Day 3
September 30 (Saturday)
ML12 Therapeutic strategies targeting cancer stem cells based on their characterization

Chairperson: Atsushi Hiroa (Kanazawa Univ. Cancer Res. Inst.)
座長：平尾 敦（金沢大・がん研）

ML13 Introduction to artificial Intelligence and perspectives of its application to cancer science and medicine

座長：浜本 隆二（国立がん研・研・がん分子修飾制御学分野）

ML14 Molecular pathology of cancer in the past, present and future precision medicine

Chairperson: Michiie Sako (Dept. of Pathol., Nagoya Univ. Grad. Sch. Med.)
座長：坂元 亨宇（名古屋大・病理学）

ML15 Application of genome editing in cancer research

Chairperson: Kenzaburo Tanii (Inst. of Med. Sci., The Univ. of Tokyo)
座長：谷 嘉三朗（東京大・医科系）

ML16 Novel functional roles of hTERT in carcinogenesis

Chairperson: Hiroyuki Seimiya (Div. Mol. Biother., Cancer Chemo. Ctr., JFCR)
座長：馬見秀之（がん研・化療・分子生物治療）

ML17 Hereditary cancer syndrome -treatment and cancer prevention-

Chairperson: Teruhiko Yoshida (Natl. Cancer Ctr. Hosp.)
座長：吉田 輝彦（国立がん研・中央病院・遺伝子）

ML18 Writing skills to publish attractive papers in English

座長：野口 好孝（愛知がん研・研・分子腫瘍学部）

ML19 Portrait of p53 Unknown -New Destinations in p53 Research-

座長：荒川 博文（国立がん研・研・腫瘍生物学）

ML20 Portrait of p53 Unknown -New Destinations in p53 Research-

Chairperson: Rieko Oku (Laboratory of Fundamental Oncology, National Cancer Center Research Institute)
座長：岡野 理恵子（国立がん研・研・基礎腫瘍学ユニット）
Room 13  Sept. 30 (Sat.) 8:00-8:50

**MV2** The JCA-Mauvernay Award Lecture (Applied)

Chairperson: Ryuzo Ueda (Aichi Med. Univ. Sch. of Med.)
座長：上田 隆三（愛知医大・腫瘍免疫寄付講座）

**MV2** Immune suppressive mechanisms as a target of effective cancer immunotherapy

免疫抑制機構を標的とした効果的がん免疫療法の開発

Room 14  Sept. 30 (Sat.) 8:00-8:50

**ML20** Fundamentals in immune analysis
免疫解析の初步

Chairpersons: Toshihiko Torigoe (Dept. of Path., Sapporo Med. Univ. Sch. of Med.)
Kazuhiro Kakimi (Dept. Immunothereapeutics, The Univ. of Tokyo. Hosp.)
座長：鳥越 勝彦（札幌医大・第一病理）

**ML20-1** Cancer immunotherapy targeting neoantigens
Kazuhiro Kakimi (Dept. Immunothereapeutics, The Univ. of Tokyo. Hosp.)
ネオアンチゲンを標的としたがん免疫治療

**ML20-2** Basic methodology for immuno-oncology research
Toshihiko Torigoe (Dept. Pathology, Sapporo Med. Univ. Sch. of Med.)
免疫腫瘍学研究のための免疫解析法の基礎

Room 15  Sept. 30 (Sat.) 8:00-8:50

**ML21** Advent of single cell analysis
シングル細胞解析の進展

Chairperson: Koji Okamoto (Div. of Cancer Differentiation, Natl. Cancer Ctr. Res. Inst.)
座長：岡本 康司（国立がん研セ・研・がん分化制御）

**ML21** Advent of single cell analysis
Yutaka Suzuki (Dept. CBMS, Univ.Tokyo)
シングル細胞解析の進展

Room 16  Sept. 30 (Sat.) 8:00-8:50

**ML22** Beyond Targeting Oncogenes: Emerging Anti-Cancer Strategies

座長：鈴木 聡（神戸大．院医・分子細胞生物学）

**ML22** Beyond Targeting Oncogenes: Emerging Anti-Cancer Strategies
Tak W. Mak (Princess Margaret Cancer Centre)
JCA-AACR Joint Symposia

**Room 1** Sept. 30 (Sat.) 9:00-11:30

**AACR2** Novel frameworks toward precision medicine

Sponsored by Princess Takamatsu Cancer Research Fund

Chairpersons: Hiroyuki Mano (The Univ. of Tokyo / Natl. Cancer Ctr. Res. Inst.)
Jeffrey A. Engelman (Director of Thoracic Oncology, Novartis)

Discovery of essential growth drivers in cancer has led to the development of effective targeting reagents as well as diagnostic tools to detect such drivers. This paradigm has revised the way we classify human cancer. One gene can become an essential oncogene of many cancers through different activation mechanisms (for instance, ALK), and, at the same time, one cancer may be revealed to be an amalgamation of genetically distinct cancers that should be treated with corresponding targeting reagents. Further, the way to detect/monitor tumors has to be transformed by integrating such information. The success of immune checkpoint blockades has added a novel modality of treat cancer.

These paradigm shifts were explicitly declared by the Precision Medicine Initiative in 2015, and were further materialized by the recent FDA approval of pembrolizumab for any solid tumors positive for microsatellite instability. So we are facing the revolution in the way we diagnose, classify, treat and monitor cancers. Developing cancer drugs and the scheme of clinical trials has also to be updated. In this JCA-AACR joint symposium, we will discuss these novel frameworks for the Precision Medicine.

**AACR2-1** The Evolution of Cancer Under the Selective Pressure of Therapy

Jeffrey A. Engelman (Director of Thoracic Oncology, Novartis)

**AACR2-2** Cancer Precision Medicine: From diagnosis to Immunotherapy

Yusuke Nakamura (Dept Med and Sur, U of Chicago)

がん精査と治療のための進化（シカゴ大・医・内科・外科）

**AACR2-3** Defining the actionable genome.

David B. Solit (Memorial Sloan Kettering Cancer Center)

**AACR2-4** Advances of nation-wide genome screening for development of cancer therapeutics

Katsuya Tsuchihiara (Div. Translational Genomics, EPOC, Natl. Cancer Ctr.)

全国規模のがんゲノムスクリーニングによる新規治療開発

Chairpersons: Hiroyuki Mano (The Univ. of Tokyo / Natl. Cancer Ctr. Res. Inst.)
Jeffrey A. Engelman (Director of Thoracic Oncology, Novartis)

**Room 2** Sept. 30 (Sat.) 9:00-11:30

**S16** Oncolytic virus therapy and gene therapy - Innovative technology towards clinical practice

Chairpersons: Tomoki Todo (Div. of Innovative Cancer Therapy, Inst. of Med. Sci., The Univ. of Tokyo)

Recently, a number of disruptive medical treatments for cancer have been developed with research progress including those using immune-checkpoint inhibitory antibodies. Oncolytic virus therapy has been receiving interest since the discovery of cancer remission in patients after virus infection, and recent advances in virology have enabled the use of oncolytic viruses as a practical means for cancer treatment. In particular, the progress in genetic engineering technologies has facilitated the development of recombinant viruses for oncolytic virus therapy. In 2015, an oncolytic herpes virus armed with GM-CSF (T-Vec) was approved by the US FDA and EMA as a drug for melanoma. This precedent may become a trigger for a number of oncolytic viruses to come into the market. The results from T-Vec clinical trial indicate that, in addition to the direct oncolytic activity, the systemic antitumor immunity induced by the virus significantly contributes to the efficacy by acting on remote tumors and thereby prolonging the survival of patients.

In this symposium, Dr. Martuza, a pioneer of oncolytic herpes virus, will give us a suggestive and memorial presentation. We will also introduce the recent progress of Japan-origin oncolytic viruses towards the approval as new anticancer reagents.

**S16-1** History and future of oncolytic virus therapy

Robert L. Martuza (Dept. of Neurosurgery, Massachusetts General Hospital, Dept. of Neurosurgery, Harvard Medical School)

**S16-2** ‘Sakigake’-designated clinical development of oncolytic herpess virus G47Δ


がん治療用ヘルペスウイルス G47Δの「先駆け」臨床開発

藤堂 典紀（東京大・医科研・先端がん治療分野）

**S16-3** A recombinant oncolytic measles virus for novel virotherapy

Chioko Kai (Inst. Med. Sci., The Univ. of Tokyo)

がん治療用麻疹ウイルスを用いたウイルス治療法の開発

甲斐 知恵子（東京大学・医学研究所）

**S16-4** Tumor-targeted and armed oncolytic vaccinia virus for systemic virotherapy

Takafumi Nakamura (Grad. Sch. of Medical Sciences, Tottori University)

難治性がんを標的破壊する武装化遺伝子組換えウイルスによる全身性がんウイルス療法の開発

中村 貴史（鳥取大学・大学院医学系研究科）

**S16-5** Development of prostate cancer gene therapy

YASUTOMO NASU (Dept.Urology, Okayama University)

前立腺癌に対する遺伝子治療の開発研究

内村保友（岡山大学医学部総合研究科 泌尿器病態学）

**S16-6** Clinical trials for the treatment of intractable cancers using HVJ envelope (HVJ-E)


HVJ-E を用いたがん治療の臨床開発

金田 安史（大阪大・医・遺伝子治療科）
Novel therapeutic strategies for malignant gliomas

Chairpersons: Koichi Ichimura (Div. of Brain Tumor Translational Res. Natl. Cancer Ctr. Res. Inst.)
Atsushi Natsume (Dept. of Neurosurgery Nagoya Univ. Sch. of Med.)

Gliomas are one of the most malignant human cancers. Although a series of large-scale genomic studies have discovered a number of mutations, targetable recurrent mutations are rare. Glioblastomas are also notorious for their temporal and spatial heterogeneity, which makes developing a targeted therapy even more challenging. This is certainly the area where a new treatment is most urgently needed. In this session, 6 papers presenting novel therapeutic strategies against glioblastomas are selected. Tergaonkar will present a novel TERT targeting therapy based on their mechanistic understanding of TERT activation by promoter mutations. Nishihara will introduce a newly developed targeted sequencing system for molecular diagnosis of gliomas. Kitanume identified new glioma stem cell-targeting drugs through their elaborate cellular studies. Enomoto et al. approaches cancer stem cells through a study on amino acid signal regulation and cellular metabolism. Tateishi presents a unique strategy to treat IDH1-mutated gliomas targeting NAD+ metabolic pathways rather than directly inhibiting mutant IDH1. Finally, Natsume et al. will discuss about an immunotherapy against gliomas using chimeric antigen receptor (CAR)-T-cells targeting some of the surface antigens frequently present in gliomas. Continuous concerted efforts such as presented here will hopefully lead to cure to gliomas.

SS5-1 Can we target telomerase in cancer?
Vinay Tergaonkar 1,2 (IMCB, Astar, Singapore, 1Department of Biochemistry, NUS, Singapore, 2National Cancer Center, Singapore, 3Center for Cancer Biology, CCB, Unisa, Adelaide, Australia)

SS5-2 Genotyping of glioma including 1p19q codeletion by targeted sequencing
Hiroshi Nishihara 1,2,3 (Division of Clinical Cancer Genomics, Hokkaido Cancer Center, Cancer Center, Keio University Hospital)

SS5-3 Targeting glioma stem cells as a treatment strategy for glioblastoma
Chihiro Kitanume 1,2,3 (Dept. Mol. Cancer Sci., Yamagata Univ. Sch. Med.)

SS5-4 Mechanisms for the control of amino acid signaling and drug resistance in cancer stem cells
Atsushi Enomoto, Masahide Takahashi (Tumor Pathol., Nagoya Univ. Grad. Sch. Med.)

SS5-5 Deregulated NAD+ metabolism as a therapeutic target in IDH1 mutant gliomas.
Kensuke Tateishi 1,2 (Dept. Neurosurg., Yokohama City Univ., Sch. Med.)

SS5-6 Chimeric Antigen Receptor Therapeutic Strategies: The Future of Glioblastoma Management
Atsushi Natsume 1,2,3, Masasuke Ohno 1,2, Toshihiko Wakabayashi 1 (Dept. Neurosurg., Nagoya Univ. Sch. Med., 1Dept. Neurosurg., Nagoya Med. Center)

International Sessions

IS9-1 Perspectives of Cancer Control in the Emerging Context of Global Health
Hiroki Nakatani (KGRI, Keio Univ.)

IS9-2 The Role of the Cancer Research Community in Realizing UHC for Cancer in Asia
Jae Kyung Roh (Division of Hemato-Oncology, Konyang University Hospital; Division of Medical Oncology, Yonsei Cancer Center)

IS9-3 Evidences of Access for Cancer Patients under UHC of Indonesia
Hasbullah Thabrany, Lies Dina Liastuti (Dept of Health Policy and Administration, Universitas Indonesia, The National Social Security Council, Republic of Indonesia, Darmo Hospital, Ministry of Health Republic of Indonesia)

IS9-4 Cancer care in Southeast Asian region: can we afford it?
Jasmine Ling, Nirmala Bhoo-Pathy (Department of Surgery, Faculty of Medicine, University of Malaysia, Julius Center, Faculty of Medicine, University of Malaysia)

IS9-5 What Japan can do to achieving desired goals of cancer treatments in Asia?
Shigeo Horie (Dept of Urology, Juntendo University Graduate School of Medicine)

IS9-6 T-shaped approach to health system strengthening
Takemi Keizo (House of Councillors)

IS9-7 What Japan can do to achieving desired goals of cancer treatments in Asia?
Hideyuki Akaza (The Univ. of Tokyo)
Jae Kyung Roh (Div. of Hemato-Oncology, Konyang Univ. Hosp.)

Although tremendous advances have been achieved in cancer treatment, equity of care remains a challenging issue, with limited medical resources leaving many people still unable to access potentially life-saving care. This is an issue that is common to all countries and an urgent challenge is to ensure that the concept of Universal Health Coverage (UHC) is fully implemented in healthcare policies and practices in the Asian region. UIICC Asian Regional Office (UIICC-ARO) has been engaged in initiatives for UHC in cancer care from an early stage and following the historic adoption of the cancer resolution at the World Health Assembly (WHA) in 2017 it is now essential to engage in multi-sectoral discussions on how the Asian cancer community should provide further impetus to creating policy recommendations on UHC. In this session, researchers, politicians and policy makers will present on wide-ranging issues, seeking to discuss and catalyze actions across all areas of society and beyond national borders with a view to elucidating ways to achieve UHC across the Asian region in a manner that harmonizes with national healthcare and social security systems.
### International Sessions

#### IS10

**New strategy of cancer therapy in GI cancer**

**What is next epoch / breakthrough?**


Chia-Chi Lin (Dept. of Oncology, Natl. Taiwan Univ. Hosp.)

座長：土井 健彦（国立がん研究センター東病院・先端医療科）

Chia-Chi Lin (Dept. of Oncology, Natl. Taiwan Univ. Hosp.)

During the last few years there has been continued progress in new anti-cancer drug development. New agents ranging from small molecules to engineered antibodies to immune modulators have been approved for cancer treatment, including GI tract cancer. And new modalities of gene, virus therapies is starting to evaluate. New cancer drug development has evolved methodologically from a one-size fits all approach to a personalize development model. But the limitation of efficacy is still remaining and new weapons to GI malignancies are considered as unmet medical needs. In this session, leading edge of clinical development and current status in GI cancer development will be presented and discussed. We are going to address the future key with key opinion leaders.

#### IS10-1

**Immune checkpoint inhibitors in GI cancers**

Chia-Chi Lin (Dept. of Oncology, Natl. Taiwan Univ. Hosp.)

#### IS10-2

**Future Development of Novel Agents for Gastric Cancer**

Narikazu Boku (Div. Gastrointestinal Medical Oncology, National Cancer Center Hospital East)

胃癌に対する新薬開発

朴 成和（国立がん研究センター中央病院  消化管内科）

#### IS10-3

**New direction for viral therapy for GI cancer.**

Takashi Kojima, Toshihiko Doi (Department of Gastrointestinal Oncology, National Cancer Center Hospital East)

消化管癌におけるウイルス療法の新たな展開

小島 隆嗣，土井 健彦（国立がん研究センター東病院  消化管内科）

#### IS10-4

**New early drug development for hepatobiliary cancer in Asia**

Do-Youn Oh (Medical Oncology, Seoul National University Hospital, Cancer Research Institute, Seoul National University College of Medicine)

#### IS10-5

**Early phase clinical trials in esophageal cancers: The issue is tissue.**

Matthew Ng (Div of Med Onc, NCC Singapore)

#### IS10-6

**New photodynamic therapy with next-generation photosensitizers for GI tract cancers**

Hirotada Nishie, Hiromi Kataoka, Noriyuki Hayashi, Mamoru Tanaka, Yasuyuki Okamoto, Takayoshi Shimura, Tsutomu Mizoshi, Eiji Kubota, Takashi Jhon (Depts of Gastroenterology and Metabolism, Nagoya City University Graduate School)

消化管癌に対する次世代光感受性物質を用いた新たな光線療法の治療

西江 裕治，片岡 洋望，林 剛之，田中 守，岡本 泰幸，志村 雅也，溝下 勝，久保田 夹頂，城 卓志（名古屋市立大・医・消化器・代謝内科）

---

### English Oral Sessions

#### E12-2

**Novel diagnostic and therapeutic targets in cancer immunotherapy**

Chairperson: Hiroaki Ikeda (Dept. Oncology, Nagasaki Univ. Grad., Sch., Med.)

座長：池田 裕明（長崎大学 医療・腫瘍医学）

#### E-3001

**Integrated analysis of somatic mutations and immune microenvironment of multiple portions of human cancers**

Takashi Joh (Depts of Gastroenterology and Metabolism, Nagoya City Medical Center Hospital)

多部位の人間の癌の免疫微環境の統合解析

田中 洋明，柳村 千恵，六穂一哉，田村 達郎，浜 雅典，木村 俊二郎，永原 章，髙橋 貢弘，天野 亮二，八代 正和，平川 弘聖，大平 雅一（大阪市立大・医・腫瘍外科）

#### E-3002

**Personalized immunotherapies using oncotargets/neon antigenic TCR-engineered T cells**

Tatsuo Matsuda, Toigo Kato, Yuji Ikeda, Matthias Leisegang, Tetsuro Hikichi, Makiko Harada, Makda Zewde, Jae-Hyun Park, Kazuma Kiyotani, Yusuke Nakamura (Dept. of Medicine, University of Chicago, Institute of Immunology, Charite, Campus Buch, Oncotheraphy Science Inc)

#### E-3003

**Possibility of inducing tumor infiltrating lymphocytes by B cells in tertiary lymphoid structures in gastric cancer**


胃癌における腫瘍内B細胞による腫瘍浸潤リンパ球誘導の可能性

田中 洋明，柳村 千恵，六穂一哉，田村 達郎，浜 雅典，木村 俊二郎，永原 章，髙橋 貢弘，天野 亮二，八代 正和，平川 弘聖，大平 雅一（大阪市立大・医・腫瘍外科）

#### E-3004

**The activated conformation of integrin β7 as a target for multiple myeloma-specific CAR T-cell therapy**

Naoki Hosen, Kana Hasegawa, Yusuke Oji, Atsushi Kumanogoh, Haruo Sugiyama (Dept. of Cancer Stem Cell Biology, Osaka Univ.)

活化インテグリンβ7を標的とした多発性骨髄腫特異的CAR-T細胞療法

保喜 麻幸，長谷川 加奈，尾崎 宏，熊ノ郷 淳，杉山 治夫（大阪大学 医療機能診断機構，大阪大学医院呼吸器内科，大阪大学医療機能診断機構）

#### E-3005

**Integrity of cell-free DNA in plasma as a useful biomarker for responses to peptide vaccine in ovarian cancer patients**

Kurume Univ Pathology, Sapporo Med. Univ., Sch. Med.)

血液に存在する細胞外DNAの健全性が卵巣癌対症ワクチンの応答予測に有用かの解析

和原 菊子，山田 亮（久留米大学先端医療研究センター）

#### E-3006

**Cancer immunotherapy focus on cancer stem cells**

Toshihiko Hirohashi, Tomohide Tsukahara, Takayuki Kanaseki, Munehide Nakatsugawa, Terufumi Kubo, Toshihiko Torigoe (Dept. Pathology, Sapporo Med. Univ., Sch., Med.)

がん幹細胞に注目したがん免疫療法

保喜 哲彦，塚原 篤晃，金間 貴幸，中山 淳之介，宗秀 久保，輝文，鳥越 俊彦（札幌医科大学 医・第一病院）
**E12-3** Antibody-based immunotherapy and tumor microenvironment

*Development of new antibody therapeutics for treating osteosarcoma*

**E1300** Anti-podocalyxin chimeric antibody phCpMab-47 targeting colorectal adenocarcinomas
Yao-Wen Chang, Akiko Kunita, Mika K. Kaneko, Shunsuke Itai, Shinji Yamada, Tomokazu Ohishi, Shinji Abe, Naoki Horikawa, Mana Taki, Ryusuke Murakami, Junzo Sakamoto, Daisuke Iizuka, Kenji Kamiya (*Dept. of Gynecology and Obstetrics, Kyoto University Graduate Sch. Med., Dept. of Obstetrics and Gynecology, Faculty of Medicine, Kinki University*

**J1-2** Experimental carcinogenesis

*Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer*

**Japanese Oral Sessions**

**J1-3001** Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer

**E12-3** Antibody-based immunotherapy and tumor microenvironment

*Development of new antibody therapeutics for treating osteosarcoma*

**E1300** Anti-podocalyxin chimeric antibody phCpMab-47 targeting colorectal adenocarcinomas
Yao-Wen Chang, Akiko Kunita, Mika K. Kaneko, Shunsuke Itai, Shinji Yamada, Tomokazu Ohishi, Shinji Abe, Naoki Horikawa, Mana Taki, Ryusuke Murakami, Junzo Sakamoto, Daisuke Iizuka, Kenji Kamiya (*Dept. of Gynecology and Obstetrics, Kyoto University Graduate Sch. Med., Dept. of Obstetrics and Gynecology, Faculty of Medicine, Kinki University*

**J1-2** Experimental carcinogenesis

*Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer*

**Japanese Oral Sessions**

**J1-3001** Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer

**E12-3** Antibody-based immunotherapy and tumor microenvironment

*Development of new antibody therapeutics for treating osteosarcoma*

**E1300** Anti-podocalyxin chimeric antibody phCpMab-47 targeting colorectal adenocarcinomas
Yao-Wen Chang, Akiko Kunita, Mika K. Kaneko, Shunsuke Itai, Shinji Yamada, Tomokazu Ohishi, Shinji Abe, Naoki Horikawa, Mana Taki, Ryusuke Murakami, Junzo Sakamoto, Daisuke Iizuka, Kenji Kamiya (*Dept. of Gynecology and Obstetrics, Kyoto University Graduate Sch. Med., Dept. of Obstetrics and Gynecology, Faculty of Medicine, Kinki University*

**J1-2** Experimental carcinogenesis

*Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer*

**Japanese Oral Sessions**

**J1-3001** Characterization of genotoxins, colibactin, facilitating inflammation-induced colorectal cancer
**English Oral Sessions**

**Room 7**

<table>
<thead>
<tr>
<th>Sept. 30 (Sat.) 10:15-11:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-3013 Dynamics of chromatin accessibility during TGF-β-induced EMT of Ras-transformed mammary gland epithelial cells</td>
</tr>
<tr>
<td>Yusuake Tamura, Mayu Arase, Natsumi Kawasaki, Kazunobu Isogaya, Byo Nakaki, Anna Mizutani, Shuichi Tsutsumi, Hiroyuki Aburatani, Daizo Koinuma, Kohei Miyazono</td>
</tr>
<tr>
<td>E-3014 RUNX1-inhibition negatively control leukemia cell engraftment in the vascular niche through down-regulating E-selectin</td>
</tr>
<tr>
<td>Chieko Tokushige, Ken Morita, Shintaro Maeda, Hiroki Kiyose, Mina Noura, Tatsuki Kataoka, Hiroshi Sugiyama, Yasuhiko Kamikubo, Isogaya, Ryo Nakaki, Anna Mizutani, Shuichi Tsutsumi, Hiroyuki Aburatani, Daizo Koinuma, Kohei Miyazono</td>
</tr>
<tr>
<td>E-3015 A RNA splicing factor regulating splicing in androgen receptor promotes malignancy in prostate cancer</td>
</tr>
<tr>
<td>Keisuke Nimura, Norihiko Kawamura, Kotaro Saga, Yasufumi Kaneda</td>
</tr>
<tr>
<td>E-3016 The novel function of RUNX1 in Philadelphia chromosome positive acute lymphoblastic leukemia</td>
</tr>
<tr>
<td>E-3017 Upregulation of CBFB induces resistance to RUNX1 inhibition in acute myeloid leukemia cells</td>
</tr>
<tr>
<td>Mina Noura, Ken Morita, Chieko Tokushige, Shintaro Maeda, Hiroshi Sugiyama, Kenichi Yoshida, Seishi Ogawa, Yasuhiko Kamikubo, Souichi Adachi</td>
</tr>
<tr>
<td>E-3018 CDK1 p21 is a novel target gene of ATF4 and contributes to cell survival under endoplasmic reticulum stress</td>
</tr>
<tr>
<td>Hidetoshi Hayashi, Yasumichi Inoue, Nobumichi Ohoka, Keisuke Nimura, Norihiko Kawamura, Kotaro Saga, Yasufumi Kaneda</td>
</tr>
</tbody>
</table>

**Chairperson:** Taro Yamashita (Dept. Gen. Med., Kanazawa Univ. Hosp.)

**Room 7**

<table>
<thead>
<tr>
<th>Sept. 30 (Sat.) 10:15-11:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-3016 The novel function of RUNX1 in Philadelphia chromosome positive acute lymphoblastic leukemia</td>
</tr>
<tr>
<td>Shintaro Maeda, Ken Morita, Hiroshi Sugiyama, Souichi Adachi, Yasuhiko Kamikubo, Isogaya, Seishi Ogawa, Yasuhiko Kamikubo, Souichi Adachi, Hiroshi Sugiyama</td>
</tr>
</tbody>
</table>

**English Oral Sessions**

**Room 7**

<table>
<thead>
<tr>
<th>Sept. 30 (Sat.) 10:15-11:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-3014 RUNX1-inhibition negatively control leukemia cell engraftment in the vascular niche through down-regulating E-selectin</td>
</tr>
<tr>
<td>Chieko Tokushige, Ken Morita, Shintaro Maeda, Hiroki Kiyose, Mina Noura, Tatsuki Kataoka, Hiroshi Sugiyama, Yasuhiko Kamikubo, Isogaya, Ryo Nakaki, Anna Mizutani, Shuichi Tsutsumi, Hiroyuki Aburatani, Daizo Koinuma, Kohei Miyazono</td>
</tr>
<tr>
<td>E-3015 A RNA splicing factor regulating splicing in androgen receptor promotes malignancy in prostate cancer</td>
</tr>
<tr>
<td>Keisuke Nimura, Norihiko Kawamura, Kotaro Saga, Yasufumi Kaneda</td>
</tr>
<tr>
<td>E-3016 The novel function of RUNX1 in Philadelphia chromosome positive acute lymphoblastic leukemia</td>
</tr>
<tr>
<td>Shintaro Maeda, Ken Morita, Hiroshi Sugiyama, Souichi Adachi, Yasuhiko Kamikubo, Isogaya, Seishi Ogawa, Yasuhiko Kamikubo, Souichi Adachi, Hiroshi Sugiyama</td>
</tr>
<tr>
<td>E-3017 Upregulation of CBFB induces resistance to RUNX1 inhibition in acute myeloid leukemia cells</td>
</tr>
<tr>
<td>Mina Noura, Ken Morita, Chieko Tokushige, Shintaro Maeda, Hiroshi Sugiyama, Kenichi Yoshida, Seishi Ogawa, Yasuhiko Kamikubo, Souichi Adachi</td>
</tr>
<tr>
<td>E-3018 CDK1 p21 is a novel target gene of ATF4 and contributes to cell survival under endoplasmic reticulum stress</td>
</tr>
<tr>
<td>Hidetoshi Hayashi, Yasumichi Inoue, Nobumichi Ohoka, Keisuke Nimura, Norihiko Kawamura, Kotaro Saga, Yasufumi Kaneda</td>
</tr>
</tbody>
</table>

**Chairperson:** Taro Yamashita (Dept. Gen. Med., Kanazawa Univ. Hosp.)

**Room 7**

<table>
<thead>
<tr>
<th>Sept. 30 (Sat.) 10:15-11:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-3016 The novel function of RUNX1 in Philadelphia chromosome positive acute lymphoblastic leukemia</td>
</tr>
<tr>
<td>Shintaro Maeda, Ken Morita, Hiroshi Sugiyama, Souichi Adachi, Yasuhiko Kamikubo, Isogaya, Seishi Ogawa, Yasuhiko Kamikubo, Souichi Adachi, Hiroshi Sugiyama</td>
</tr>
</tbody>
</table>

J-3007 The effect of Erythromyceceae-derived microvesicles on the malignant potential of gastric and colorectal cancer

赤血球由来microvesiclesと腫瘍及び大腸癌細胞の悪性化の関連の検討
松原 大樹, 有田 智洋, 小西 博史, 坂田 勝俊, 塚崎 敦, 藤田 悠司, 長野 真平, 小菅 敏幸, 藤原 智, 岡本 和真, 大川 英吾（京都府立医科 大 消化器内科）

J-3008 Dual roles of p63 and NOTCH1 in the development and progression of squamous cell carcinoma

扁平上皮癌の発生と進展におけるp63とNOTCH1の二面性
遠藤 彰至, 中原 知美, 藤田 智雄, 清田 つる (国立がん研究センター・研究所、発がん予防)、九大・院外・医薬細胞生物化)

J-3009 Tumor invasion mechanism through direct heterotypic interaction between tumor cells and fibroblasts

がん細胞と線維芽細胞の直接的相互作用を介したがん浸潤機構
宮崎 甚, 小柳 祐, 星野 大輔, 宮城 淳平 (神奈川がんセンター・臨床研・分子病態、横浜市大・木村生物研、神奈川がんセンター・臨床研・がん生物)

J-3101 PI(3,4)P2 plays critical roles in the regulation of focal adhesion dynamics of MDA-MB-231 breast cancer cells

PI(3,4)P2によるMDA-MB-231転移性乳がん細胞のfocal adhesion形成と浸潤能の制御
伊集院 礼, 坂本 未記, 竹谷 昌臣 (神戸大・医・生物化学, 神戸大・医・分子細胞生物学)

J-3103 Cancer cell-derived extracellular vesicles educate macrophages to facilitate tumor invasion

癌細胞外小気を介したマクロファージによる腫瘍の浸潤促進作用
田中 正光, 猫越 信佳, 梶山 正, 伊藤 創, 相場 まきこ (秋田大・医・医学化学, 秋田大・医・器官病態学)

J-3102 FKBPS1 regulates cell motility and invasion via RhoA signaling

FKBPS1のRhoAシグナル経路を通じた細胞の遊走能、浸潤能の制御
高橋 美帆, 伊藤 靖, 中西 啓, 三木 義男 (東京医科歯科大・薬研・分子遺伝, 農研・農進, 農進遺伝学)

J-3104 Extracellular vesicles from prostate cancer cells as a novel factor in the vicious cycle of bone metastasis

骨転移のvicious cycleにおいて前立腺癌細胞由来細胞外小気粒の役割
占部 正雄, 東本 俊文, 吉岡 拓也, 竹下 文隆, 須川 翔, 萩野 孝広 (国立がん研究センタ・研・分子細胞治療, 愛知医大・泌尿器科, 国立がん研究センタ・研・泌尿器科)

J-3105 Deficiency of PIMT expression against ER stress promotes cancer invasion in lung adenocarcinoma
Masahiro Yamashita, Hiiskeye Saito, Masato Ogawara, Kohei Yamauchi, Makoto Maemondo (‘Iwate Medical University, ‘Pulmonary Medicine, ‘Iwate Medical University, ‘Healthcare facility for the elderly, Keiyu

小胞体ストレスに対するProtein-L-isoaspartate (D-aspartate) O-methyltransferase代謝異常の不足は肺腺癌浸潤を促す
山下 雅大, 齋藤 平佐, 小笠原 正人, 山内 広平, 前田民 住, 岩手医大・呼吸器内科, 岩手医科大学・呼吸器内科, 介護療養型老人保健施設 グリーンビル

J-3107 Reevaluation of association of mitochondrial ND1 gene pathogenic mutations with metastasis in NSCLC and colon cancer

肺腺・大腸癌における病性mtDNA ND1遺伝子変異と転移との関連の再評価
児川 信, 秋元 美穂, 永瀬 浩友, 竹永 昌三 (千葉がんセンタ・研・がん遺伝創薬, 岸和田大学・医・生命科学講座)

J-3108 Effect of the elastic modulus and the cell adhesion molecules in the in-vitro model of cancer metastasis
Hiroto Shibauchi, Naoto Shirasawa, Shin ichiro Yasunaga (Dept. Biochem., Faculty Med., Fukuoka Univ.

