



11th AACR-JCA Joint Conference
Breakthroughs in Cancer Research
Feb. 8-12, 2019 | Westin Maui, Maui, HI

AACR American Association
for Cancer Research

JCA 日本癌学会
JAPANESE CANCER ASSOCIATION

Poster Session D

Tuesday, February 12, 2019

5:30 p.m.-7:30 p.m.

Haleakala Ballroom

Cancer biology

D01 Analysis of molecular mechanism of renal cancer progression using serial orthotopic transplantation model. Kosuke Miyakuni¹, Jun Nishida¹, Shogo Ehata², Kohei Miyazono¹. ¹Department of Molecular Pathology, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan, ²Department of Molecular Pathology, Graduate School of Medicine and Environmental Science Center, The University of Tokyo, Tokyo, Japan.

D02 Elucidation of the involvement of prolactin in endometrial cancer: A novel strategy for young hyperprolactinemic patients with endometrial cancer. Fumitaka Saito, Chimeddulam Erdenebaatar, Mahina Monsur, Munekage Yamaguchi, Ritsuo Honda, Takashi Ohba, Hironori Tashiro, Hidetaka Katabuchi. Kumamoto University, Kumamoto-City, Japan.

D03 Cachexia and subsequent effects on prognosis, metabolism, and immunomodulation in cholangiocarcinoma. Katherine M. Jackson, Luis Ruffalo, Roma Kaur, Shuyang Qin, Peter Juvilier, Alexa Melucci, Brian Belt, David C. Linehan, Peter A. Prieto. URMC, Rochester, NY, USA.

D04 The role of endoplasmic reticulum stress and the unfolded protein response in metastasis. Shemani Jagoda, Georgia Porter, Angelica Merlot. The University of New South Wales, Sydney, NSW, Australia.

D05 Asbestos provides iron-dependent mutagenic microenvironment to repairing mesothelial cells. Fumiya Ito, Shinya Toyokuni. Nagoya University Graduate School of Medicine, Nagoya, Japan.

D06 Unexpected estrogen response mediated by a membrane-bound type estrogen receptor GPR30 promotes malignant potentials of uterine cervical adenocarcinoma via regulation of claudin-1 expression. Akira Takasawa, Kumi Takasawa, Makoto Osanai. Sapporo Medical University, Sapporo, Hokkaido, Japan.

D08 Identification of PRPF19 as a novel regulator of a senescence-apoptosis switching. Kimiyoshi Yano, Shisei Kan, Ryou-u Takahashi, Hidetoshi Tahara. Hiroshima University, Hiroshima, Japan.

D09 Bcl11a promotes AML development through the abrogation of PU.1 activity. Yoshitaka Sunami¹,

Seiko Yoshino¹, Takashi Yokoyama², Takuro Nakamura¹. ¹Cancer institute of JFCR, Tokyo, Japan, ²Nara Institute of Science and Technology, Nara, Japan.

D10 Tracing p57⁺ cells identifies quiescent stem cells in normal and neoplastic tissues. Tsunaki Higa, Yasutaka Okita, Akinobu Matsumoto, Shoichiro Takeishi, Hirokazu Nakatsumi, Keiichi I. Nakayama. Division of Cell Biology, Department of Molecular and Cellular Biology, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan.

D12 Antitumor profile of a PI3K inhibitor ZSTK474 and conventional chemotherapeutic agents across a panel of human sarcoma cell lines. Naomi Tamaki¹, Nachi Namatame¹, Yuya Yoshizawa¹, Mutsumi Okamura¹, Yumiko Nishimura¹, Kanami Yamazaki¹, Shin-ichi Yaguchi², Shingo Dan¹. ¹JFCR, Tokyo, Japan, ²JFCR, Zenyaku Kogyo Co., Ltd., Tokyo, Japan.

D13 Misregulation of CD46 exon13 alternative splicing contributes to bladder cancer development. Jin Zeng, Ke Chen. Department of Urology, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

D14 NEK8 knockdown decreases proliferation, migration, invasion, and stemness of breast cancer cells. Eun Ji Kang¹, Han-Byoel Lee², Hyeong-Gon Moon³, Dong-Young Noh³, Wonshik Han³. ¹Department of Cancer Research Institute, Seoul National University College of Medicine, Seoul, Korea, ²Department of Surgery, Seoul National University College of Medicine, Seoul, Korea, ³Department of Cancer Research Institute, Seoul National University College of Medicine, Department of Surgery, Seoul National University College of Medicine, Seoul, Korea.

