

Poster Session A

Tuesday, December 2, 2014, 1:15-3:30 p.m.

Antibody Effector Mechanisms in Immune Therapy

A01 Ex vivo evaluation of an anti-Müllerian hormone type II receptor humanized antibody with optimized Fc effector function in ovarian cancer. Houcine Bougherara, Fariba Némati, Christophe De Romeuf, Jean-Marc Barret, Gérald Massonnet, Marie-Aude Le Frère-Belda, Jean-François Prost, Didier Decaudin, Emmanuel Donnadieu.

A02 The art of omission: Low fucose antibodies enhance tumor cell clearance in vivo. Rens Braster, Remco Visser, Gestur Vidarsson, Marjolein van Egmond.

A03 Preclinical and clinical evaluation of combinatorial therapeutic antibody/immunostimulant treatment in childhood ependymoma: Promising anti-tumor effect with trastuzumab, GM-CSF and IL2. Andrea Griesinger, Andrew Donson, Diane Birks, Vladimir Amani, Michael Handler, Jean Mulcahy-Levy, Kathleen Dorris, Nicholas Foreman.

A04 Systemic agonistic anti-CD40 treatment of tumor bearing mice modulates hepatic myeloid suppressive cells and causes immune-mediated liver damage. Jose Medina-Echeverz, Chi Ma, Tobias Eggert, Tim F. Greten.

A05 Combining the long-acting engineered cytokine NKTR-214 with checkpoint inhibitors is synergistic and shows long lasting anti-tumor immunity in murine tumor models. Seema Kantak, Rhoneil Pena, Murali Addepalli, Steve Lee, Kirksey Yolanda, Rupesh Kanhere, Priyam Jha, Ute Hoch, Deborah Charych, Stephen K Doberstein.

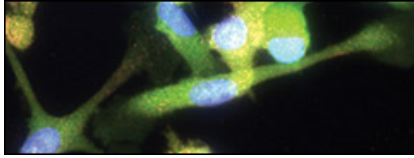
A06 Identification and characterization of a potent anti-human TIM-3 antagonist. Jean da Sliva Correia, Marilyn Kehry, Margaret Marino, Haley Laken, David J King.

A07 Combining CTLA4 and PD-L1 blockade leads to complete eradication of metastatic osteosarcoma. Danielle M Lussier, John L Johnson, Pooja Hingorani, Joseph N Blattman.

A08 Distribution, cutoff, and functional significance of a potential biomarker for Imprime PGG, an experimental cancer immunotherapeutic, in a healthy subject population. Diane McMurray, Ben Harrison, Katie Ertelt, Richard Walsh, Lindsay Wurst, Steven Leonardo, Nadine Ottoson, Adria Bykowski Jonas, Xiaohong Qiu, Nandita Bose, Peter Maimonis.

A09 Combination therapy with Anti-PD-1 and Poly-IC inhibits tumor progression and metastasis in pancreatic cancer. Kamiya Mehla, Thomas Caffrey, Kelly A O Connell, Maria M Steele, Paul Grandgenett, Michael A Hollingsworth.

A10 Soluble CD25 and C-reactive protein predict overall survival in melanoma patients receiving anti-CD40 monoclonal antibody CP-870,893 (α CD40) and anti-CTLA4 monoclonal antibody tremelimumab. Rosemarie Mick, David Bajor, Lee Richman, Robert Vonderheide.



A11 Activity of a bispecific antibody targeting EGFR and cMet with enhanced Fc effector function in EGFR mutant setting with cMet pathway activation. Keri L Soring, Katharine D Grugan, Randall J Breszki, Jose Pardinias, Leopoldo Luistro, Barbara Bushey, Joost Neijssen, Paul Parren, Janine Schuurman, Mark Anderson, Ricardo Attar, Matthew V Lorenzi, Mark Chiu, [Sheri Moores](#).