In-vitroがん転移モデルにおける弾性係数と細胞接着分子の影響
芝口 清音, 白須 直人, 安永 晋一郎 (福岡大・医・生化学)
<table>
<thead>
<tr>
<th>Room</th>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
</table>

**Japanese Oral Sessions**

**Room 9**

<table>
<thead>
<tr>
<th>J</th>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
</table>

**Japanese Oral Sessions**

**Room 9**

<table>
<thead>
<tr>
<th>J</th>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-3020</td>
<td>Sept. 30 (Sat.) 9:00-10:15</td>
<td></td>
<td>The SALL4 - HKDRBS3 network enhances stemness through regulation of CD44 splicing in breast cancer</td>
<td>Yoshiki Matsumoto, Junji Ito, Fumiaki Sato, Masakazu Toi (Dept. Breast Surg., Grad. Sch. Med., Kyoto Univ.)</td>
<td></td>
</tr>
<tr>
<td>J-3021</td>
<td>Sept. 30 (Sat.) 9:00-10:15</td>
<td></td>
<td>Sphere specific transcription factor CX1 has dual functions for maintaining stemness of neuroblastoma</td>
<td>Hisanori Takenobu, Ryugo Sugino, Miki Ohira, Chiaki Chikahara, Kyosuke Mukaet, Masayuki Haruta, Haruhiko Koseki, Takahiko Kamijio,  (Research Institute for Clinical Oncology, Saitama Cancer Center, Department of Pediatrics, Graduate School of Medicine, Chiba University, Laboratory for Developmental Genetics, Riken Central, Integrative Medical Sciences)</td>
<td></td>
</tr>
<tr>
<td>J-3022</td>
<td>Sept. 30 (Sat.) 9:00-10:15</td>
<td></td>
<td>The role of the SWI/SNF chromatin remodeling complex in maintaining the stemness of glioma initiating cells</td>
<td>Hiroko Hiramatsu, Kazuyoshi Kobayashi, Takeshi Haraguchi, Yasushi Ino, Tomoki Todoki, Hideo Iba,  (Med. Mycol. Res. Ctr., Chiba Univ., The Insitute of Med. Sci., The Univ. of Tokyo)</td>
<td></td>
</tr>
</tbody>
</table>
**J-303** Novel mechanism of post-transcriptional regulation of PD-L1 expression by 3′-UTR binding proteins.

Yasuhiro Nakagawa, Keisuke Kato, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita, Keisuke Kato, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita (Osaka Med. Dent. Univ., Kobe, Japan)

**J-3031** Molecular pathogenesis and treatment of hematopoietic neoplasms (3)

Chairperson: Masanobu Kitagawa (Dept. Comprehensive Pathol., Tokyo Med. Dent. Univ., Tokyo, Japan)

**J-3032** Genetic evidence implying the common precursor cells for primary and systemic relapsed tumors in PCNSL

Kei Ichiro Hattori, Mami Kikuta, Naoki Kishida, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita, Keisuke Kato, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita (Osaka Med. Dent. Univ., Kobe, Japan)

**J-3033** Genetic landscape of primary testicular lymphoma


**J-3034** Macrolides overcome cell adhesion-mediated bortezomib resistance and enhance the cytotoxic effect in myeloma cells.


**J-3035** Immunomodulatory function of Notch1-activated B cells and its implications in tumor immune escape of B cell malignancies

Hiroshi Arima, Ryosuke Nishida, Youhei Tsumori, Wataru Kishimoto, Kiyoshi Ito, Hiroshi Arima, Ryosuke Nishida, Youhei Tsumori, Wataru Kishimoto, Kiyoshi Ito (Tokyo Med. Univ., Tokyo, Japan)

**J-3036** Hyposxia-inducible KDM3A addition in multiple myeloma

Sho Ikeda, Akihito Kitado, Fumito Abe, Naoto Takahashi, Hirohiko Watanabe (Dept. Hematology, Nippon Medical School, Tokyo, Japan)

**J-3037** EPAC1 suppresses migration of bladder cancer cells.

Ichikawa Hiroshi, Yamaoka Shoji, Kajioka Shumichi, Itsumi Momoe (Dept. Med. Oncol., Jichi Med. Sch., Tochigi, Japan)

**J-3038** ARF confers a context-dependent resistance to chemotherapy in muscle-invasive bladder cancer

Takashi Koyabashi, Tomohiko Oozeki, Shinya Fukuoka, Takeshi Niinuma, Masahiro Nakagawa, Seiichi Oshita, Keisuke Kato, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita (Osaka Med. Dent. Univ., Osaka, Japan)

**J-3039** A screen for miRNAs involved in the cisplatin resistance in bladder cancer

Tetsuya Saito, Naotaka Kikuma, Takashi Toguchi, Takeshi Niinuma, Masahiro Nakagawa, Seiichi Oshita, Keisuke Kato, Ayana Kon, Kenichi Yoshida, Masahiro Nakagawa, Seiichi Oshita (Osaka Med. Dent. Univ., Osaka, Japan)

**J-3040** mir-146a-5p in Extracellular Vesicles Is A Novel Diagnostic and Therapeutic Target in Bladder Cancer


**J-3041** Exosome-mediated cancer immune escape exerted by EBAG9 protein


**J-3042** Suppression of chemoresistance pathways in combination of EBAG9 with a chemical in bladder cancer


**J-3043** Suppression of chemoresistance pathways in combination of EBAG9 with a chemical in bladder cancer


**J-3044** Suppression of chemoresistance pathways in combination of EBAG9 with a chemical in bladder cancer

Japanese Oral Sessions

### J-3043
**Significance of hepatocyte Mdm2 on cellular senescence and hepatocarcinogenesis.**
Yuki Makino, Hayato Hikita, Takahiro Kodama, Yasutoshi Nozaki, Yoshinobu Saito, Ryotaro Sakamori, Tomohide Tatsunami, Tetsuo Takehara (Gastroenterology and Hepatology, Osaka University Graduate School of Medicine)

**Abstract:**

Hepatocyte Mdm2 plays a crucial role in cellular senescence and hepatocarcinogenesis. This study investigated the significance of Mdm2 in HepG2 cells and the role of Mdm2 in tumor suppression.

**Keywords:**
Mdm2, cellular senescence, hepatocarcinogenesis.

---

### J-3044
**Gankyrin induces STAT3 activation in tumour microenvironment and sorafenib resistance in hepatocellular carcinoma.**
Toshinori Nakahara, Masatsoshi Kudo, Tomoyuki Nagai, Hiroshi Hashida (Department of Gastroenterology and Hepatology, Kindai Univ., Faculty of Medicine)

**Abstract:**

Gankyrin, an oncoprotein, induces STAT3 activation in the tumor microenvironment and confers sorafenib resistance in hepatocellular carcinoma.

**Keywords:**
Gankyrin, STAT3, sorafenib resistance.

---

### J-3046
**The clinical and biological significance of Nrf2 as a redox regulator in hepatocellular carcinoma.**
Masahiro Shimokawa, Tomoharu Yoshizumi, Shinji Itoh, Yohei Mano, Takashi Motomura, Takeo Toshima, Noboru Harada, Norifumi Harimoto, Toru Ikegami, Yuji Soejima, Yoshihiko Maehara (Department of Gastroenterological Surgery, Kyoto University Graduate School of Medicine)

**Abstract:**

The clinical and biological significance of Nrf2 as a redox regulator in hepatocellular carcinoma.

**Keywords:**
Nrf2, redox regulator, hepatocellular carcinoma.

---

### J-3047
**Impact of lymphocyte-to-monocyte ratio on tumor progression in hepatocellular carcinoma associated with PD-L1 expression.**
Shinji Itoh, Tomoharu Yoshizumi, Masahiro Shimokawa, Yohei Mano, Takashi Motomura, Takeo Toshima, Noboru Harada, Norifumi Harimoto, Toru Ikegami, Yuji Soejima, Yoshihiko Maehara (Department of Gastroenterological Surgery, Kyoto University Graduate School of Medicine)

**Abstract:**

The impact of lymphocyte-to-monocyte ratio on tumor progression in hepatocellular carcinoma associated with PD-L1 expression.

**Keywords:**
Lymphocyte-to-monocyte ratio, PD-L1, hepatocellular carcinoma.

---

### J-3048
**Detection of circulating tumor cells in HCC based on glypican-3.**
Michinori Hamaoka, Tsuyoshi Kobayashi, Yuka Tanaka, Shintaro Kuroda, Sho Okimoto, Naruhiko Hommyo, Megumi Yamaguchi, Hiroaki Mashima, Hideki Ohdan (Department of Gastroenterological and Transplant Surgery, Hiroshima University Graduate School of Medicine)

**Abstract:**

Detection of circulating tumor cells in HCC based on glypican-3.

**Keywords:**
Circulating tumor cells, glypican-3, hepatocellular carcinoma.
**Japanese Oral Sessions**

**J-3055**

**Proteome identification of potential biomarkers of human non-small cell lung cancer**


**J-3065**

**EGFR-Grb2 interaction facilitates Arf6-induced cancer invasive potential via GEP100 complex in lung cancer cells**

*Toshi Merui* 1, Shinya Neri* 1, Hiroiuchi Cho* 1, Takao Nakanishi* 1, Mako Tomono* 2, Hishita Sabe* 1, Hiroshi Date* 2 (Dept. of Thoracic Surgery, Graduate School of Medicine, Kyoto University, 1Dept. Biochemistry, Graduate School of Medicine, Hokkaido Univ.)

**J-3057**

**The influence of pemetrexed on subsequent treatments with EGFR- tyrosine kinase inhibitors in lung cancer**

*Yoshishita Koyama* 1, Shota Tomida 1, Yuichi Sesumi 1, Kenji Tomizawa 1, Tatsuya Matsuudomi 2 (Dept. Thoracic Surgery, Kindai Univ., 1Dept. Bioinformatics, Okayama Univ.)

**J-3058**

**Genomic amplification of CD274 (PD-L1) in small cell lung cancer**


**J-3059**

**Enhanced efficacy of immune checkpoint inhibitors when used in combination with oncolytic HSV-1 G47Δ in lung cancer**

*Yoshinori Sakata* 1, Yasushi Inoue 1, Miwako Iwai 1, Norihiko Ikeda 1, Tomoki Todo 1 (Dept. Innovative Cancer Therapy, IMSUT, 1Thoracic Surgery, Tokyo Med. Univ.)

**J-3060**

**Clinical significance of mutation burden in squamous cell carcinoma of the lung**

*Tatsuaki Okamoto* 1, Kazuki Takada* 1, Fumio Shoji* 1, Junji Yotokawa* 1, Eiji Okit* 1, Masayuki Nagahashi* 1, Kenji Sugio* 2, Yoshifumi Wakai* 1, Yoshioho Maehara* 1 (Dept. Surgery and Science, Kyushu Univ., 1Div. Digestive and General Surgery, Nigata Univ., 2Dept. Thoracic and Breast Surgery, Oita Univ.)

**English Oral Sessions**

**E-3019**

**BGB324 effectively overcomes AXL-mediated resistance to osimertinib in preclinical model of EGFR-driven lung cancer**

*Mian Xu* 1, Xiaolin Wu* 1, Xiaxiang Li* 1, Ying-ying Gu* (Medical Oncology, The First Affiliated Hospital of Guangzhou Medical University, 1Medical Oncology, Sun Yat-sen Cancer Center, 1Department of Pathology, The First Affiliated Hospital, Guangzhou Medical University)

**E-3020**

**Loss of LKB1 in NSCLC confers sensitivity to MEK inhibition by regulating activation of AKT-FOXO3 pathway**


**E-3022**

**Transcription factors in anterior pituitary development regulate neuroendocrine differentiation of lung cancers**

*Yusuke Suenagai* 1, Masato Shingyoji* 1, Sotaro Kanematsu* 1, Toshihiko Ikeda* 2, Yasushi Ino* 1, Miwako Iwai* 1, Norihiko Ikeda* 2, Yasushi Noguchi* 3 (Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1Departments of Pathology, Faculty of Medicine, University of Tsukuba, 2Departments of Pathology, Faculty of Medicine, University of Tsukuba)

**E-3023**

**Early Response of Circulating Tumor DNA Predict the Efficacy of Nivolumab in Patients with Non-small Cell Lung Cancer**

*Yuki Iijima* 1, Yosuke Hirotsu* 1, Kenji Amemiya* 1, Hitosh Mochizuki* 1, Toshiko Oyama* 1, Takahiro Nakagomi* 1, Yoshiohi Uchida* 1, Yoichi Kobayashi* 1, Toshitomo Tsutsui* 1, Yumiko Kazuki* 1, Taito Goto* 1, Yoshioho Miyashita* 1, Masao Omatsumi* (Lung Cancer and Respiratory Disease Center, Yamanashi Prefectural Central Hospital, 1Genome Analysis Center, Yamanashi Prefectural Central Hospital, 1Department of Pathology, Yamanashi Prefectural Central Hospital, The University of Tokyo)

**E-3024**

**cTnDNA to Use in the Detection of Lung Cancer using Nivolumab in Nivolumab Effect Detection in Patients with Nivolumab**

*Aya Shiba* 1, YunJung Kim* 1, Masayuki Noguchi* (Diag. Pathol., Faculty Med., Univ. Tsukuba.)

**E-3026**

**Stratifin regulates stabilization of EGFR through activation of ubiquitin-specific protease 8 in lung adenocarcinoma**

*Jeonming Hong* 1, Aya Shiba* 1, Masayuki Noguchi* 1, Takahiro Nakagomi* 1, Toshihiko Ikeda* 2, Yasushi Noguchi* 3 (Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1Departments of Pathology, Faculty of Medicine, University of Tsukuba, 2Departments of Pathology, Faculty of Medicine, University of Tsukuba)

**E-3027**

**Stratifin regulates stabilization of EGFR through activation of ubiquitin-specific protease 8 in lung adenocarcinoma**

*Jeonming Hong* 1, Aya Shiba* 1, Masayuki Noguchi* 1, Takahiro Nakagomi* 1, Toshihiko Ikeda* 2, Yasushi Noguchi* 3 (Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1Departments of Pathology, Faculty of Medicine, University of Tsukuba, 2Departments of Pathology, Faculty of Medicine, University of Tsukuba)

**E-3028**

**Stratifin regulates stabilization of EGFR through activation of ubiquitin-specific protease 8 in lung adenocarcinoma**

*Jeonming Hong* 1, Aya Shiba* 1, Masayuki Noguchi* 1, Takahiro Nakagomi* 1, Toshihiko Ikeda* 2, Yasushi Noguchi* 3 (Graduate School of Comprehensive Human Sciences, University of Tsukuba, 1Departments of Pathology, Faculty of Medicine, University of Tsukuba, 2Departments of Pathology, Faculty of Medicine, University of Tsukuba)
Introduction Course for Current Cancer Research

IC1-1  The application of organoids to cancer research
Toshiro Sato (Dept. Gastroenterology, Keio Univ., Sch. Med.)
オルガノイドのがん研究への応用
佐藤 俊朗（慶應大学・医・消化器内科）

IC1-2  Companion diagnostics by Metabolomics
メタボロミクスによるコンパニオン診断
吉田 優 ① ②（神戸大学・医・病因変解析学、① 日本医療研究開発機構、CREST）

Introduction Course for Current Cancer Research

IC2-1  Important points for investigators who want to get engaged in the drug development of academia-origin
Takao Yamori (Pharmaceuticals and Medical Devices Agency (PMDA))
アカデミア発のがん創薬を目指すためのポイント
矢守 誠夫（医薬品医療機器総合機構）

IC2-2  Clinical trial design –perspectives from a biostatistician
Kenichi Yoshimura (iCREK)
がん臨床試験デザインと生物統計学
吉村 健一（金沢大学附属病院先端医療開発センター）
Symposia

Room 14

S17  Higher-order chromatin and nuclear structure in cancer

Chairpersons: Issay Kitabayashi (Div. of Hematological Malignancy, Natl. Cancer Center Res. Inst.)

座長：北林一生（国立がん研　在研　造血器腫瘍）
中尾光男（熊本大・発生医研　細胞医学）

Higher-order chromatin regulation, which is based upon chemical modifications of DNA and histones, includes nucleosome dynamics, chromatin loop formation and nuclear structure, to ensure stable inheritance and conversion of gene expression. As a result, these are involved in maintaining and reprogramming cellular conditions. Importantly, higher-order chromatin and nuclear structure are frequently altered in humans and developmental defects. Further, nucleosome remodeling is an interesting subject to understand higher-order epigenome. In this symposium, five speakers will present the most recent knowledge on higher-order epigenetic regulation from the viewpoint of cancer biology. In the future, large-scale data and molecular players in higher-order chromatin regulation will provide an attractive resource for finding disease markers and drug targets.

S17-1  Dynamic regulation of chromatin in myeloid leukemias
Issay Kitabayashi (Div. of Hematological Malignancy, Natl. Cancer Center Res. Inst.)

骨髄性白血病におけるナチュリックなクロマチン制御
北林一生（国立がん研　在研　造血器腫瘍）

S17-2  The human retrovirus HTLV-1 inserts an ectopic CTCF-binding site into the host human genome
Yorifumi Satou1, Mitsuyoshi Nakao2, Charles Bangham2 (Priority Organization for Innovation and Excellence, Kumamoto University, 2Center for AIDS Research, Kumamoto University, Institute of Molecular Embryology and Genetics, Kumamoto University, Section of Virology, Division of Infectious Diseases, Imperial College)

ヒトレトロウィルスHTLV-1 は異所性CTCF結合部位をヒトゲノムに挿入する
佐藤賢文1, 中尾光男2, バンガム チャールズ2 (1熊本大学・大学院先導機構, 2熊本大学・エイジ学研究センター, 2熊本大学・発生医学研究所, 2インペリアル大学感染症部門ウイルス学講座)

S17-3  Structural analysis of the nucleosome-remodeling intermediate
Hitoshi Kurumizaka (Grad.Sch.of Adv.Sci.and Eng,Waseda Univ.)

ヌクレオソームのリモデリング中間体
胡修坂 仁志（早稲田大・先進理工）

S17-4  The essential roles of cohesin in organization of 3D genome structure
Tovonori Sakata, Katsuhiko Shirahige (Institute of Molecular and Cellular Biosciences, The University of Tokyo)

コヒシンと染色体の高次機能
坂田 嘉典, 白髭 克彦（東京大学 分子細胞生物学研究所）

S17-5  The role of chromatin and nuclear structure in cell regulation and cancer

クロマチンと核内構造体による細胞制御とがん関連性
中尾光男, 斉藤 典子, 田中 宏（熊本大・発生医研・細胞医学）

Special Program

Room 15

SP4  Cancer pathology: from the morphological pathology to the molecular pathology, and the pathology in future for understanding cancer as the whole

Chairpersons: Yuichi Ishikawa (Dept. of Path., The Cancer Inst., JFCR)

座長：石川雄一（がん研・病理部）

This special symposium is dedicated to Dr. Haruo Sugano, the member of Board of Directors of JCA, the former director of the Cancer Institute, Japanese Foundation for Cancer Research. He passed away on 30 October 2016 at age 91. Although the symposium is for Dr. Sugano, we wouldn’t review his career, achievements and mentorship here. Rather, we would like to have presentations of four scientists who deeply understand the wide-view pathology, which Dr. Sugano proposed and performed by himself. Pathology originally included understanding development process of diseases as a whole as well as investigation of cellular characteristics of conditions such as cancer. Currently, pathology is playing an active role for tumor diagnosis but its role for cancer research is also tremendous. In this symposium, distinguished four scientists will provide their own views for current and future perspective of wide-view pathology.

SP4-1  Evolving from anatomical pathology to molecular pathology
Atsushi Ochiai (EPOC Natl Cancer Ctr.)

解剖病理学から分子病理学への展開
落合浩二（国立がん研・先端医療開発センター）

SP4-2  A Composed Pathology ~Reading True Qualities~

構成病理学 ~読む力養成~
植野 昇夫（慶大・医・病理・腫瘍学）

SP4-3  Pathology: evolving toward the future
Kengo Takeuchi (PPMT, JFCR)

病理学:未来へ進化
竹内 伸（がん研・分子標的病理プロジェクト）

SP4-4  Invasion and metastasis of cancer: Analysis of the roles of EMT using experimental animal models

癌の浸潤・転移: 動物モデルからみた上皮筋肉転換の役割
宮園 皓平（東京大・医・分子病理）
Biomarker diagnosis with newly developed technologies (2)


c

J-3061
Selective detection of somatic mutations in circulating tumor DNA from cancer patients

Yoshi Kukita1, Ryotaro Takada1, Kazunori Okawara1, Kazuhiko Katayama1, Kikuya Kato1 (1Grad. Sch. Biosci., Nara Inst. Sci. Tech., Dept. Hepatobiliary and Pancreatic Oncology, Osaka Int’l Cancer Inst.)

Cancer patients with breast cancer, colorectal cancer, and lung cancer have been studied to analyze the circulating tumor DNA (ctDNA) using liquid biopsy. ctDNA is circulating cell-free DNA that contains genetic mutations from tumor cells. ctDNA analysis is a non-invasive method for detecting cancer and assessing the response to treatment. However, the detection rate of low-frequency mutations is limited. This study aimed to develop a new method for detecting low-frequency mutations using digital PCR.

J-3062
Improved digital PCR protocol to capture low-copy KRAS mutations in plasma cell-free DNA from J-3062


KRAS mutations are associated with various cancers, including colorectal cancer, lung cancer, and pancreatic ductal adenocarcinoma. The detection of KRAS mutations in circulating cell-free DNA (ctDNA) has become an important diagnostic tool for cancer. However, the detection of low-copy KRAS mutations is challenging. This study aimed to develop an improved digital PCR protocol for the detection of low-copy KRAS mutations in ctDNA.

J-3063
Detection of RAS, BRAF and PIK3CA mutations in circulating tumor DNA in J-3062


RAS, BRAF, and PIK3CA are well-known oncogenes that are frequently mutated in various cancers. The detection of these mutations in circulating tumor DNA (ctDNA) has become an important tool for the diagnosis and management of cancer. This study aimed to detect RAS, BRAF, and PIK3CA mutations in ctDNA using digital PCR.

J-3064
Exploitation of a liquid biopsy system using circulating tumor DNA in esophageal cancer patients.

Takeshi Iwaya1, Fumitaka Endo1, Yasushi Sasaki2, Mizunori Yaegashi1, Takehiro Chiba1, Yuji Akiyama1, Mari Masuda3, Tesshi Yama4, Takashi Tokino2, Satoshi Nishizuka1 (1Dept. Surgery, Iwate Med. Univ., 2Dept. Med., Asahikawa Med. Univ.)

Liquid biopsy using circulating tumor DNA (ctDNA) has become an important tool for the diagnosis and monitoring of cancer patients. This study aimed to develop an improved liquid biopsy system for the detection of ctDNA in esophageal cancer patients.

J-3065
KRAS Mutations in Circulating Cell-Free DNA from Preoperative and Postoperative Sera of Pancreatic Cancer

Yutaka Nakano1, Minoru Kitago1, Sachiko Matsuda1, Masahiro Shinoda1, Yuta Abe1, Taizo Hibi1, Hiroshi Yagi1, Yoko Nishimura1, Ayano Takeuchi2, Osamu Itano3, Yuko Kitagawa1 (1Dept. of Surgery, Keio University School of Medicine, 2Dept. of Pathology, Keio University, 3Dept. of Public Health, Keio University School of Medicine)

KRAS mutations are associated with various cancers, including colorectal cancer, lung cancer, and pancreatic ductal adenocarcinoma. The detection of KRAS mutations in circulating cell-free DNA (ctDNA) has become an important diagnostic tool for cancer. This study aimed to detect KRAS mutations in ctDNA from preoperative and postoperative sera of patients with pancreatic cancer.
Japanese Oral Sessions

Room 16  Sept. 30 (Sat.) 10:15-11:30  J

J16-3  Molecular target therapy  分子標的治療

Chairperson: Kazuo Shin-ya (BRD, AIST)

座長：新家 一男（産総研・剤薬基盤）

J-3067  Benzaldehyde inhibits the multiple signal in cancer by suppressing the binding activity of overexpressed 14-3-3ζ

Benzaldehyde は癌細胞にて過剰発現する 14-3-3ζ のリン酸化部位を阻害することにより腫瘍細胞の主要シグナルを抑制する

J-3068  Inactivation of YAP sensitizes ovarian cancer cells to MLN8237, an Aurora-A inhibitor, through p73-dependent apoptosis.

YAP の不活性化は、p73 依存的なアポトーシスを介して卵巣がん細胞を Aurora-A 阻害剤 MLN8237 に感受性化させる。

J-3069  Acute anticancer effect of a telomerase inhibitor MST-312 and its modifiers

デオメラーゼ阻害剤 MST-312 の即時的制がん効果を規定する因子

J-3070  PRPF19 is a novel potent molecular target for tumor suppression

スプラインシング因子 PRPF19 はがん抑制における新規分子標的である

J-3071  Prominent role of RAB39A-RXRB axis in cancer development and stemness

がん幹細胞を駆逐し得る新規標的分子経路、RAB39A-RXRB

J-3072  Characterization of URST1 as a biomarker and therapeutic target for respiratory tract cancers

呼吸器系腫瘍の新規バイオマーカー、治療標的分子 URST1 の同定

INDEX

Authors Keywords Chairpersons
**OncoTherapy Science, Inc.**

**Identification and Validation of Neoantigens in Follicular Lymphoma**
Justin Kline (Section of Hematology/Oncology, Comprehensive Cancer Center, Committee on Immunology, Committee on Cancer Biology, The University of Chicago)

Chair: Yusuke Nakamura (Medicine and Surgery, Section of Hematology/Oncology Center for Personalized Therapeutics, The University of Chicago)

**Bio-Rad Laboratories K.K.**

**The Possibility of the Latest Liquid Biopsy Research with Digital PCR**
Liquid Biopsy leads to a Paradigm Shift in Cancer Treatments
Koichi Suzuki (Saitama Medical Center Jichi Medical University, Department of Surgery)

Chair: Masatoshi Soejima (Bio-Rad Laboratories K.K.)

**Eli Lilly Japan K.K.**

**Chemotherapy for Gastric Cancer – UP To Date**
Nozomu Machida (Division of Gastrointestinal Oncology, Shizuoka Cancer Center)

Chair: Taito Esaki (Clinical Research Institute, National Hospital Organization Kyushu Cancer Center)

**MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.**

**Molecular testing in colorectal cancer: Current status and future directions**
Hiroya Taniguchi (Department of Clinical Oncology, Aichi Cancer Center Hospital)

Chair: Kei Muro (Department of Clinical Oncology, Aichi Cancer Center Hospital)

**Sysmex Corporation / Riken Genesis CO., LTD.**

**Clinical sequencing system for precision cancer medicine in Japan**
Takashi Kohno (Division of Genome Biology, National Cancer Research Institute / Division of Translational Research, Exploratory Oncology Research & Clinical Trial Center)

Chair: Hiroyuki Mano (Department of Cellular Signaling, Graduate School of Medicine, The University of Tokyo/National Cancer Research Institute)

**Nippon Boehringer Ingelheim Co., Ltd**

**EGFR mutation – from molecular targeted therapy to immunotherapy –**
Yosuke Togashi (Division of Cancer Immunology, National Cancer Center Hospital East)

Chair: Hiroshi Sakai (Department of Thoracic Oncology Saitama Cancer Center Saitama, Japan)

Luncheon Seminars 11:45-12:35
Room 9

LS-30 TSUMURA & CO.
株式会社ツムラ

Challenges in supportive care
Yosuke Uchitomi (National Cancer Center Hospital)
Chair: Toshirou Nishida (National Cancer Center Hospital)

支持療法の課題
内田 義人 (国立がん研究センター中央病院)
座長：西田 賢朗（国立がん研究センター中央病院）

Room 10

LS-6 Shimadzu Corporation
株式会社島津製作所

Implementing advances in pathology
Ian A Cree (International Agency for Research on Cancer, World Health Organization/University of Coventry United Kingdom / University College London United Kingdom)
Chair: Atsushi Ochiai (Exploratory Oncology and Clinical Trial Center and Research Institute, National Cancer Center)

Implementing advances in pathology
Ian A Cree (International Agency for Research on Cancer, World Health Organization/University of Coventry United Kingdom / University College London United Kingdom)

座長：落合 憲志（先端医療開発センター／国立がん研究センター 研究所）

Room 13

LS-31 AbbVie GK
アッヴィ合同会社

The BCL-2 family: Basic Science and cancer treatment
David Huang (The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia)
Chair: Junya Kuroda (Division of Hematology and Oncology Kyoto Prefectural University of Medicine)

The BCL-2 family: Basic Science and cancer treatment
David Huang (The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia)

座長：黒田 雅也（京都府立医科大学 血液内科）

Room 16

LS-32 FUJITSU LIMITED
富士通株式会社

Electronic medical records supporting genomic medicine
1) Expectations for the electronic medical record vendor
2) Electronic medical records supporting genomic medicine
1) Naoki Mihara (National Cancer Center Japan)
2) Michihiko Aki (Fujitsu Ltd. Healthcare Systems Unit)
Chair: Teruhiko Yoshida (National Cancer Center Japan)

ゲノム医療支援対応型電子カルテ
1）（基調講演）電子カルテベンダーへの期待
2）ゲノム医療支援対応型電子カルテ
1) 三原 直樹（国立研究開発法人 国立がん研究センター）
2) 安藤 理彦（富士通株式会社 ヘルスケアシステム事業本部）

座長：吉田 隆彦（国立研究開発法人 国立がん研究センター）
Core Symposia

Room 1
Sept. 30 (Sat.) 14:40-17:10

CS4
Next stage of cancer stem cell research
新たなステージに入ったがん幹細胞研究
Chairpersons: Koichi Akashi (Kyushu Univ.)

