訓<sup>1</sup>、原田宣幸<sup>1</sup>、松浦敬憲<sup>1</sup>、鈴木雅美<sup>2</sup>、福角隆仁<sup>2</sup>、猪原秀典<sup>2</sup>、原英二<sup>1</sup> (1大阪大学 微生物病研究所、2大阪大学医学系研究科 耳鼻科・頭頸部外科)

## 23 Cancer prevention/chemoprevention

Room P Sep. 22 (Fri.) 16:30-17:15 E/J  
**P23-1 Anti-carcinogenic effects of natural products and their mechanisms**  
 天然成分のがん抑制とそのメカニズム

Chairperson: Naoyuki Nishiya (Div. Integ. Info., Dept. Clin. Pharm., Iwate Med. Univ. Sch. Pharm.)

座長: 西谷直之 (岩手医大・薬・臨床情報)

**P-2347 Sangyod rice extract suppressed cell migration in MDA-MB-231 and MCF-7 breast cancer cell lines.**  
 Mongkol Pongsuchart, Oatchima Butlang, Chadaphorn Kamsingwong (Dept. of Zoology, Faculty of Sci., Kasetsart Univ., Bangkok, Thailand)



- P-2348** *Vernonia amygdala* Extract prevents TGF- $\beta$ 1 Induced Epithelial-to-Mesenchymal Transition in human lung cancer A549 cells  
Hui C. Hsu<sup>1</sup>, Ting X. Chang<sup>1</sup>, Bo J. Tzeng<sup>1</sup>, Wei J. Chen<sup>1</sup>, Meng F. Tsai<sup>2</sup> (1Dept of biotech. & Animal Sci., NIU, 2Dept. of Biomed. Sci., Da-Yeh U)
- P-2349** **Anti-tumorigenic effects and mechanisms of non-alcoholic beer toward NNN - induced lung tumorigenesis**  
Jun Takata<sup>1</sup>, Katsuyuki Kiura<sup>2</sup>, Sakae Arimoto<sup>1</sup> (1Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, 2Okayama University Hospital)  
ノンアルコールビールによる、NNN 誘導肺がん発症抑制とその機構  
高田 潤<sup>1</sup>、木浦 勝<sup>2</sup>、有元 佐賀恵<sup>1</sup> (1岡山大学 大学院医歯薬総合研究科(薬学系)、2岡山大学病院)
- P-2350** **The inhibitory effects of plant extracts on the proliferation of lung adenocarcinoma cell lines**  
Hinako Suga<sup>1</sup>, Kyoichi Takao<sup>2</sup>, Masaharu Nomura<sup>3</sup>, Noriko Gotoh<sup>4</sup> (1Juntendo Univ. Sch. Med., 2Showa Women's Univ. Sch. Life Sci., 3Shingo Central Clinic, 4Kanazawa Univ. Cancer Res. Inst.)  
肺腺がん細胞株の増殖に対する植物抽出物の抑制効果  
須賀 比奈子<sup>1</sup>、高尾 恭一<sup>2</sup>、野村 将春<sup>3</sup>、後藤 典子<sup>4</sup> (1順天堂大・医、2昭和女子大・生活機構、3新郷中央診療所、4金沢大・がん進展制御研)
- P-2351** **Discovery of RB-reactivating juices**  
Mitsuharu Masuda<sup>1</sup>, Mano Horinaka<sup>2</sup>, Shusuke Yasuda<sup>2</sup>, Mie Morita<sup>2</sup>, Emi Nishimoto<sup>2</sup>, Hideki Ishikawa<sup>1</sup>, Michihiro Mutoh<sup>1</sup>, Toshiyuki Sakai<sup>2</sup> (1Kyoto Pref. Univ. Med., Dept. Mol.-Target. Prev., 2Kyoto Pref. Univ. Med., Dept. Drug Discov. Med.)  
RB 再活性化ジュースの発見  
増田 光治<sup>1</sup>、堀中 真野<sup>2</sup>、安田 周祐<sup>2</sup>、森田 美枝<sup>2</sup>、西幹 栄美<sup>2</sup>、石川 秀樹<sup>1</sup>、武藤 倫弘<sup>1</sup>、酒井 敏行<sup>2</sup> (1京都府立医科大学・分子標的予防医学、2京都府立医科大学・創薬医学)
- P-2352** **Construction of an in vivo screening system for anticancer agents using Cordyceps and its related species cultured broth**  