Clinical research and clinical trials

D15 Prognostic and predictive value of Cell Cycle Progression (CCP) score in ductal carcinoma in situ of the breast. Matteo Lazzeroni¹, Andrea DeCensi², Aliana Guerrieri-Gonzaga¹, Eleonora Pagan³, Vincenzo Bagnardi³, Debora Macis¹, Davide Serrano¹, Andrea Vingiani¹, Massimo Barberis¹, Giancarlo Pruneri⁴, Susanne Wagner⁵, Sara Gandini¹, Giuseppe Viale¹, Bernardo Bonanni¹. ¹European Institute of Oncology IRCCS, Milan, Italy, ²E.O. Ospedali Galliera, Genoa, Italy, ³University of Milan-Bicocca, Milan, Italy, ⁴IRCCS Istituto Nazionale Tumori, Milan, Italy, ⁵Myriad Genetics, Salt Lake City, UT, USA.

D16 The genetic landscape of pediatric low-grade gliomas: incidence, prognosis and response to therapy—a SickKids pLGG Task Force Update. Cynthia Hawkins¹, Scott Ryall¹, Michal Zapotocky¹, Kohei Fukuoka¹, Ana Guerreiro-Stucklin¹, Mariarita Santi-Vicini², Lea Surrey², Angela Waanders², Ruth Tatevossian³, David Ellison³, Uri Tabori¹. ¹The Hospital for Sick Children, Toronto, ON, Canada, ²Children's Hospital of Philadelphia, Philadelphia, PA, USA, ³St Jude Children's Research Hospital, Memphis, TN, USA.

D17 Efficacy of TGFβ receptor inhibitor galunisertib is linked to macrophages- and regulatory T cells-recruiting cytokines in pancreatic cancer patients. Davide Melisi, Rocio Garcia-Carbonero, Teresa Macarulla, Denis Pezet, Gael Deplanque, Martin Fuchs, Jorg Trojan, Mark Kozloff, Francesca Simionato, Valeria Merz, Ann Cleverly, Claire Smith, Shuaicheng Wang, Michael Man, Kyla Driscoll, Shawn Estrem, Michael Lahn, Karim Benhadji, Josep Tabernero. University of Verona, Verona, Italy.

D18 Prognostic factors of curative malignant colorectal obstruction after SEMS. Katsuya Ohta¹, Masakazu Ikenaga¹, Masami Ueda¹, Kato Ryo¹, Yujiro Tsuda¹, Shinsuke Nakashima¹, Jin Matsuyama¹, Ken

Konishi², Terumasa Yamada¹. ¹Higashiosaka City Medical Center, Higashiosaka, Japan, ²Hyogo Prefectural Nishinomiya Hospital, Nishinomiya, Japan.

D19 Autophagy markers modulated tumorigenesis and prognosis in certain subsites of oral squamous cell carcinoma. Hsueh-Wei Chang¹, Pei-Feng Liu², Huai-Pao Lee², Wei-Lun Tsai², Luo-Pin Ger², Chih-Wen Shu³. ¹Kaohsiung Medical University, Kaohsiung, Taiwan, ²Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, ³I-Shou University, Kaohsiung, Taiwan.

D20 Liver volume is the key to predicting adverse events during chemotherapy. Takuma Iwai¹, Hiroshi Maruyama¹, Hiroshi Makino¹, Tadashi Yokoyama¹, Atsushi Hirakata¹, Junji Ueda¹, Hideyuki Takata¹, Seiichi Shinji², Michihiro Koizumi², Takeshi Yamada², Hiroshi Yoshida². ¹Nippon Medical School Tama-Nagayama Hospital, Tama-shi, Tokyo, Japan, ²Nippon Medical School, Bunkyo-ku, Tokyo, Japan.

D21 S100A10 Upregulation associates with poor prognosis in lung squamous cell carcinoma. Yuriko Saiki¹, Kimiaki Sato², Kazumori Arai³, Kota Ishizawa⁴, Shinichi Fukushige⁴, Kenko Aoki⁴, Jiro Abe⁵, Satomi Takahashi⁵, Ikuro Sato⁵, Akira Sakurada², Yoshinori Okada², Akira Horii⁴. ¹Tohoku University School of Medicine, Sendai, Japan, ²Institute of Development, Aging and Cancer, Tohoku University, Sendai, Japan, ³Shizuoka General Hospital, Shizuoka, Japan, ⁴Tohoku University School of Medicine, Sendai, Japan, ⁵Miyagi Cancer Center, Sendai, Japan.