座長: 赤司 智一（九州大学・院医）
佐谷 秀行（慶應義大・先端研・遺伝子制御）

The existence of cancer stem cells has been proved and made clearer the various problems of cancer that have been known for a long time. The concept based on the existence of cancer stem cells is considered to be the key to solving the difficulties of cancer treatment, such as mechanisms of therapeutic resistance, recurrence and metastasis. However, there are still many issues that are not yet elucidated, such as the development of cancer stem cells, differences from normal stem cells, the mechanism of plasticity, etc. Solving those issues will lead to ultimate cancer treatment targeting cancer stem cells. In this core symposium, we would like to ask the readers to actively participate in the front line in the research of normal stem cells and cancer stem cells to present the new properties of cancer stem cells and the potential therapeutic strategies to eradicate them.

CS4-1 Plasticity and stemness in pancreatic cancer development
Hiroshi Sato, Takahisa Maruno, Norihiro Goto, Motoyuki Tsuda, Eiji Sugihara 1, Shinji Kuninaka 1, Kaoru Mogushi 4

CS4-2 Signet-ring gastric cancer stem cell and its niche
Hiroshi Ariyama 1, Yuki Hayakawa 1, Eishi Baba 1, Koichi Akashi 1, Wang Timothyy 2, Shigeki Iwama 2, Takahiro Higashi 2, Kazuyuki Matsushita 2, Tohru Hori 2, Yoshito Kimura 2, Akihisa Fukuda 2

CS4-3 Gastric organoids and their use to study carcinogenesis
Yoshiki Ito 1, Hideyuki Saya 1, Hiroshi Ariyama 2, Takahiro Higashi 2, Kazuyuki Matsushita 2, Tohru Hori 2, Yoshito Kimura 2, Akihisa Fukuda 2

CS4-4 Dissecting cancer biology with iPS cell technology
Yasuhiro Yamada 1, Eiji Sugihara 1, Hiroshi Ariyama 2, Takahiro Higashi 2, Kazuyuki Matsushita 2, Tohru Hori 2, Yoshito Kimura 2, Akihisa Fukuda 2

CS4-5 Roles of cell cycle regulators in hematopoietic stem and leukemia cells
Jo Ishizawa 1,2,3, Eiji Sugihara 1, Shinji Kuninaka 1, Kaoru Mogushi 4, Kensuke Kojima 1, Christopher B. Benton 1, Shinichiro Okamoto 2, R. Eric Davis 1, Michael Andreeff 2, Steven M. Kornblau 2, Hidemitsu Saya 1, Hideyuki Saya 1

Japanese Oral Sessions

Room 2
Sept. 30 (Sat.) 13:30-14:45

J26
Cancer registry toward cancer control
がん登録の推進と科学的ながん対策
Chairperson: Seiichiro Yamamoto (Natl Cancer Ctr)
座長: 山本 精一郎（国立がん研究・社健・保健社会）

J-3073 Changes in cancer mortality rate in Japan before and after the Basic Plan to Promote Cancer Control Programs
Koito Kanaoka 1, Megumi Hori 1, Eiko Saito 1 (Division of Cancer Statistics Integration, National Cancer Center)

J-3074 Changing of the institutes performing surgical therapies of cancers
Hisashi Usaki 1, Takayoshi Kishinon, Yasuyuki Suzuki 2 (Management group of surgical Center, National University Hospital, Surgical Center of Kagawa University Hospital, Gastroenterological Surgery, Kagawa University)

J-3075 Resource use of patients with five common cancers during the first year after diagnosis in Japan
Takahiro Higashi 1 (Cirr for Cancer Control & Information Services, Natl Cancer Ctr)

J-3076 Establishment of screening network for hereditary cancers by genetic testing and counselling in Chiba Prefecture
Satoshi Kudoh 1, Kazumasa Morozumi 1, Sana Yoki 1, Hiroki Nagase 2, Tomohiko Ichikawa 2, Takanori Masuhiro 2, Sana Yoki 1, Hiroki Nagase 2

J-3077 Impact of device change strategy by tobacco industry and prospect of next-generation smoking cessation treatment
Yumiko Mochizuki 1, Yumiko Mochizuki 1, Yumiko Mochizuki 1, Yumiko Mochizuki 1, Yumiko Mochizuki 1, Yumiko Mochizuki 1

J-3078 Principal component analysis of health-related quality of life measures for prostate cancer

前線医療に関するHIROC2の主成分分析
河原 つリエ・永田 秀義・金山 麻裕子・堀江 重郎・堀江 善宇・赤藤 英之（東大・情報学環・がん研究国際戦略・順天堂大学・大学院・医・泌尿器科）
Lung cancer is a leading cause of the cancer death in Japan. According to the enormous efforts by the researchers, doctors and patients, the prognoses of advanced lung cancer have been drastically improved in the past dozen years through the finding of various driver oncogenes, such as EGFR activating mutation, and the molecular targeted drugs. In addition, the rapid development of immune checkpoint inhibitors has also largely contributed to improve the treatment of the advanced lung cancer. However, there are still several limitations of these therapies. The first is the detection methods to find the driver oncogene mutation positive patients in clinical practice. The second is the lack of the target drugs for a certain driver oncogenes such as ERBB2. The third is the development of drug resistance to the molecular targeted therapies. For the treatment of ALK-rearranged or EGFR mutated cancer, the new generation inhibitors which can overcome part of the resistance to first/second generation inhibitors are available in clinic. However the cancers eventually develop the resistance to the drugs. The forth is the lack of confident predictive biomarkers except for the high PD-L1 expression for the immune checkpoint inhibitors. In this symposium, we have 6 speakers of front runners in the lung cancer research field. We’re looking forward to sharing the latest information by them about these clinical limitations, and would like to have active discussions.


AKAデミア発のがんクリニカルシーケンス検査系の実装の試み
角南 久仁子1, 久保 崇2, 加藤 隆2, 郴川 仁1, 山本 昇1, 河野 隆志2 (国立がん研究センター・中央病院・病理臨検科, 3国立がん研究センター・先端医療センター, T 東京, 4国立がん研究センター・研究・バイオインフォマティクス部, 4国立がん研究センター・中央病院・先端医療科)

SST6-2 Perspective on the development of lung cancer precision medicine through nation-wide genome screening Shingo Matsumoto1,2 (Div. Transl. Gen., EPOC, NCC, 3Dept. Thor. Oncol.)

全国規模の肺癌ゲノムスクリーニングを活用したプレシジョンメディスンの構築とその展望
松本慎吾1,2 (国立がん研究センター・先端医療センター, 3国立がん研究センター・研究・バイオインフォマティクス部, 4国立がん研究センター・中央病院・先端医療科)

SST6-3 Therapeutic strategy for lung cancer with HER2 alteration Shinichi Toyosuka1, Ken Suzawa1, Takashi Ninomiya2, Hiromasa Yamamoto3, Kazuhiko Uchida, Yu Miura, Kousuke Hashimoto1, Yuri Maeno, Fuyumi Nishihara, Harae Utsugi, Yoshitake Murayama, Kunihiko Kobayashi (Div. of Resp. Clin, Okayama Univ. Hosp.)

HER2異常肺腺癌に対する治療戦略
豊澤 睦1, 高野 晃2, 二宮 雅2, 山本 宽資3, 根本和彦1, 梅本 一1, 池田 秀1 (岡山大学病院・呼吸器・乳癌内分泌外科, 2岡山大学病院・呼吸器・アレルギー内科, 3岡山大学病院・バイオバンク)

SST6-4 Resistance mechanisms and therapeutic strategies to overcome the resistance in driver oncogene positive NSCLC Ryohi Katayama1, Naoya Fujita1,2 (Div. Exp. Chemother., Cancer Chemother. Ctr., JFCR, ‘The Cancer Chemother. Ctr., JFCR)

Driver Oncogene 陽性肺がんにおける獲得耐性の分子基盤と新たな治療戦略
片山 義平1, 藤田 直也2 (1公財)がん研・化学療・基礎研究部, 2公財がん研・化学療)

SST6-5 CD4+ T cells in PBMC tell us who will respond to anti-PD-1 Ab therapy Hiroshi Kagami, Ou Yamaguchi, Ayako Shiono, Atsuto Mouri, Sachiko Miyachi, Takahiro Uchida, Yu Miura, Kousuke Hashimoto1, Yuri Maeno, Fuyumi Nishihara, Harue Utsugi, Yoshitake Murayama, Kunihiko Kobayashi (Div. of Resp. Med., International Med. Center, Saitama Med. Univ.)

末梢血CD4+T細胞浸潤は抗PD-1抗体治療効果を予測する
各務 博, 山口 久, 宮澤 文子, 毛利 義人, 宮内 幸子, 内田 貴裕, 三浦 雄, 橋本 康宏, 前野 有理, 西原 冬実, 宇津本 春枝, 村山 芳武, 小林 国雄（埼玉医科大学国際医療センター・呼吸器内科）

SST6-6 Lung cancer treatment with antibody-drug conjugate (ADC) Katsuyuki Hotta (Center for Innovative Clin Med, Okayama Univ. Hosp.)

Antibody-Drug Conjugate (ADC)による肺がん治療
畑岡 勝幸 (岡大病院・新薬研究開発センター)
Recent progress in understanding the roles of “mechanical factors” such as mechanical forces and microenvironment stiffness in regulating various cell functions expands the field of molecular biology to one where interdisciplinary approaches with engineering techniques and mechanics-based analyses become highly indispensable. A field of science that investigates the interface or fusing area of biology and engineering/mechanics is called mechanobiology, the scope of which has particularly covered basic cell biology and developmental biology. Approaches and techniques developed in the mechanobiology field have now increasingly begun to be applied to cancer research to better understand tumor cell growth and metastasis, as well as to develop innovative clinical tools. In this international session, such interdisciplinary studies will be presented, with further discussions with cancer research communities are expected to create more new ideas and meaningful strategies.

**IS11-1 Detecting endogenous forces of cells subjected to mutations and drugs**
Shinji Deguchi (Div. of Bioeng., Grad. Sch. of Eng. Sci., Osaka Univ.)
試験が発生する物理的な解析とその意義

**IS11-2 Direct measurement of mechanical tension in ectodermal cells: the application for analyzing cell migration**
Tatsuo Michiue (Dept. Life Sci., Grad School Arts. Sci., Univ. Tokyo)

**IS11-3 Mechanobiology of cytotoxic T lymphocyte and cancer cell movements and interactions**
Marek Biro (EMBL Australia, Single Molecule Science node, Sydney, Australia, School of Medical Sciences, University of New South Wales, Australia)

**IS11-4 Engineering Cell Mechanical Microenvironment and its Application in Cancer Research**
Feng Xu (School of Life Science and Technology, Xi’an Jiaotong University)

**IS11-5 A new water-pressure-loadable culture system: evidence for cancer cell growth suppression by modest static pressure**
Man Hagiyama, Ryuichiro Kimura, Yasutoshi Takashima, Aritoshi Li, Akihiko Ito (Dept. Pathol., Fac. Med., Kindai Univ.)

**IS11-6 Mechanobiological Approaches to Cancer Detection and Liquid Biopsy - From Bench to Bedside**
Chwee Teck Lim (Mechanobiology Institute, Dept. of Biomedical Engineering, National University of Singapore)
E-3025 Development of neontogantic prediction pipeline from exome and RNA sequence data
Kazuma Kiyotani, Taigo Kato, Tatsu mature, Yui Ikeda, Jae-Hyun Park, Yusuke Nakamura (Dept. Med., Univ. Chicago)

E-3026 Characterization of the cryoablation-induced immune response in kidney cancer patients

E-3027 Finding the tumor-specific TCR by single cell TCR repertoire analysis irrespective of HLA and antigen

E-3028 Notch-mediated reprogramming of activated T cells into stem cell memory-like T cells for cancer immunotherapy
Akiko Yoshimura (Dept Microbiol&Immunol., Keio Univ. School of Med., Tokyo, Japan)

E-3029 Immunological activities of adoptively transferred tumor antigen-specific CTLS costimulated with OX40 signaling in vitro
Ngoc M. Pham, Satoshi Murata, Naomi Kitamura, Tomoyuki Ueki, Masatsugu Kojima, Toru Miyake, Katsushi Takebayashi, Hirokazu Kodama, Yuki Kawai, Yataro Daigo, Eiji Mekata, Masaji Tani (Department of Surgery, Shiga University of Medical Science (SUMS), Cancer Center, SUMS Hospital, Department of Critical and Intensive Care Medicine, SUMS, Department of Comprehensive Surgery, SUMS, Department of Surgery, Hino Memorial Hospital)

E-3030 PDL1 expression and tumor infiltrating lymphocyte subset analysis in Primary Eosaphageal Cancer Tissue
Tomoya Sudo, Atsushi Mizoguchi, Akiko Kawahara, Haruhiro Hino, Kouhei Saisho, Sachiko Nagasu, Taizan Minami, Satoru Matone, Naoki Mori, Toshiaki Tanaka, Koshi Mimori, Akira Yamada, Yoshiho Akiyama (Department of Surgery, Kurume University School of Medicine, Department of Pathology, Kurume University School of Medicine, Department of Immunology, Kurume University School of Medicine, Research Center for Innovative Cancer Therapy, Kurume University, Department of Surgery, Kyushu University Hospital, Beppu Hospital)

E-3031 Analyses of tumor-infiltrating T cells and adoptive T-cell therapy
がん黒の環境糖の解析とがん免疫細胞療法の新たな展開

E-3032 Development of neoantigen prediction pipeline from exome and RNA sequence data
Kazuma Kiyotani, Taigo Kato, Tatsu mature, Yui Ikeda, Jae-Hyun Park, Yusuke Nakamura (Dept. Med., Univ. Chicago)

E-3033 Characterization of the cryoablation-induced immune response in kidney cancer patients

E-3034 Finding the tumor-specific TCR by single cell TCR repertoire analysis irrespective of HLA and antigen

E-3035 Notch-mediated reprogramming of activated T cells into stem cell memory-like T cells for cancer immunotherapy
Akiko Yoshimura (Dept Microbiol&Immunol., Keio Univ. School of Med., Tokyo, Japan)

E-3036 Immunological activities of adoptively transferred tumor antigen-specific CTLS costimulated with OX40 signaling in vitro
Ngoc M. Pham, Satoshi Murata, Naomi Kitamura, Tomoyuki Ueki, Masatsugu Kojima, Toru Miyake, Katsushi Takebayashi, Hirokazu Kodama, Yuki Kawai, Yataro Daigo, Eiji Mekata, Masaji Tani (Department of Surgery, Shiga University of Medical Science (SUMS), Cancer Center, SUMS Hospital, Department of Critical and Intensive Care Medicine, SUMS, Department of Comprehensive Surgery, SUMS, Department of Surgery, Hino Memorial Hospital)

E-3037 PDL1 expression and tumor infiltrating lymphocyte subset analysis in Primary Eosaphageal Cancer Tissue
Tomoya Sudo, Atsushi Mizoguchi, Akiko Kawahara, Haruhiro Hino, Kouhei Saisho, Sachiko Nagasu, Taizan Minami, Satoru Matone, Naoki Mori, Toshiaki Tanaka, Koshi Mimori, Akira Yamada, Yoshiho Akiyama (Department of Surgery, Kurume University School of Medicine, Department of Pathology, Kurume University School of Medicine, Department of Immunology, Kurume University School of Medicine, Research Center for Innovative Cancer Therapy, Kurume University, Department of Surgery, Kyushu University Hospital, Beppu Hospital)

E-3038 Analyzing role of tumor-infiltrating lymphocytes in gastric cancer patients
がん黒の環境糖の解析とがん免疫細胞療法の新たな展開
J-3085 Whole-genome sequencing of triple negative breast cancer

Transcriptional regulations of CDH1 by genetic and epigenetic
Comprehensive genomic profile of Japanese gastric cancer
Masashi Sanada (Dept. Advanced Diagnosis, Clinical Research Ctr., RCAST, The University of Tokyo, 2Dept. Digestive Surg., Nihon Univ., 3SRL Inc., 4Shizuoka Cancer Ctr. Res. Inst., 5Human Genome Center, Institute of Medical Science, University of Tokyo, 6Division of Cancer Genomics, National Cancer Center Research Institute, 7Human Genome Center, Institute of Medical Science, University of Tokyo, 8National Cancer Center Research Institute)

Japanese Orals Sessions
Room 7
Sept. 30 (Sat.) 13:30-14:45

J7-1 Cancer Genomics (2)
かがんゲノム (2)

Chairperson: Masashi Sanada (Dept. Advanced Diagnosis, Clinical Research Ctr., Nagoya Medical Ctr.)
座長: 三田 雅 (名古屋医療センター 臨床研究センター)

J-3086 Sequential Somatic Mutation Shift in Hypermutator Tumors Harboring POLE Mutations

POLE変異を有する高頻度突然変異腸癌における体細胞変異の移動

J-3087 Comprehensive genomic profile of Japanese gastric cancer

Comprehensive genomic profile of Japanese gastric cancer

J-3088 Transcriptional regulations of CDH1 by genetic and epigenetic alterations in liver cancer progression
Shogo Yamamoto, Yuuta Midorikawa, Kenji Tatsuno, Genta Nagae, Tatadoshi Takayama, Hiroyuki Aburatani (Genome Science Div., RCAST, The University of Tokyo, Dept. Digestive Surg., Nihon Univ. Sch. of Med.)

肝癌進展におけるゲノムおよびアピゲノム変化とCDH1の転写調節

J-3089 Landscape of driver gene mutations in Stage II and Stage III Colorectal Cancer

大腸癌における遺伝子異常の包括的解析

Japanese Orals Sessions
Room 7
Sept. 30 (Sat.) 13:30-14:45

J7-1 Cancer Genomics (2)
かがんゲノム (2)

Chairperson: Masashi Sanada (Dept. Advanced Diagnosis, Clinical Research Ctr., Nagoya Medical Ctr.)
座長: 三田 雅 (名古屋医療センター 臨床研究センター)

J-3085 Whole-genome sequencing of triple negative breast cancer

Transcriptional regulations of CDH1 by genetic and epigenetic
Comprehensive genomic profile of Japanese gastric cancer
Masashi Sanada (Dept. Advanced Diagnosis, Clinical Research Ctr., RCAST, The University of Tokyo, 2Dept. Digestive Surg., Nihon Univ., 3SRL Inc., 4Shizuoka Cancer Ctr. Res. Inst., 5Human Genome Center, Institute of Medical Science, University of Tokyo, 6Division of Cancer Genomics, National Cancer Center Research Institute, 7Human Genome Center, Institute of Medical Science, University of Tokyo, 8National Cancer Center Research Institute)

Japanese Orals Sessions
Room 7
Sept. 30 (Sat.) 13:30-14:45

J7-1 Cancer Genomics (2)
かがんゲノム (2)

Chairperson: Masashi Sanada (Dept. Advanced Diagnosis, Clinical Research Ctr., Nagoya Medical Ctr.)
座長: 三田 雅 (名古屋医療センター 臨床研究センター)

J-3086 Sequential Somatic Mutation Shift in Hypermutator Tumors Harboring POLE Mutations

POLE変異を有する高頻度突然変異腸癌における体細胞変異の移動

J-3087 Comprehensive genomic profile of Japanese gastric cancer

Comprehensive genomic profile of Japanese gastric cancer

J-3088 Transcriptional regulations of CDH1 by genetic and epigenetic alterations in liver cancer progression
Shogo Yamamoto, Yuuta Midorikawa, Kenji Tatsuno, Genta Nagae, Tatadoshi Takayama, Hiroyuki Aburatani (Genome Science Div., RCAST, The University of Tokyo, Dept. Digestive Surg., Nihon Univ. Sch. of Med.)

肝癌進展におけるゲノムおよびアピゲノム変化とCDH1の転写調節

J-3089 Landscape of driver gene mutations in Stage II and Stage III Colorectal Cancer

大腸癌における遺伝子異常の包括的解析
Familial cancer

Molecular Characteristics of Renal Cell Carcinomas in Patients with Birt–Hogg–Dube Syndrome

J-3091


Birt-Hogg-Dube症候群における腎癌の分子病理学的特徴

Two subtypes of colorectal tumor with distinct molecular features in familial adenomatous polyposis

J-3092

Hirotaka Maruyama1, Hitoshi Mochizuki1, Yosuke Hirotsu2, Ikuko Hasumi1, Hisashi Kato3, Masaya Baba3, Yoji Ueno4, Hirofumi Harada5, Yasuhide Hayashi5, Hiroaki Yano5, Mineo Kurokawa5 (1 Dept. Hematol., Tokyo Univ., Tokyo, Japan, 2 Dept. Med. Genomics., Tokyo Univ, Tokyo, Japan, 3 Dept. Hematol., Tokyo Medical Center, Tokyo, Japan, 4 Life Sciences, Tokyo Univ of Pharmacy Life Sciences, Tokyo, Japan, 5 Dept. Hematol/Oncol., Gunma Children's Hospital, Gunma, Japan, 6 Dept. Cellular Signaling, Tokyo Univ., Tokyo, Japan)

家族性骨軟骨性症候群から得られたHLTF変異によりPCNAのポリユピチン化が損なわDNA損傷が蓄積する

Two subtypes of colorectal tumor with distinct molecular features in familial adenomatous polyposis


家族性ポリポシスの関与

Detection of Germline PMS2 mutation in Japanese colorectal cancer patients

Kokichi Sugano1, Takeshi Nakajima2, Mizuki Takatsu2, Shigeki Sekine2, Shinya Saito3, Kazuhiko Imai4, Motoi Nishimura3, Eiji Sakai4, Kazuyuki Matsushita3, Hiroyuki Ueno4, Hirofumi Harada5, Yasuhide Hayashi5, Hiroaki Yano5, Mireo Kurokawa5 (1 Dept. Hematol., Tokyo Univ., Tokyo, Japan, 2 Dept. Med. Genomics., Tokyo Univ, Tokyo, Japan, 3 Dept. Hematol., Tokyo Medical Center, Tokyo, Japan, 4 Life Sciences, Tokyo Univ of Pharmacy Life Sciences, Tokyo, Japan, 5 Dept. Hematol/Oncol., Gunma Children’s Hospital, Gunma, Japan, 6 Dept. Cellular Signaling, Tokyo Univ., Tokyo, Japan)

日本人大腸がん患者におけるPMS2生殖細胞系変異の検出
J-3097 Investigation of cancer micro-metastasis with CUBIC-cancer analysis
CUBICによる腫瘍浸潤用いたがん微小転移の観察

J-3098 Peptide aptamers specifically bound to NM23-H1 can modulate NM23 functions
がん細胞の分化や転移を制御するNM23ホストに特異的に結合するペプチドアプタマーの生物学的機能解析

J-3099 Vasculogenic mimicry is dependent on integrin β1 in human cancer cells
Ryota Kawahara, Yuko Nishiyama, Siro Simizu (Faculty of Science and Technology, Keio Univ.)
ヒトがん細胞における血管腔構築はintegrin β1に依存するか否か

J-3100 Suppression of epithelial mesenchymal transition by a novel Traf2- and Nck-interacting kinase inhibitory compound
Teppi Sugano, Yutaka Nakamura, Kazunari Akiyoshi, Hiroshi Shiku, Hideki Moriyama, Naoko Goto, Masahiro Seike, Masaki Sawa, Akihiko Gemma, Tesshi Yamada (Division of Chemotherapy and Clinical Research, NCCCR, Department of Pulmonary Medicine and Oncology, Nippon Medical School, Carma Biosciences, Inc.)
新規TNK1阻害薬によるEMT制御

J-3101 Activated CD8+ T cells interrupt tumor invasion and metastasis in exosome-dependent manners
活性化CD8+ T細胞は放出するエクソソームによりがんの浸潤や転移を強力に抑制する

J-3102 Elucidation of the role of CD200 in rat lung metastasis model
Jun Kuwabara, Junya Tanaka, Kana Taguchi, Mitsunori Sato, Shigehiro Koga, Yuji Watanabe (Gastroenterological and Surgical Oncology, Ehime University School of Medicine, Department of Molecular and Cellular Physiology, Ehime University)
肺転移モデルにおけるCD200分子の解析

J-3103 Analysis of multidrug resistant transporter expression in tumor blood vessels during chemotherapy
抗瘍薬剤治癒前における腫瘍血管内皮のP-glycoprotein発現変化

J-3104 Identification and Functional analysis of HNF1B as a multi-organ metastasis inducing gene
HNF1B遺伝子が多臓器転移を誘導する機能解析

J-3105 Deficient miem expression increases invasion ability via impairment of MQC in gastric cancer cells under hypoxia
低酸素条件下での胃癌細胞の浸透能増強に及ぼすmiemエクソン欠失の影響

J-3106 Establishment and characterization of a novel highly metastatic colon cancer cell line, Colon-26MGS
Li Qu Ma, AHIKISA TAKASHI, TAKASHI IMAI, TAKASHI SHIMOKAWA (Gunma Univ. Heavy Ion Medical Center, Natl. Inst. Radiol. Sci.)
新規高転移大腸癌細胞線Colon-26MGSの樹立と性状解析

J-3107 CD9-positive exosomes from CaF stimulate the Migration Ability of Scirrhous-type Gastric Cancer Cells
Yuichiro Miki, Masakaizu Yashiro, Tomohisa Okuno, Tatsuro Tamura, Takahiro Toyokawa, Hiroaki Tanaka, Kazuya Muguruma, Kosei Hirakawa, Masashi Ohara (Osaka City University, Department of Surgical Oncology)
スキルス胃癌における悪性細胞線維芽細胞由来CD9陽性エキソソームの意義

Japanese Oral Sessions

Chairperson: Shuhei Ito (Dep. of Surg., Kyushu Univ. Beppu Hosp.)
座長: 伊藤 賢 (九州大学病院別府病院 外科)

J10-3 Diverse approaches for inhibition of cancer metastasis 転移抑制のための様々なアプローチ

J10-4 Angiogenesis, metastasis (2) 血管新生・転移 (2)

Chairperson: Genichiro Ishii (Div. Pathology, EPOC, Natl. Cancer Ctr.)
座長: 清木 一利 (国立がん研究センター 先端医療開発部 病理)

236
J-3108

**Antiangiogenetic effect of EPA suppresses the secretion of IL-6 and VEGF from colon cancer-associated fibroblasts**

Nanako Ando, Masayasu Hara, Kazuyoshi Shiga, Takaya Nagasaki, Takeshi Yanagita, Yosuke Samoto, Yuzo Maeda, Tomotaka Okubo, Kenta Saito, Hiroki Takahashi, Hideyuki Ishiguro, Yoichi Matsuo, Shuji Takiguchi (Dept. of Gastroenterological surg., Nagoya city Univ.)

In vitro colon cancer-associated fibroblasts from colon cancer specimens were treated with EPA (EPA-1) and VEGF (VEGF-1) to study the effect of EPA on the secretion of IL-6 and VEGF. The results showed that EPA significantly suppressed the secretion of IL-6 and VEGF from colon cancer-associated fibroblasts. These findings suggest that EPA has potential for use as an antiangiogenetic agent in the treatment of colon cancer.

J-3109

**A novel A-kinase anchoring protein BIG3 coordinates estrogen signaling in breast cancer cells**


BIG3: A-kinase anchoring protein, is a target for estrogen signaling in breast cancer cells. BIG3 coordinates estrogen signaling by regulating the activity of protein kinase A (PKA) in response to estrogen stimulation. This study reveals the mechanism by which BIG3 regulates estrogen signaling in breast cancer cells and provides insights into the development of new therapeutic strategies for breast cancer.

Japanese Oral Sessions

**J13**

**Growth factors / hormones / signal transduction**

Chairperson: Keiji Miyazawa (Dept. Biochem., Univ. Yamanashi, Sch. Med.)

座長: 潮田 航二 (山梨大・医)

**J-3110 Inhibition of SWI/SNF complex-dependent NF-kB activation suppresses tumor formation**


The SWI/SNF complex is a large multi-subunit chromatin-remodeling enzyme that plays a key role in transcriptional regulation. This study investigated the role of the SWI/SNF complex in NF-kB activation and tumor formation. The results showed that inhibition of SWI/SNF complex activity suppressed NF-kB activation, which in turn inhibited tumor formation.

**J-3111 A novel long noncoding RNA promotes epithelial-mesenchymal transition via TGF-β-Smad pathway**

Satoshi Sakai, Masatoshi Kitagawa (Hamamatsu Univ., Sch. of Med.)

TGF-β-Smad pathway is involved in the regulation of epithelial-mesenchymal transition (EMT), which is a key process in cancer metastasis. This study identified a novel long noncoding RNA that promotes EMT via the TGF-β-Smad pathway, providing new insights into the molecular mechanisms of EMT and potential therapeutic targets for cancer.

**J-3112 Activation and detection of Met/HGF receptor by cyclic peptide technology**

Wenyu Miao, Katsuya Sakai, Naoya Ozawa, Kenichiro Ito, Hiroki Sugar, Kunio Matsumoto (Cancer Res. Inst., Kanazawa Univ., Dept. of Chem., Graduate Sch. of Science, Tokyo Univ)

Met/HGF receptor is a target for the development of new therapeutic strategies for cancer. This study investigated the activation and detection of the Met/HGF receptor using cyclic peptide technology, providing new insights into the molecular mechanisms of Met/HGF receptor activation and potential therapeutic targets for cancer.

**J-3113 MIP-1α/α-calcineurin loop contributes to decreased sensitivity to melphalan in multiple myeloma**

Yu-ichi Koumoto, Masanobu Tsubaki, Tomoyoshi Takeda, Yoshiko Tomorai, Keiji Mashimo, Katsuhiko Sakaguchi, Shozo Nishida (Dept. of Pharmacotherapy, Fac of Pharmacy, Kindai Univ., Dept. of Pharmacy, Japanese Red Cross Society Wakayama Medical Center)

MIP-1α and α-calcineurin are involved in the regulation of multiple myeloma cell proliferation and survival. This study investigated the role of MIP-1α and α-calcineurin in the decreased sensitivity to melphalan in multiple myeloma, providing new insights into the molecular mechanisms of multiple myeloma and potential therapeutic targets for cancer.

**J-3114 JUN-mediated EGFR upregulation compensates neuroblastoma cell survival in ALK inhibitor treatment.**


ALK inhibitor treatment is a key strategy for the treatment of neuroblastoma. This study investigated the role of JUN-mediated EGFR upregulation in neuroblastoma cell survival in ALK inhibitor treatment, providing new insights into the molecular mechanisms of ALK inhibitor resistance and potential therapeutic targets for cancer.
The Hippo effector Yorkie drives tumorigenesis by antagonizing Pointed/ETS-mediated cellular senescence in Drosophila
Takao Itagaki, Masato Enomoto, Tatsushi Igaki (Grad. Sch. of Bio., Kyoto Univ.)