Tomokazu Ohishi<sup>1,2</sup>, Hayamitsu Adachi<sup>1</sup>, Shunichi Ohba<sup>1</sup>, Hiroyuki Inoue<sup>1</sup>, Akiko Harakawa<sup>1</sup>, Nana Hashimoto<sup>1</sup>, Junjiro Yoshida<sup>2</sup>, Daisuke Tatsuda<sup>2</sup>, Ryuichi Sawa<sup>3</sup>, Manabu Kawada<sup>2</sup>, Masanori Hatakeyama<sup>1,4</sup> (1Institute of Microbial Chemistry (BIKAKEN), Numazu Branch, 2Institute of Microbial Chemistry (BIKAKEN), Laboratory of Oncology, 3Institute of Microbial Chemistry (BIKAKEN), Laboratory of Molecular Structure Analysis, 4Institute of Microbial Chemistry (BIKAKEN), Laboratory of Microbial Carcinogenesis)  
冬虫夏草類培養液を用いたがん剤 in vivo スクリーニング系の構築  
大石 智一<sup>1,2</sup>、安達 勇光<sup>1</sup>、大庭 俊一<sup>1</sup>、井上 裕幸<sup>1</sup>、原川 晃一<sup>1</sup>、橋本 奈々<sup>1</sup>、吉田 潤次郎<sup>2</sup>、立田 大輔<sup>2</sup>、澤 竜一<sup>3</sup>、川田 学<sup>2</sup>、畠山 昌則<sup>1,4</sup> (1微生物化学研究所(微化研) 沼津支所、2微生物化学研究所(微化研) 第1生物活性、3微生物化学研究所(微化研) 分子構造解析、4微生物化学研究所(微化研) 第3生物活性)
- P-2353** **Investigation of the anti-tumor activity of extracts of jabolicaleaves.**  
Yuki Hentona, Shinya Ikematsu, Yuko Murayama, Hidehiro Yokoda (National Institute of Technology, Okinawa College)  
ジャボチカバの葉の抽出物の抗腫瘍活性作用の検討  
辺土名 勇樹、池松 真也、村山 裕子、與古田 英裕 (沖縄工業高等専門学校)
- P-2354** **The prevention of cancer promotion by caramel caused by heating the glucose, and its precursor study**  
Nobuaki Takahashi (no)  
ブドウ糖カラメルのがん促進予防とその前駆体の研究  
高橋 延昭 (なし)
- P-2355** **Cell-derived artificial nanovesicle as a drug delivery system for malignant melanoma treatment**  
Hui M. Wang (Grad. Inst. of Biomed. Engineering, NCHU)
- P-2356** **The challenge of PGV-1 in suppressing liver cancer cell growth, in vitro and in vivo**  
Edy Meiyanto<sup>1,2</sup>, Dhania Novitasari<sup>2,3</sup>, Nadzifa Nugraheni<sup>2</sup>, Febri Wulandari<sup>2</sup>, Dyandingtyas Dewi<sup>2,4</sup>, Muthi Ikawati<sup>1,2</sup>, Junya Kato<sup>3</sup> (1Dept. of Pharm. Chemistry, Faculty of Pharm., Univ. Gadjah Mada, 2Cancer Chemoprevention Res. Ctr., Faculty of Pharm., Univ. Gadjah Mada, 3Grad. Sch. of Sci. and Tech., Nara, Japan, 4Dept. of Pharmacology & Clin. Pharm., Univ. Gadjah Mada)
- P-2357** **Pentagamavunone-1 (PGV-1) Halts Cell Growth by Inducing Senescence and Inhibits Migration of Human Hepatoma JHH-4 Cells**  
Nadzifa Nugraheni<sup>1,2</sup>, Mila Hanifa<sup>2</sup>, Rohmad Y. Utomo<sup>2,3</sup>, Edy Meiyanto<sup>2,3</sup> (1Dept. of Biotechnology, Grad. sch. Univ. Gadjah Mada, 2Cancer Chemoprevention Res. Ctr., Faculty of Pharm., Univ. Gadjah Mada, 3Dept. of Pharm. Chemistry, Faculty of Pharm., Univ. Gadjah Mada)
- P-2358** **Cancer chemoprevention with DNA demethylating agents on virus-derived leukemogenesis in AKR mice**  
Yuta Yamamoto<sup>1,2</sup>, Tatsuro Watanabe<sup>2</sup>, Hiroshi Ureshino<sup>1,2</sup>, Satoshi Yamashita<sup>2</sup>, Naoko Hattori<sup>1</sup>, Toshikazu Ushijima<sup>1</sup>, Shinya Kimura<sup>1,2</sup> (1Division of Hematology, Faculty of Medicine, Saga University, 2Department of Drug Discovery and Biomedical Sciences, Saga University, 3Department of Life Engineering, Maebashi Institute of Technology, 4Department of Epigenomics, Institute for Advanced Life Sciences, Hoshi University)