D22 The impact of postoperative weight change on prognosis in breast cancer patients depends on their age. Helga Tryggvadottir¹, Maria Ygland Rödström¹, Karolin Isaksson¹, Signe Borgquist², Helena Jernström¹. ¹Lund University and Skane University Hospital, Lund, Sweden, ²Lund University and Aarhus University and Aarhus University Hospital, Lund and Aarhus, Sweden and Denmark.

D23 Effectiveness of antiviral therapy in hepatitis B virus-related hepatocellular carcinoma initially treated with transarterial chemoembolization. Baek Gyu Jun¹, Sae Hwan Lee². ¹University of Ulsan College of Medicine, Gangneung Asan Hospital, Gangneung, South Korea, ²Soonchunhyang University College of Medicine Cheonan Hospital, Cheonan, South Korea.

D24 Wnt5a expression correlates with clinicopathologic features and prognosis of hepatocellular carcinoma patients. Kazuki Wakizaka, Toshiya Kamiyama, Kenji Wakayama, Tatsuya Orimo, Hideki Yokoo, Shingo Shimada, Akihisa Nagatsu, Takanori Ohata, Hirofumi Kamachi, Akinobu Taketomi. Department of Gastroenterological Surgery I, Hokkaido University Graduate School of Medicine, Sapporo, Japan.

D25 The efficacy of endoscopic self-expandable metallic stents as palliation for colorectal obstruction with unresectable malignant diseases. Yoshinao Chinen, Katsuya Ohta, Go Sato, Takaaki Sakai, Hiroaki Itakura, Ryo Kato, Kiyotsugu Iede, Masami Ueda, Yujiro Tsuda, Shinsuke Nakashima, Jin Matsuyama, Masakazu Ikenaga, Terumasa Yamada. Higashiosaka City Medical Center, Higashiosaka, Osaka, Japan.

D26 The impact of postoperative adjuvant chemotherapy completion on prognosis of stage III colorectal cancer. Junichi Nishimura, Yusuke Takahashi, Masayoshi Yasui, Hajime Ushigome, Masayuki Ohue. Osaka International Cancer Institute, Osaka, Japan.

D27 Prediction of metachronous cancers following lung cancer in early stage. Akitoshi Okada, Hiroko Shigemi, Yukihiro Umeda, Kayo Sakon, Masayuki Satoh, Mitsutoshi Sugiyama, Akikazu Shimada, Makiko

Yamaguchi, Tomoaki Sonoda, Maiko Kadowaki, Miwa Morikawa, Yuko Waseda, Masaki Anzai, Masato Sasaki, Takaaki Koshiji, Tamotsu Ishizuka. University of Fukui Hospital, Fukui, Japan.

D28 HSP60 Repressed E-cadherin expression to promote cell invasion and migration for poor prognosis in buccal mucosa squamous cell carcinoma. Bor-Hwang Kang¹, Chih-Wen Shu², Cheng-Hsin Lee³, Huei-Han Liu³, Luo-Ping Ger³, Pei-Feng Liu³. ¹Department of Otorhinolaryngology-Head and Neck Surgery, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, ²School of Medicine for International Students, I-Shou University, Kaohsiung, Taiwan, ³Department of Medical Education and Research, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan.

D29 Clinical efficacy of OT-101: A TGF- β 2 antisense and proposed confirmatory phase 2/3 trial in pancreatic cancer (PC). David Nam, Larn Hwang, Vuong Trieu. Oncotelic, Agoura Hills, CA, USA.

Drug resistance

D30 Computational modeling identifies optimal use of EGFR tyrosine kinase inhibitors for lung cancer patients with EGFR mutations. Hiroshi Haeno, Akihiro Ohashi, Susumu Kobayashi. Japanese National Cancer Center, Kashiwa, Chiba, Japan.

D31 RNA sequencing reveals differential expression profiles of ABC transporters and drug resistance signature in KSHV-infected cancer cells. Fatima Ali-Rahmani, Bethelihem Tebase, Cu Nguyen, Robert Robey, Nooshin Nasiri, Michael Gottesman. National Cancer Institute, Bethesda, MD, USA.

D32 Avapritinib (BLU-285), a selective exon 17 mutant KIT kinase inhibitor, reverses multidrug resistance mediated by ABCB1 and ABCG2 in cancer cell lines. Chung-Pu Wu¹, Sung-Han Hsiao¹, Sabrina Lusvardi², Suresh. V Ambudkar². ¹Graduate Institute of Biomedical Sciences, Chang Gung University, Guishan, Tao-Yuan, Taiwan, ²Laboratory of Cell Biology, CCR, NCI, National Institutes of Health, Bethesda, MD, USA.