A12 PDL-1 blockade and Sunitinib enhance the efficiency of oncolytic viral therapy. [Ahmed Mostafa](#), Kathy Gratton, Keith A Lawson, Zhong-Qiao Shi, Chandini Thirukkumaran, Don G Morris.

A13 Humanized mouse models for in vivo evaluation of anti-human cancer immunotherapeutics. Juan Zhang, Meng Qiao, [Qian Shi](#).

A14 Overcoming therapeutic MAb resistance in aggressive HER2 positive breast carcinomas by adoptive immunotherapy using optimized effectors cells. [Sandrine Valsesia-Wittmann](#), Beatrice Clemenceau, Anne-Catherine Jallas, Jean-Yves Blay, Aurelien Marabelle, Christophe Caux, Henri Vie.

A15 Humanized anti-hepatocyte growth factor (HGF) antibody, suppresses innate irinotecan resistance induced by fibroblast-derived HGF in colon cancer cells. [Jong Kyu Woo](#), Ju-Hee Kang, Keumju Shin, Seong-Won Song, Jung Ju Kim, Sang-Jin Lee, Seung Hyun Oh.

A16 High αV integrin level in melanoma cells is associated with development of brain metastasis in athymic rats. [Jeffrey Wu](#), Michael A. Pagel, Leslie L Muldoon, Edward A. Neuwelt.

Interaction of Radiobiology

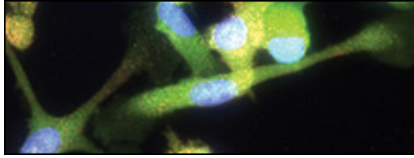
A17 The role of radiation-induced TGF- β in the generation of MDSCs. [Alba Gonzalez-Junca](#), Ilenia Pelicciotta, Kyla Elizabeth Discroll, Mary Helen Barcellos-Hoff.

A18 A systems biology approach to predict immunotherapy augmented abscopal effects. [Jan Poleszczuk](#), Sotiris Prokopiou, Mark Robertson-Tessi, Kimberly Luddy, Eduardo Moros, Mayer Fishman, Julie Djeu, Heiko Enderling.

A19 Systems biology approach predicts the diagnostic value of T effector : T regulatory cell ratio in clinical response to combined radiation/immunotherapy of high-risk soft tissue sarcoma. [Sotiris Prokopiou](#), Jan Poleszczuk, Mark Robertson-Tessi, Kimberly A. Luddy, Mayer Fishman, Eduardo Moros, Julie Y. Djeu, Heiko Enderling.

A20 A systematic evaluation of abscopal responses following radiation therapy in patients with metastatic melanoma treated with ipilimumab. [Ravi A. Chandra](#), Tyler J. Wilhite, Tracy A. Balboni, Alexander Spektor, Andrea K. Ng, Frank Stephen Hodi, Jonathan D. Schoenfeld.

A21 Adenosine is a rheostat for radiation therapy-induced immune activation. [Erik Wennerberg](#), Noriko Kawashima, Sandra Demaria.



A22 Radiation potentiates the induction of macrophages infiltration into tumor by Ninjurin-1 in endothelial cells. Jong Kyu Woo, Ju-Hee Kang, Yeong-Su Jang, Goo Taeg Oh, Sang-Jin Lee, Seung Hyun Oh.

Other

A24 Cancer-testis antigen expression is shared among gynecological tumors. Arlene E Garcia-Soto, Tulay Koru-Sengul, Feng Miao, Taylor Schreiber, Wilberto Nieves-Neira, Eckhard Podack.

A25 Immunotherapy using LOAd700 armed with CD40 ligand controls experimental pancreatic cancer and activates immune responses. Emma Svensson, Rafael Moreno, Ioanna Milenova, Lisa Christiansson, Ramon Alemany, Angelica Loskog.

A26 Sex differences in melanoma lung metastasis. Janet L. Markman, Daiko Wakita, Timothy R. Crother, Moshe Arditi.