Hippo通路による細胞老化シグナル制御を介した新たながん悪性化・進展メカニズムの遺伝学的解明
井藤 喜夫, 深井 英人, 井田 廣史（京都大・医歯薬学院
学・細胞分子生物学）

Novel senescence-associated microRNAs inhibit proliferation of intractable cancer cells
Yuki Yamamoto, Kimiyoshi Yano, Akira Shimamoto, Hitodehoto Tahara

新規老化関連マイクロRNAは動物系がん細胞の増殖を抑制する
山本 唯昭, 矢野 公義, 島本 姉, 田原 晴俊（広島大・医歯薬学院
学・細胞分子生物学）

Caspase-1-induced pyroptosis potentializes anti-tumor immunity
Shinsuke Nakajima, Kohsuke Tsuchiya, Takashi Suda (Div. of immunol., Cancer Res. Inst., Kanazawa Univ.)

カスパーゼ1介導するバロトロージは抗腫瘍免疫を増強する
中嶋 伸介, 土屋 晃二, 渋田 貴司（金沢大学・がん研・免疫炎症制御）

PLEKH1 promotes apoptosis by enhancing Bax oligomerization through interaction with Bid in human colon cancer
Sei Kuriyama, Tetsushi Sakuma, Takashi Yamamoto, Masamitsu Tanaka

PLEKH1はBaxのオリゴマー化によって細胞死を
促進する
栗山 正, 佐久間 哲史, 山本 卓, 田中 正光（秋田大・医・分子生化学, 2広島大・院・数理・分子遺伝学）

The effect of TRF2 inhibitors in cancer cells
Yoshitomo Shirota, Masaki Kinehara, Akira Shimamoto, Hitodehoto Tahara

テロメア結合タンパク質TRF2の結合阻害剤ががん細胞に及ぼす影響
城陽 嘉男, 松根 隆信, 島本 姉, 田原 晴俊（広島大・医歯薬学院
学・細胞分子生物学）

Livin confers the resistance to lymphoma-suppressive barrier by Fas restoration
Eiji Sugihara, Norisato Hashimoto, Satoru Osuka, Sayaka Ueno
(Takatsune Shimizu, Hideyuki Saya, Akira Horii (1Dep. of Mol. Pahol., Tohoku Univ., Grad. Sch. Med.)

LivinはFas発現阻害によるリンパ腫制御バリアに対する抵抗性を
与える
杉原 英生, 2松本 修, 3大須賀 聖, 3植野 さがみ, 滝口 恒, 佐藤 秀行（2筑波大・国際臨床学連携・高齢医療, 3慶應大・医・先端研究・遺伝子制御, 4エモリーワ・脳神経腫瘍, 5里矢大・薬・病態生理）

Comprehensive preclinical assessment of novel compounds using genetically engineered mouse models of prostate cancer
Yuriko Saika, Kota Ishizawa, Makoto Sunamura, Akira Horii (2Dept. of Mol. Pahol., Tohoku Univ., Grad. Sch. Med.)

タキシン制御を獲得した長円扁平上皮癌細胞のABCB1発現は
遺伝子増幅とエビジェネティクスに接続する
藤井 由利子, 石見 大幸, 今村 蜻蛉, 田村 眞明（3東北大・院・医・分子病理, 4東京医科大・八王子医療・消化器外）

Schlafen1 expression is associated with antitumor effects of trabectedin in human sarcoma cell lines

スラファニン1の発現はヒト軟骨腫細胞に対するトレベクトリンの
抗腫瘍効果を介した
松尾 由美, 2小野原 真治, 羅場 由美, 3山内 祐二, 中村 賢司, 4尾崎 尙子, 大村 直樹, 5横山 光明（3大学院大, 6病院外科学, 7徳島大学, 生物資源薬学科, 8徳島大学大学院, あしかが健康科学大学）

Comprehensive exploration to identify molecular mechanisms explaining BCP801 sensitivity in human cancer.

ヒト腫瘍におけるBCP801の感受性を標的分子組織を対象とした包括的遺伝子解析
大村 嘉明, 2山下 経嗣, 50歳, 3小林 康明, 田中 俊行, 4京極 俊, 原田 亜希, 横田 進, 5佐藤 康弘, 6井上 昌, 7北里大学 外科, 8徳島大学大学院, 医薬学系学術研究科

JMJD2A is associated with drug sensitivity through regulation of CCDC8 expression in metastatic gastric cancer
Takahiro Nagakawa, Toshihito Tanahashi, Koichi Okamoto, Tatsuya Taniguchi, Noriaki Murayama, Hironori Tanaka, Yoshimi Bandou, Yasushi Sato, Naoki Muguruma, Tetsuji Takayama (Dept. Gastroenterology and Oncology, Instit. of Biomed. Sci., Tokushima Univ. Grad. Sch.)

ヒストリコトリメチル化酵素JMJD2Aは切除不能進行胃癌において
CCDC8の発現を調節することで薬物感受性を制御している
中川 恒世, 松本 典人, 木村 哲夫, 高松 泰成, 木村 直樹, 井口 隆司, 5村山 典典, 田中 宏明, 6坂本 良美, 佐藤 康弘, 7杉原 亮樹, 8高松 哲治（徳島大学大学院 消化器内科学, 9徳島大学大学院, 病理学）
Japanese Oral Sessions

Seat: 佐々木 健嗣（昭和大学、医、腫瘍内科）

J-3127 Whole exome sequencing to identify genetic markers for Herceptin-induced cardiotoxicity

全エクソーム解析によるハセブチン薬理学的マーカー探索

宇宙川 智也1、2、中村 泰治1、2、大西 怪1、2、田村 研治3、下井 亜美4、吉田 正行1、吉田 裕彦4、十時 泰1、柴田 龍弘1、前前 均1、2、(がん研 - CPM セ - リキッドバイオブピー、国立がん研究センター、遺伝医学会、国立がん研究センター、がんゲノムマックス、国立がん研究センター中央医療院、乳癌腫瘍内科、国立がん研究センター、病理学、国立がん研究センター、病理学、基盤的臨床研究センター)

J-3128 The relationship of the plasma concentration of T-DM1 with PFS and toxicity in breast cancer patients
Akihiko Shinomura1,2, Hitomi Sumiyoshi-Oka1,2, Takashi Shimada1,2, Mitsushiro Hayashi1,2, Shigeisha Kitano1,2, Kan Yonemori1,2, Chikako Shimizu1, Kenji Tamura1,2, Akinobu Hamada1,2, (Dept. Breast and Medical Oncology, Natl. Cancer Ctr. Hosp., 3Dept. Medical Oncology and TR, Grad. Sch. Med., Kumanoto Univ., 4SHIMADZU Corporation, 5Dept. Mol. Pharmacology, Natl. Cancer Ctr. Res. Inst., 6Dept. Experimental Therapeutics, Natl. Cancer Ctr. Hosp.)

乳癌患者における T-DM1 血中濃度と無増悪生存期間および毒性との関連

下村 昭彦1,2, 大熊 ひなみ1, 坪田 広史1, 林 光博1, 北野 恒久3, 米盛 勲1,5, 水野 干佳子1, 田村 研治1,2, 萩田 哲朗3,5 (国立がん研究センター、中央医療院、乳癌腫瘍内科、岡本大学 医学部 総合医学科、医学部 病理学科、国立がん研究センター、病理学、国立がん研究センター、医療設備)

J-3129 Optimized phosphoproteomic analysis method for Spheroids and Patient-Derived Organoids embedded in Matrigel

オルガノイドを始めとするMatrigel包埋サンプルを解析可能なリン酸化プロテオーム法の開発

同部 雄一1, 足立 淳1, 朝長 毅1 (医療基盤健栄研・プロテオーム)

J-3130 A phase 1 / II to find optimal dosing of Erlotinib(RE)in only patients with lung cancer harboring EGFR sensitive mutations

感受性 EGFRIA遺伝子異常を持つ非小細胞肺癌におけるErlotinibの至適投与量の検討

竹田 雄一1、石塚 直樹1、佐野 和美1、杉山 温1 (国立国際医療フォーラム病院、呼吸器内科、臨床研究開発病院、臨床研究センター、3明治薬科大学・薬物体内動態学教室)

J-3131 Heterogeneous tissue distributions of erlotinib in lung cancer using MALDI mass spectrometry imaging
Mitsuihiro Hayashi1, Yukari Tsukuba1, Hiroki Aikawa1, Kenji Tamura1, Yasuhiko Fujiiwa1, Takeshi Isobe1, Akinobu Hamada1 (Division of Molecular Pharmacology, National Cancer Center Research Institute, 2Division of Medical Oncology and Respiratory Medicine, Shimane University, 3Department of Breast and Medical Oncology, National Cancer Center Hospital)

MALDI質量分析イメージングによるエロチニブ腫瘍組織内分布の評価

林 光博1, 津嶋 由佳里1, 相川 博明1, 田村 研治1, 藤原 康弘1, 嶋部 咲1, 深田 哲朗1 (国立がん研究センター・分子薬理研究分野、2島根大学医学部呼吸器・臨床腫瘍学、3国立がんセンター中央病院乳癌・腫瘍内科)
MOA in gastric cancer

Chairperson: Naohide Oue (Dept. Mol. Pathol., Hiroshima Univ.)

座長：大上 直秀（広島大学・医歯薬学院・分子病理学）

J-3133  Mieap expression is associated with MQC integrity and controls ROS production in gastric cancer cells under hypoxia

Mieap発現は胃癌細胞の低酸素下でのミトコンドリア品質管理機構とROS産生の制御に寄与する

J-3134  Blockade of potassium ion transports enhances hypotonicity-induced cytocidal effects in gastric cancer
Toshiyuki Kosuga, Atsushi Shiozaki, Michihiko Kudou, Yuzu Yamazato, Shuhei Komatsu, Masayuki Komatsu, Kohei Taniguchi, Keisuke Matsusaki, Fumiko Chiwaki, Hitoshi Ichikawa, Hiromi Sakamoto, Makoto Asaumi, Kazuhiro Yoshida, Kazuhiro Sato, Kazuhisa Uchiyama, Yukihiro Akao

胃癌におけるカリウムイオン輸送遮断による低浸透圧細胞増殖効果

J-3135  Oncogene RNA helicase DDX6 promotes the process of c-Myc expression in gastric cancer cells

RNAヘリカーゼDDX6の胃癌におけるc-Mycを介した癌遺伝子としての働き

J-3136  Membrane-anchoring ARHGAP fusions promote peritoneal metastasis in diffuse-type gastric cancer

未分化型胃がんでは膜係留型のARHGAP融合分子がRhoAの不活性化を介して腹膜転移を促進する

J-3137  Expression and role of sodium/iodide symporter in gastric cancer
Tomoki Konishi, Atsushi Shiozaki, Yosuke Ariyoshi, Daisuke Itaka, Toshiyuki Kosuga, Hitototaka konishi, Takeshi Kubota, Hitoshi Fujisawa, Kazuma Okamoto, Mitsuhiro Kishimoto, Yoshinori Marunou, Eigo Otsuji (1Dept. of Digestive Surgery, Kyoto Prefectural University of Medicine, Pathology Dept, Kyoto Prefectural University of Medicine, Molecular Cell Physiology Dept, Kyoto Prefectural University of Medicine)

胃癌におけるNISの発現と機能

J-3138  Overexpression of Leucine-rich α2-glycoprotein-1 is a prognostic marker in gastric cancer
Tsuyoshi Takahashi, Masaaki Yamamoto, Takahito Sugase, Yurina Saito, Koju Tanah, Yasuhito Miyazaki, Tomoki Makino, Yukihiro Kurokawa, Kiyokazu Nakajima, Makoto Yamasaki, Masaki Mori, Yuichi Doki (Deptartment of gastroenterological surgery, Osaka university)

胃癌における予後マーカーとしてのLeucine-rich α2-glycoprotein-1 の意義の検討

240
**E-3031** Novel theranostic strategy: combination of fluorescence oncolytic virus and chemotherapy for scirrhous gastric cancer


座長：若林 俊彦（名古屋大・医・脳神経外科）

**E-3032** Molecular mechanisms of SETDB2 histone methyltransferase overexpression in gastric cancer

Yoshimitsu Akivama, Taketo Nishikawaji, Shu Shimada, Yasuhito Yuasa, Shinnji Tanaka (Dept. Mol. Oncol., Tokyo Med. & Dentl. Univ.)

**E-3033** Exosome-mediated transfer of miR-21 among histological subpopulations increases malignant potential in gastric cancer

Taisuke Imamura, Shuhei Komatu, Daisuke Ichikawa, Wataru Okajima, Kizuki Yuza, Chiaki Higashihara, Keisuke Ueki, Toshihiro Noguchi, Takeshi Kubota, Hitoshi Fujiwara, Eigo Otsuji (Division of Digestive Surgery, Kyoto Prefectural University of Medicine.)

**E-3034** Association between Activin receptor type 2A mutation and microsatellite instability in gastric cancer

Kizuki Yuzo, Masayuki Nagahashi, Hiroshi Ichikawa, Yoshifumi Shimada, Kazuaki Takabe, Toshifumi Wakai (Division of Digestive Surgery, Kyoto Prefectural University of Medicine.)

**E-3035** The role of Ki-67 expression gastric cancer as a prognostic biomarker

Won Sup Lee (Gyeongsang National University School of Medicine)
English Oral Sessions

**Room 12**
Sept. 30 (Sat.) 14:45-16:00

**E14-10**
Glioma (2)


座長: 武生 晃丈（熊大・医・脳外）

**E-3043**
The function and mechanism of fusion gene EGFR-ncGLIOMA in the development of glioma
Zheng Zhao (Beijing Neurosurgical Institute)

**E-3044**
Genetic and epigenetic analysis of cerebellar gliomas

小脳グリオーマのゲノム・エピゲノム解析
野村 昌志, 武生 晃丈, 永江 玄太, 山本 尚吾, 賀本 健二, 上田 宏生, 成田 善孝, 永根 基雄, 梶木 敬介, 西川 充, 齊藤 優人, 小澤 浩幸, 奥大・医・脳外, 奥大・先端研・グリオーマサイエンス, 国立がん研究機構脳神経外科, 奥大・医・脳外, 総合医大・国際医療せ・脳神経外科)

**E-3045**
The comparison of Receptor Tyrosine Kinases in high grade gliomas between treatment of chemoradiotherapy
Kuanyu Wang (Beijing Neurosurgical Institute)

**E-3046**
Expression and Prognostic Value of mRNAs in Low Grade Glioma with MGMT Promoter Methylated
Wen Wang, Zheng Zhao, Fan Yang, Fan Wu, Haoyuan Wang, Qing Lan, Jiangfei Wang, Jizong Zhao (Inst. Resource Development and Analysis, Kumamoto Univ.)

**E-3047**
Metabolic process of reactive oxygen species distinguishes immune microenvironment and prognosis in glioma
Kunpeng Ren, Wen Cheng (Department of pathology, the Shening Hospital of China Medical University, Department of Neurosurgery, the First Hospital of China Medical University)

**E-3048**
Does ATRX immunohistochemistry deserve a surrogate of 1p/19q codeletion in grade II, III gliomas?

グレードII,III グリオーマ分子診断における ATRX 免疫組織染色の 1p/19q 共欠失のサコートマーカーとしての有用性は真実か？
増田 隆, 塚本 勝, 畠木 敬介, 鶴木 啓, 平野 純, 荒木 和也, 岩林 俊彦, 加藤 昌幸, 夏目 敦至 (名古屋大学・医・脳神経外科, 東北大学・医・抗体制薬研究分野, 三重大学・医・脳神経外科)

Introduction Course for Current Cancer Research

**Room 13**
Sept. 30 (Sat.) 13:30-14:40

**IC3**
Introduction Course for Current Cancer Research 3

Chairperson: Yoshinori Murakami (Div. of Mol. Path., Inst. of Med. Sci., The Univ. of Tokyo)

座長: 村上 善則（東京大・医科研）

**IC3-1**
Basic immunology essential for understanding of cancer immunotherapy
Yasuyazu Nishimura (Inst. Resource Development and Analysis, Kumamoto Univ.)

がん免疫療法を理解するための基礎免疫学
西村 泰治（熊本大学・医・細胞増殖制御）

**IC3-2**
Are treasures buried all over the place?

宝物はそこそこ埋まっている？
中山 啓子（东北大学・医・細胞増殖制御）
Introduction Course for Current Cancer Research

IC4 Introduction Course for Current Cancer Research 4

座長：高橋 隆（名古屋大・院医・分子腫瘍）

IC4-1 Basics of cancer genomics for the clinical implementation of precision cancer medicine
ゲノム医療に必要な遺伝子変異の基礎知識
稲澤 幸治1,2（東京医歯大・難治研・分子細胞遺伝、2東京医歯大・疾患バイオリデザインセンター）

IC4-2 Cancer epigenome and its application to diagnosis and therapy
Atsushi Kaneda (Dept Mol Oncol, Grad Sch Med, Chiba Univ)
エビゲノム診断と癌の基礎知識
金田 鼐志（千葉大・院医・分子腫瘍学）

Symposia

S18 New therapeutic ways for new precision cancer medicine: vulnerability of cancer cells

Chairpersons: Takashi Kohno (Natl. Cancer Ctr. Res. Inst. /NCC-EPOC)

座長：河野 隆志（国立がん研・研／国立がん研・先端医療開発所）

清水 圭臣（東京医歯大・難治研）

Intensive biological studies of cancerous and non-cancerous cells have discovered novel therapeutic ways to fight cancers for which existing methods do not work efficiently. This session invites six distinguished speakers who discovered new therapeutic ways targeting “vulnerability of cancer cells” by (1) autophagy (a Nobel Prize-awarded topic in 2016), (2) Golgi apparatus, (3) DNA sequence-specifically binding drug, (4) hTERT-driven oncolytic virus, (5) chromatin regulator deficiency in cancer, and (6) iPS cell derived regenerated T cells. Welcome and let’s discuss together for cancer patients!!!
**J-3049 A MDM2 inhibitor achieves synergistic cytotoxicity with oncolytic adenoviruses on mesothelioma with the wild-type p53**

Thi Thanh Thao Nguyen¹, Boya Zhong¹, Takao Morinaga¹, Shuji Kubo², Ikko Sekine², Yuji Tada², Koichiro Tatsumi³, Hideaki Shimada¹, Kenzo Hiroshima¹, Masatoshi Tagawa¹ (¹Pathol. & Cell Ther., Chiba Cancer Ctr. Res. Inst., Chiba, ²Dept. of Medicine, Faculty of Medicine, Tohoku University, ³Dept. of Surgery, Tohoku Univ.).

A new adenovirus carrying p53 gene and MDM2 inhibitor combination therapy has shown promising results in mesothelioma xenografts. This synergistic effect is crucial in the treatment of this aggressive malignancy. Further clinical trials are needed to confirm these findings.

**E-3050 Development of Pancreatic tumor-targeting Oncolytic Adenovirus**


In this study, we developed a novel oncolytic adenovirus targeting pancreatic cancer cells. The virus was designed to specifically infect pancreatic cancer cells, thereby minimizing toxicity to normal cells. Clinical trials are planned to assess its therapeutic potential.

**E-3051 Retroviral replicating vector-mediated suicide gene therapy for osteosarcoma**

Shuji Kubo¹, Misato Takagi-Kimura¹, Tomoki Todo³, Noriyuki Kasahara² (¹Dept. Surgery, Tohoku Univ., ²Dept. Genetics, Tohoku University Graduate School of Medicine, ³Dept. Orthopaedic Surgery, Tohoku University Graduate School of Medicine).

A novel suicide gene therapy vector was developed for osteosarcoma treatment. This vector specifically targets osteosarcoma cells, while sparing normal tissues. Preclinical studies show promising results, warranting further clinical investigation.

**E-3052 Enhancement of gap junctional activity by iPS cell-derived neural stem cells in stem cell-based suicide gene therapy**

Hiroki Kato¹, Tomohiro Yamaguchi¹, Hiroki Yamashita¹, Ikuo Sekine¹ (¹Dept. Pathol. & Cell Ther., Chiba Cancer Ctr. Res. Inst., ²Dept. Surgery, Tohoku Univ.).

This study investigates the enhancement of gap junctional activity by iPS cell-derived neural stem cells in suicide gene therapy for cancer. Results suggest potential improvements in therapy efficacy.

**E-3053 Effective and clinically-applicable combination of oncolytic virus therapy with iPS cell-derived dendritic cells**

Satoru Taguchi¹, Hiroshi Futahara¹, Satoshi Akita¹, Hiroyuki Sato¹, Hiroshi Futahara¹, Satoshi Akita¹ (¹Dept. Pathol. & Cell Ther., Chiba Cancer Ctr. Res. Inst., ²Dept. Surgery, Tohoku Univ.).

This study explores the combination of oncolytic virus therapy and iPS cell-derived dendritic cells. Preclinical results indicate a promising approach for cancer treatment.

**E-3054 For the establishment of iPS based allogeneic T-cell immunotherapy against tumor**

Minagawa Akiyama¹, Yasushi Umemura¹, Tetsuya Nakamura¹, Masaaki Yasukawa¹, Naoko Takasugi¹, Shin'ya Yamanaka¹, Shin Kaneko¹ (¹Kyoto University Center for iPS research and application, ²National Cancer Center Hospital, ³Department of Hematology, School of Medicine, University of Tokyo).

This study aims to establish allogeneic T-cell immunotherapy against cancer using iPS cells. Preliminary results suggest potential for personalized medicine.

---

**Special Symposium**

**_room 15, Sept. 30 (Sat.) 13:30-16:00**

**SS3 Supportive care in cancer: current status and future perspective**


**SS3-1 First National Patient Experience Survey for Cancer Patients in Japan**

Fumihiro Takahashi, Takahiro Higashi (¹Center for Cancer Control and Information Services, National Cancer Center Hospital).

This survey aims to understand the experiences of cancer patients in Japan, providing valuable insights for future support and care strategies.

**SS3-2 Global understanding of "Neuron–tumor cell" and "Central–peripheral" interactions for supportive oncology**

Minoru Narita¹, Yosuke Uchitomi² (¹Biostatistics, Tohoku Univ. Graduate School of Medicine, ²J-SUPPORT, National Cancer Center Hospital).

Understanding the interactions between neurons and tumor cells is crucial for developing effective supportive oncology treatments. This research aims to expand our knowledge in this area.

**SS3-3 Improvement of Supportive Care in Cancer and future perspectives**

Mitsuru Saito (¹Dept. Breast Oncology, Juntendo University).

This session will focus on the current status and future perspectives of supportive care in cancer. Key challenges and future directions will be discussed.

---

**English Oral Sessions**

**Room 16, Sept. 30 (Sat.) 13:30-14:45**

**E21 Gene therapy and oncolytic virus therapy (1)**


**E-3054 For the establishment of iPS based allogeneic T-cell immunotherapy against tumor**

Minagawa Akiyama¹, Yasushi Umemura¹, Tetsuya Nakamura¹, Masaaki Yasukawa¹, Naoko Takasugi¹, Shin'ya Yamanaka¹, Shin Kaneko¹ (¹Kyoto University Center for iPS research and application, ²National Cancer Center Hospital, ³Department of Hematology, School of Medicine, University of Tokyo).

This study aims to establish allogeneic T-cell immunotherapy against cancer using iPS cells. Preliminary results suggest potential for personalized medicine.
Japanese Oral Sessions

<table>
<thead>
<tr>
<th>Room 15-16</th>
<th>Sept. 30 (Sat.) 14:45-16:00</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>J21</strong> Gene therapy and oncolytic virus therapy (2)</td>
<td></td>
</tr>
</tbody>
</table>

Chairperson: Hiroshi Fukuhara (Dept. Urology, Grad. Sch. Med., The Univ. of Tokyo)

座長：福原 浩（東京大学 医学系研究科 泌尿器外科学）

**J-3139**
Reovirus-mediated down-regulation of HIF-1α in subcutaneous tumors following systemic administration

Takuma Hotani, Masashi Tachibana, Hiroyuki Mizuguchi, Kenzo Hiroshima, Masatoshi Hi Tagawa (Dept. Pathol & Cell Ther., Chiba Cancer Res. Inst.)

レオウィルス全身投与後のマウス皮下腫瘍におけるHIF-1αの発現量低下に関する検討

**J-3140**
A role of Wee1 kinase in adenoviruses-induced cell death and viral replication.

Takao Morinaga, Thi Thanh Thao Nguyen, Boya Zhong, Shuji Kubo, Ikuo Sekine, Yuji Tada, Koichiro Tatsumi, Hideaki Shimada, Kenzo Hiroshima (The Univ. of Tokyo, Chiba Cancer Res. Inst., and Chiba Med. Univ.)

アデノウイルスによる細胞死とウイルスの複製におけるWee1キナーゼの役割

**J-3141**
Targeted enzyme/drug delivery system for glioma using iPSC-derived NSCs by integration-free HSVtk gene transfer method

Tomohiro Yamasaki, Hiroaki Kenmochi, Hiroki Namba (Neurosurg., Hamamatsu Univ., Sch. Med.)

iPSC-NSCを用いた遺伝子導入への効率的な治療システムの開発

**J-3142**
Oncolytic activity of a recombinant SLAM-blind measles virus against scirrhous gastric cancer cells


スライム・マウス（SLAM）を盲導させて作製したスレピュース・スレピラミー・マウスウイルス（Oncolytic HSV-1 armed with soluble B7-1）が食道癌の実験モデルにおける効果を示す。

**J-3143**
Efficacy of oncolytic HSV-1 armed with soluble B7-1 in a mouse model for lymph node metastases of tongue cancer


マウス舌がんリンパ節転移モデルにおける有効性評価

**J-3144**
Preclinical safety and biodistribution evaluation of an oncolytic herpes simplex virus type 1 armed with interleukin-12


IL-12発現型がん治療用ヘルペスウイルスの臨床安全性および体内分布評価
1 Chemical carcinogenesis and radiation carcinogenesis

**Room P** Sept. 30 (Sat.) 16:00-17:30  E/J

**P1-5** Anticancer drug susceptibility

**P-3001** Coptidis Rhizoma induces intrinsic apoptosis through BAX and BAK activation in human melanoma
Xiaoxiu Xu, Satoru Yokoyama, Yoshihiro Hayakawa, Ikuo Saiki (Div. Pathogenic Biochem., Int. Nat. Med., Toyama Univ.)

**P-3002** Enhanced efficacy of trifluoridine for ionizing radiation in human colorectal cancer cell lines
Kazuki Matsuno, Mamoru Nukatsuka, Takashi Kobunai, Teiji Takechi (Translational Research Laboratory, Taiho Pharmaceutical Co., Ltd.)

**P-3003** Function analysis of sphingosine-1-phosphate produced by sphingosine kinases in pancreatic cancer progression

**P-3004** Isolation of 5-FU and CDDP-resistant mutants from a human gastric scirrhou cancer cell line, HSC-39
Chiba Mitsuru (Dept. Radiation Oncology, Nanfang Hospital, Southern Medical University, Guangzhou, China.)

**Room P** Sept. 30 (Sat.) 16:00-17:30  E/J

**P1-6** Radiation susceptibility and carcinogenesis

**P-3005** Serum mirt-375-3p as potential biomarkers of acute radiation syndrome in mice exposed to lethal dose

**P-3006** Influences of genetic background on tumorigenesis and lifespan shortening of carbon ions in mice
Yi Shang, Mayumi Nishimura, Yoshihira Shimada, Shizuko Kakinuma (Dept. Radi. Effects. Res. NIRS, QST)

**P-3007** Effect of age at exposure on the incidence of lung and mammary cancer after thoracic X-ray irradiation in Wistar rats

**P-3008** Inhibition of NF-kB/MET improves sensitivity to radiation and EGFR inhibitor in lung cancer
Rong Wang, Wei Wang, Qi Li, Shunli Pengu (Division of Medical Oncology, Cancer Research Institute, Kanazawa University, Japan, Department of Radiation Oncology, Nanfang Hospital, Southern Medical University, Guangzhou, China.)

**P-3009** Effect of UV Irradiation on the Apoptosis of Human T Cell Leukemia Using 385nm UVA-1-LED
Shunko Albano Inada (Department of Science and Engineering, Hirosaki University.)

**P-3010** Establishment of ovarian cancer cell lines faithfully recapitulating the pathological features of primary tumors

**P-3012** Metformin suppresses the migration of cervical cancer cells
Wamida Sukketsiri, Henna Hakimee, Pilaiwanwadee Hutamekalin, Tulaporn Wongtawatchai, Supita Tanasawet (Department of Pharmacology, Faculty of Science, Prince of Songkla University, Department of Physiology, Faculty of Science, Prince of Songkla University, Department of Anatomy, Faculty of Science, Prince of Songkla University)

**P-3013** The evaluation of glucose metabolism in cancer cells using 13C-glucose breath test and 3D cell culture system.
Sho Kijima, Yoshihira Urita (Dept. DGMEC, Toho Univ., Sch. Med.)

**P-3014** Application of the substrata of tissue/organ sections for histopathology based systems for nanotoxicology

**Nanomaterialの毒性評価への組織切片担体培養系の応用**

**Nanomaterialの毒性評価への組織切片担体培養系の応用**

**Nanomaterialの毒性評価への組織切片担体培養系の応用**
**5 Signal transduction and gene expression**

**Room P**

**Sept. 30 (Sat.) 16:00-17:30**

**P5-10 Transcriptional regulation (2)**

**P-3022 Characterization of the 5'-flanking region of the human IFIH1 (MDA5) gene and its response to trans-resveratrol**


**P-3023 A circadian clock gene, PER2, activates HIF-1 α as an effector molecule for recruitment of HIF-1 α to its enhancer regions**


**P-3024 Contribution of Cl- channels to the transcriptional regulation of HER2 in breast cancer cells**

Makuto Fujimoto, Hiroaki Kito, Susumu Ohya (Dept. Pharmaco., Kyoto Pharmaceut. Univ.)

**P-3025 AhR function in human lung cancer cells.**


**P-3026 Elucidation of transcriptional regulation mechanism of PVRLA, a receptor for oncolytic measles virus**


**P-3015 RUNX1 positively regulates HER2 signaling pathway through modulating the expression of SOS1 in gastric cancer cells.**

Yoshishige Mitsuda,1 Ken Morita2,3, Shintaro Maeda,1 Hiroshi Sugiyama,1 Souichi Adachi2,3, Yasuhiro Kamikubo1 (Dept. of Human Health Science, Kyoto Univ., 2Department of Pediatrics, Kyoto Univ., 3Department of Hematology, Kyoto Univ., Kyoto, 3Department of Clinical and Experimental Medicine, Kyoto, Kyoto)

**P-3016 A comprehensive screening revealed Fra-1 regulates expression of HMGA1 in human esophageal squamous cell carcinoma**


**P-3017 Withdrawn**

**P-3018 Aryl hydrocarbon receptor regulates HDAC8 expression to repress tumor suppressive activity in hepatocellular carcinoma**

Kwe-Yan Liu1, Li-Ting Wang2, Shyh-Shin Chiuo3,4, Chee-Yin Chai5, Edward Hsi6, Shen-Nien Wang, Shu-Ku Huang, Shih-Hsien Hsu6,7,8 (Graduate Institute of Medicine, College of Medicine, KMU, Kaohsiung, Taiwan, 2Department of Pediatrics, College of Medicine, KMU, Kaohsiung, Taiwan, 3Division of Hematology-Oncology, Dept. of Pediatrics, KMUH, Kaohsiung, Taiwan, 4Department of Pathology, College of Medicine, KMU, Kaohsiung, Taiwan, 5Department of Genome Medicine, College of Medicine, KMU, Kaohsiung, Taiwan, 6Center for Environmental Medicine, KMU, Kaohsiung, Taiwan, 7CICAR, KMU, Kaohsiung, Taiwan)

**P-3019 Overcoming enzalutamide-resistant castration-resistant prostate cancer by targeting transcriptional repressor BCL-6.**

Hirosi Hongo, Takeo Kosaka, Yasumasa Miyazaki, Eiji Kikuchi, Motootsugu Oya (Dept. Urol., Keio Univ. Sch. Med.)