- DNA メチル化阻害薬によるウイルス由来のマウス自然発がんに対するがん予防効果**  
山本 雄大<sup>1,2</sup>、渡邊 達郎<sup>2</sup>、嬉野 博志<sup>1,2</sup>、山下 聡<sup>3</sup>、服部 奈緒子<sup>4</sup>、牛島 俊和<sup>4</sup>、木村 晋也<sup>1,2</sup> (1佐賀大学 医学部 血液呼吸器腫瘍内科、2佐賀大学 医学部 創薬科学共同研究講座、3前橋工科大学 工学部 生物工学科、4星薬科大学 先端生命科学研究所)
- P-2359** **Response to antiviral therapy for chronic hepatitis C and risk of hepatocellular carcinoma occurrence in Japan**  
Yoko Yamagiwa<sup>1,2</sup>, Keitaro Tanaka<sup>3</sup>, Keitaro Matsuo<sup>4</sup>, Keiko Wada<sup>3</sup>, Yingsong Lin<sup>6</sup>, Yumi Sugawara<sup>7</sup>, Tetsuya Mizoue<sup>8</sup>, Norie Sawada<sup>1</sup>, Hidemi Takimoto<sup>9</sup>, Hidemi Ito<sup>7</sup>, Tetsuhisa Kitamura<sup>10</sup>, Ritsu Sakata<sup>11</sup>, Takashi Kimura<sup>12</sup>, Shiori Tanaka<sup>1</sup>, Manami Inoue<sup>1</sup> (1Natl. Cancer Center Inst. for Cancer Control, 2Internat. Univ. of Health and Welfare, 3Saga Univ., 4Aichi Cancer Ctr. Res. Inst., 5Gifu Univ., 6Aichi Med. University, 7Tohoku Univ., 8Natl. Ctr. for Global Health and Med., 9Natl. Inst. of Health and Nutrition, 10Osaka Univ., 11Radiation Effects Res. Foundation, 12Hokkaido Univ.)  
日本における C 型慢性肝炎に対する抗ウイルス療法効果と肝細胞癌リスク：システマティックレビューおよびメタアナリシス  
山極 洋子<sup>1,2</sup>、田中 恵太郎<sup>3</sup>、松尾 恵太郎<sup>4</sup>、和田 恵子<sup>5</sup>、林 櫻松<sup>6</sup>、菅原 由美<sup>7</sup>、溝上 哲也<sup>8</sup>、澤田 典絵<sup>9</sup>、瀧本 秀美<sup>9</sup>、伊藤 秀美<sup>4</sup>、北村 哲久<sup>10</sup>、坂田 律<sup>11</sup>、木村 尚史<sup>12</sup>、田中 詩織<sup>1</sup>、井上 真奈美<sup>1</sup> (1国立がん研究センターがん対策研究所、2国際医療福祉大学、3佐賀大学、4愛知がんセンター研究所、5岐阜大学、6愛知医科大学、7東北大学、8国立国際医療研究センター、9国立健康・栄養研究所、10大阪大学、11放射線影響研究所、12北海道大学)
- P-2360** **Altered glycosylated-proteome profiling: Anti-metastatic of natural peptides derived from Tecoma stans in A549 cells**  
Suchecwin Krobthong<sup>1</sup>, Yodying Yingchutrakul<sup>2</sup> (1Faculty of Science, Chulalongkorn Univ., Bangkok, 2National Omics Center, BIOTEC, NSTDA, Thailand)
- P-2361** **Effects of curcumin-loaded nanocomplexes on Opisthorchis viverrini infection induced-cholangiocarcinoma in hamsters**  
Chanakan Jantawong<sup>1</sup>, Chanakan Jantawong<sup>1,4,5,7</sup>, Yaovalux Chamgramol<sup>2,7</sup>, Kititi Intuyod<sup>2,7</sup>, Chawalit Pairojkul<sup>2,7</sup>, Aroonsri Pripem<sup>3</sup>, Rungtiwa Dangtakot<sup>4</sup>, Thatsanapon Pongking<sup>5</sup>, Sakda Waraasawapiti<sup>2,7</sup>, Porntip Pinlaor<sup>5,7</sup>, Somchai Pinlaor<sup>6,7</sup> (1Biomedical Science Program, Graduate School, Khon Kaen University, Thailand, 2Department of Pathology, Faculty of Medicine, Khon Kaen University, Thailand, 3Faculty of Pharmacy, Mahasarakham University, Thailand, 4Faculty of Allied Health Sciences, Nakhonratchasima College, Thailand, 5Faculty of Associated Medical Sciences, Khon Kaen University, Thailand, 6Department of Parasitology, Faculty of Medicine, Khon Kaen University, Thailand, 7Cholangiocarcinoma Research Institute, Khon Kaen University, Thailand)