A27 Nitroaspirins abrogate myeloid derived suppressor cell inhibition of dendritic cell antigen presentation to CD4+ T cells in pancreatic adenocarcinoma. Joseph Markowitz, Zachary C. VanGundy, Lai Wei, Tracey L. Papenfuss, William E. Carson.

A28 TRAIL mediated reduction of an immunogenic cell death protein, heat shock protein 70, in glioblastoma. Andrea N. McCray.

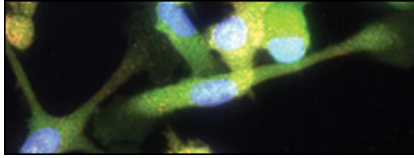
A29 Differential expression of the gangliosides GD3 and GD2 in canine and human osteosarcoma cell lines: A immunotherapy target. Rowan J Milner, Noaki Chimura, Kristina D Bowles, Marc Salute.

A30 Anti-tumor effect of natural killer cells in human PBMCs against ovarian cancer. Veethika Pandey, Jeremiah L Oyer, Robert Y Igarashi, Susan B Ingersoll, Alicja J Copik, Deborah A Altomare.

A31 Synergy of anti-CD40, CpG and MPL in activation of macrophages. Yongyu Shi, Mildred Felder, Paul M Sondel, Alexander L Rakhmilevich.

A32 Applying flow cytometry-based ImageStreamX technology to quantitatively characterize intracellular epitopes within rare circulating tumor cells from metastatic prostate cancer patients. Edwin E Reyes, David J VanderWeele, Ryan Duggan, Donald J Vander Griend, Russell Z Szmulewitz.

A33 Preparation of local anti-wart and anti-inflammatory rub of polyglycidol based saturated lipid (DDP-PG) with HPMC containing curcumin. Sharif Mohammad Shaheen, Pavel Bakardzhiev, Denitsa Momekova, Neli S. Koseva, Stanislav Rangelov.



A34 Characterization of tumor infiltrating lymphocytes in human breast cancer by infrared imaging. Magali Verdonck, Soizic Garaud, Laurence Buisseret, Hugues Duvillier, Christine Desmedt, Roland de Wind, Christos Sotiriou, Karen Willard-Gallo, Erik Goormaghtigh.

A36 Novel therapeutic approaches for human malignant mesothelioma. Haining Yang, Sandro Jube, Michele Carbone.

Overcoming Obstacles to Generating Adaptive Immunity

A37 Immunization of cutaneous melanoma patients with the allogeneic cell vaccine CSF-470 enhances immune infiltration of metastatic lesions and would favor subsequent response to Vemurafenib. Mariana Aris, María Betina Pampena, Estrella M Levy, Alicia I Bravo, Florencia P Madorsky-Rowdo, Ana Mordoh, Julio Kaplan, Antonela Baron, Mariela Urrutia, Paula A Blanco, María Marcela Barrio, José Mordoh.

A38 Phase I study of combination immunotherapy with agonistic CD40 monoclonal antibody (mAb) CP-870,893 (α CD40) and anti-CTLA-4 antibody tremelimumab (treme) in patients with metastatic melanoma. David L Bajor, Rosemarie Mick, Matthew J. Riese, Richman P Lee, Xiaowei Xu, Drew A Torigian, Erietta Stelekati, Martha Sweeney, Brendan J Sullivan, Lynn M Schuchter, Ravi Amaravadi, E John Wherry, Robert H Vonderheide.

A39 Targeting tumor infiltrating myeloid cells with a potent CCR1 small molecule antagonist. Ashley G Bischof, Joanne BL Tan, Sreenivas Punna, Penglie Zhang, Israel Charo, Anne-Marie Duliege, Thomas Schall.