**BCL6 を標的としたエンザルタミド耐性去勢抵抗性前立腺癌克服戦略**

本郷 周, 小坂 麗, 宮崎 崎, 宮田 桃, 柴田 栄次, 大家 基樹 (慶應義塾大・医, 泌尿器科)

**P-3020 Isolation of reporter cells using a highly sensitive trap vector system**


**高感度トラップベクターを用いたレポーター細胞の作製**

石川公輔, 渡辺 雄治, 仙波 萌太郎2,5,6 (バイオ産業情報コンソーシアム, 2福島医科大学・医産 TR センター, 1早稲田大学・先進理工)

**P-3021 Oncogenic RNA helix-DDX6 regulates post-transcriptional step of erb2 expression in gastric cancer cells**


**がん関連RNAヘリックスDDX6のerb2リン酸化前における役割**

森田 眞, 林 謙一郎 (阪大・医・腫瘍外科学, 2岐大・院・連合創薬, 3大阪医大・医・消化器外科学)

**P-3027 thymosin-β4 facilitates cancer metastasis via the activation of MRTF/SRF pathway.**

Tsuyoshi Morita, Ken’ichi Hayashi (Dept. Pharm. biol. and Neurosci., Grad. Sch. Med., Osaka Univ.)

thymosin-β4 によるMRTF/SRF フシグを介したがん転移制御機構の解明

森田 眞, 林 謙一郎 (阪大・医・神経遺伝子学)
P-3028  Molecular mechanisms underpinning differential biological activities of alternatively spliced human YAP isoforms
Chi Ben, Atsushi Takahashi, Masanori Hatakeyama (Div. Microbiol. Grad. Sch. Medicine, The University of Tokyo)

P-3029  Loss of Rheb suppresses T-ALL development without severe defects in normal hematopoiesis
Masaya Deno, Susumu Kohno, Tatsunori Nishimura, Noriko Gotoh, Chiiaki Takahashi, Atsushi Hirao (Cancer Res Inst, Kanazawa Univ)

P-3030  The mechanism of stabilizing spheroïd formation in the progression of peritoneal cancer cell dissemination
Juri Ogishima1, Ayumi Taguchi1, Akira Kawara1, Katsuyoshi Adachi1, Mitsuyo Yoshida1, Massakazu Sato2, Satoko Eguchi1, Tohru Kiyono1, Yutaka Osuga1, Tomoyuki Fujii1, ‘Obstetrics and Gynecology Dept. Faculty of Medicine, Tokyo Univ., ‘Obstetrics and Gynecology Dept. Faculty of Medicine, Niho Univ., ‘Div. of Carcinog. Cancer Prev., Natl. Cancer Ctr. Res. Inst.)

P-3031  Functional analysis of ectodomain shedding of ErbB receptor tyrosine kinases by TMPRSS4 protease

P-3032  Role of Tsc2-mTORC1 signaling in intestinal homeostasis

P-3033  Gene regulation induced by the mechanical effects of ultrasound resulted in melanoma growth inhibition
Loreto Jr. B. Ferri1, Kazuki Yamaguchi1,2, Yurika Ikeda-Dantsuji1,3, Takashi Kondo1, Yoshiaki Tabuchi1, Yukihiro Furusawa1, Ichiro Takasaki1, Katsuuro Tachibana1 (‘Department of Anatomy, Fukuoka University School of Medicine, ‘Department of Dermatology, Fukuoka University School of Medicine, ‘Department of Microbiology and Immunology, Fukuoka University School of Medicine, ‘Department of Radiological Sciences, GSMPS, University of Toyama, ‘Division of Molecular Genetics Research, LSRC, University of Toyama)

P-3034  Altered CHO-K1 Cells Proliferation under Different Genistein Concentration
Gagas P. N. Ilmawati1, Haruna A. Muflikha1, Nur D. Malina1, Beni Lestari1, Riris I. Jenie1,2, Edy Meiayanto1,2 (‘Cancer Chemoprevention Research Center, Faculty of Pharmacy, Universitas Gadjah Mada, ‘Department of Pharmaceutical Chemistry Faculty of Pharmacy, Universitas Gadjah Mada)

P-3035  PLK1-mediated phosphorylation of WDR62/MCPH2 is required for proper mitotic spindle orientation
Tatsuo Miyamoto1, Kosuke Hosoba1, Silvia Natsuko Akutsu1, Hiroyuki Morino1, Akhiro Fukumitsu1, Yoshinori Matsusawa1, Hideshi Kawakami1, Takashi Yamamoto1, Kenji Shimizu1, Hirofumi Ohashi1, Shinya Matsusawa1,2 (‘Dept. Genet and Cell Biol. RIRBM., Hiroshima Univ., ‘Dept. Mol Epidemiol., RIRBM., Hiroshima Univ., ‘Dept. Math and Life Sci., Grad Sch.Sci., Hiroshima Univ., ‘Dept. Genet., Saitama Children’s Medical Center.)

P-3036  A Repressor Candidate of Cancer Specific mRNA Re-splicing: A Key factor for splicing fidelity or mRNA quality control?
Toshiki Kameyama1, Kosuke Hosoba1, Silvia Natsuko Akutsu1, Hiroyuki Morino1, Akhiro Fukumitsu1, Yoshinori Matsusawa1, Hideshi Kawakami1, Takashi Yamamoto1, Kenji Shimizu1, Hirofumi Ohashi1, Shinya Matsusawa1,2 (‘Dept. Genet and Cell Biol. RIRBM., Hiroshima Univ., ‘Dept. Mol Epidemiol., RIRBM., Hiroshima Univ., ‘Dept. Math and Life Sci., Grad Sch.Sci., Hiroshima Univ., ‘Dept. Genet., Saitama Children’s Medical Center.)

P-3037  A Repressor Candidate of Cancer Specific mRNA Re-splicing: A Key factor for splicing fidelity or mRNA quality control?
Toshiaki Kawamura (Div. Gene Expression Mechanism, Fujita Health Univ.)

250
サンプリングおよび臨床調査

P-3038
Sampling and library preparation for optimized clinical targeted sequencing from FFPE cancer tissues
Takashi Kubo, Sachiyto Mitani, Erika Arakawa, Kuniko Sunami, Yuki Katsuya, Eisaku Furukawa, Mamoru Kato, Takahiko Kuno, Hiroshi Nakagomi, Hitoshi Yoshida, Yuko Sugiyama, Nobuhiro Takeshima, Yutaka Iizuka, Takeshi Nagashima, Yuji Shimoda, Miyuki Tamura, Takafumi Nakagaki, Ryota Nakagawa, Yasuhito Nannya
(National Cancer Center Research Institute, Frontier Medical, Sapporo Med. Univ., National Cancer Center Research Inst., Department of Gastroenterology and Hepatology, Department of Oral Surgery, Sapporo Med. Univ.)

P-3039
P-3040
P-3041
P-3042
P-3043
P-3044

Identification of genetic alterations in oral squamous cell carcinomas using amplicon-based whole-exome sequencing
Yasushi Sasaki, Miyu Tamura, Takafumi Nakagaki, Ryota Koyama, Masashi Idozawa, Kazuhiro Ogi, Hiroshi Hirosaka, Hiroshi Nakase, Takashi Tokino
(National Cancer Center Research Institute, Frontier Medical, Sapporo Med. Univ., National Cancer Center Research Inst., Department of Oral Surgery, Sapporo Med. Univ.)

P-3045

Comprehensive Sequencing Analyses of Uterine and Ovarian Carcinoma


P-3046

Carcinoma of the cervix

Masatoshi Kusuhara, Ken Yamaguchi, Hideki Makishima, Kenichi Urakami, Tetsuo Noda, Seiichi Ohshima
(Cancer Diagnostics Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Medical Genetics Division, Shizuoka Cancer Center Research Institute, Regional Genetics Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center)

P-3047

Classification of tumor microenvironment immune types based on the immune response-associated gene expression
Yasuto Akiyama, Akira Iizuka, Takeshi Nagashima, Yuhi Shimoda, Tomoe Tanabe, Sumiko Ohnami, Shumpei Ohnami, Keiichi Ohshima, Ken Masatoshi Kusuhara, Tohru Mochizuki, Ken Yamaguchi, Cancer Diagnosis Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Cancer Diagnosis Research Division, Shizuoka Cancer Center Research Institute, Medical Genetics Division, Shizuoka Cancer Center Research Institute, Regional Genetics Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center

P-3048

Next-generation sequencing approach for detecting 491 fusion genes from human cancer - Project HOPE
Kenichi Urakami, Yuhi Shimoda, Keiichi Ohshima, Takeshi Nagashima, Junko Saito, Tomoe Tanabe, Yuko Watanabe, Masakuni Serizawa, Sumiko Ohnami, Suyumi Ohnami, Tohru Mochizuki, Masatoshi Kusuhara, Ken Yamaguchi, Cancer Diagnosis Research Division, Shizuoka Cancer Center Research Institute, Medical Genetics Division, Shizuoka Cancer Center Research Institute, Regional Genetics Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center

P-3049

Carcinoma of the lung

Satoshi Nakamura, Hiroyuki Abe, Tetsuo Usukish, Masashi Fukayama, Shunji Kotsaka, Keiichi Ohshima, Fatima Oltan, Tohru Mochizuki, Masatoshi Kusuhara, Ken Yamaguchi, Cancer Diagnosis Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Cancer Diagnosis Research Division, Shizuoka Cancer Center Research Institute, Medical Genetics Division, Shizuoka Cancer Center Research Institute, Regional Genetics Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center

P-3050

Carcinoma of the breast

Masatoshi Kusuhara, Ken Yamaguchi, Hideki Makishima, Kenichi Urakami, Tetsuo Noda, Seiichi Ohshima
(Cancer Diagnostics Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Medical Genetics Division, Shizuoka Cancer Center Research Institute, Regional Genetics Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center)
P-3049  Intra tumor heterogeneity involving malignancy in liver metastatic colorectal cancer
Reika Kawabata1, Andrei Turtoiu1, Yukihiro Otaka1, Susumu Rokuda1, Takehiko Yokobori1, Burnella Costanza2, Masahiko Nishiyama1,2 (Dept. Mol. Pharm. & Oncol., Gunma Univ. Grad. Sch. Med., 3Div. Integrated Oncology Res., Gunma Univ. Institute for Advanced Res.)

P-3050  Detection of multiple minute genomic deletions by digital MLPA and target NGS in tumors
Yoshie Yoshikawa, Masaki Ohmurraya, Tomoko Hashimoto-Tamaki, Mitsuru Emi (Dept. Genetics, Hyogo College of Medicine)

P-3051  Global analysis of cancer-stromal interactions for target discovery

P-3052  Detection of multiple low frequency mutations by molecular-barcode sequencing
Kei Namba1, Shuta Tomida2, Kazuhiro Shien1, Hiromasa Yamamoto1, Junichi Soh1, Kazunori Tsukuda1, Shinichi Toyooka1 (1Thoracic Surg., 7Dept. of Surg., Tokushima Breast Care Clinic)

P-3053  Cancer genome phasing for regulatory mutations and allelic transcriptional imbalances using long read sequencing

P-3054  Introduction and management of MSK-IMPACT in Yokohama City University Hospital
Shingo Kato1, Tetsuya Matsuura1, Yasushi Ichikawa2, Atsushi Nakajima1, (1Dept. Gastroenterology and Hepatology, Yokohama City Univ., Sch. Med., 2Dept. Oncology, Yokohama City Univ., Sch. Med.)


P-3056  The relationship between vitamin D receptor (Foki) polymorphism and cervical cancer susceptibility among Thai Women
Sophida Phuthong1, Wannapa Settheetham-Ishida1, Sitakan Naraphop1, (1Dept. of Physiol., Khon Kaen Univ., Khon Kaen, Thailand, 2Chulabhorn International College of Med., Thammasat Univ., Pathum Thani, Thailand)

P-3057  A non-synonymous SNP in the ABCG4 gene (rs3765534, E757K) is associated with the risk of breast cancer.
Megumi Tsukamoto1, Hiidemi Ito1, Hiroshi Nakagawa1, Keitaro Matsuo1 (Graduate School of Biosci. and Biotech., Chubu Univ., 2Division of Mol. Med., Aichi Cancer Ctr. Res. Inst.)

P-3058  Application of PAXgene® fixed paraffin embedded samples to laser capture microdissection
Masaki Yamazaki1, Masami Suzuki1, Atsuhiko Kato1 (Research Dev., Chugai Pharmaceutical Co., Ltd., 2Forerunner Pharma Research Co., Ltd.)

P-3059  Identification of novel susceptibility genes in Japanese hereditary breast cancer families by whole exome sequencing

P-3060  Mutation status of RAD51C, PALB2, and BRIP1 in 100 Japanese familial breast cancer cases without BRCA1/2 mutation

P-3061  Mutation status of RAD51C, PALB2, and BRIP1 in Japanese familial breast cancer patients with BRCA1/2 mutation

P-3062  Identification of novel susceptibility genes in Japanese hereditary breast cancer families by whole exome sequencing

P-3063  Identification of novel susceptibility genes in Japanese hereditary breast cancer families by whole exome sequencing
Microtubule stabilization by the loss of BRCA2 is attributed to MAP4 assembly
BRCA2 の欠損による微小管の安定化は MAP4 集合体に起因する
山田 翔太, 高岡 奉美, 中西 聖, 三木 直男 (1 东京医科齿科大学, 難研, 2 送信, 3 送信 分野)

Highly sensitive DNA Methylation analysis of MLH1 and BRCA1
MLH1 送信と BRCA1 送信 送信領域の高感度メチル化 DNA 解析
野村 幸男, 横野 芳夫, 新井 正美 (1 东京医科歯科大学, 送信送信 送信, 2 送信 送信, 3 送信 送信)

A novel germline mutation in MEN1 identified by whole exome sequencing in a multicentric gastric patient
Akane Naruoka¹, Sumiko Ohnami¹, Takeshi Nagashima², Masakuni Serizawa³, Keiichi Oshihama³, Keiichi Hatakeyama³, Yuji Shimoda³, Masato Abe¹, Takashi Nakajima¹, Shumpei Ohnami³, Kenichi Uragami¹, Masatoshi Kusuhara⁴, Ken Yamaguchi¹ (Drug Discovery and Development Division, Shizuoka Cancer Center Research Institute, Cancer Diagnostics Research Division, Shizuoka Cancer Center Research Institute, SRL Inc., Medical Genetics Division, Shizuoka Cancer Center Research Institute, Pathology Division, Shizuoka Cancer Center Hospital, Regional Resources Division, Shizuoka Cancer Center Research Institute, Shizuoka Cancer Center)
多中心性胃癌患者における全エクソーム解析を用いた新発性内分泌腫瘍 1 型の新規遺伝子塩基配列異常の同定
成郷 聡, 池野 哲子, 長橋 隆之, 芦澤 昌邦, 大鳥 啓一, 鳴山 慶一, 下田 勇治, 阿部 真人, 中島 孝, 大渕 俊平, 深上 研一, 植原 正俊, 山口 建 (1 送信 送信, 2 新規塩基配列分析部, 3 新規塩基配列分析部, 4 送信 4 送信 送信 送信 送信)

Small molecule STF-62247 induces cell death with apoptosis and autophagy in leukemic cells
Tomohiro Kozako¹, Keisuke Sato¹, Kentaro Ogata², Hitotoshi Kamimura³ (Dept. Biochem., Fac. Pharm., Fukuoka Univ., Dept. Pharm., Fukuoka University Hospital)
STF62247 によるアポトーシスおよびオートファジーを介する細胞死に関する検討
小迫 明弘, 藤本 豊明, 酒井 真也, 神村 英利 (1 Fukuoka 大学が, 2 化学, 3 Fukuoka 大学が, 薬剤部)

Induction of autophagy by sphingosine kinase 1 inhibitor PF-543 in oral squamous cell carcinoma cells
Masakazu Hamada¹, Hiroyasu Kameyama¹, Soichi Iwai (Dept. Oral and Maxillofac. Surg2 Osaka Univ.)
Sphingosine kinase 1 阻害薬 PF-543 による口腔扁平上皮癌細胞に対するオートファジーの関与
浜田 正和, 亀山 裕実, 岩井 聡一 (大阪 建, 口外 2)

Therapeutic effects and antitumor mechanism of trehalose liposomes against lung carcinoma mice model
Keiji Kusawara, Hideaki Ichihara, Yoko Matsumoto (Div. of Applied Life Science, Sojo Univ.)
トレハロースリポソームを用いた肺がんモデルマウスの治療効果と制がん機構
桑原 啓司, 市原 義英, 松本 陽子 (崇徳大学, 生物生存, 網院)

Therapeutic effects of hybrid liposomes against mouse model of colorectal cancer in vivo due to long term accumulation
Masaki Okumura, Hideaki Ichihara, Yoko Matsumoto (Div. of Applied Life Science, Sojo Univ.)
大腸がんモデルマウスに対するハイブリッドリポソームの長期蓄積による治療効果
奥村 真樹, 市原 義英, 松本 陽子 (崇徳大学, 生物生存, 網院)
Cellular senescence and apoptosis

P-3071 Gonadotropin-Releasing Hormone -I and II induce apoptosis in human granulosa cells

Hwa-yong Lee, In-sun Hong (The Faculty of Liberal Arts, Jungwon University, Lee Gil Ya Cancer and Diabetes Institute, Gachon University, Department of Molecular Medicine, School of Medicine, Gachon University)

Amino Acids Starvation Enhances Gefitinib-Induced Cytotoxicity in EGFR-Expressing Cancer Cells via Atypical Necroptosis

Yu Saito1, Shota Moriya 2, Hiromi Kazama1, Kazuhiro Hisasawa1, Kana Miyahara1, Naoharu Takano1, Masaki Hiramoto1, Kiyohiro Tsukahara1, Keisuke Miyazawa1 (Dept. of Hematology, Tokyo Medical, Division of Hematology, Tokyo Medical, Dept. of Breast surgery, Tokyo Medical)

Studies of switching between two types of cell death, necrosis and apoptosis


Depletion of gamma-glutamylcyclotransferase (GGCT) induces autophagy followed by cellular senescence

Keiko Taniguchi1, Susumu Nakata1, Kengo Matsumura1, Hiromi Iki1, Susumu Kageyama2, Akihiro Kawashita1, Tatsuhito Yoshi1 (Clin. Oncol., Kyoto Pharm. Univ., Dept. of Pharm., Kyoto Univ. Hosp., Dept. Oncol., Shiga Univ. of Med. Sci.)

HSF1 depletion induces senescence through DHR52-MDM2-p53 pathway in immortalized human diploid fibroblasts (iHDFs)

Tsukasa Oda, Takayuki Sekimoto, Kiminori Kurashima, Takayuki Yamashita (Lab of Mol. Genet., IMCR, Gunma Univ.)

Cellular senescence as well as apoptosis is induced by chemotherapy in various cancer cells

Hirotoshi Kawata, Takeo Nakaya, Akira Tanaka (Dept. Patho., Jichi Med. Univ.)

Correlation between TERT polymorphisms related to lung adenocarcinoma risk and telomere length


Establishment of a new protocol to detect hTERT-RdRP activity

Marco Ghilotti, Yohsiko Maida, Mami Yasukawa, Kenkichi Masutomi (Cancer Stem Cell, NCC)

Knockdown of TTK in ovarian cancer cells caused dysfunction of cell division, multinuclear cell formation and cell death

Boya Deng1, Jae-Hyun Park1, Yatara Daito4, Yusuke Nakamura4 (The Department of Medicine, The University of Chicago, Human Genome Center, Institute of Medical Science, University of Tokyo, Shiga University of Medical Science Center for Antibody and Vaccine)

CRISPR/Cas9-based knockout of the chromatin remodeling factor ATRX and its effect in neuroblastoma (NB) cells

AKTER JESMIN, Yutaka Kata, Hisanori Takenobu, Masayuki Haruta, Parvin Sultana, Koyou Mukaee, Ryoichi Sugino, Miki Ohira, Takekiko Kamijo (Research Institute for Clinical Oncology, Saitama Cancer Center, Saitama)

Establishment of a new protocol to detect hTERT-RdRP activity

Marco Ghilotti, Yohsiko Maida, Mami Yasukawa, Kenkichi Masutomi (Cancer Stem Cell, NCC)

Knockdown of TTK in ovarian cancer cells caused dysfunction of cell division, multinuclear cell formation and cell death

Boya Deng1, Jae-Hyun Park1, Yatara Daito4, Yusuke Nakamura4 (The Department of Medicine, The University of Chicago, Human Genome Center, Institute of Medical Science, University of Tokyo, Shiga University of Medical Science Center for Antibody and Vaccine)

CRISPR/Cas9-based knockout of the chromatin remodeling factor ATRX and its effect in neuroblastoma (NB) cells

AKTER JESMIN, Yutaka Kata, Hisanori Takenobu, Masayuki Haruta, Parvin Sultana, Koyou Mukaee, Ryoichi Sugino, Miki Ohira, Takekiko Kamijo (Research Institute for Clinical Oncology, Saitama Cancer Center, Saitama)

Establishment of a new protocol to detect hTERT-RdRP activity

Marco Ghilotti, Yohsiko Maida, Mami Yasukawa, Kenkichi Masutomi (Cancer Stem Cell, NCC)

Knockdown of TTK in ovarian cancer cells caused dysfunction of cell division, multinuclear cell formation and cell death

Boya Deng1, Jae-Hyun Park1, Yatara Daito4, Yusuke Nakamura4 (The Department of Medicine, The University of Chicago, Human Genome Center, Institute of Medical Science, University of Tokyo, Shiga University of Medical Science Center for Antibody and Vaccine)
10 Invasión y metastasis

**P10-3**

Development of the novel diagnostic techniques and assessment

新たな診断技術・評価法の開発

**P10-382**

Exudative low density granulocytes assist peritoneal recurrence via the production of neutrophil extracellular traps

Joji Kitayama, Rihito Kanamaru, Hidenori Tsukui, Hideyuki Ohzawa, Hironori Yamaguchi, Shiro matsumoto, kentaro kurashina, Hideyo Miyato, yoshinori Hosoya, Naohiro Sata (Dept. gastrointestinal Surgery, lichi Medical University)

間質術後の腹膜再発における腹水浸出性低密度好中球の意義

北山 丈二、内山 理人、津久本 秀則、大澤 元之、山口 博美、松本 志朗、倉科 敦太郎、宮戸 秀世、細谷 好則、佐田 尚宏（自治医科大学・消化器外科）

**P10-383**

Evaluation of partial pressure of oxygen in false-negative N0 lymph node


転移術陰性リノック節の酸素分圧の評価

菊池 浩平、飯田 佐知子、森 高樹、小玉 哲也（東北大学・医工、唾液器工、東北大学・院外口腔内診療）

**P10-384**

Study of a diagnostic method for lymph node metastasis by lymphangiography using micro-CT and high frequency US


マイクロCTと高周波超音波を用いたリノック組織検査の新たな診断法の開発

岩村 亮、森 哲朗、阪本 真弥、小玉 哲也（東北大学・医工、唾液器工、東北大学・院外口腔内診療）

**P10-385**

Angiopoietin-like protein 4 (Angptl4) expression is a poor prognosis factor of OSCC.


アンギオポエチンライク4の発現は口腔頭部皮膚癌の予後マーカーとなるうる。

田中 拓也、尾木 直孝、吉田 迎司、長尾 昌之、福岡 大喜、川原 健太、松岡 裕一郎、坂田 純海、有田 英生、中嶋 康、今村 隆夫、中山 秀樹（熊本大学医学部附属病院口腔外科）

**P10-386**


Glucose uptake assayによるがん転移に関する新規評価法の検討

常春 麻衣、稲川 慎起（*KAC ·バイオサイエンス事業部）

**P10-387**

Dynamic analysis of MDCK-cyst rotation as a model of ductal or acinous cancer cell collective invasion


管腔・腺腫型がん細胞集団浸潤機会としてのMDCKシスト回転の動的解析

平田 周英、清川 聖子（金沢医大・医・病）

**P10-4**

Comprehension of cancer microenvironment for metastasis (chemokines)

転移にかかわるがん微小環境の理解（1）

**P10-388**

CMTM6, a regulator of EWS cell migration, is regulated by miR-451


ユーティング肉腫の転移に関わるケモカイン様タンパク質CMTM6の同定

西山 勝子、浅野 尚文、藤原 優子、近藤 格、土屋 直人（国立がん研究・研究所・分子病学）、（国立がん研究・研究所・希少癌）、（慶大・医・整形）

**P10-389**

Possibility of post-surgical adjuvant therapy with 5-fluorouracil to augment breast cancer metastasis to lungs.

Soichiro Sasaki, Tomohisa Baba, Naofumi Makiida (Div. Molec. Bioregulation, Cancer Res. Inst., Kanazawa Univ.)

5-FU化学療法による乳がん転移の促進機構

佐々木 宗一、馬場 昭久、向田 伸直（金沢大・がん研・分子生体応用）

**P10-390**

The impact of chemokine in the peritoneal metastatic nicheoccupied of ovarian cancer and peritoneal mesothelial cells


卵巣癌と中皮細胞が形成する腹膜播種ニッチのケモカインの役割

安井 啓、植山 昌宏、吉田 雅子、杉山 麻衣、刘 文华、吉川 史隆（名古屋大・医・産婦人科）、名古屋大・ヘルリサーチセンター（産婦人科）

**P10-391**

Relation between CXCR4, RANK expression and Akt-mTOR activation on bone metastasis from TN breast cancer.

Yayoi Okada, Fumio Ishikawa, Fumi Saito, Hideaki Ogata (Center for Medical Education, Faculty of Medicine, Toho University, Dept. of Mol. Immunol. Faculty of Medicine, Toho University, *Div. of Gen. Gastroen.Surgery, Dept.of Surgery)

TNタイプ乳癌細胞の骨転移におけるCXCR4、RANK発現とAkt-mTORシグナル伝達の関与

森田 星生、石田 訓英、齊藤 美穂、纖村 秀昭（東京大学 医学部・医学教育センター）、東京大学 医学部・分子免疫学講座、東京大学 医学部・外科講座（肺癌内科研）

**P10-392**

CAFs promote metastatic seeding of the highly epithelial breast carcinoma cell cluster with a quasi-mesenchymal trait.

Yasuhiko Ito, Yuko Matsumura, Yoshihiro Mezawa, Kaidiiva Sulladan, Nadilla Wahl, Yashikavo Terao, Satoru Takeda, Ko Okumura, Kazuyoshi Takeda, Okio Hino, Akira Orimo (Dept. of Molecular Pathology, Juntendo University Faculty of Medicine, Dept. of Obstetrics and Gynecology, Juntendo University Faculty of Medicine, *Atopy Research Center, Juntendo University Faculty of Medicine, Biomed. Res. Center, Graduate Sch. of Med., Juntendo, Univ.)

癌内練維芽細胞は、部分的に間葉系細胞の性質を有した高上皮性の乳癌細胞クラスターの転移を促進する

伊藤 順、松村 秀裕、森田 直宏、山本 晦、ソノオ カツオリ（ウリオリダナ）、寺尾 泰夫、田野 眞、井原 太也、田中 和夫、植村 興夫、折茂 彰（順天堂大学・病理・腫瘍学、順天堂大学・産婦人科、順天堂大学・アポトーシス研究センター、順天堂大学・研究基盤センター）

**P10-5**

Development of the novel inhibitor of cancer metastasis

がん転移阻害薬の開発

**P10-393**

Soluble VEGFR-3 decoy capturing VEGF-C suppresses metastases to wide-spectrum organs in a mouse mammary cancer model.


VEG-F-Cを捕捉する可溶性VEGFR-3デコイはマウス乳癌モデルの多臓器転移を抑制する

柴田 雅朗、伊藤 裕子、田中 義久、瀬良 仁美、前村 哲夫（大阪医大・大・生命科学薬剤学部）

**P10-394**

Chloroquine reduces metastases of cholangiocarcinoma cells in lungs by tail vein assay of cancer metastasis.

Kanokwan Nahok, Piyapong Sittipan, Sopit Wongkham, Wunchana Seubwai, Ubon Chaon (Dept. of Biochem., Faculty of Med., Khon Kaen Univ., Thailand, *Liver Fluke and Cholangiocarcinoma Research Center, Khon Kaen Univ., Thailand)

クロロキエンは胆管癌細胞の肺癌転移を抑制する

カノクワナナホク、ピヤポン スティピア、ソピト ウォンクラム、ウンチャンナ サウバイ、ウボン カオーン（生物化学・医科大学、クホクカエン医大・肝吸虫と胆管癌研究センター）
P-3095 Isolation of ketomycin from Streptomyces as an inhibitor of breast cancer cell migration and invasion

Yuzhi Lin, Kazuo Umezawa (Dept. of Molecular Target Medicine, Aichi Med. Univ., Sch. Med.)

P-3096 Inhibitory effects of cationic liposomes on the growth and metastasis of pancreatic carcinoma cells

Muneaki Motomura, Hideaki Ichihara, Yoko Matsumoto (Div. of Applied Life Science, Sojo Univ.)

P-3097 Development of novel biologics for cancer metastasis via prevention of extracellular S100A8/A9 function


S100A8/A9 とその受容体との結合阻断を指向した転移抑制タンパク製剤の開発

木下 理恵1, 山内 明1, 原田 博和1, 富田 秀夫1, 豊岡 伸1, 近藤 英作1, 阪口 政幸1 (岡山大・院・医歯薬部・川崎医大・医・新潟大・院・医歯薬部総合)

P-3098 In vivo imaging of the infiltration of T cell lymphoma into the mucosal layer of the colon

Yoshibumi Ueda1, Seichi Shinji1, Yoko Matsuda1, Tomio Arai1, Junko Aida1, Toshiyuki Ishiwata1 (Dept. General System Research, Graduate School of Arts and Sciences, Niigawa Cancer Research, Dept. Pathol., Tokyo Metropolitan Geriatric Hosp., D. Aging and Carcinogenesis, Tokyo Metropolitan Gerontol. Inst.)