Room P Sep. 22 (Fri.) 12:50-13:35

E/J

**P23-2** **Anti-carcinogenic effects of synthetic chemicals**  
合成化学物質によるがん抑制

Chairperson: Yoshihiro Sowa (Ctr. for Higher Education, Kyoto Pref. Univ. of Med.)

座長：曾和 義広 (京府医大・教育センター)

**P-2355** **Cell-derived artificial nanovesicle as a drug delivery system for malignant melanoma treatment**

Hui M. Wang (Grad. Inst. of Biomed. Engineering, NCHU)

Room P Sep. 22 (Fri.) 16:30-17:15

E/J

P25-1

### Recent advances in cancer bioinformatics and computational biology (1) がんにおけるバイオインフォマティクス・計算生物学の新展開 (1)

Chairperson: Yasuhiro Kojima (Lab. Comp. Life Sci., National Cancer Center)  
座長: 小嶋 泰弘 (国がん・研究所・計算生命)

- P-2362 Network Pharmacology Approach on Apoptosis Inducer Mechanism of 22-(4-Pyridinocarbonyl) Jorunnamycin A Against NSCLC**  
Ikseon Ikseon<sup>1</sup>, Varisa Pongrakhananon<sup>1,3</sup> (<sup>1</sup>Dep. of Pharmacol Physiol, CU, <sup>2</sup>Dept. of Pharmacy, STIKES Senior Medan, <sup>3</sup>Preclinical Tox Efficacy, CU)
- P-2363 Application of machine learning method MaxWiK to the simulation of the clonal evolution of cancer cells**  
Iurii Nagornov (The Natl. Inst. of Advanced Industrial Sci. and Tech.)
- P-2364 Helenus: A machine learning algorithm for cancer cell (CC) gene expression deconvolution from bulk RNA-seq**  
Valentina Beliacva, Ekaterina Ivleva, Boris Shpak, Danil Litvinov, Anastasia Zotova, Krystle Nomic, Zlata Polyakova, Daniar Dyikanov, Alexander Kuznetsov, Maria Savchenko, Aleksandr Zaitsev, Nathan Fowler, Alexander Bagaev (BostonGene, Corp., 95 Sawyer Rd, Waltham, MA 02453.)
- P-2365 Transcriptomic analysis of Microtubule-associated proteins and the association with lung cancer progression**  
Natsaranyatron Singharajkomron<sup>1</sup>, Varisa Pongrakhananon<sup>1,2</sup> (<sup>1</sup>Dept. of Pharmacology & Physiol., Faculty of Pharm. Sci., Chulalongkorn Univ., <sup>2</sup>Preclinical Toxicity/Efficacy, Assessment of Med. & Chemicals Res. Unit, Chulalongkorn Univ.)
- P-2366 Alpinia galanga L. Possessed Dual Effects Towards Luminal Breast Cancer in Bioinformatic Analysis**  