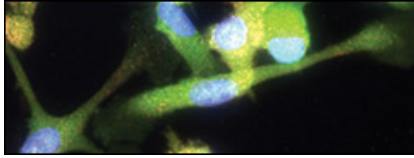
A41 Galectin-9 has tumor promoting properties that may be targetable in metastatic melanoma. Elizabeth Ann L Enninga, Wendy K Nevala, Svetomir N Markovic.

A42 MK-1775, a WEE1 inhibitor alleviates resistance to immune attack of tumor cells undergoing an epithelial-mesenchymal transition. Duane H Hamilton, Romaine I Fernando, Kwong-Yok Tsang, Claudia Palena.

A43 Immunologic profiling of pediatric malignancies for plausible immunotherapeutic trial selection. Kellie B. Haworth, Jennifer L. Leddon, Chun-Yu Chen, Timothy P. Cripe.

A44 Checkpoint inhibition of adaptive immunity by IL-9 can be disrupted to achieve rapid T cell sensitization and rejection of progressive tumor challenges. Dominique B Hoelzinger, Ana Lucia Dominguez, Peter A Cohen, Sandra J Gendler.

A45 Cyclin-dependent Kinase 5 regulates gamma-interferon induced PD-L1 up-regulation in solid tumors. Agne Petrosiute, Joseph Nthale, Gabby Valdivieso, R. Dixon Dorand, Tej Kumar Pareek, Deborah Sim Barkauskas, Jay T. Myers, John J. Letterio, Duncan Stearns, Alex Yee-Chen Huang.



A46 Antibody-mediated phosphatidylserine blockade significantly enhances the efficacy of downstream immune checkpoint inhibition in K1735 and B16 mouse melanoma. Bruce Freimark, Jian Gong, Dan Ye, Van Nguyen, Shen Yin, Rich Archer, Chris Hughes, Jeff Hutchins, Jeff Hutchins, Alan Schroit, Rolf Brekken, [Xianming Huang](#).

A47 Use of a cytotoxic peptide that induces immunogenic cell death to engage innate immunity in the treatment of metastatic breast cancer. Arati Limaye, Rania Bassiouni, Jeremiah Oyer, Robert W Igarashi, Orielyz Flores, J. Manuel Perez, Alijca Copik, [Annette R Khaled](#).

A48 Vaccine maneuvers which reverse tolerance to MUC1 requires antigenic diversity to mediate protection and delay immunoedited escape variants. [Vani Lakshminarayanan](#), Nitin Supekar, Dustin B McCurry, Jei Wei, Cathy S Madsen, Judy M Bradley, Latha B Pathangey, Margreet A Wolfret, Geert Jan Boons, Peter A Cohen, Sandra J Gendler.

A49 Systemic oncolytic reovirus for the treatment of primary and secondary brain tumors. Adel Jebar, Liz Ilett, Tim Kottke, Emma West, Karen Scott, Simon Thomson, Matt Coffey, Gerard Nuovo, Susan Short, Richard Vile, [Alan Melcher](#).

A50 Immunomonitoring in a phase II/III trial of therapeutic vaccination with CSF-470 plus BCG plus GM-CSF versus IFN- α in patients with cutaneous melanoma. [María Betina Pampena](#), Estrella Mariel Levy, María Paula Blanco, María Marcela Barrio, José Mordoh.

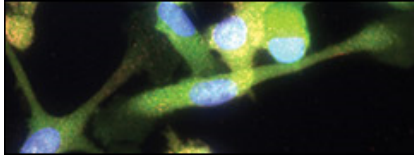
A51 Intradermal delivery of polymeric nanoparticle based vaccine formulation using a hollow microneedle system. Lin Niu, Leonard Chu, Kris Hansen, [Jayanth Panyam](#).