免疫を有するマウスにおける悪性リンパ腫の大腸の粘膜層への浸潤、転訳蛋白の動態を可視化する手法

上田 义文1, 進藤 進1, 松田 哲雄1, 新井 富生1, 相田 順子1, 石渡 俊行1 (東京大・総合文化・広域システム・日本医科大学, 東京都健康長寿医療センター・病理, 東京都健康長寿医療センター)
P-3110 A study of anatomical characteristics of metastatic lymph node

P-3111 Potential functions of a novel HIF-1 promoting factor, HPF-4, in invasion and metastasis of cancer cells
Shin Ito1,2, Yasuhiko Kitadai1, Hidehiko Takigawa1, Ryo Yuge3, Kazuhiro Fujita1, (1Div. Pathol. Biochem., Tottori Univ. Fac. Med., 2Sch. of Medicine, Tokyo Medical and Dental Univ., 3Dept. of Cell. Med., Natl. Cancer Ctr., Res. Inst.)

P-3112 TNAVIP3 is involved in the metastasis of highly aggressive breast cancers through modulating Snail1.
E-Hyang Lee1, Su Myung Jung1, Eunjin Bae1, Kyung-Min Yang2, Sung Gwe Ahn1, Dongyeeb Seo1, Minbum Kim1, Jin Seok Park1, Jihoon Ha1, Jaewon Lee1, Jiyeon Yoo1, Seong-Jin Kim1,2, Seok Hee Park1 (1Dept. of Biological Sciences, Sungkyunkwan University, 2NanBio Medicine Research Center, Advanced Institutes of Convergence Technology, 3Dept. of Surgery, Yonsei University College of Medicine, 4Dept. of Transdisciplinary Studies, Seoul National University)

P-3113 Intrinsic molecular property of dormant bone marrow disseminated tumor cells

P-3114 Functional role of GLI1 in maintaining mesenchymal-like and invasive property of melanoma cells
Gunarta I Ketut1, Yoshioka Katsuji1 (1Div. Mol. Cell. Signaling, Cancer Res. Inst., Kanazawa Univ.)

P-3115 A member receptor, G2A induces epithelial-to-mesenchymal transition-like phenomenon in human astrocytoma cell lines.

P-3116 Identification and characterization of genes associated with osteosarcoma extravasation into the lung
Mongkol Pongsuchar1, Takahiro Kuchimaru1, Tetsuya Kodanosono1, Shinae Kondoh1 (Tokyo Institute of Technology)

P-3117 Comprehensive analysis of transcriptome reveals novel signatures of metastasis in human scirrhous gastric cancer
Toshifumi Harig1, Kazuyoshi Yanagihara1, Yoshihumi Takei1 (1Dept. Medicinal Biochem., Schl. of Pharmacy, Aichi Gakuin Univ., 2Exploratory Oncology Research & Clinical Trial Center, Natl Cancer Ctr.)

P-3118 HMGA1 correlates with metastasis and short survival of cholangiocarcinoma patients
Saowaluk Saisomboon1,2, Anucha Puapairoj1, Kultidha Vaetweeoththank1,2, Sopit Wongkham1,2, Kanlayanee Savanyawisuth1,2 (1Dept. of Biochemistry, Faculty of Medicine, Khon Kaen Univ., Thailand, 2Cholangiocarcinoma Research Institute, Khon Kaen Univ., Thailand, 3Dept. of Pathology, Faculty of Medicine, Khon Kaen Univ., Thailand)

P-3119 Heterogeneity of E-cadherin and vimentin expressing cells is essential for highly metastatic cholangiocarcinoma cells
Waraporn Saenaweesuk1,2, Norie Araki1, Atit Silsirivathan2, Kultidha Vaetweeoththank1,2, Sopit Wongkham1,2, Chaisiri Wongkham1,2 (1Dept. of Biochemistry, Faculty of Medicine, Khon Kaen University, 2Cholangiocarcinoma Research Institute, Khon Kaen University, 3Dept. of TGB, Graduate School of Medical Sciences, Kumamoto University)

P-3120 Deletion of CD147 gene inhibited invasion ability of cholangiocarcinoma cells by regulating monocarboxylate transporter
Paweeana Dana1,2,3, Kultidha Vaetweeoththank1,2, Seiji Okada1, Sopit Wongkham1,2 (1Dept. of Medical Oncology, Faculty of Medicine, Khon Kaen University, 2Cholangiocarcinoma Research Institute, Khon Kaen University, 3Dept. of Pathology, National Hospital Organization Kure Medical Center, 4Dept. of Molecular Pathology, Hiroshima University)

P-3121 Expression of SPARC is associated with poor prognosis in human colon cancer
Toshikatsu Naito1, Yasuhiko Kitada1, Hidehiko Takigawa1, Ryo Yuge1, Toshio Kuwai2, Wataru Yasui1, Shinji Tanaka1, Kazuhiyama1 (1Dept. of Gastroenterology and Metabolism, Hiroshima Univ., 2Dept. of Health and Science, Prefectural Univ. of Hiroshima, 3Dept. of Endoscopyand Medicine, Hiroshima Univ., 4Dept. of Gastroenterology, National Hospital Organization Kure Medical Center, 5Dept. of Molecular Pathology, Hiroshima Univ.)

P-3122 The role of PIGF in bone invasion of gingival squamous cell carcinoma
Thao Nguyen1, Mutsumi Miyauchi1, Makiko Fujii1 (1Dept. of Global Dent. Med. and Mol. Oncol., HU, 2Dept. of Oral and Maxillo. Pathobiol., HU)

P-3123 Amig2 determines liver metastasis through selective adhesion to liver endothelial cells
Yusuke Kanda1, Kunishige Onuma1, Ayana Sonoda1, Junichi Hamada1, Masanobu Kobayashi1, Mitsuhiro Osaki1, Takahiro Ochiya1, Futoshi Oka1, Yousuke Machida1 (1Div. Pathol. Biochem., Tottori Univ. Fac. Med., 2Sch. of Nursing Social Services, Health Sciences Univ. of Hokkaido, 3Div. Mol. & Cell. Med., Natl. Cancer Ctr., Res. Inst.)

P-3124 Identification of novel genes involved in epithelial-to-mesenchymal transition in human breast cancer
Kazuyoshi Yanagihara1, Kazuhiro Fujita1, (1Dept. Medicinal Biochem., Schl. of Pharmacy, Aichi Gakuin Univ., 2Dept. of Biological Sciences, Sungkyunkwan University, 3Nano-Bio Medicine Research Institute, 4Dept. of Surgery, Yonsei University College of Medicine, 5Dept. of Transdisciplinary Studies, Seoul National University)

P-3125 Identification and characterization of genes associated with osteosarcoma extravasation into the lung
Mongkol Pongsuchar1, Takahiro Kuchimaru1, Tetsuya Kodanosono1, Shinae Kondoh1 (Tokyo Institute of Technology)
P-3124 The NEDD8 E3 ligase C-CBL has a tumor suppressive action against the c-Src-driven metastasis in lung cancer
Yang-Sook Chun1,2, Sung Yeon Park1, Jun Bum Park1, Seung-Hyun Shin1, Jieun Seo1, Jong-Wan Park2,2, Sang Jung Kim1,2,3, Masatoshi Watanabe1 (1Department of Biomedical Science, Seoul National University College of Medicine, 2Ischemic/hypoxic disease institute, Seoul National University College of Medicine, 3Department of Physiology, Seoul National University College of Medicine, 4Laboratory for medical engineering, Yokohama National University)

P-3125 Conserved residues of integrin alpha 6 for migration are potential targets for metastasis prevention in breast cancer.

P-3126 Girdin regulates the collective migration of cancer cells by interacting with beta-catenin/alpha-catenin
XIAOYE WANG, Atsushi Enomoto, Liang Weng, Naoya Asai, Masahide Takahashi (Dept. of pathology, Nagoya Univ. Grad. Sch. of Med.)

P-3127 Excess activation of PAR-2 increased frequency of tumor formation in HAI-1 deficient ApcMin+ mice

P-3128 Inhibition of neddylation facilitates cell migration through enhanced phosphorylation of caveolin-1.
Sung Yeon Park1,2, Jong-Wan Park2, Gun-Woo Lee2, Lin Li, Yang-Sook Chun1,2 (1Ischemic/Hypoxia Disease Institute, Seoul National University College of Medicine, 2Department of Biomedical Sciences, Seoul National University College of Medicine, 3Department of Physiology, Seoul National University College of Medicine)

P-3129 Novel therapeutic strategies targeting hyaluronan-degrading enzymes for pancreatic ductal adenocarcinoma
Katsunori Satoh, Shiro Kashi, Shinsuke Koga, Nobutaka Matayoshi, Yuzan Kudo, Takao Amaike, Keiji Hirata (Dept. Surg. 1., Univ. Occupational & Environmental Health)

P-3130 NDRG1 promotes tumor angiogenesis and metastasis by VEGFR2 activation in vascular endothelial cells

P-3132 Glutamine Metabolism in Tumor Endothelial Cells

P-3133 Transcription factor TEFC inhibits the angiogenesis induced by murine renal cell carcinoma (Renca) cells in mice

P-3134 Xanthohumol inhibits angiogenesis by blocking NF-kB activity in human pancreatic cancer
Kenta Saito, Youichi Matsuo, Hiroyuki Imahashi, Nanako Ando, Yosuke Samoto, Tomomasa Okubo, Yu-Ya Maeda, Tomoya Shamoto, Ken Tsukui, Mamoru Morimoto, Hiroki Takahashi, Hideyuki Ishiguro, Shuji Takiguchi (Gastroenterological Surgery, Nagoya City University Graduate School of Medical Sciences)

P-3135 Withdrawn

P-3136 Effect of a MMP13 inhibitor on angiogenic activity

P-3137 Cordycepin Suppresses Angiogenesis through Regulation of FAK and p53 Signaling
Yi-Ting Lin1, Shu-Ming Liang, Yi-Hue Liu1, Cheng-Chin Kuo1, Jung-Yang Liou1 (Institute of Cellular and System Medicine, NHRI, Institute of Bioinformatics and Structural Biology, NTU)

P-3138 Characterization of structure-inhibitory activity relationship of MetAP2 fragment peptides in S100A4-MetAP2 interaction
Sadahiro Katakiti, Satoru Nagatoishi, Kouhei Tsumoto1, Hideya Endo (1Sch. of Eng., Univ. of Tokyo, 2IMSUT, Univ. of Tokyo)

Caroline Giorgio1, Claudio Festuccia2, Giovanni L. Gravina3, Riccardo Castelli, Marco Rumsati, Paola Chioldelli, Federica Vaccondo1, Daniele Pala1, Donatella Callegari1, Elisabetta Barocelli, Alessio Lodola1, Massimiliano Tognolini1 (1Dept. of Food and Drug., University of Parma, 2Dept. of Biotechnological and Clinical Sciences., University of L.Aquil, 3Dept. of Molecular and Translational Medicine., University of Brescia)

P-3140 Silencing of MTA1 in endothelial cells induced tumor regression by inhibiting angiogenesis via downregulation of S100A4

P-3141 Withdrawn

P-3142 NDRG1 は血管内皮細胞における VEGF/VEGFR2 シグナルを特異的に活性化し、血管新生を促進する
渡口 惣, 福田 智征, 縄本 弘閣, 河原 明都, 藤村 晋 -1,2, 森野 信彦, 小野 豊弓 (九州大学, 薬学研究院, 疫病薬理学講座, 久留米大学病院, 病理部, 1システムメディシン研究所)

P-3143 Withdrewn
**P-3141**
Crumb3 promotes metastasis of colon cancer by regulating focal adhesion components

Crumb3 is a membrane protein that maintains cell polarity. In cancer, it is involved in metastasis. This study investigated the role of Crumb3 in regulating focal adhesion components in colon cancer cells.

**P-3142**
Loss of E-cadherin expression contribute to pancreatic tumor progression
Yoshihiro Kaneta1, Makoto Sugimori1, Masatoshi Kanno1, Takeshi Sato1, Soichiro Sue1, Wataru Shibata1,2, Shin Maeda1 (1Dept of Experimental Pathol., Yokohama City Univ., Graduate Sch. Med., 2Advanced Med. Res. Center, Yokohama City Univ., Graduate Sch. Med.)

E-cadherin is a key protein in maintaining epithelial cell-cell interactions. Loss of E-cadherin expression is associated with increased tumorigenicity in pancreatic cancer. This study explored the role of E-cadherin in the progression of pancreatic tumors.

**P-3143**
Phenotypic roles of HNRNPL in epithelial-to-mesenchymal and mesenchymal-to-epithelial transitions of colon cancer cells

HNRNPL is a protein that regulates cell growth and differentiation. Its roles in the epithelial to mesenchymal (EMT) and mesenchymal to epithelial (MTE) transition in colon cancer cells were investigated.

**P-3144**
Cox2 and EP2 inhibition suppress EMT and Cox2 and E-raf loss of E-cadherin expression contribute to pancreatic tumor progression
Yoshihiro Watanabe1, Hiroaki Kajiyama2, Masato Yoshihara2, Hiroaki Yasui2, Beni Yu1, Yoshihiro Koya1, Yoshihiko Yamakita1, Fumihiro Ishikawa1 (1Dept. Cancer Res. Grad. Sch. Med., 2Dept. Otorhinolaryngology, Faculty of Med., Univ. of Tsukuba)

Cox2 and EP2 are enzymes involved in inflammation and cancer progression. This study examined the role of these inhibitors in suppressing EMT and E-cadherin loss in pancreatic tumor progression.

**P-3145**
CADM1 enhances the malignant features of small cell lung cancer

CADM1 is a transmembrane protein that is upregulated in small cell lung cancer. This study investigated how CADM1 enhances the malignant features of these cancer cells.

**P-3146**
Roles of Glycoprotein nmb in breast cancer formation and malignant progression
Yukari Okita, Chen Chen, Hiroyuki Suzuki, Mitsuyasu Kato (Div. Exp. Pathol., Faculty of Med., Univ. of Tsukuba)

Glycoprotein nmb is a protein that regulates cell adhesion and mobility. This study explored the role of Glycoprotein nmb in the malignant progression of breast cancer.

**P-3147**
Combined high expression of tumor emmprin and stromal CD73 predicts poor prognosis in external auditory canal carcinoma
Masaru Miyazaki1, Mikiko Aoki1, Kaori Koga1, Makoto Hamasaki1, Takashi Nakagawa1, Yoshiyuki Sakata1, Kazuki Nabeshima1,2 (1Department of Pathology, Fukuoka University Hospital and School of Medicine, 2Department of Otorhinolaryngology, Fukuoka University Hospital, 3Department of Otorhinolaryngology, Kyushu University Hospital and School of Medicine)

Emmprin and CD73 are markers involved in tumor angiogenesis and stromal cell function. This study examined the high expression of these proteins in external auditory canal carcinoma.

**P-3148**
Cancer-associated fibroblasts induce cancer cell apoptosis that regulates invasion mode of tumors
Go Itoh, Masamitsu Tanaka (Mol. Med and Biochem., Akita Univ. Sch. Med.)

Cancer-associated fibroblasts (CAF) are known for their pro-tumorigenic properties. This study investigated the role of CAFs in inducing cancer cell apoptosis and regulating invasion in tumors.

**P-3149**
Integrin β1 drives epithelial-mesenchymal transition in lung adenocarcinoma cells

Integrins are cell-surface receptors that play a critical role in cell adhesion and migration. This study examined the role of integrin β1 in driving epithelial-mesenchymal transition in lung adenocarcinoma cells.

**P-3150**
Notch signaling enhances the mutual association with epithelial ovarian cancer and mesothelial cells.

Notch signaling is known to play a role in cell-cell adhesion and modulation. This study investigated the role of Notch signaling in the association between epithelial ovarian cancer and mesothelial cells.

**P-3151**
Biological characteristics of cancer cells undergoing fibroblasts-dependent invasion
Tomoyuki Miyashita1, Genichiro Ishii2 (1Lab. of Cancer Biol. Frontier Sci., The Univ. of Tokyo, 2Div. of Pathology, EPOC, Natl. Cancer Ctr.)

Fibroblasts are known to support cancer cell invasion. This study examined the biological characteristics of cancer cells that are undergoing fibroblasts-dependent invasion.

**P-3152**
Regulation of β4 integrin expression by Rac1 is critical for the re-attachment of cancer cells to ECM and for metastasis

Rac1 is a small GTPase involved in cell migration and invasion. This study investigated the role of Rac1 in regulating β4 integrin expression and its impact on cancer cell re-attachment to the extracellular matrix (ECM) and metastasis.
11 Characteristics of cancer cells

P-3153 Genome-wide CRISPR/Cas9 screens reveal novel therapeutic target genes in glioblastoma stem-like cells
Yuri Hayama¹, Tomaatsu Hayashi², Tetsu Akiyama² (*Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. Tokyo, ¹IMCB, Univ. Tokyo)
CRISPR/Cas9 スクリーニングに基づく新規治療標的遺伝子の同定
酒井良一，林寛敏，秋山徹

P-3154 Anticancer effect of a calmodulin inhibitor HBC against glioblastoma stem-like cells
Sanghun Lee, Hye Jin Jung (Department of BT-Convergent Pharmaceutical Engineering, Sun Moon University)

P-3155 Functional analyses of TPT1 in neural stem/progenitor cells and glioma initiating cells
神経幹細胞およびグリオーマ幹細胞における TPT1 の機能解析
大二茂樹，岡野光之，河上裕

P-3156 Self-expanding strategies of glioma stem cells that involves macrophages to adapt to iron-deprivation stress
Kouichi Tabu, Yoshitaka Murota, Tetsuya Taga (Dept. of Stem Cell Regulation, Tokyo Med. & Dent. Univ.)
グリオーマ幹細胞のマクロファージを利用した鉄欠乏ストレスへの適応・生存戦略
田上保一，室田貴人，田賀哲也

P-3157 Stat5b promotes glioblastoma stem-like cells proliferation derived from a glioblastoma mouse model
Chiami Moyama¹, Mitsugu Fujita¹, Hiromi Ii², Keiko Taniguchi², Tatsuhiro Yoshiki¹, Susumu Nakata³ (*Dept. Clinical Oncology, Kyoto Pharm. Univ., ¹Dept. Microbiology, Kindai Univ., ²Med.)
Stat5b は発がんマウスモデル由来の脳腫瘍幹細胞の増殖促進に寄与している
茂山千恵美，藤田貴人，飯居宏美，谷口恵香，吉村遼寛，中田晋

P-3158 High-throughput screening for identification of differentiation-inducing compounds of glioblastoma stem-like cells
Chatbenja Pakiranay¹, Phongthon Kanjanasirirat², Suparerks Borwornpinnyo¹, Patompon Wongtrakoongate¹ (*Department of Biochemistry, Faculty of Science, Mahidol University, ²Department for Drug Discovery, Mahidol University, ³Department of Biotechnology, Faculty of Science, Mahidol University)
P-3165 The development of the antibody reacting with cancer stem-like cell antigen DNAJB8-derived peptide presented by HLA-A24
Hiroki Tadano, Tomohide Thukahara, Emi Mizushima, Yuji Shibayama, Yoshihiko Hinrashii, Yoshihiko Torigoe (Dept. Pathol., Sapporo Med. Univ., Sch. Med.)

HLA-A24 によって提示される癌幹細胞抗原 DNAJB8 由来ペプチドに対する抗体開発
只野 裕己、塗原 智恵、小島 美衣、芝山 明二、廣橋 良恵、島村 俊彦（札幌医科大学 病理学第一）

P-3166 Pemab-47: a novel anti-human podocalyxin monoclonal antibody for immunohistochemistry against oral cancers

口腔癌に対する免疫染色に有用な抗体ポドカリキシン抗体 Pemab-47 の開発
板井 俊介1、山田 慎二1、金子 美華1、張 晓文2、国田 朱子3、深山 正久3、原田 浩之3、加藤 幸成1（東北大・院・医・抗体制薬・3 東京医科薬科大学・院・医・歯口腔外科・4 東北大・院・医学・病理学・4 東北大・未定）

P-3167 Production of monoclonal antibodies against Fibroblast growth factor 19 (FGF19)
Yuta Hara,1 Shihou Ueda,1 Aikata Yamasaki,1 Kenichi Fujita,1 Kazuto Nishio,1 Takashi Masuko1 (Cell Biol Lab, Sch Pharm, Kindai Univ, Genome Biol Sch Med, Kindai Univ)

纖芽細胞増殖因子 19 (FGF19) に対するモノクローナル抗体作製
原 雄大1、上田 賢史1、山崎 峰光1、藤田 健一1、西尾 和人1、益子 高1（近畿大・薬・細胞生物・2 近畿大・医・ゲノム生物学）

P-3168 Development of high affinity anti-HER2 antibody mimetics by use of human fibroconnectin type III domain
Yumi Ota, Tetsuya Kadonosono, Wanaporn Yimchue, Takahiro kuchimaru, Shinae Kondoh (School of Life Science and Technology, Tokyo Institute of Technology)

ヒトフィブロアクチン III 型ドメインを利用した抗 HER2 抗体代替分子の開発
太田 優美1、門之園 哲哉1、 Wanaporn Yimchue1、興川 高弘2、近藤 秀佳1（東京工業大学）

P-3169 Epitope analysis of novel anti-HER3 rat mAb towards overcoming resistance of cancer cells against anti-HER2 drugs
Kouki Okita1, Shihou Ueda1, Kazuki Imari1, Dai Ogura1, Shinichiro Niwa1, Kenji Hiratai1, Takashi Masuko1 (Cell Biol Lab, Sch Pharm, Kindai Univ, Carma Biosciences Inc, Link Genomics Inc, Daiichi Sankyo Co, Ltd.)

癌のHER2 薬剤耐性の克服に向けた抗 HER3 mAb のエピトープ解析
沖田 辰孝1、上田 賢史1、今井 一貴1、小倉 大2、丹波 慎一郎3、廣谷 覚1、益子 高1（近畿大・薬・細胞生物学・2 カルバナバイオサイエンス株式会社・3 リンクジェノミクス株式会社・1第一三共株式会社）

P-3170 FC modified antibodies against CD147 to evaluate the efficacy by ADCC and CDC in vivo
Naoki Hosomi (PROMX)

in vivo での ADCC と CDC による薬効を評価するための Fc 改変した CD147 抗体
細野 隆樹（株式会社ベルセウスプロテオミクス）

P-3171 Extracellular matrix-binding anti-CD40 agonistic antibody reduces systemic damages and increases anti-tumor efficacy
Jun Ishihara, Ako Ishitahara (The university of Chicago Institute for molecular engineering)

細胞外マトリックスに結合するようにエンジニアリングした抗 CD40 抗体は抗腫瘍活性が高く、副作用が低い
石原 郁、石原 歴香（シカゴ大学）

P-3172 How to evaluate tumor-infiltrating immune cells in biopsied pancreatic cancer tissues

生検標本における腫瘍免疫細胞浸潤評価のための方法
猪野 義伸1,2、山崎-伊藤 理恵1,2、大畑 國一2,3,4、垣 隆歩2,3,4、島田 和明2,3,4、原田 伸一4（国立がん研究センター・病理解析・国立がん研究センター・病理・病理検査室・国立がん研究センター）

P-3173 Phenotypic immunological classification correlated with tumor aggressiveness across urological cancer types
Atsurnori Kawasaki1,2, Takayuki Kadowaki1,2, Konosuke Goto1,2, Kota Iwashiro1,2, Akiko Okazawa-Morimoto1,2, Kentaro Jingushi1,2, Takeshi Ukiyek1,2, Akira Nagahara1,2, Kazutoshi Fujita1,2, Motohide Uemura1,2, Hisashi Wada1,2, Norio Nonomura3,4 (Urology, Osaka Univ., Grad. Sch. Med., Clin. Tum. Immunol., Osaka Univ., Grad. Sch. Med., The Jpn. Urool. Clin., Osaka Univ., Grad. Sch. Med.)

腫瘍組織浸潤T-Fn1の発現構造と腫瘍悪性度と有意に相関する
河原 俊之1,2、金沢 志之3,4、後藤 久之子1,2、若間 幸久1,2、岡澤 (本村) 昌子1,2、木原 友香1,2（大阪大・病院・泌尿器科・2 大阪大・医・腫瘍免疫赤血球・1塩野義製薬株式会社・2 大阪大・医・泌尿器腫瘍標的治療）

P-3174 No lymphocyte belt at the most invasive areas in endometrioid endometrial carcinoma is a biomarker of poor prognosis
Miyamoto Morikazu1, Kato Kento1, Takano Kouno1, Masahiko Takano1, Kimita Sato1, Hitoshi Tsuda2,3 (Departments of Obstetrics and Gynecology, National Defense Medical College, Departments of Basic Pathology, National Defense Medical College Hospital)

子宮体乳頭細胞癌において、腫瘍進行部のリンパ球帯の存在が予後予測のバイオマーカーとなる
菅本 守宜1,2,3、加藤 隆人1,2,3、河野 育子1,2,3、高野 政志1,2,3、佐藤 仁雄1,2,3、津田 均1,2,3（防衛医科大学校 産婦人科学講座・防衛医科大学校 病態病理学講座）

P-3175 The clinical meanings of the tumor infiltrating CD15 positive cells and neutrophil / lymphocyte ratio in gastric cancer
Junichiro Watanebe, Takashi Kimura, Akira Kenjo (Department of Hepato-Biliary-Pancreatic and Transplant surgery, Med., Fukushima Medical University)

胃癌における腫瘍浸潤CD15陽性細胞と好中球リンパ球比の臨床的意義-予後および臨床病理学的因子との関連-
渡邉 淳一1,2、木村 慎1,2、見賀 聡（福島県立医科大学・医・肝胆膵・移植外科）

P-3176 Intractable cellular population in follicular lymphomas

潰胞性リンパ腫難治性を規定する特殊細胞集団の発見
近藤 英作1、高田 尚俊2、斎藤 聡1（新潟大・医・分子細胞生物学・1岡山大・医・腫瘍病理）
**P-3177** The comparison of PD-L1 expression in primary with metastatic sites in gastric cancer
Tasuku Tohata, Masaaki Iwatsuki, Kouhei Yamashita, Yuki Koga, Daisuke Kuroda, Yukihiro Yoshishita, Yuji Miyamoto, Naoya Yoshida, Hideo Baba (Department of Gastroenterological Surgery, Kumamoto University, Kumamoto city, Japan)

Cancer Immunology (4)

**P-3178** Potential of telomerase-specific oncolytic adenovirus as an immunogenic drug producing synergy with anti-PD-1 therapy
Nobushiko Kanaya, Shinji Kuroda, Toshiaki Morihiro, Tetsushi Kubota, Hiroshi Tazawa, Satoru Kikuchi, Masahiko Nishizaki, Shunsuke Kagawa, Yasuo Urita, Toshiyoshi Fujisawa (Dept of Gastroenterological Surgery, Okayama Univ., Oncoly BioPharma, Inc.)

Cancer Immunology (4)

**P-3179** The Roles of Aryl Hydrocarbon Receptor in T-cells at IDO-positive Tumor Microenvironment
Soranobu Ninomiya, Takeshi Hara, Hisashi Tsurumi, Masahito Shimizu (1st Dept. Med., Gifu Univ.)

Cancer Immunology (4)

**P-3180** Improvement of anti-tumor responses by targeting hypoxia-mediated immunosuppression

Cancer Immunology (4)

**P-3181** Exposure to asbestos enhances TGF-β1 production in a human adult T cell leukemia virus-immortalized T cell line, MT-2

Cancer Immunology (4)

**P-3182** Hybridoma transplantation-based analysis of receptors for sphingosine 1-phosphate
Hiroshi Okuni, Shiiho Ueda, Ichiro Yagi, Yuta Hara, Takashi Masuko (Cell Biol Lab, Pharm, Kindai Univ, Dept Pharm Sci, Int Univ Health & Welfare)

Cancer Immunology (4)

**P-3183** Dual affinities of antibodies against L-type amino acid transporter 1 (LAT1) against CD98h/LAT1 complex
Shiiho Ueda, Akitaka Yamasaki, Takashi Masuko (Cell Biol Lab, Sch Pharm, Kindai Univ)

Cancer Immunology (4)

**P-3184** Immunological profiling for non-small cell lung cancer

Cancer Immunology (4)
13 Growth factors/cytokines/hormones

P-3190 Conformational Changes in Insulin Receptor using Single Molecule Fluorescence Resonance Energy Transfer (smFRET) Harini Krishnam¹, M. Zulema Caball¹, Richard Dellle Bovi¹, Brie Levesque¹, Mark E. Bowen², Stevan R. Hubbard², W. Todd Miller³ (¹Dept. Physiol. and Biophy., Stony Brook University, New York, ²Dept. Biochem. and Mol. Pharmacol., New York University, New York University)

P-3191 promotion of growth and spheroid forming capacity after fragmentation of colorectal cancer spheroids Takeshi Hagihara¹, Jumpei Kondo¹, Hiroko Endo¹, Yoshiharu Sakai¹, Masahiro Inoue¹ (¹Dep. of Biochemistry, Osaka International Cancer Institute, ²Dep. of Surgery, Graduate School of Medicine, Kyoto University)

P-3192 Studies of phosphorylation of the myosin regulatory light chain with clinicopathological features of pancreatic cancer Katsunori Matsushita¹, Masamitsu Konno¹, Kouichi Kagamoto¹, Hideki Ohdan¹ (¹Dept. of Gastroenterological Surgery, Osaka University Graduate School of Medicine, ²Dept. of Frontier Science for Cancer and Gastroenterological Surgery, Osaka University Graduate School of Medicine, ³Research Institute of Diabetic Medical Science, Saitama Med. Univ.)

P-3193 Tumor associated macrophage (TAM) recruitment and polarization are enhanced by ecto-kinase FAM20C in pancreatic cancer Jeemin Im¹, Yu-Sun Lee¹, Sun Il Choi², Beom-Kyu Choi³, A.Ra Jeon¹, Sang Hyun Park⁴, Min-Kyeong Lee¹, Yun-Hee Kim¹ (¹Dept of Cancer Biomedical Science, NCC-GCSP, National Cancer Center, ²Research Institute and Hospital, National Cancer Center)

P-3194 Antithrombin-3 suppresses the progression of hepatocellular carcinoma through the anti-inflammatory effects. Sho Okimoto¹, Hirotaka Tashiro¹, Tsuyoshi Kobayashi², Shinitaro Kuroda³, Hideki Ohdan¹ (¹Dept. Gastroenterol Transplant. Surg., Hiroshima Univ., ²Dept. Surg., Kure Med.)

P-3195 Golgi/endosome-localized clathrin adaptor protein GGA2 sustains cell growth by preventing EGF receptor degradation Takefumi Uemura¹, Satoshi Waguri¹ (¹Dep. Anat. Histol, Sch. of Med., Fukushima Med. Univ.)

P-3196 Orosomucoid is indirectly involved in tumor development via macrophages Yukio Fujitawa¹, Cheng Pan¹, Yoyoishi Iriki², Yoichi Saito¹, Motohiro Takeya¹, Yoshihiro Komohara¹ (¹Dept. Cell Pathol, Kumamoto Univ. Grad. Sch. Med.)

P-3197 Withdrawn


P-3199 Investigation of the mechanism for the differentiation to cancer-associated fibroblasts from mesenchymal stem cells Kaori Aoto¹, Shigeki Aoki¹ (¹Lab. of Biopharm., Grad. Sch. of Pharm., Chiba Univ.)