Dyaningtyasdewi P. Putri<sup>1</sup>, Eri P. Nugroho<sup>2</sup>, Nurulwali F. Hasbiyani<sup>2</sup>, Hajidah Musyayadah<sup>2</sup>, Edy Meiyanto<sup>2,3</sup> (<sup>1</sup>Pharmacology and Toxicology Laboratory, Department of Pharmacology and Clinical Pharmacy, <sup>2</sup>Cancer Chemoprevention Research Center, <sup>3</sup>Macromolecular Engineering Laboratory, Department of Pharmaceutical Chemistry)
- P-2367 Functional interactome analysis in various tumor-promoting pathways in obesity-associated liver tumor microenvironment**  
Atsuki Uno<sup>1</sup>, Yoshiki Nonaka<sup>2</sup>, Kanae Echizen<sup>3</sup>, Ryota Yamagishi<sup>3</sup>, Yi Cheng<sup>3</sup>, Naoko Ohtani<sup>3</sup> (<sup>1</sup>Dept. of Med., Osaka City Univ., <sup>2</sup>Dept. of Pathophysiology, Grad. sch. of Medicine, Osaka City Univ., <sup>3</sup>Dept. of Pathophysiology, Grad. sch. of Medicine, Osaka Metropolitan Univ.)  
肥満誘導性肝臓がん微小環境における様々ながん促進的経路に着目した機能的インタラクトーム解析  
宇野 敦葵<sup>1</sup>、野中 允幾<sup>2</sup>、越前 佳奈恵<sup>3</sup>、山岸 良多<sup>3</sup>、程 イ<sup>3</sup>、大谷 直子<sup>3</sup> (<sup>1</sup>大阪市立大学・医学部、<sup>2</sup>大阪市立大学・院医・病態生理学、<sup>3</sup>大阪公立大学・院医・病態生理学)
- P-2368 Detection of enhancer activity at the single-cell level by deep learning method**  
Ken Murakami, Mariko Okada (Osaka Univ. Inst. for Protein Res.)  
ディープラーニング手法を用いた一細胞レベルエンハンサー検出法の開発  
村上 賢、岡田 真里子 (阪大・蛋白研)
- P-2369 nanoTune: transcriptomewide detection tools for RNA modification**  
Hiroki Ueda<sup>1</sup>, Dasgupta Bhaskar<sup>1</sup>, Boyi Yu<sup>1</sup>, Genta Nagae<sup>2</sup>, Hiroyuki Aburatani<sup>2</sup> (<sup>1</sup>Advanced Data Science, RCAST, Univ. of Tokyo, <sup>2</sup>Genome & Medicine, RCAST, Univ. of Tokyo)  
nanoTune: トランスクリプトームワイドな RNA 修飾検出ツールの開発  
上田 宏生<sup>1</sup>、Dasgupta Bhaskar<sup>1</sup>、Boyi Yu<sup>1</sup>、永江 玄太<sup>2</sup>、油谷 浩幸<sup>2</sup> (<sup>1</sup>東京大・先端研・先端データサイエンス、<sup>2</sup>東京大・先端研・ゲノムサイエンス)

P25-2

### Recent advances in cancer bioinformatics and computational biology (2) がんにおけるバイオインフォマティクス・計算生物学の新展開 (2)

Chairperson: Riu Yamashita (Translational Informatics, EPOC, NCC)  
座長: 山下 理宇 (国立がん研究センター先端医療開発センタートランスレーショナルインフォマティクス分野)