A52 Radiation and dual PD-L1 and CTLA4 checkpoint blockade non-redundantly improves tumor resistance, response, and immunity. [Andrew J. Rech](#), Christina Twyman, Amit Maity, Ramesh Rengan, Kristen E. Pauken, Erietta Stelekati, Bihui Xu, Hannah Dada, Pamela M. Odorizzi, Ramin D. Herati, Kathleen D. Mansfield, Dana Patsch, Ravi Amaravadi, Lynn Schuchter, Hemant Ishwaran, Rosemarie Mick, Daniel Pryma, George Xu, Michael Feldman, Tara C. Gangadhar, Stephen Hahn, E. John Wherry, Andy J. Minn, Robert H. Vonderheide.

A53 Expression of immune checkpoint modulators on CD4+ and CD8+ T cells coincides with activation during the priming phase of an allogeneic response. [Nina Chi Sabins](#), Benjamin Harman, Linda Barone, Sandra Santulli-Marotto.

A54 Laser-assisted intradermal delivery of Xcl1-specific fusion vaccines induces potent anti-tumor response. [Dorothea Terhorst](#), Dorothea Terhorst, Even Fossum, Bjarne Bogen, Sandrine Henri, Bernard Malissen.

A55 PD-1 blockade synergizes with cisplatin radiation therapy aiding in clearance of murine HPV+ oropharyngeal carcinoma. [Daniel W. Vermeer](#), Steven Powell, William C Spanos, John H Lee.



A56 Intratumoral injection of IMO-2055, a novel Toll-like receptor 9 agonist, with ipilimumab induces a systemic tumor-specific immune response. Daging Wang, Dong Yu, Sudhir Agrawal.

A58 JAK1 deficiency as a novel mechanism of tumor immune escape in uterine cancer. Yuan Ren, Yonghong Zhang, Richard Z Liu, David A Fenstermacher, Kenneth L Wright, Jamie K Teer, Jie Wu.

Tumor Microenvironment

A59 Novel inhibitors of human IDO1 and TDO. Monali Banerjee, Sandip Middy, Ritesh Shrivastava, Sushil Raina, Dharmendra Yadav, Satveer Singh, Anindita Manna, Debjani Chakraborty, Arjun Surya.

A60 Synergistic effect of targeted chemotherapy delivery using theranostic nanoparticles and PD-L1 blockade in an orthotopic mouse pancreatic cancer model. Erica N Bozeman, Ning Gao, Weiping Qian, Andrew Wang, Lily Yang.

A61 A clinical stage TLR5 agonist Entolimod™ activates T cell immunity against liver metastases via CXCR3-coordinated NK cell recruitment to the liver. Craig Brackett, Bojidar Kojouharov, Jean Veith, Sandra Gollnick, Lyudmila Burdelya, Scott Abrams, Andrei Gudkov.

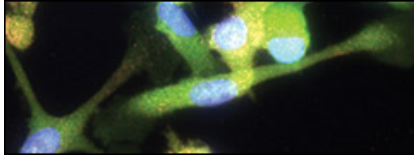
A62 Immune and T cell receptor heterogeneity in distinct tumors within individual melanoma patients. Alexandre Reuben, Rodabe N Amaria, Cara Haymaker, Marie Andree Forget, Chantale Bernatchez, Pei-ling Chen, Michael Tetzlaff, Michael A Davies, Karen C Dwyer, Jennifer A Wargo, Zachary A Cooper.

A63 The role of DARC in the immunological tumor microenvironment of breast cancer. Melissa B Davis, Michele Monteil, Rupali Hire, Elizabeth W Howerth.

A64 Chronic allergic contact dermatitis, A potent tumor promoter of Marjolin's ulcer. Shadmehr Demehri, Trevor J Cunningham, Eva A Hurst, Andras Schaffer, David M Sheinbein, Wayne M Yokoyama.

A65 Immune modulation of natural killer cell adoptive transfer for the treatment of osteosarcoma lung metastasis: Targeting the PD-1/ PDL-1 signaling pathway. Pooja M Dhupkar, Eugenie Kleinerman, Nancy Gordon.