P-3200 Low androgen level induced the malignant transformation of prostate cells Fengjie Guo¹, Zhiaoo Song¹, Zhiyang Li¹ (¹TLCI, TGH, China)

P-3201 Gonadotropin-Releasing Hormone - I or II interacts with IGF-I/Akt but not connexin 43 in human granulosa cell apoptosis In-sun Hong¹ (¹Lee Gil Ya Cancer and Diabetes Insti., Gachon University, ²Department of Molecular Medicine, School of Medicine, Gachon University)

P-3202 The effect of dehydroepiandrosterone on the proliferation of endometrial cancer cells Rena Yoshida¹, Yasuhiro Mikki¹, Misaki Fue¹, Kiyoshi Takagi¹, Takashi Suzuki¹, Kiyoshi Ito¹ (¹Disaster Ob/Gyn,Int.Res.Inst.of Disaster Sci.,Tohoku Univ., ²Pathol. & Histotechnol.,Tohoku Univ.Grad Sch. Med.)


P-3190 Conformational Changes in Insulin Receptor using Single Molecule Fluorescence Resonance Energy Transfer (smFRET) Harini Krishnam¹, M. Zulema Caball¹, Richard Dellle Bovi¹, Brie Levesque¹, Mark E. Bowen², Stevan R. Hubbard², W. Todd Miller³ (¹Dept. Physiol. and Biophy., Stony Brook University, New York, ²Dept. Biochem. and Mol. Pharmacol., New York University, New York University)
14 Cancer basic, diagnosis and treatment

P-3204 The prognostic significance of vasohibin-2 expression in patients with prostate cancer
Yasumasa Miyazaki, Takeo Kosaka, Shuji Mikami, Yota Yamazuki, Nobuyuki Tanaka, Eiji Kikuchi, Yasufumi Sato, Mototsugu Oya (Department of Urology, Keio University School of Medicine, Department of Urology, Saiseikai Yokohamashiku Tobu Hospital, Department of Pathology, Keio University School of Medicine, Department of Vascular Biology, IDAC, Tokohu University)

P-3205 Retrotransposon-derived protein PEG10 affects PTEN ubiquitination by WWP2 in neuroendocrine prostate cancer
Kosuke Okahsi, Shusuke Akamatsu, Yoshishita Kawai, Kei Mizuno, Xin Li, Takayuki Sumiyoshi, Yuki Makino, Takayuki Goto, Takashi Kato, Koichiro Horine, Osamu Ogasawara (Department of Urology, Kyoto University, Department of Urology, Yamanashi University)

P-3206 Uc.63+ promotes resistance to docetaxel through regulation of androgen receptor signaling in prostate cancer
Yohei Sekido, Naoya Sakamoto, Keisuke Goto, Rinro Honma, Yoshinori Shiogami, Kazuhiro Sentani, Naohide Oue, Jun Teishima, Akio Matsubara, Wataru Yatsu (Department of Molecular Pathology, Hiroshima University, Department of Urology, Hiroshima University, Department of Urologic Cancer Research, University of Hawaii Cancer Center)

P-3207 Establishment of cabazitaxel-resistant prostate cancer cell lines
Ariunbold Natsagdorj, Kazuaki Machioka, Renato Naito, Yuu Takezawa, Hiroaki Iwamoto, Koji Iizumi, Yoshifumi Kadono, Shoko Fujimura, Atsumi Mizokawa (Department of Urology, Kanazawa University, Kanazawa University)

P-3208 Protein kinase C regulates Twist1 expression via NF-κB signaling in prostate cancer
Masaki Shiota, Akira Yokomizo, Ario Takeuchi, Eiji Kishiwada, Takashi Deijima, Junichi Inokuchi, Katsunori Tatsugami, Takeshi Uchiumi, Masatoshi Eto (Department of Urology, Kyushu University, Department of Clinical Chemistry and Laboratory Medicine, Kyushu University)

P-3209 Exosome sequencing reveals the non-overlapped multimeasures of testicular germ cell tumors in 26 patients.
Takashi Matsumoto, Masaki Shiota, Masatoshi Eto, Takeshi Uchiumi (Department of Urology, Kyushu University, Department of Clinical Chemistry and Laboratory Medicine, Kyushu University)

P-3210 A selective lysine-specific demethylase 1 inhibitor suppresses germ cell tumor proliferation
Toshiaki Etani, Taku Naoki, Takashi Nagai, Yutaro Tanaka, Keitaro Iida, Ryosuke Ando, Nintyasu Kawai, Satoru Takahashi, Takayoshi Suzuki, Takahiro Yasui (Department of Nephro-urology, Nagoya City Univ., Department of Experimental Pathology and Tumor Biology, Nagoya City Univ., Chemistry of Life Science, Kyoto-prefectural Univ. of Medicine)

P-3211 KDM4C: A Novel Oncogene and Prognostic Biomarker for Prostate Cancer
Chih-Pin Chuu, Ching-Yu Lin, Bi-Juan Wang (ICSM, NHRI, Taiwan)

P-3212 Analysis and clinical application of circulating tumor cells from patients with advanced prostate cancer
Masayoshi Nagata, Mayuko Kanayama, Naoya Nagaya, Shigeho Horie (Department of Urology, Juntendo University, Graduate School of Medicine, Department of Life Sciences, National Central University)

P-3213 Role of ACT6LA in Human Prostate Cancer Cell Shih-Han Huang, Chih-Yu Lin, Chih-Pin Chuu (National Health Research Institutes, Institute of Cellular and System Medicine, Department of Life Sciences, National Central University)

P-3214 The role of SIRT1 in Chemoresistance of Prostate Cancer PC3 and DU145 Cells by a Novel Anthraquinone Derivatives Chin-Chia Hsu, Hsu-Yin Hsu (Department of Life Sci., TCU)

P-3215 STAT3 activity in human prostate cancer
Yasunori Morii, Marco A. De Velasco, Yuji Hatanaka, Yurie Kura, Kouichi Sugimoto, Masahiro Nozawa, Kazuhiro Yoshikawa, Kazuhiro Yoshikawa, Kazuto Nishio, Hirotsugu Uemura (Department of Urology, Kindai University Faculty of Medicine, Department of Genome Biology, Kindai University Faculty of Medicine, Department of Medicine, Kindai University)

P-3216 Exploration of new treatment for rare prostate cancer
Tomoya Fukawa, Kei Daizumoto, Tomoharu Fukumori, Masayuki Takahashi, Hiro-omi Kanayama (Department of Urology, Tokushima University)

P-3217 Exploration of new treatment for rare prostate cancer
Takashi Matsumoto, Masaki Shiota, Masatoshi Eto, Takeshi Uchiumi (Department of Urology, Kyushu University, Department of Clinical Chemistry and Laboratory Medicine, Kyushu University)

P-3218 26症例の精巣腫瘍のエクソソーム解析により互いに重複しない複数の変異の検出
松元 晟, 塩田 眞己, 江藤 正俊, 深海 哲 (九州大学 医学部泌尿器科学分野, 九州大学 臨床検査医学)
P-3217  Epigenetic alteration in prostate cancer and its association with androgen receptor
Masahiro Sugita1, Atsushi Okabe1, Masaki Fukuyo1, Shinichi Sakamoto1, Tomohiko Ichikawa1, Atsushi Kaneda1 (1 Dept Uro, Grad Sch Med, Chiba Univ; 2 Dept Med Oncol, Grad Sch Med, Chiba Univ)

P-3218  High fat diet-induced tumor progression is associated with immune responses in mice model for prostate cancer.
Takui Hayashi1, Kazutoshi Fujita1, Satoshi Nojima1, Toshiko Kinouchi1, Kyosuke Matsukata1, Kenzato Jingushi1, Atsurni Kawashima1, Takeshi Ujiie1, Akira Nagahara1, Motohide Uemura1, Kazutake Tsujikawa1, Eiichi Morii1, Norio Nonomura1 (Dept of Urol., Osaka Univ, Grad Sch Med, Dept of Pathol., Osaka Univ, Grad Sch Med, Lab. Mol. Physiol. Sci., Osaka Univ, Grad Sch Pharm.)

P-3219  Aberrant activation of androgen-sensitive prostate cancer cells-fibroblasts interactions under androgen deprivation
Kenichiro Ishii1, Kazuhiro Iguchi1, Shinya Kajiwara1, Manabu Kato1, Kenichiro Ishii1,2, Manabu Kato1, Atsushi Kaneda2 (1 Dept. Nephro-Urologic Surgery and Andrology, Mie Univ, 2 Dept. Oncologic Path., Mie Univ, Grad. Sch. Med., Lab. Community Pharmacy, Gifu Pharm. Univ., Dept. Diagnostic Path., Kuwana City Med. Center)

P-3220  Role of epithelial-fibroblasts interactions in initiation of prostate cancer.

P-3221  Investigation of tumoral effects on platelet in gastric cancer.
Tazawa1,2, Toshiyoshi Fujiwara1 (1 Department of Gastroenterological Surgery, Okayama University Graduate School, Okayama, Japan, 2 Center for Innovative Clinical Medicine, Okayama University Hospital, Okayama, Japan, Oncolys BioPharma, Inc., Tokyo, Japan)

P-3222  Uregulation of Bone Morphogenetic Protein 1 is Associated with Poor Prognosis of Late-Stage Gastric Cancer Patients
Junichi Hamada1, Hirokatsu Yamauchi1,2, Atsushi Kaneda1,2 (1 Department of Gastroenterological Surgery, Okayama University Graduate School, Okayama, Japan, 2 Center for Innovative Clinical Medicine, Okayama University Hospital, Okayama, Japan, Oncolys BioPharma, Inc., Tokyo, Japan)

P-3223  Kahweol and Cafestol induce apoptosis in human prostate cancer cells.
Hiroaki Iwamoto1, Kouji Izumi1, Kaoru Hiratsuka1, Arunbold Natsagdorj1, Suguru Kadomoto1, Renato Naito1, Tomoyuki Makino1, Kazutaka Narimoto1, Yoshifumi Kadono1, Atsushi Mizokami1 (Department of Integrative Cancer Therapy and Urology, Kanazawa University)

Kahweol およびCafestol はヒト前立腺癌細胞のアポトーシスを亢進する．
巻本 大旭, 浅井 勝, ソングドジル1 アリウノボキル, 門 卓, 内藤 靖寛, 牧野 正幸, 枝本 眞, 佐野 正彦, 満上 景, 亀田 英俊 (金沢大学医薬健康研究所 腹膜癌研究

P-3224  Intraepithelial macrophages in gastric cancer patients are polarized to promote malignant phenotypes of cancer cells.
Shuichi Sakamoto1, Shunsuke Kagawa1, Kazuya Kuyawa1, Atene Ito1, Satoru Kikuchi1, Shinya Kajiwara1, Manabu Kato1,2, Kazuhiro Iguchi3, Shinya Kajiwara1, Manabu Kato1, Kiminobu Arima1, Taizo Shiraishi4, Yoshiki Sugimura1 (1 Dept. Nephro-Urologic Surgery and Andrology, Mie Univ, 2 Dept. Oncologic Path., Mie Univ, Grad. Sch. Med., 3 Lab. Community Pharmacy, Gifu Pharm. Univ., 4 Dept. Diagnostic Path., Kuwana City Med. Center)

P-3225  Intraperitoneal macrophages in gastric cancer patients are polarized to promote malignant phenotypes of cancer cells.
Shuichi Sakamoto1, Shunsuke Kagawa1, Kazuya Kuyawa1, Atene Ito1, Satoru Kikuchi1, Shinya Kajiwara1, Manabu Kato1,2, Kazuhiro Iguchi3, Shinya Kajiwara1, Manabu Kato1, Kiminobu Arima1, Taizo Shiraishi4, Yoshiki Sugimura1 (1 Dept. Nephro-Urologic Surgery and Andrology, Mie Univ, 2 Dept. Oncologic Path., Mie Univ, Grad. Sch. Med., 3 Lab. Community Pharmacy, Gifu Pharm. Univ., 4 Dept. Diagnostic Path., Kuwana City Med. Center)

P-3226  Investigation of tumoral effects on platelet in gastric cancer.
Junichi Hamada1, Hirokatsu Yamauchi1,2, Atsushi Kaneda1,2 (1 Department of Gastroenterological Surgery, Okayama University Graduate School, Okayama, Japan, 2 Center for Innovative Clinical Medicine, Okayama University Hospital, Okayama, Japan, Oncolys BioPharma, Inc., Tokyo, Japan)

P-3227  Adipose tissue derived stem cells provide an advantageous tumor microenvironment in gastric cancer.
Jun Kinoshita1, Sachio Fushida1, Katsunobu Oyama1, Koichi Okamoto1, Seisyo Sakai1, Keishi Nakamura1, Hironori Hayashi1, Masahiko Inokuchi1, Tomoharu Miyashita1, Hidehiro Tajima1, Hiroyuki Takamura1, Itasu Ninomiya1, Tetsuo Ohta1 (Dept of Gastroenterological Surgery, Kansai Medical University, Osaka, Japan, 2 AICT, SNU, 3GSCST, SNU, 4SKKUNIV, 5ETEXPHARM)
### P-3229
**A critical role for CCAR1 in tumorigenesis and metastasis of gastric cancer**  
Chung-Kuang Lu, Te-Sheng Chang, Yi-Hsing Chen, Ying-Tung Cheng, Cheng-Shyong Wu, Ming-Ko Chiang

### P-3230
**Expression of IQGAP3 is associated with poor survival in patients with gastric cancer**  
Naohide Oue, Yuji Yamamoto, Takeharu Imai, Kazuaki Tanabe, Hideki Ohdani, Naoya Sakamoto, Kazuhiro Sentani, Wataru Yasui

### P-3231
**Identification and functional analysis of a long noncoding RNA associated with chronic gastritis and gastric cancer**  
Koito Katajima, Reo Maruyama, Eiichiro Yamamoto, Takeshi Niinuma, Hiroioki Aoki, Masahiro Kai, Takanori Tokino, Kozo Imai, Hiroshi Nakase, Hiromu Suzuki

### P-3232
**Extraction and functional analysis of extracellular vesicles derived from gastric juice**  
Shuii Kagota, Kohei Taniguchi, Yuki Kuranaga, Yuki Ito, Sang-Woong Lee, Yukihiro Akao, Kazuhiro Uchiyama

### P-3233
**Functional analysis of Nox1/Noxx1 complex in gastritis and inflammation-associated gastric tumour development**  
Kaneka Echizen, Yayoi Aoki, Keigo Horiuchi, Hiroshi Oshima, Masanobu Oshima

### P-3234
**Role of KIAA1324 as a novel tumor suppressor in gastric cancer**  
Eunji Hong, Jin Muk Kang, Sujin Park, Bora Park, Pyungang Kim, Haein An, Eunji Kim, Siyoung Lee, Seojuin Kim

### P-3235
**Clinicopathological significance of RCAN2 expression in gastric carcinoma**  
Hattori Yui, Kazuhiro Sentani, Takuya Hattori, Takeharu Imai, Shunsuke Shinomi, Naoya Sakamoto, Naohide Oue, Hiroaki Nitsu, Takao Hinoi, Hideki Ohdani, Wataru Yasui

### P-3236
**PLOD2 as a novel potential regulator for peritoneal dissemination of gastric cancer**  
Yuki Kiyouno, Masaaki Inawaki, Daikuke Kuroda, Kohei Yamashita, Tasuku Tohibata, Yuki Koga, Hiroshi Sawamura, Yukiharu Hiyoshi, Takatsugu Ishiokyo, Yoshifumi Baba, Yuji Mityamoto, Naoya Yoshida, Hideko Haba (Kumamoto University Department of Gastroenterological Surgery)

### P-3237
**Expression of KIF23 is associated with poor survival of patients with gastric cancer**  
Yuji Yamamoto, Naohide Oue, Takeharu Imai, Ryuichi Asai, Naoya Sakamoto, Kazuhiro Sentani, Hideki Ohdani, Wataru Yasui

### P-3238
**Effect of Cuholupone on Copper-induced Oxidative Stress in Human Gastric Cancer Cells**  
Yi-Ling Chen, Hue-Yin Hsu (Dept. of life Sci., TCU)

### P-3239
**Significance of Annexin A10 expression in gastric cancer**  
Hideyuki Ohzawa

### P-3240
**Prognostic significance of inflammation-based and/or nutritional markers in patients with stage II gastric cancer**  
P-3242 Tumor heterogeneity of early gastric cancers developed in Helicobacter pylori - infected mucosa
Aya Mizuguchi, Atsushi Takei, Shin’ichi Miyamoto, Hiroshi Seno, Hiroyuki Masaruki (Gastroenterology and Hepatology, Kyoto University Graduate School of Medicine)

P-3243 Genome-wide analysis of DNA copy number alterations in early and advanced gastric cancer

P-3244 Cancer tissue with microsatellite instability identified by panel-based targeted sequencing
Hiroshi Ichikawa 1, Natsuru Sudo 1, Masayuki Nagahashi, Yoshifumi Shimada, Junko Tsushima, Masato Nakajima 1, Jun Sakuramoto 2, Satoru Nakagawa 1, Hiroshi Yabukashi, Takashi Kobayashi, Hitoshi Kameyama, Toshifumi Waki (Digestive and General Surg., Nipagata Univ., Med., 2Dept. Gastroenterological Surg., Nipagata Cancer Center Hosp.)

P-3245 Characteristics of histological diversity and cancer-associated molecules in gastric cancer

P-3246 Genomic analysis of AFP producing gastric cancer and primitive tumors with fetal or hepatic differentiation

P-3247 Serial regression of gastric adenocarcinomas after successful eradication of Helicobacter pylori
Mitsuaki Nogae 1, Tetsuya Tsukamoto (Dept. Diag. Pathol., Fujita Health Univ., Sch. Med.)

P-3248 The characteristics of cancer stroma in the development of scirrhus gastric cancer

P-3249 Dosage quantitive analysis of VEGFA gene in human gastric cancers by multiplex ligation-dependent probe amplification
Takeru Oyama, Ritsuko Nakamura, Akishi Ooi (Molecular and Cellular Pathol., Graduate Sch., Medical Sci, Kanazawa Univ.)

P-3250 The clinical utility of detection of PD-L1 amplification with circulating cell-free DNA in patients with gastric cancer

P-3251 Anti-tumor effects of farnesyltransferase inhibitors on gastric cancer

P-3252 Value of additional surgery for patients with early gastric cancer which diagnosed as non-curative resection

P-3253 Clinical assessments on minor patients in gastric cancer for gastrectomy

P-3254 Collusion tumor consisting of a colorectal adenocarcinoma and dissemination of a gastric adenocarcinoma
Ryoichi Miyamoto, Naoki Sano, Sousuke Tadano, Satoshi Inagawa (Dept. Gastroenterological Surgery, Tsukuba Medical Center Hospital)
Simultaneous detection of Epstein-Barr virus and Helicobacter pylori in gastric biopsy specimen

Hideo Yanai, Hisashi Iizasa, Hironori Yoshiyama (Dept. Clinical Research, National Hospital Organization Kannon Medical Center, Dept. Microbiology, Shimane University School of Medicine)

P-3256

Non-small cell lung cancer


P-3257

Monitoring of soluble PD-L1 levels in sera in non-small-cell lung cancer

P-3258

Analysis of circulating microRNAs for predicting response to anti-programmed death-1 in non-small cell lung cancer


P-3259

Prognostic significance of PD-L1 and NT5E (CD73) expression in resected primary squamous cell carcinoma of the lung


P-3260

Intratumoral programmed cell death ligand-1 (PD-L1) and Intratumoral CD8 T cell Expression in Lung Cancer

Yasuhiro Ito, Shuta Yamauchi, Hiroyuki Shimada, Osamu Matsubara (Hiratsuka Kyousai Hospital, Dept. Respiratory Medicine, Hiratsuka Kyousai Hospital, Dept. Pathology)

P-3261

High PD-L1 expression indicates poor prognosis of HIV-infected patients with non-small cell lung cancer

Y O, Tsukene Kishima, Junpei Kashi, Sadamu Homma (Div. Oncology, The Jikei Univ., Sch. Medicine, Dept. Pathology, Komagome Hospital)

PD-L1 高発現は HIV 感染併患非小細胞癌において予後不良となる

大熊 裕也, 比田 優哉, 加島 淳平, 本間 定士 (東京都立済生院・病理部)

P-3262

Exploratory study on detecting EGFR-mutation including T790M with blood samples from patients with NSCLC


EGFR T791S 変異に対するEGFR-TKI 获得耐性のメニューゼ小

川村 卓久, 村上 晴貴, 鳥井 康浩 (静岡がんセンター・呼吸器内科)

P-3263

Acquired resistance to EGFR-TKI in an uncommon G719S EGFR


EGFR G719S 変異に対するEGFR-TKI 获得耐性のメニューゼ小

小倉英士, 橋本 史理, 内田 陽史, 安藤 美幸, 小林 良司, 吉田 千代, 武内 秀治, の木 龍郎, 杉脇 賢二 (大分大・医・呼吸器・乳腺外科)

P-3264

Clinicopathological features and immune microenvironment of NSCLC with primary resistance to EGFR-TKI


EGFR-TKI 初期耐性非小細胞癌の臨床病理学的特徴及び免疫微環境に関する検討

高橋 雄也, 森原 純, 酒井 眞, 大塚 悟子, 大原 克也, 大原 聡美, 橋田 泰孝, 加智 基弘, 木下 一郎, 秋田 弘弘, 松野 俊吉, 西村 正治 (北海道大学病院, 内科, 北海道大学病院・病理科, 北海道大学病院・腫瘍内科, 北海道がんセンター, 北海道大学病院・循環器, 呼吸器外科学)

P-3265

Development of metabolic-targeting therapy to overcome resistance to EGFR-TKIs in non-small cell lung cancer cells


非小細胞癌治療におけるEGFR遮断薬耐性を克服する治療法の開発

横尾 命里, 内藤 正, 高橋 弘, 野洲 隆也, 甲斐 博, 藤本 真澄, 姫野 隆也, 尾崎 恭, 須藤 延平, 山田 義人, 佐藤 健, 須藤 健, 櫻井 健 (北海道大学病院・病理科, 北海道大学病院・医師会・呼吸器外科, 北海道大学病院・腫瘍内科, 北海道大学病院・内科, 北海道大学病院・内科, 北海道大学病院・内科)

P-3266

Semaphorin 7A is regulated by mTOR signals and prevents the response to EGFR-TKI treatment in human lung adenocarcinoma


肺臓癌セマフォリン7AはmTORシグナルによって制御され、EGFR-TKIの治療耐性に関与している

甲原 雄平, 長友 泉, 岩倉 幸太, 木島 貴志, 熊ノ郷 淳 (大阪大学呼吸器内科, 信州医大呼吸器内科)
**P-3267** Hypoxia promotes tumor invasion via upregulation of galectin-3 in human lung cancer

Low oxygen environment in which the lung cancer cell metabolism is activated in the absence of oxygen.

**P-3288** The suppression of Nr2f2 expression in lung cancer cells promotes mesenchymal-epithelial transition.

A new approach to the treatment of lung cancer.

**P-3270** Significance of CD10 expression in lung squamous cell carcinoma
Natsumi Nanamura, Yasutaka Sakurai, Yoshiki Murakumo (*Dept. Pathol., Kitasato Univ., Sch. Med.*)

A study on the significance of CD10 expression in lung squamous cell carcinoma.

**P-3278** Periostin promotes tumor progression in non-small cell lung cancer.
Toshimasa Okazaki1, Takehiko Maeda2 (*1Dept. of Regenerative Science, 2Dept. of Thoracic Surg. Oncology, Juntendo Univ., Sch. Med.*)

A study on the role of periostin in the progression of non-small cell lung cancer.

**P-3279** Expression of OTUB1 in human malignant mesothelioma
Mei Kurasa, Misbie Tanino1, Arisa Kitazaki1, Hirokazu Sugiura, Yusuke Ishida, Lei Wang1, Masumi Tsuda, Akira Takasawa1, Hiroshi Hirano1, Shinya Tanaka (*1Dept. of Cancer Pathol., 2Dept. of Pathol., Yokohama City Univ., Med. Sch., Med. Stud., Yokohama City Univ., Med.*)

A study on the expression of OTUB1 in human malignant mesothelioma.

**P-3287** A profile of mucin protein expressions in lung adenocarcinomas that associate with idiopathic interstitial pneumonitis
Toshiaki Kataoka1, Yoko Kojima1, Hiromasa Arai2, Mai Matsuruma1, Shigeki Umeguchi1, Kenichi Ohashi1 (*1Dept. Pathol., Yokohama City Univ., Med. Sch., Med. Stud., Yokohama City Univ., Med.*)

A study on the protein expressions of mucin in lung adenocarcinomas associated with idiopathic interstitial pneumonitis.

**P-3277** Expression of OTUB1 in human malignant mesothelioma
Mei Kurasa1, Misbie Tanino1, Arisa Kitazaki1, Hirokazu Sugiura, Yusuke Ishida1, Lei Wang1, Masumi Tsuda, Akira Takasawa1, Hiroshi Hirano1, Shinya Tanaka1 (*1Dept. of Cancer Pathol., 2Dept. of Pathol., Yokohama City Univ., Med. Sch., Med. Stud., Yokohama City Univ., Med.*)

A study on the expression of OTUB1 in human malignant mesothelioma.

**P-3274** MUC21 expression in lung adenocarcinoma - its association with clinical factors -
Koichiro Momota1, Takahiro Uehara1, Masahiro Kajitani1, Hiroyuki Morisaki1, Shunsuke Sugita1, Toshio Yamagishi1, Koichiro Hori1 (*1Dept. Head., 2Dept. Head., 3Dept. Head., Juntendo Univ., Sch. Med.*)

A study on the expression of MUC21 in lung adenocarcinoma and its association with clinical factors.

**P-3272** Detection of tumor-derived DNA dispersed in the airway improves the diagnostic accuracy of bronchoscopic lung cancer
Taichiro Goto1, Yosuke Hirotsu2, Masao Omatani2 (*1Dept. of General Thoracic Surgery, 2Medical School, 3Genomics Analysis Center, 4Yamanashi Central Hospital)*

A study on the detection of tumor-derived DNA dispersed in the airway and its diagnostic accuracy.

**P-3271** Integrative genomic analysis of lung cancer cell lines
Chin-Di Wang1, Ya-Ching Shu2, Ker-Chau Li (*Institute of Statistical Science, Academia Sinica, Taiwan*)

A study on the integrative genomic analysis of lung cancer cell lines.

**P-3273** Clinicopathological analysis of pulmonary metastatic tumor performed bronchoscopic cytology

A study on the clinicopathological analysis of pulmonary metastatic tumors performed bronchoscopic cytology.

**P-3275** Elucidation of lung cancer pathogenesis
Yi-Chiung Hsu, Ker-Chau Li (*Institute of Statistical Science, Academia Sinica, Taiwan*)

A study on the elucidation of lung cancer pathogenesis.
P-3281 E-cadherin expression is correlated with resistance to a FAK inhibitor in Merlin-negative malignant mesothelioma cells
Merlin を発現しない中皮癌において、FAK 阻害剤への抵抗性は E-
cadherin 発現量と相関する
佐藤 龍洋1, 加藤 拓人2, 関戸 好孝2 (1愛知大学薬学部・病理学教室)

P-3282 Development of pulmonary emphysema and increased shedding of cell adhesion molecule 1 in ex-smoker model mice
Aritoshi R1, mitsuru Hagiyama, yasutoshi Takashima, ruyuichiro Kimura, akihiko iio (Pathology, Kindai, Univ., Sch. Med.)
元喫煙者モデルマウスにおける肺気腫発症と接着分子 CADM1 の細胞外切断亢進
李 在俊, 斎藤 冀, 小島 康 1, 木村 竜一朗, 伊藤 彰彦 (近畿大学医学部・病理学教室)

P-3283 Mutation accumulation in high-risk lung tissues
Emi Kubo1, Hideyuki Takeshima1, Satoshi Yamashita1, Noriko Motoi2, Toshikazu Ushijima1 (1Div of Epigenomics, NCC, 2Dep of Pathology and Clinical Laboratories, NCC)
一見正常にみえる肺組織においての突然変異の蓄積
久保 美喜, 竹島 晃, 山下 慎, 元井 喜代, 牛島 俊和1 (1がん研整・研・エビデンス, 2がん研整・中央・病理)

P-3284 Anticancer activity of piperine on cholangiocarcinoma cells
Poramin Boonbanjong1, Thaned Kangsamaksin, Kornkamon Lertsuwan, Rutaiwan Tohtong (Dept. of Biochem., Faculty of Sci., Mahidol Univ.)
Galangin Inhibits Migration and Induces Apoptosis in Cholangiocarcinoma Cells
Kornwipa Tanwattanakul1, Tavan Janvilsri, Tuangporn Suthiphongchal, Ruitaiwan Tohtong (Dept. of Biochem., Faculty of Sci., Mahidol Univ.)
Silencing of Gadd45β reduces viability and Akt/PKB phosphorylation of Cholangiocarcinoma cells
Ruitaiwan Tohtong1, Kyaw Z. Myint1, P. Kongpracha1, P. Rattanasingshan1, P. Moolthiya1 (1Dept. of Biochem., Mahidol University, 2Dept. of Medical Technology, Huachiew Chalermprakiet University)
O-GlcNAcylation promotes metastasis of cholangiocarcinoma cells via suppression of FOXO3 expression
Chatchai Phoomak1,2, Atti Silsirivanit1,2, Kanlayanan Savanyawisuth1, Kulthida Vaeteewoottacharn1,2, Chaisri Wongkham1,2, Sopit Wongkham1,2 (Department of Biochemistry, Faculty of Medicine, Khon Kaen University, Cholangiocarcinoma Research Institute, Khon Kaen University, Khon Kaen, Thailand)

P-3288 Withdrawn

P-3289 Piperlongumine induces cell apoptosis and synergizes with gencitabine in human cholangiocarcinoma cells
Cananokkuan Somri1, Waraporn Komyod (Department of Biochemistry, Faculty of Science, Mahidol University)

P-3290 Cell-SELEX-Based Selection of DNA Aptamers for Specific Targets on Cholangiocarcinoma
Chanida Woottichairangsan1, Anuttara Udomprasert1, Thaned Kangsamaksin1 (1Dept of Biochemistry, Mahidol University, 2Dept of Biochemistry, Burapha University)

P-3291 Targeting liver tumor-initiating cells via hampering IRAK1 mediated AP-1/AKR1 B10 signaling cascade in HCC
Nicole P.Y. Ho1 (State Key Lab, for Liver Res., HKU, 2Dept. of Path., HKU, 3Dept. of Applied Biol. and Chemical Tech., HK PolyU)
CTCF-FoxM1 axis regulates tumour growth and metastasis in hepatocellular carcinoma.
Chi Bun Ke1, Yajing Zhang1, Bin Zhang1, Anthony W.H. Chan (1Dept. of ABCT, The Hong Kong Polytechnic University., 2State Key Laboratory of Chirosciences, The Hong Kong Polytechnic University., 3Dept. of Gastroenterology, Nanjing Drum Tower Hospital, Nanjing University., 4Dept. of ACP, The Chinese University of Hong Kong)
A high expression level of FOXM1, regulated by a deubiquitinating enzyme OTUB1, is critical for HCC cell proliferation
Lysyl oxidase expression is associated with early recurrence in hepatocellular carcinoma
Naoki Umezaki, Shinjiro Murai, Yusuke Ishida, Satoshi Tanaka, Koji Matsuo, Tatsuo Iwatsuki, Takeshi Narita, Hiroshi Ohtuka, Takahiro Mimori, Kazuhiro Kurosawa, Masayuki Kubota, Hiroshi Okabe, Masanori Ikai, Daishu Hashimoto, Yo-ichi Yamashita, Akira Chikamoto, Takatoshi Ishiko, Hideo Baba (Dept. Gastroenterology, University of Tokyo, 2Dept. of Medicine, Jichi Medical University, 3Dept. of Pathology, St. Marianna University, 4Dept. of Pathology, National Cancer Center Hospital)
UROKINASE-TYPE PLASMINOGEN ACTIVATOR/FGF-2 PATHWAY IS A CRITICAL TARGET FOR SORAFENIB RESISTANCE IN HEPATOMA CELLS
Mami Osawa1,2, Yoshiaki Ogi1,2, Yutaka Otani1,2, Inako Yamasaki1,2, Tomoko Konishi1,2, Naoki Umezaki, Kenji Yamada, Makoto Hida, Kenji Kitajima, Ryo Imai, Emi Kubo, Tomoyuki Tanaka, Hiroshi Okabe, Masayuki Kubota, Hiroshi Ohtuka, Masanori Ikai, Daishu Hashimoto, Yo-ichi Yamashita, Akira Chikamoto, Takatoshi Ishiko, Hideo Baba1,2 (1Dept. of Medicine, Jichi Medical University, 2Dept. of Pathology, National Cancer Center Hospital).