D33 Functional detection of phospho-circuits identifies the kinome vulnerabilities of BRAFV600E colorectal cancer. Ana Ruiz-Saenz¹, Chloe E. Atreya¹, Changjun Wang¹, Bo Pan¹, Diede Brunen², Courtney Dreyer¹, Anirudh Prahallad², Dana J. Steffen³, Danislav Spassov¹, Cynthia Cowdrey¹, Scott Vandenberg¹, Kevan Shokat¹, Silvio Gutkind³, Mark M. Moasser¹, René Bernards², Laura L van 't Veer¹, Jean-Philippe Coppé¹. ¹University of California at San Francisco, San Francisco, CA, USA, ²The Netherlands Cancer Institute, Amsterdam, The Netherlands, ³University of California at San Diego, San Diego, CA, USA.

D34 Epigenetic regulation of miR-200b is associated with cisplatin resistance in bladder cancer. Tetsuya Shindo¹, Takeshi Niinuma², Hiroshi Kitajima², Kai Masahiro², Takashi Tokino³, Naoya Masumori¹, Hiromu Suzuki². ¹Sapporo Medical University School of Medicine, department of Urology, Sapporo, Hokkaido, Japan, ²Sapporo Medical University School of Medicine, department of Molecular Biology, Sapporo, Hokkaido, Japan, ³Sapporo Medical University School of Medicine, Medical Genome Science, Research Institute for Frontier Medicine, Sapporo, Hokkaido, Japan.

D35 Metabolic and epigenetic remodeling drives therapy-induced cellular reprogramming and leads to the development of acquired drug resistance in BRAF mutant melanoma. Heinz Hammerlindl¹, Dinoop Ravindran Menon², Sabrina Hammerlindl¹, Elmar Zuegner³, Joachim Torrano¹, Meenhard Herlyn⁴, Christoph Magnes³, Helmut Schaidler¹. ¹Dermatology Research Centre, University of Queensland Diamantina Institute, Translational Research Institute, The University of Queensland, Brisbane, Australia, ²Department of Dermatology, University of Colorado, Denver, CO, USA, ³Joanneum Research Forschungsgesellschaft m.b.H., HEALTH, Institute for Biomedicine and Health

Sciences, Graz, Austria, ⁴The Wistar Institute, Philadelphia, PA, USA.

D36 Sensitivity to ATR inhibitors in cancer cell lines with ARID1A mutations. Ronja Biehs Anugwom, Junjie Chen. University of Texas MD Anderson Cancer Center, Houston, TX, USA.

D37 Loss of a regulatory subunit of PP2A in resistance to HER2 inhibition in HER2 positive breast cancer. Yi Bao¹, Soo Chin Lee¹, Qiang Yu². ¹Cancer Science Institute, Singapore, Singapore, ²Genome Institute of Singapore, Singapore, Singapore.

D38 Identification of miR-18a target genes in cisplatin-resistant ovarian cancer. Blanca I. Quiñones-Díaz¹, Victoria Sánchez-Guzmán², Jeyska M. Reyes-González¹, Pablo E. Vivas-Mejía¹. ¹University of Puerto Rico Medical Sciences Campus, San Juan, PR, Puerto Rico, ²University of Puerto Rico-Río Piedras Campus, San Juan, PR, Puerto Rico.

D39 Identification and targeting of resistant cell populations in glioblastoma. Taylor Wilson¹, Megan Wu², Kimia Ghannad-Zadeh¹, Sunit Das¹. ¹University of Toronto, Toronto, ON, Canada, ²Hospital for Sick Children, Toronto, ON, Canada.

D40 Cancer stemness and chemoresistance in the subpopulation of EpCAM-positive ovarian cancer cells. Takeshi Motohara, Fumitaka Saito, Hironori Tashiro, Hidetaka Katabuchi. Department of Obstetrics and Gynecology, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan.

D41 Stathmin1 enhances eribulin sensitivity in paclitaxel-resistant gastric cancer cells. Hiroshi Ariyama¹, Kyoko Yamaguchi¹, Tomoyasu Yoshihiro¹, Kohei Arimizu¹, Akashi Koichi¹, Eishi Baba². ¹Department of Medicine and Biosystemic Science, Kyushu University Faculty of Medicine, Fukuoka, Japan, ²Department of Comprehensive Clinical Oncology, Kyushu University Faculty of Medicine, Fukuoka, Japan.

D42 Ulixertinib (BVD-523) antagonizes multidrug resistance in ABCB1- and ABCG2-overexpressing cancer cells. Ning Ji¹, Zi-Ning Lei², Yuqi Yang², Chao-Yun Cai², Jing-Quan Wang², Pranav Gupta², Xiaomeng Xian², Dong-Hua Yang², Dexin Kong¹, Zhe-Sheng Chen². ¹Tianjin Medical University, Tianjin, China, ²St. John's University, Queens, NY, USA.