A66 Tumor-associated neutrophils in early stage human lung cancer are not immunosuppressive, but exhibit an inflammatory phenotype and provide accessory signals for T cell activation. Evgeniy Eruslanov, Pratik Bhojnagarwala, Jon Quatromoni, Tom Stephen, Anjana Ranganathan, Charuhas Deshpande, Tatiana Akimova, Anil Vachani, Leslie Litzky, Wayne Hancock, Jose Conejo-Garcia, Michael Feldman, Sunil Singhal, Steven Albelda.



A67 Phase 1 study of VX15/2503, an immunomodulatory antibody to Semaphorin 4D that reverses tumor growth in preclinical studies. [Elizabeth E Evans](#), Terrence L Fisher, Cynthia Edington, Holm Bussler, Sebald Torno, Alan S Jonason, Janaki Veeraraghavan, Christine Reilly, Michael A Doherty, Jennifer Seils, Laurie A. Winter, Tracy Pandina, Crystal Mallow, Renee Kirk, Alan Howell, Sue Giralico, Maria Scrivens, Katya Klimatcheva, William J Bowers, Mark Paris, Drew Warren Rasco, Ramesh K Ramanathan, Amita Patnaik, Glen J Weiss, Danielle Mutz, Lisa Blaydorn, Anthony W Tolcher, Valerie Iddison, Ernest S Smith, John E Leonard, Maurice Zauderer.

A68 Local tumor treatments to simulate systemic antitumor immune responses. Patrick Lizotte, Mee Rie Sheen, Amy M Wen, Nicole F Steinmetz, [Steven Fiering](#).

A69 The immunological environment in triple negative breast cancer; impact on clinical outcomes towards a prognostic clinical test. [Mathieu Gigoux](#), Tina Gruosso, Nicholas Bertos, Sadiq Saleh, Atilla Omeroglu, Hong Zhao, Margarita Souleimanova, Sarkis Meterissian, Michael Hallett, Morag Park.

A70 Melanoma-derived nanovesicles as drivers of immunosuppression. [Rachel Goldenstein](#), Wendy Nevala, Svetomir N Markovic.

A71 Modulation of macrophages in breast tumors towards an anti-tumor phenotype. [Jennifer L Guerriero](#), Anthony Letai.

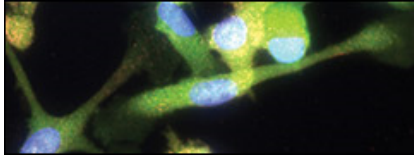
A73 Clinical significance of tumor-infiltrating immune cells focusing on BTLA and Cbl-b in patients with gallbladder cancer. Seiji Oguro, Yoshinori Ino, Kazuaki Shimada, Yutaka Hatanaka, Yoshihiro Matsuno, Tomoo Kosuge, [Nobuyoshi Hiraoka](#).

A74 Spatial organization of myeloid cells in tumor microenvironment. Minhyeok KIM, Seon Woo LEE, Suk-Jo KANG, [Changwon KANG](#).

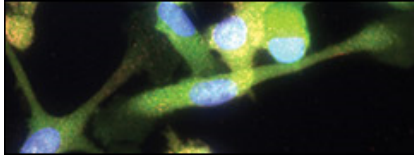
A75 The CD8:M2 ratio by digital multiplex gene expression permits accurate quantification of net intra-tumoral immunity within the tumor microenvironment in DLBCL. [Colm Keane](#), Frank Vari, Mark Hertzberg, John Seymour, Kim Anh Le Cao, Devinder Gill, Rodney Hicks, Michael Green, Kristen Radford, Lyn Griffiths, Dipti Talaulikar, Maher K Gandhi.

A76 Immune mechanisms and racial disparities in colon cancer. [Mohammad W Khan](#), Mengxi Tian, John M Carethers, Kathleen L McGuire.

A77 Differential recruitment of myeloid derived immune cells and fibroblasts to the thyroid tumor microenvironment in mouse models of papillary and follicular thyroid cancer. [Lee Ann King](#), Sergey Novitsky, Julio Ricarte-Filho, Philip Owens, Aime T. Franco.