- P-2370 Evaluation of copy number alternations detection tools for whole genome sequence data**  
Hanako Ono<sup>1</sup>, Masahiro Gotoh<sup>1</sup>, Takashi Kohno<sup>2</sup>, Kouya Shiraiishi<sup>1,2</sup> (<sup>1</sup>Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Genome Biol., Natl. Cancer Ctr. Res. Inst.)  
全ゲノム解析におけるコピー数変化検出ツールの評価  
小野 華子<sup>1</sup>、後藤 政広<sup>1</sup>、河野 隆志<sup>2</sup>、白石 航也<sup>1,2</sup> (1)国がん 研究所 臨床ゲノム解析部門、(2)国がん 研究所 ゲノム生物学分野)
- P-2371 Development of Cancer Mutation Visualization Tools for Large Samples**  
Ritsuko Onuki, Miki Ohira, Takehiko Kamijo (Res. Inst. for Clin. Oncology, Saitama Cancer Ctr.)  
大量サンプルのためのがん変異可視化ツールの開発  
小貫 律子、大平 美紀、上條 岳彦 (埼玉県立がんセンター臨床腫瘍研究所)
- P-2372 The analysis of mutational signatures for understanding carcinogenesis considering temporal heterogeneity**  
Shiina Naito<sup>1,2</sup>, Michiaki Hamada<sup>1,2,3</sup>, Taro Matsutani<sup>1</sup> (<sup>1</sup>Waseda Univ., <sup>2</sup>AIST-Waseda Univ. CBBDOIL, <sup>3</sup>Nippon Medical Sch.)  
時間的異質性を考慮した、がんの発生原因の解明に向けた変異シグネチャの解析  
内藤 詩菜<sup>1,2</sup>、浜田 道昭<sup>1,2,3</sup>、松谷 太郎<sup>1</sup> (1)早稲田大学、(2)産総研・早大 CBBDOIL、(3)日本医科大学)
- P-2373 Two-Step Screening Method for Cancer Gene Data Analysis- Multivariate Oncogenes among 169 Microarrays- Shuichi Shinmura (Seikei Univ. Economics)**  
がん遺伝子データ解析のための二段階スクリーニング法-169 個のマイクロアレイによる多変量がん遺伝子-  
新村 秀一 (成蹊大学・経済学部)
- P-2374 Japanese Herbal Kampo Medicine Treatment for Hospitalized Cancer Patients**  
Nobuaki Michihata<sup>1</sup>, Yohko Nakamura<sup>1</sup>, Taisuke Jo<sup>2</sup>, Kiyohide Fushimi<sup>3</sup>, Hideo Yasunaga<sup>4</sup>, Yoshitaka Hippon<sup>1</sup> (<sup>1</sup>Cancer Prevention Ctr., Chiba Cancer Ctr. Res. Inst., <sup>2</sup>Dept. of Health Services Res., The Univ. of Tokyo, <sup>3</sup>Tokyo Med. & Dental Univ. Graduate Sch., <sup>4</sup>Dept. of Clinical Epidemiology, The Univ. of Tokyo)  
癌入院患者に対する漢方薬治療 DPC データを利用したリアルワールド研究  
道端 伸明<sup>1</sup>、中村 洋子<sup>1</sup>、城 大祐<sup>2</sup>、伏見 清秀<sup>3</sup>、康永 秀生<sup>4</sup>、筆宝 義隆<sup>1</sup> (1)千葉県がんセンター研究所がん予防センター、(2)東京大学大学院ヘルスサービスマニサーチ講座、(3)東京医科歯科大学大学院医療政策情報学分野、(4)東京大学大学院臨床疫学経済学教室)
- P-2375 Collaboration trends between cancer research field and other research fields searched from patent applications**  
Satoru Sekiya<sup>1</sup>, Aoyagi Kazuhiko<sup>1</sup>, Toshio Ogawa<sup>2</sup>, Teruhiko Yoshida<sup>3</sup>, Akinobu Hamada<sup>4</sup>, Fumitaka Takeshita<sup>1</sup> (<sup>1</sup>PRIMO, Natl. Cancer Ctr., <sup>2</sup>Faculty of Agriculture, Setsunan Univ., <sup>3</sup>CRAS, Natl. Cancer Ctr., <sup>4</sup>Division of Molecular Pharmacology, Natl. Cancer Ctr. Res. Inst.)  
特許出願から見たがん研究分野と他の研究分野との連携の動向  
関矢 聡<sup>1</sup>、青柳 一彦<sup>1</sup>、小川 俊夫<sup>2</sup>、吉田 輝彦<sup>3</sup>、濱田 哲暢<sup>4</sup>、竹下文隆<sup>1</sup> (1)国立がん研究センター・革新的がん研究支援室、(2)摂南大・農、(3)国立がん研究センター・研究支援センター、(4)国立がん研究センター・分子薬理)
- P-2376 Study of CDISC standards implementation in academia (AMED project)**  
Taro Shibata<sup>1</sup>, Toshiki Saito<sup>2</sup> (<sup>1</sup>National Cancer Center, Center for Research Administration and Support, <sup>2</sup>NHO Nagoya Medical Center, Clinical Research Center)  
アカデミアにおける CDISC 標準利用促進に関する研究開発 (AMED 研究)  
柴田 大朗<sup>1</sup>、齋藤 俊樹<sup>2</sup> (1)国立がん研究センター 研究支援センター、(2)NHO 名古屋医療センター臨床研究センター)
- P-2377 Real-world Olaparib Prescription Data in Japan: Insight from the National Database**  
Masakazu Sato<sup>1</sup>, Tadahiro Goto<sup>1,2</sup> (<sup>1</sup>TXP Medical Co. Ltd., <sup>2</sup>School of Public Health, The University of Tokyo)  
NDB オープンデータを用いた日本におけるオラパリブ処方実態に関