D43 Regression of a gemcitabine-resistant pancreatic-cancer patient-derived orthotopic xenograft (PDOX) by MEK inhibitors cobimetinib and trametinib. Masaki Sato¹, Kei Kawaguchi¹, Michiaki Unno¹, Robert Hoffman². ¹Graduate School of Medicine, Tohoku University, Sendai, Japan, ²Department of Surgery, University of California San Diego, San Diego, CA, USA.

D44 Role of novel hot-spot mutations of BCR-ABL1 in resistance towards TKIs: A structural, thermodynamic and kinetic study. Erik Laurini, Domenico Marson, Suzana Aulic, Maurizio Fermeglia, Sabrina Pricl. University of Trieste, Trieste, Italy.

D45 Foretinib overcomes entrectinib resistance associated with the NTRK1 G667C mutation in NTRK1 fusion-positive tumor cells in a brain metastasis model. Akihiro Nishiyama¹, Kenji Kita¹, Azusa Tanimoto¹, Shinji Takeuchi¹, Atsushi Tajima², Takayoshi Kinoshita³, Seiji Yano¹. ¹Division of Medical Oncology Cancer Research Institute, Kanazawa University, Kanazawa, Japan, ²Department of Bioinformatics and Genomics, Graduate School of Advanced Preventive Medical Sciences, Kanazawa University, Kanazawa, Japan, Kanazawa, Japan, ³Graduate School of Science, Osaka Prefecture University, Osaka, Japan, Kanazawa, Japan.

D46 Establishment and characterization of monoclonal antibody to detect ERCC1 overexpression, a possible biomarker for cisplatin resistance. Takayuki Oishi¹, Yuka Sasaki¹, Bungo Furusato², Emiko Udo², Takae Onodera¹, Satoru Iwasa³, Kazuhiko Nakao⁴, Yasuhide Yamada⁵, Nobuyoshi Hiraoka⁶, Mitsuko Masutani¹. ¹Department of Frontier Life Science, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, ²Department of Pathology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, ³Gastrointestinal Medical Oncology Division, National Cancer Center Hospital, Tokyo, Japan, ⁴Department of Gastroenterology and Hepatology, Nagasaki University Graduate School of Biomedical Sciences, Nagasaki, Japan, ⁵Department of Chemotherapy, Hamamatsu University Hospital, Hamamatsu, Japan, ⁶Division of Pathology, National Cancer Center Hospital, Tokyo, Japan.

Novel targets and drug discovery

D47 FK-A11, an HDAC/PI3K dual inhibitor, enhances the efficacy of anti-PD-1 antibody in a mouse model of melanoma. Chikashi Ishioka¹, Ken Saijo¹, Hiroo Imai¹, Sonoko Chikamatsu¹, Yuki Kasahara¹, Hidekazu Shirota¹, Tadashi Katoh². ¹Department of Clinical Oncology, IDAC, Tohoku University, Sendai, Japan, ²Faculty of Pharmaceutical Science, Tohoku Medical and Pharmaceutical University, Sendai, Japan.

D48 Developing first-in-class pregnane X receptor (PXR) antagonist to overcome cancer drug resistance. Wenwei Lin¹, Yue-Ming Wang¹, Sergio Chai¹, Yongtao Li¹, Lili Lv², Jie Zheng³, Jing Wu¹, Qijun Zhang², Yong-Dong Wang¹, Patrick Griffin³, Taosheng Chen¹. ¹St. Jude Childrens Research Hospital, Memphis, USA, ²Shanghai Medicilon Inc., Shanghai, China, ³The Scripps Research Institute, Jupiter, FL, USA.

D49 Sepiapterin reductase: A novel metabolic in vivo target in neuroblastoma. Andre S. Bachmann¹, Marie R. Mooney¹, Eric J. Kort², Dirk Geerts³. ¹Michigan State University, Grand Rapids, MI, USA, ²Van Andel Institute, Grand Rapids, MI, USA, ³University of Amsterdam, Amsterdam, The Netherlands.

D50 Novel small biomolecule promotes ER-stress-mediated cell death in hepatocellular carcinoma cells. Ala'a Al Hrou¹, Amphun Chaiboonchoe², Basel Khraiweh², Chandraprabha Murali¹, Badriya Baig¹, Raafat El-Awady³, Hamadeh Tarazi³, Amnah Alzahmi², David Nelson², Yaser Greish¹, Wafaa Ramadan³, Kouros Salehi-Ashtiani², Amr Amin¹. ¹UAE University, Al Ain, United Arab Emirates, ²NYU-AD, Abu Dhabi, United Arab Emirates, ³University of Sharjah, Sharjah, United Arab Emirates.