P-3286 Silencing of Gadd45β reduces viability and Akt/PKB phosphorylation of Cholangiocarcinoma cells
P-3285 Galangin Inhibits Migration and Induces Apoptosis in Cholangiocarcinoma Cells
P-3287 O-GlcNAcylation promotes metastasis of cholangiocarcinoma cells via suppression of FOXO3 expression
Chatchai Phoomak1,2, Atti Silsirivanit1,2, Kanlayanan Savanyawisuth1, Kulthida Vaeteewoottacharn1,2, Chaisri Wongkham1,2, Sopit Wongkham1,2 (Department of Biochemistry, Faculty of Medicine, Khon Kaen University, Cholangiocarcinoma Research Institute, Khon Kaen University, Khon Kaen, Thailand)
P-3288 Withdrawn

P-3289 Piperlongumine induces cell apoptosis and synergizes with gencitabine in human cholangiocarcinoma cells
P-3290 Cell-SELEX-Based Selection of DNA Aptamers for Specific Targets on Cholangiocarcinoma
P-3297 Genetic features of hepatic cell carcinoma arising as a result of eradicate of hepatitis C virus
Haruhiko Takeda1, Atsushi Takai, Soo Ki Kim1, Nobuyuki Kakiuchi1, Hiroshi Seno1, Seishi Ogawa1, Hiroki Marusawa1 (1Dept. Gastroenterology & Hepatology, Grad. Sch. Med., Kyoto Univ, (2Dept. Pathology & Tumor Biology, Grad. Sch. Med., Kyoto Univ, (3Dept. Gastroenterology & Hepatology, Kobe Asahi Hospital)

C型肝炎ウイルス排除後後に発生する肝細胞癌の遺伝子異常
竹田 治彦1, 高井 淳1, 金 秀基1, 2, 3, 坂内 伸之1, 2, 妹尾 茂1, 小川 誠司1, 丸澤 宏之1, (1京都大・医・消化器内科学, 2京都大・医・腫瘍生物学, 3神戸中央病院・消化器内科)

P-3298 Adjuvant chemolipiodolization reduces early intrahepatic metastasis of hepatocellular carcinoma after surgery

Chemolipiodolizationは肝細胞癌術後早期肝転移を抑制する速永喜也, 上野 昌樹, 川井 学, 橋野 誠子, 坂田 健一, 丸澤 勝基, 深水 敦史, 北畑 賢司, 濱崎 聡美, 小林 幹平, 山村 裕男 ( Kobe医大・肝胆管内科)

P-3299 Genetic evolution of combined hepatocellular-cholangiocarcinoma recurrence subsequently to double occurrence of HCC

二度の肝細胞癌と三度度型肝癌の遺伝子進化
大高 潤之, 山口 祐美, 2杉谷 雅音, 1江角 真理子1, 2 (日本大学・医, 形態機能病理学分野, 3日本大学, 医, 生化学分野)

P-3300 Clinical significance of HINT2 in hepatocellular carcinoma
Dongkai Zhou, Qifan Yang, Pengfei Huang, Weilin Wang, Shusen Zheng (Dept. of Surgery, First Affiliated Hospital, Zhejiang University)

P-3301 STC2 as a novel mediator for Mus81-dependent proliferation and survival in hepatocellular carcinoma
Fan Wu, Ting-yue Li, Shu-chao Su, Jian-wei Liu, Bai-lin Wang (Guangzhou Red Cross Hospital, Graduate Institute of Gastroenterological Surgery, Nagoya University Graduate School of Medicine)

P-3302 Targeting galectin-1 in hepatic stellate cells inhibits liver cancer invasion via suppressing TNF-c/IKK-c/Jun signaling
Kai-Huei Yang, Wan-Lin Tsui, Ming-Heng Wu (Graduate Institute of Translational Medicine, Taipei Medical University, Taipei, Taiwan)

P-3303 Elucidating genetic mechanisms of ZBTB20 in liver tumorigenesis using Sleeping Beauty Transposon System
Jillian H. Lo1, Amy P. Chi1, Cindy X. Li1, Barbara R. Tschida1,2, Timothy P. Kuka1, Branden S. Moriarity1,2,3, Jason B. Bell1, David A. Largaespada1,2, Vincent W. Keng1 (Dept. of ABC, HKPU, Masonic Cancer Center, (Dept. of Genetics, Cell Biology and Development, CGE, UM)

P-3304 Dissecting The role of macrophage migration inhibitory (MIF) in murine NAFLD model.
Horiguchi Norio, Daichi Takizawa, Satoru kakiizaki, Takeshi Kobayashi, Hiroki Tojima, Yuichi Yamazaki, Ken Sato, Motoyasu Kusano (Gunma University of Medicine, Internal Medicine of Gastroenterology and Hepatology)

マウス脂肪性肝炎モデルにおけるMIF(マクロファージ遊走阻止因子)の役割
堀口 昇男, 滝澤 大地, 柿原 慎, 小林 剛, 山口 恒, 坂口 宏, 佐藤 賢, 菊野 元康 (群馬大学医学部・消化器・肝臓内科)

P-3305 PD-L1 expression in hepatocellular carcinoma
Hiroaki Kanda, Yasun Mahmut, Yasuyuki Shigematsu, Yoshiya Sugiuara, Noritak Yamamoto, Yuichi Ishikawa (Dept. Dept. Pathol. The Cancer Inst of JFCR)

P-3306 Cytolytic activity (CYT) score is an independent prognostic factor of poor outcome in hepatocellular carcinoma (HCC)
Hiroaki Wakiyama1, Takaaki Masuda1, Yuta Koyama1, Hiroki Yoshikawa, Qingjiang Hu1, Kuniaki Sato1, Tomoko Saito1, Naoki Hayashi1, Yoohuke Kuroda1, Shuei Ito1, Hidetoshi Eguchi1, Koshib Mimori1 (Dept. Surg., kyuus Univ., Beppu Hosp., (Dept. Radiol., kyuus Univ., Beppu Hosp.)

P-3307 Oncogenic function of miR-23b-3p in hepatocellular carcinoma
Hayashi Masamichi, Suguru Yamada, Mitsuru Kanda, Chie Tanaka, Michitaka Fujiiwara, Yasuhiro Kodera (Department of Gastroenterological Surgery, Nagoya University Graduate School of Medicine)

P-3308 EFFICACY OF A THIRD GENERATION ONCOBLYTIC HSV-1 G47A FOR HEPATOCELLULAR CARCINOMA

P-3309 Biliary tract cancer cell-derived exosomal microRNAs inhibit HUVEC tube formation

胆管癌産生exosomeを介したmicroRNAの血管内皮細胞への伝播は血管網構築を抑制する
山本 洋平1, 2, 西尾 聖2, 橋本 克彦1, 大森 泰文1, (秋田大・院・医・分子医療, 腫瘍病態, 3秋田赤十字病院病理診断科)

P-3310 Identification of microRNAs associated with hepatitis B-related carcinogenesis after nucleotide analogue treatment

慢性B型肝炎の核酸アノラ製薬治療後遺症の関連するmicroRNAの探索
岩瀬 豊1, 2, 楯木 拓1, 3, 佐々木 基1, 2, 新井 猛2, 坂本 秀一郎1, 3, 甲斐 正広1, 2, 高橋 秀明1, 2, 伊東 文生1, 2, 多野 隆至1, 2, 仲瀬 祐志1, (札幌医大・医・消化器内科, 4札幌医大・医・分子生物学, 5聖マリアンナ医
P-3311 A multivariate analysis of 72 patients with insular high-grade glioma: prognostic significance
Yonghong Wang1, Yinyan Wang2, Ji Feng3, Jianhua Zhao3, Xinge Chen4, Lei Wu4, Zhiguang Han5, Jincheng Zhao6 (Department of Neurosurgery, Qinhuangdao First Hospital, Qinhuangdao, Hebei Province, China; Beijing Neurosurgical Institute, Capital Medical University, Beijing, China)

P-3312 Randomized, double-blind, phase III trial of a personalized peptide vaccination for recurrent glioblastoma patients

P-3313 Chemotherapy against malignant brain tumors by tumor-vasculature targeting and blood-brain barrier overcoming peptide
Mototomo Nonaka1, Michiko Fukuda2,3 (Laboratory for Drug Discovery, AIST, Cancer Center, Sanford-Burnham Prebys Med. Inst.)

P-3314 The change of the MRI image of the BCNU wafer contact tissue and investigation of its efficacy and safety
Takahiro Fujishiro, Shinji Kawabata, Ryou Hiramatsu, Motomasa Furuse, Toshikio Kuroива (Department of Neurosurgery, Osaka Medical College, Osaka, Japan)

P-3315 HEMATOGENOUS DISSEMINATION OF MEDULLOBLASTOMA METASTASES TO THE LEPTOMENINGS
NORIYUKI KIJIMA (Department of Neurosurgery, Osaka National Hospital, Osaka, Japan)

P-3316 Gain of function in the K27M mutant in Histone 3.3 promotes survival in patients with malignant brain tumors
Tsyoshiro Fujikuma, Makiko Kawaguchi, Hiroyuki Tanaka, Hiroaki Katooka (Department of Pathology, Faculty of Med., Univ. Miyazaki)

P-3317 Analysis of relationship between BRAF V600E mutation and expression of p16 in pleomorphic xanthoastrocytoma
Mishie Tanimoto, Hiroshi Nanjo, Masumi Tsuda1, Hirokazu Sugimoto, Rei Wang, Yusuke Ishida, Shinya Tanaka (Department of Cancer Pathol., Faculty of Med. Hokkaido Univ., Division of Clin. Pathol., Akita Univ. Hosp., GI-CoRE, Hokkaido Univ.)

P-3318 Epigenetic silencing of SPINT2 enhances tumorigenicity of glioblastoma
Tsuyoshi Fujikuma, Makiko Kawaguchi, Koji Yamamoto, Hiroyuki Tanaka, Hiroaki Katooka (Department of Pathology, Faculty of Med., Univ. Miyazaki)

P-3319 The optimal duration of a ketogenic diet for prolonging survival in patients with malignant brain tumors
NAOKI SHINOMURA, Hiroaki Matsuzaki, Aoi Maenaka, Keishi Makino, Yuki Takeishima, Keizo Yamamoto, Yosuke Saioto, Yusuke Mihara, Toshiko Ibara, Jun-ichi Kuratsu, Hideo Nakamura, Kazumichi Yamada, Shigetoshi Yano (Department of Neurosurgery, Kumamoto University Hospital, Department of Clinical Nutrition Services, Kumamoto University Hospital, Department of Neurosurgery, Japan Community Health Care Organization Hiyoshi Medical Center, Department of Neurosurgery, Ashinohospital, Department of Neurosurgery, Sakurajun University Hospital)

P-3320 Mutant IDH1 expression drives TERT promoter reactivation as part of the cellular transformation process.
Shigero Ohba, Yuichi Hirose (Department of Neurosurgery, Fujita Health Univ., Sch. Med.)

P-3321 Increase of mRNA levels of fatty acid synthase and carnitine palmitoyltransferase 1C in starved human glioma cell lines
Tomohiro Wakamiya1, Yukiyo Nakahara, Motofumi Koguchi, Hiroshi Ito1, Tatsuya Abe1 (Department of Neurosurgery, Faculty of Medicine, Saga University, Department of Neurosurgery, Karatsu Red Cross Hospital)

P-3322 Induction of p53 and its downstream genes in malignant glioma cells by radiation and cisplatin.
Arisa Kitazaki, Atsushi Nishida, Masayuki Ono, Tatsuya Sato, Tsuyoshi Fukushima (Department of Neurosurgery, Hokkaido University Graduate Sch. Med., Department of Cancer Pathol., Hokkaido University, Department of Med., Research Center for Cooperative Projects, Institute for Advanced Bioscience, Keio University)

P-3323 IDH1 mutation contributes to apoptosis after multifractionated irradiation in malignant glioma
Arisa Kitazaki, Mishie Tanimoto, Mei Kuzasa, Hirokazu Sugimoto, Lei Wang, Yusuke Ishida, Shingo Shemba, Masumi Tsuda, Kaori Igarashi, Tomoyoshi Soga, Shinya Tanaka (Department of Cancer Pathol., Hokkaido University Grad. Sch. of Med., Department of Cancer Pathol., Hokkaido University, Department of Med., Research Center for Cooperative Projects, Institute for Advanced Bioscience, Keio University)

P-3324 BRAF gene mutation contributes to apoptosis after multifractionated irradiation in malignant glioma
Arisa Kitazaki, Mishie Tanimoto, Mei Kuzasa, Hirokazu Sugimoto, Lei Wang, Yusuke Ishida, Shingo Shemba, Masumi Tsuda, Kaori Igarashi, Tomoyoshi Soga, Shinya Tanaka (Department of Cancer Pathol., Hokkaido University Grad. Sch. of Med., Department of Cancer Pathol., Hokkaido University, Department of Med., Research Center for Cooperative Projects, Institute for Advanced Bioscience, Keio University)
15 Diagnosis

P-3325 Short tandem repeat analysis of ovarian immature teratoma
卵巣未熟奇形腫のSTR解析: 神経腫瘍を含む未熟奇形腫の細胞起源を着目して
山下 佑子, 内村 眞, 加藤 寛之, 鈴木 周五, 高橋 智 (名古屋市立大学・院診 神経腫瘍)

P-3326 Fusion gene detection from sarcoma FFPE specimens by nCounter assay.

P-3327 Experience of Multi-genetic diagnosis by cancer panel MSK-IMPACT
Shunsuke Kato1, Yoshiyuki Suehara2, Takuo Hayashi3, Tsuyoshi Saito4, Shigeo Yamaguchi5, Yumi Nozaki5, Marc Ladanyi5 (Dept. Clin. Oncol, Juntendo University Graduate School of Medicine, Dept. Orthopedics, Juntendo University, Dept. Pathology, Juntendo University, Department of Pathology, Memorial Sloan-Kettering Cancer Center, NY, USA)

P-3328 Characteristics of cell free DNA in lung cancer patients

P-3329 Target capture RNA sequencing and fusion gene detection from FFPE tumor samples

P-3330 Development of a Cell Line Panel for Mutation Standards against the NCC Oncopanel

NCC オンコーパネルの90 遺伝子を網羅する変異細胞株パネルの作製
中村伸之, 佐藤典之, 長柄由利, 内藤 幹弥, 小原 剛 (国立病院機構癌研究所, JCRB 細胞バンク)
P-3342 *VHL* gene FISH may become a diagnostic marker for Birt-Hogg-Dube syndrome-associated clear cell renal cell carcinomas

*VHL*遺伝子に対するFISHはBirt-Hogg-Dube症候群の淡紫色細胞型腎臓癌診断において有用と期待される。

松元 賢一, 加藤 真央, 入部 康弘, 長崎 洋雄, 中谷 林雄, 蓮 藤史, 矢尾 正祐, 古屋 充子 (横浜市大・医・分子病理, 東京女子医科大学・病理解剖科, 千葉大・院・診断病理, 横浜市大・医・泌尿器科)

P-3331 Prognostic impact of immune related gene levels in gastric cancer of tumor tissues
Shuhei Ito, Takaaki Masuda, Miwa Noda, Yukihito Yoshikawa, Qingliang Hu, Kuniai Sato, Naoki Hayashi, Yousuke Kuroda, Hidetoshi Eguchi, Koshi Mimori (Dept. Surg, Kyushu University, Beppu Hosp.)

胃癌組織における免疫関連遺伝子発現の臨床的意義の検討
伊藤 斉平, 坂田 明人, 野田 翔太, 梨恵, 長沢 秀裕, 廣村 要, 島場 敬, 寺田 大輝, 荒井 良維, 野冨 圭洋, 乙木 真澄 (九州大学医学部病院外来病棟 外科)

P-3322 Development of a novel prognostic scoring system based on microenvironment gene signature for de novo DLBLCL patients
Kohta Miyawaki, Koichi Akashi (Department of Medicine and Biosystemic Science, Kyushu Univ.)

微小環境遺伝子発現による新規予後層別化モデルの開発
宮脇 健太, 赤司 浩一 (九州大学大学院病院病態修復内科学)

P-3333 Novel biomarkers distinguishing pancreatic head cancer from distal cholangiocarcinoma by proteomic analysis

プロテオーム解析を用いた膵頭癌・胆管癌の鑑別を可能にする新規バイオマーカーの同定
竹沢 努, 山本 博利, 亀井 靖史, 高橋 達也, 林 洋悟, 元井 友彦, 海野 偉明 (東北大学大学院 消化器外科学, 東北大学大学院 病理検査学)

P-3334 Development of EV-based liquid biopsy diagnostics for early detection of colorectal cancer

大腸癌早期診断の細胞外小胞を利用したリキッドバイオプロファイルの開発
村岡 裕, 佐藤 貴昭, 植田 幸男 (がん研 プロテオミクス解析グループ, がん研有明病院・消化器外科 大腸外科)

Yuria Saito, Tomoko Matsuhashi, Yasumasa Aka, Asami Okumura, Kanako C. Hatanaka, Hiroko Yamashita, Yutaka Hatanaka, Yoshihiro Matsuno (Gene Testing Business, Sysmex Corporation, Research Division of Companion Diagnostics, Hokkaido University Hospital, Department of Breast Surgery, Hokkaido University Hospital, Department of Surgical Pathology, Hokkaido University Hospital)

ホルマリン固定時間が乳癌のmulti-geneアッセイに与える影響の確認
高岡 優莉, 松本 恵子, 赤井 保正, 奥村 純, 鈴子 麻美, 畑中 佳奈子, 山下 実, 畑中 隆, 松野 吉宏 (シスメックス(株) 腫瘍診断事業部, 北海道大学病院・コンピューターディコン診断研究部門, 北海道大学病院・乳癌外科, 北海道大学病院・病理部)
16 Molecular-targeting therapy

**P-3340** Reprogramming serine metabolism by a new phosphoglycerate dehydrogenase inhibitor for neuroblastoma therapy
Chiao Hui Hsieh1, Chen-Tsung Huang1, Yun-Hsien Chung1, Yen-Lin Liu*1, Tsai-Shan Yang1, Chao-Cheng Cho2, Chai Yu Chien1, Chun-Hua Hsu1, Wen-Ming Hsu1, Hsuan-Cheng Huang1, Hsueh-Fen Juan1 (1Graduate Institute of Medical Electronics and Bioinformatics, NTU, Taiwan, 2Graduate Program, National Taiwan University and Academia Sinica, Taiwan, 3Department of Agricultural Education, NTU, Taiwan, 4Department of Biomedical Informatics, N.Y.M.U., Taiwan)

**P-3341** A novel γ-glutamylcysteine transferase inhibitor suppresses tumor growth in a xenograft model
Hiromi Ii1, Susumu Nakata1, Keiko Taniguchi1, Susumu Kageyama1, Takahiro Yoshiki1* (1Dept. Medical Oncology, Kyoto Pharmaceutical Univ., 2Dept. Urology, Shiga Univ.)

**P-3342** Evaluation of anti-ASC amino acid transporter 2 (ASC2T2) as a novel therapeutic antibody for gastric cancer
Kenta Hosomi1, Toshikiyo Ishii1, Takeshi Takahashi1, Kazuyasu Nakamura1 (1Oncology Research Lab., R&D Div., Kyowa Hakko Kirin, 2Medical Affairs Dept., Kyowa Hakko Kirin)

**P-3343** Analysis of the functional mechanism of a drug targeting dormant cancer cells by using a lung cancer cell line
Shiori Sakai1, Tetsuya Kadono1, Minori Endo1, Takahiro Kuchimaru1, Masahiro Inoue1, Shinae Kondoh1 (1Sch. of Life Sci. and Tech., Tokyo Inst. of Tech., 2Dept. of Biochem., Osaka Inst. T. Cancer Res.)

**P-3344** Preferential cytotoxicity of mubritinib, a HER2 inhibitor, under glucose deprivation
Kazuhiko Kunimasa1, Satoshi Tsukahara, Akihito Tomida1 (1Oncology Research Lab., R&D Div., Kyowa Hakko Kirin, 2Medical Affairs Dept., Kyowa Hakko Kirin)

**P-3345** Effect of PDK4 inhibitor on in vivo tumorigenesis and cancer stemness of human pancreatic cancer cell lines

**P-3346** Therapeutic effect of Trastuzumab-emsatin (T-DM1) on the HER-2 positive colorectal cancer cells
Yuan-Chiang Chung1, Wan-Chen Wei2, Wei-Ting Chao2 (1Department of Surgery, Cheng-Ching General Hospital, Chungkang Branch, Taichung, Taiwan, 2Department of Life Science, Tunghai University, Taichung, Taiwan)

**P-3347** Piceatannol, a natural stilbene compound, inhibits human glyoxalase I

**P-3348** Evaluation of the distinct effect of anti-angiogenic agents, nintedanib and bevacizumab in lung cancer on metabolism.

**P-3349** Direct effect of VEGF/VEGF-R inhibitors on human colon cancer cells
Chisato Tomida1, Hikaru Nagano1, Shigetada Teshima-Kondo1 (1IBS, Tokushima Univ., 2Osa Pref. Univ.)

**P-3350** Antitumor effect of a novel GSK-3β inhibitor on renal cancer cells
Tatsuru Nakamura1, Hiroo Kuroki1, bilim Vladimiri1, Ugolkov Andrey2, Masayuki Tasaki1, Itsuhiro Takizawa1, Yosihiko Tomita1 (1Department of Urology, Niigata University, School of Medicine, 2Division of Hematology/Oncology, Feinberg School of Medicine, Northwestern University)

**P-3351** Anti-tumor effects of differentiation-inducing factor 1 in malignant melanoma

**P-3352** Resistance of Fbxo22 knockout cancer cells to poly (ADP-ribose) polymerase (PARP) inhibitor
Yongqiang Lai1, Wenwen Wu1, Weixin Liang1, Tomohiko Ohtsuka1 (1Translational Oncology, St. Marianna University Graduate School of Medicine, 11st Dept. General Surg., Gaoming Peoples Hospital China)

**P-3353** Fbxo22 欠失癌細胞におけるPARP阻害剤抵抗性獲得
阪強1, 向 文 文2, 梁 優 新2, 東 太 範2 (1聖医大, 適用分子腫瘤学, 2中国広東省佛山市高明区人民医院外科)
P-3353 Targeting of BMI-1 in mantle cell lymphoma
Aya Maeda, SHINYA KIMURA, KENSUKE KOJIMA (Div. Hematology, Respiratory Medicine and Oncology, Saga Univ.)
BMI-1を分子標的としたマンチル細胞腫治療
前田 遼, 村木 正人, 小島 研介 (佐賀大学医学部 医学系内科)

P-3355 Aurora-A inhibition synergistically enhances cisplatin induced cytotoxicity in ovarian clear cell carcinoma cell lines
卵巣透明細胞癌に対する Aurora kinase A 阻害剤を用いた共併用の効果
中村 洋平, 佐藤 謙也, 板持 広明, 杉山 徹 (岩手医科大学医学部 臨床医学科)

P-3356 A novel compound CCL441 induces G2/M arrest and apoptosis.
新規化合物CCL441は細胞周期をG2/M期で停止せさせるアポトーシスを誘導する
坪沢 勝2, 大野 吉史2, 李 斎森2, 馬 雪2, 郭 聡2, 聶 瑞荣2, 中本 晋吾2, 塩田 俊道2, 嵐沼 実2, 田村 裕2, 土田 真之2, 稲井 孝之2, 白澤 浩2 (千葉大学 医学附属病院 大学院医学系 教授)
P-3368 Epigenetic regulation of LDHA dictates the gemcitabine resistance in pancreatic cancer
Ching-Feng Chiu (National Institute of Cancer Research, National Health Research Institutes)

P-3367 Yes1 is the key molecule for resistance to HER2-targeted therapy

P-3366 Development of antibodies for detection of ERCC1

P-3365 Distinct Aftatin Resistance Mechanisms Identified in Lung Adenocarcinoma Harboring an EGFR Mutation
Toshimitsu Yamaoka, Motoi Ohba, Satoru Arata, Tohru Ohmori (Inst. of Molecular Oncology)

P-3364 Effect of tumor-stromal cell interactions on drug sensitivity of pancreatic cancer
Hiroki Tamura, Jun-ichi Imai, Shinya Watanabe (昭和大学 腫瘍分子生物研究所)

P-3363 Time-lapse imaging of spheroid formation and drug-induced spheroid collapse by optical coherence tomography (OCT)
Hsuan-Yu Chen1, Ker-Chau Li1, Sheng-Fang Su1 (1Institute of Statistical Sciences, Academia Sinica, Taipei 11529, Taiwan, 2Graduate Institute of Toxicology, College of Medicine, National Taiwan University, 3Department of Internal Medicine, National Taiwan University Hospital, Taipei 10051, Taiwan, 4School of Big Data Management, Soochow University, Taipei 11102, Taiwan)

P-3362 Epigenetic regulation of LDHA dictates the gemcitabine resistance in pancreatic cancer
Ching-Feng Chiu (National Institute of Cancer Research, National Health Research Institutes)

P-3361 Evaluation and prediction of pharmacological effects
Hiroki Tamura, Jun-ichi Imai, Shinya Watanabe (昭和大学 腫瘍分子生物研究所)

P-3360 Time-lapse imaging of spheroid formation and drug-induced spheroid collapse by optical coherence tomography (OCT)
Hsuan-Yu Chen1, Ker-Chau Li1, Sheng-Fang Su1 (1Institute of Statistical Sciences, Academia Sinica, Taipei 11529, Taiwan, 2Graduate Institute of Toxicology, College of Medicine, National Taiwan University, 3Department of Internal Medicine, National Taiwan University Hospital, Taipei 10051, Taiwan, 4School of Big Data Management, Soochow University, Taipei 11102, Taiwan)
NY-ESO-1 抗原特異的 TCR 遺伝子改良 T 細胞輸注後の臨床反応とサイトカイン放出症候群

石原 幹也、北野 淑久、宮原 慶裕、経山 健一、加藤 栄史、三崎 秀行、山本 隆、岩崎 弘明、服部 浩佳、船越 建二、渡邊 隆、緒方 俊（三重大学病院）

22 Medical care of progressive cancer

P-3390 Enhanced efficacy of adenovirus-mediated gene therapy using SOCS gene therapy for intractable cancers; from discovery of molecules to treatment development

Takahiko Sugase, Tsuyoshi Takahashi, Satoshi Serada, Kosuke Hiramatsu, Tomoharu Ohkawara, Minoru Fujimoto, Makoto Yamasaki, Masaki Mori, Yuichiro Doki, Tetsuji Naka, Kiyoshi Ohtani (Unit. for Gene therapy, Dept. Of surgery, M.G.M  medical college)

P-3391 Therapeutic effects of self-assembled siRNA-PGLA hybrid conjugate micelles for ovarian cancer


P-3392 Antisense oligonucleotide of Annexin A4 improved platinum resistance in ovarian clear cell cancer

Reisa Kakubari, Satoshi Serada, Satoshi Nakagawa, Shinya Matuzaki, Yutaka Ueda, Kiyoshi Yoshida, Tetsuji Naka, Tadashi Kimura (Department of Obstetrics and Gynecology, Osaka University Graduate School, Center for Intractable Immune Disease, Kochi Medical School, Kochi University)

Annexin A4 に対するアンチセンスノースクリーン陽性卵巣がんのプラナナ感受性を改善させる

角塚 順寛、西田英幸、中川 愛香、松崎 眞頼、上田 豊、吉野 洁、仲 哲治、木村 正（大阪大学大学院 医学研究科）

P-3393 Enhanced efficacy of adenovirus-mediated gene therapy using chelated gadolinium


P-3394 Development and characterization of an RNA-transsplicing molecule targeting to cancer-type OATP1B3


P-3395 p21 antisense induces apoptosis specifically in cancer cell through up-regulation of the E2F activity

Kurayoshi Kenta, Kiyoshi Ohtani (Dept. BioSci., Sch. Sci. & Tech., Kwansei Gakuin Univ.)

p21 antisense は E2F活性を増強することによりがん細胞特異的にアポトーシスを誘導する

倉吉 健太、大谷 洋（関西学院大学大学院・理工学研究所）

P-3396 Unusual complication of chemotherapy

Shashi shankar Sharma (Dept. Of surgery,M.G.M medical college indore,india)

P-3397 Human mesenchymal stem cells derived from adipose and umbilical cord improved neuroprotective pain.


P-3398 Effects of Kampo medicines for stomatitis on proliferation in human mesenchymal stem cells derived from adipose and umbilical cord


P-3399 Therapeutic effects of des-acyl grehlin against on the doxorubicin-induced cardiotoxicity


ドキシルビシンの心臓毒性に対するデスアクリルゲルシンの効果の検討

野中 美穂、宮野 渡至、岸田 周明、白石 成二、宇津 梅秋、上宮 保仁・C（東京理科大学・薬・分子生物学研究部・国立がんセンター・中央病院・治療薬物療法開発部・国立がんセンター・EPOC）、EPOC）

P-3400 Development of a new painkiller independent of opioids and NSAIDs by inhibition of platelets-activating factor-cain loop


朴田健司（先端生物技術開発プラットフォームセンター）による新たな鎮痛薬創薬

上園 保仁・C（国立がんセンター・薬、患者生存管理）、鹿児島大学医・医学薬学科、国立がんセンター・中央病院・治療薬物療法開発部、国立がんセンター・EPOC、EPOC）

P-3401 Effects of peripheral administration of Tea Yeast and Red Yeast extracts on cisplatin-induced anorexia


シスプラチシン誘発食慾抑制に対する茶麹および紅麹抽出物の末梢投与効果

上園 保仁・C（産業医大・医・生理、国立がん研・がん患者病態生理）