## する検討

佐藤 雅和<sup>1</sup>、後藤 匡啓<sup>1,2</sup> (1TXP Medical 株式会社、<sup>2</sup>東京大学大学院  
公共健康医学専攻)

P-2378 **Association between delayed initiation of adjuvant chemotherapy  
and poor survival outcome among gastric cancer patients**  
Taisuke Ishij, Yuichi Ichinose, Takahiro Higashi (NCC Div. of Health  
Service Res.)

胃がん術後補助化学療法開始の遅れは生命予後不良と関連する  
石井 太祐、市瀬 雄一、東 尚弘 (国がん 医療政策部)

## Survivor Scientist Program

Room P Sep. 22 (Fri.) 16:30-18:00 J

SSP

Survivor Scientist Program  
サバイバー・科学者 プログラム

Chairperson: Taichi Isobe (Oncology &amp; Social Med., Kyushu Univ.)

座長：磯部 大地 (九州大・連携社会医学分野)

Japanese Cancer Association (JCA) launched the JCA-Survivor Scientist Program (JCA-SSP) to train "research advocates" who will participate in cancer research from the perspective of cancer patients and their families by deepening the understanding of cancer research. In addition, the JCA-SSP program facilitates the collaboration between cancer scientists, cancer survivors, and patient-advocacy groups, which is essential to promote cancer research, thereby contributing to the improvement of cancer therapies.

At the annual meeting this year, we are planning to hold the 8th JCA-SSP program by inviting ~3 research advocates who will learn about cancer research and its current and future relevance to cancer therapeutics by inviting ~4 research advocates who participated in the previous JCA-SSP program. Scientists and patient advocates who have attended the SSP program at American Association for Cancer Research (AACR) will also join this JCA-SSP program as scientific mentors and advocate mentors to assist participants throughout the 3-day program. Participants are requested to present their current activities and expectations for cancer research at poster presentation. Participants are divided into groups. Each group will present achievements of their group work on a given topic at the end of this program.

SSP-1 Yasuko Azuma

RCJの活動と会員およびraccoon参加者について

東 靖子 (一般社団法人日本希少がん患者会ネットワーク)

SSP-2 Shinji Ishiwatari

『腹膜偽粘液腫患者支援の会』活動報告と余命半年患者の病歴報告

石渡 真二 (腹膜偽粘液腫患者支援の会)

SSP-3 Ruri Maeda

がん研究を促進させ、誰もがその恩恵を受けるために

前田 留里 (NPO 法人京都ワーキング・サバイバー)

SSP-4 Yumi Nakanishi

がん研究とがん患者のかけ橋となれ～あなたの笑顔がみたいから～

中西 由美 (特定非営利活動法人がんピアネットふくしま)

SSP-5 Tsuyoshi Shiraiwa

すい臓がん啓発“パープルリボン活動”と“早期発見”について

白岩 剛 (NPO 法人パンキャンジャパン)

SSP-6 Mayumi Terada

終了報告審査——認定臨床研究審査委員会一般委員としての私見

寺田 真由美 (一般社団法人 日本癌医療翻訳アソシエイツ)

SSP-7 Hiroimi Todoroki

1人では小さな力でも、共に向かう未来は現実になる

轟 浩美 (認定NPO 法人 希望の会)