D51 Anti-PD-L1 morpholino oligonucleotides combined with radiation reduced PD-L1 protein expression of cancer cells in vitro and in vivo. Jeffrey Wu, Prakash Ambady, Cymon Kersch, Leslie L. Muldoon, Edward A. Neuwelt. Oregon Health and Sciences University, Portland, OR, USA.

D52 Structure-activity relationship study of quinomycin antibiotics focusing on cross-bridge structures of bicyclic depsipeptides to develop HIF-1 inhibiting antitumor agent. Hiideko Nagasawa¹, Kota Koile¹, Masahiro Ebihara², Tasuku Hirayama¹, Mieko Tsuji¹. ¹Gifu Pharmaceutical University, Gifu, Japan, ²Gifu University, Gifu, Japan.

D53 Epigenetic targeted therapy of EZH2 and BET BRD4 in AT/RT. Ali Zhang, Andrea Piunti, Patrick A Ozark, Xingyao He, Hiroaki Katagi, Takahiro Sasaki, Kathryn L Laurie, Stewart Goldman, Lihua Zou, Ali Shilatifard, Rintaro Hashizume. Northwestern University, Chicago, IL, USA.

D54 Heterozygous deletion of chromosome 17p renders human cancers vulnerable to the inhibition of RNA polymerase II. Yunhua Liu, Yujing Li, Yifan Sun, Xinna Zhang, Xiongbin Lu. Indiana University School of Medicine, Indianapolis, IN, USA.

D55 Combination therapy with CDK4/6 and mTOR inhibitors achieved synergistic effect in sarcoma. Xiaochun Wang, David Goldstein, Philip Crowe, Jia-Lin Yang. University of New South Wales, Sydney, NSW, Australia.

D56 The dimerization block cell-permeable peptide targeting C16orf74 inhibits pancreatic cancer growth and invasion. Toru Nakamura¹, Toshihiro Kushibiki¹, Masumi Tsuda², Takahiro Tsuchikawa¹, Koji Hontani¹, Kazuho Inoko¹, Mizuna Takahashi¹, Satoshi Hirano¹. ¹Department of Gastroenterological Surgery II, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ²Department of Cancer Pathology, Hokkaido University Graduate School of Medicine, Sapporo, Japan.

D57 Inhibition of the redox system shows preferential cytotoxicity to human pancreatic cancer cells under nutrient-deprived conditions. Isao Momose, Takefumi Onodera, Yohko Yamazaki, Hayamitsu Adachi, Manabu Kawada. Institute of Microbial Chemistry (BIKAKEN), Numazu, Shizuoka, Japan.

D58 Novel therapeutic agents for miRNA downregulation and malignant pleural mesothelioma treatment. Anna Tessari¹, Giuseppe Lo Russo², Marina Capece¹, Shimaa Soliman¹, Filippo De Braud², Marina C. Garassino², Harvey I. Pass³, Carlo M Croce¹, Dario Palmieri¹. ¹The Ohio State University, Columbus, OH, USA, ²Fondazione IRCCS Istituto Nazionale Tumori di Milano, Milan, Italy, ³NYU Langone Medical Center, New York, NY, USA.

D59 Development of next-generation drug candidates for prostate cancer based on the novel platform antagonist KCI807. Rayna Rosati, Manohar Ratnam. Wayne State University School of Medicine and Barbara Ann Karmanos Cancer Institute, Detroit, MI, USA.

D60 Alpha-particle-emitting astatine-211-labeled trastuzumab for targeted cancer cell ablation. Huizi Keiko Li, Sumitaka Hasegawa. National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, Chiba, Japan.

D61 Bidirectional effect of autophagy on sphingosine kinase I inhibitor PF543-induced cell death of oral squamous cell carcinoma cells. Masakazu Hamada, Hiroyasu Kameyama, Soichi Iwai, Narikazu Uzawa. Department of Oral and Maxillofacial Surgery II, Osaka University Graduate School of Dentistry, Osaka, Japan.

D62 The novel miR-143 target gene, SLC30A8, has a role in glucose metabolism in glioblastoma cells. Eunice L. Lozada-Delgado¹, Yasmarie Santana², Robert Rabelo¹, Pablo Vivas¹. ¹University of Puerto Rico, San Juan, PR, USA, ²PR Comprehensive Cancer Center, San Juan, PR, USA.

D63 Growth inhibitory and chemo-sensitization effects of dopamine receptor D2 antagonism in pancreatic cancer. Pouria Jandaghi¹, Maryam Safisamghabadi¹, Anie Monast², Morag Park², Veena Sangwan², Yasser Riazalhosseini¹. ¹Department of Human Genetics, McGill University and Genome Quebec Innovation Centre, Montreal, QC, Canada, ²Rosalind and Morris Goodman Cancer Research Centre, McGill University, Montreal, QC, Canada.

D64 Molecular targets of trans-chalcone in antitumorigenesis. Gabriel Silva¹, Mozart Marins¹, Ana Lucia

Fachin¹, Seung Joon Baek². ¹University of Ribeirão Preto, SP, Brazil, ²Seoul National University, Seoul, Korea.

D65 Novel somatic mutations of PRKAR1A in sporadic cardiac myxoma. Jian He. Key Laboratory of Systems Biomedicine (Ministry of Education), Shanghai Center for Systems Biomedicine, Shanghai Jiaotong University, Shanghai, Shanghai, China.

D66 Inhibition of the CLCF1-CNTFR signaling axis in non-small cell lung cancer using an engineered ligand trap provides significant antitumor effect. Cesar Marquez¹, Jun Kim¹, Amato Giaccia¹, Jennifer Cochran², Alejandro Sweet-Cordero³. ¹Stanford University School of Medicine, Stanford, CA, USA, ²Stanford University, Department of Bioengineering, Stanford, CA, USA, ³University of California, San Francisco, San Francisco, CA, USA.

D67 Lipocalin-2 as a therapeutic target for inflammatory breast cancer. Ginette S. Santiago-Sanchez¹, Fatma Valiyeva², Bisrat Debeb³, Pablo E. Vivas¹. ¹University of Puerto Rico-Medical Sciences Campus, San Juan, Puerto Rico, United States, ²UPR Comprehensive Cancer Center, San Juan, Puerto Rico, United States, ³University of Texas MD Anderson Cancer Center, Houston, TX, United States.

D68 Bioavailability and distribution of the metastatic cancer inhibitor MBQ-167 in mice. Maria del Mar Maldonado¹, Gabriela Rosado-González², Joseph Bloom³, Linette Castillo-Pichardo⁴, Jorge Duconge³, Eliud Hernández-O'Farril³, José Rodríguez-Orengo¹, Suranganie Dharmawardhane¹. ¹Department of Biochemistry, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico, USA, ²Department of Biology, University of Puerto Rico Río Piedras Campus, San Juan, Puerto Rico, USA, ³Department of Pharmaceutical Sciences, School of Pharmacy, University of Puerto Rico, San Juan, Puerto Rico, USA, ⁴Department of Pathology and Laboratory Medicine, Universidad Central del Caribe, Bayamón, Puerto Rico, USA.

D69 Intracellular delivery of a RAS-inactivating enzyme potently reduces viability and proliferation of RAS-driven cancer cells. Minyoung Park¹, Vania Vidimar², Karla J.F. Satchell², Roman A. Melnyk¹. ¹University of Toronto, Toronto, ON, Canada, ²Northwestern University Feinberg School of Medicine, Chicago, IL, USA.

D70 Convection-enhanced delivery of EZH2 inhibitor for the treatment of DIPG. Takahiro Sasaki¹, Hiroaki Katagi¹, Xingyao He¹, Ali Zhang¹, Kathryn E Loughlin², Stewart Goldman², Rintaro Hashizume³. ¹Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ²Division of Hematology, Oncology and Stem Cell Transplantation in the Department of Pediatrics, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ³Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University Department of Biochemistry and Molecular Genetics, Northwestern University, Chicago, IL, USA.

D71 Combination therapy targeting podoplanin to treat oral squamous cell carcinoma. Clinton A. Timmerman, Garrett B. Gianneschi, Stephanie A. Sheehan, Edward P. Retzbach, Gary S. Goldberg. RowanSOM, Stratford, NJ, USA.

D72 Nano-delivery of PNKP inhibitor exhibits synthetic lethality in PTEN-deficient colorectal cancer xenograft mice. Zahra Shire¹, Igor M. Paiva², Timothy D.R. Morgan³, Feridoun Karimi-Busheri⁴, Dennis Hall³, Michael Weinfeld¹, Afsaneh Lavasanifar², Sams M.A. Sadat². ¹Department of Oncology, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, AB, Canada, ²Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada, ³Department of Chemistry, Faculty of Science, University of Alberta, Edmonton, AB, Canada, ⁴Division of Experimental Oncology, Cross Cancer Institute, Edmonton, AB, Canada.

D73 Designing effective drug combinations for targeting ER stress loading in cancer therapy using MDA-MB-231-ERAI-Venus system. Kana Miyahara¹, Hiromi Kazama², Takashi Ishikawa¹, Keisuke

Miyazawwa². ¹Department of Breast Surgery, Tokyo Medical University, Shinjuku-ku, Tokyo, Japan, ²Department of Biochemistry, Tokyo Medical University, Shinjuku-ku, Tokyo, Japan.

D74 EgLN2 as a potential therapeutic target in triple-negative breast cancer. Mamoru Takada¹, Ming Zhuang², Hiroyuki Inuzuka³, Jing Zhang⁴, Takafumi Sangai⁵, Hiroshi Fujimoto⁵, Masayuki Ohtsuka⁵, Takeshi Nagashima⁵, Yasuhiko Kaneko⁶, Qing Zhang⁴. ¹Chiba University, Chiba, Japan; University of North Carolina at Chapel Hill, Chapel Hill, NC, Japan, US, ²Shanghai Jiaotong University, Shanghai, China, ³Tohoku University, Sendai, Japan, ⁴University of North Carolina at Chapel Hill, Chapel Hill, NC, US, ⁵Chiba University, Chiba, Japan, ⁶Saitama Cancer Center, Ageo, Saitama, Japan.

D75 Targeted inhibition of BET bromodomain and JMJD3 proteins for the treatment of DIPG. Hiroaki Katagi¹, Ali Zhang¹, Gavin T Blyth², Frank D. Eckerdt², Patrick A. Ozark³, Lihua Zou³, Xingyao He¹, Kathryn E Loughlin⁴, Takahiro Sasaki¹, Craig M. Horbinski⁵, Amanda M. Saratsis¹, Stewart Goldman⁴, C. David James¹, Ali Shilatifard³, Rintaro Hashizume⁶. ¹Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ²Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, IL, USA, ³Department of Biochemistry and Molecular Genetics, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ⁴Division of Hematology, Oncology and Stem Cell Transplantation in the Department of Pediatrics, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ⁵Department of Pathology/Neurological Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA, ⁶Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University Department of Biochemistry and Molecular Genetics, Northwestern University, Chicago, IL, USA.

D76 Structure-activity relationship study of biguanide derivatives for tumor microenvironment modulator. Takayuki Sakai¹, Kentaro Oh-hashii², Yoshiyuki Matsuo³, Kiichi Hirota³, Kensuke Okuda⁴, Tasuku Hirayama¹, Hideko Nagasawa¹. ¹Gifu Pharmaceutical University, Gifu, Japan, ²Gifu University, Gifu, Japan, ³Kansai Medical University, Osaka, Japan, ⁴Kobe Pharmaceutical University, Kobe, Japan.

D77 Targeting podoplanin-platelet interaction for the treatment of osteosarcoma. Ai Takemoto, Takao Ukaji, Miho Takami, Shigeo Sato, Ryohei Katayama, Naoya Fujita. JFCR, Tokyo, Japan.

D78 Plasma membrane damage and photochemical reaction of photosensitizer in near-infrared photoimmunotherapy. Kohei Nakajima, Kanta Ando, Hideo Takakura, Mikako Ogawa. Hokkaido University, Sapporo, Japan.

D79 Development of a novel agent for photoimmunotherapy with small peptides as a targeting ligand. Kazuki Terada, Kohei Nakajima, Hideo Takakura, Mikako Ogawa. Hokkaido University, Sapporo, Japan.

D80 Identification of ERBB4 as an actionable target by using selective anticancer effect of EGFR family tyrosine kinase inhibitors. Noritaka Tanaka¹, Kanami Yamazaki¹, Yuko Uno², Yoshimi Ohashi¹, Yumiko Nishimura¹, Masaaki Sawa², Shingo Dan¹. ¹JFCR, Tokyo, Japan, ²Carna Biosciences, Kobe, Japan.

D81 A high-content cellular senescence screening identifies a novel tumor-suppressive microRNA. Yuki Yamamoto, Ayaka Nishiura, Kimiyoshi Yano, Saori Fukunaga, Masaki Kinehara, Ryou-u Takahashi, Hidetoshi Tahara. Hiroshima University, Hiroshima, Hiroshima, Japan.

D82 Comparative transcriptomic analysis of lung-iPSC, NSCLC, and SCLC: Potential implications for iPSC modeling and therapeutic targeting of lung cancer. Vivek Shukla, James Gao, Sudheer Gara, Ruihong

Wang, Julie A. Hong, Mary R. Zhang, Haobin Chen, Chuong D. Hoang, David S. Schrump. National Cancer Institute, Bethesda, MD, USA.