- A78 Identification of novel immuno-modulatory targets for cancer immunotherapy.** Ofer Levy, Galit Rotman, Liat Dassa, Gady Cojocar, Amir Toporik, Arthur Machlenkin, Tal Fridman, Ilan Vaknin, Eyal Neria, Zurit Levin, Spenser Liang, John Hunter, Inbal Barbiro, Shirley Sameah-Greenwald, Cyrille Cohen, Chen Ankri, Einav Safion.
- A79 The prognostic importance of Th1 cell infiltration in colorectal cancer and mechanisms of immune regulation.** Agnes Ling, Sofia Edin, Maria L Wikberg, Åke Öberg, Richard Palmqvist.
- A80 Validation and clinical correlation of triplex CD3, CD8 and FOXP3 IHC of tumor-infiltrating lymphocytes in follicular lymphoma.** James R Mansfield, Christian Slater, Richard Byers.
- A81 Immune-cancer interactions in tumors and tumor-draining lymph nodes: Novel prognostic indicators for breast cancer.** James Mansfield, Peter Lee.
- A82 The cholesterol metabolite, 27-hydroxycholesterol, promotes breast cancer metastasis.** Erik Russell Nelson, Suzanne E Wardell, Donald P McDonnell.
- A83 The role of Ikaros in effector and regulatory T cell homeostasis in a murine pancreatic cancer model.** Nadine Nelson, Shengyan Xiang, Xiaohong Zhang, Karoly Szekeres, Ghansah Tomar.
- A85 Identification and enrichment for rare naturally-occurring tumor-reactive T cells in the tumor microenvironment reveals new and diverse opportunities for cancer immunotherapy.** Daniel J Powell.
- A86 Harnessing T-cell homeostasis to diagnose and treat solid and liquid tumors.** Mark Robertson-Tessi, Derek Park, Kimberly Luddy, Adam Mailloux, Pearlie K Burnette, Alexander Anderson.
- A87 Myristoylated alanine rich C-kinase substrate (MARCKS) expression in lung cancer cells influences immune cell populations in tumor microenvironment in murine models.** Timothy D Rohrbach, Travis D Hull, John S Jarboe, Nicholas Eustace, Yong Wang, Jessy S Deshane, Christopher D Willey.
- A88 Targeting 4-1BB costimulation to the tumor stroma with bispecific aptamer conjugates enhances the therapeutic index of tumor immunotherapy.** Brett Schrand, Alexey Bereznoy, Randall Brenneman, Anthony Williams, Agata Levay, Ling-Yuan Kong, Ganesh Rao, Shouhao Zhou, Amy Heimberger, Eli Gilboa.
- A89 PPAR γ induced TGF β expression in myeloid cells contributes to lung cancer metastasis.** Trisha R Sippel, Howard Li, Dwight Hanson, Lisa Greene, Bonnie Bullock, Joanna Poczobutt, Mary Weiser-Evans, Raphael Nemenoff.

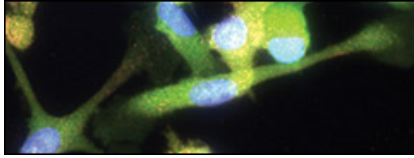


A90 Tumor associated PDL1 expression pattern in microscopically tumor positive sentinel lymph nodes (SLN) in patients with melanoma. Ahmad A Tarhini, Jennifer A Yearley, Christopher Gibson, Uma N. M. Rao, Cindy Sander, John M Kirkwood.

A91 Chronic inflammation modulates TLR4 expression in HCC cells. Ping-Hui Tseng, Yi-Chen Cheng, Chieh Yen, An-Jie Cheng.

A92 Small molecules targeting HMGR and HDAC in colorectal cancer. Tzu-Tang Wei, Yi-Ting Lin, Yu-Chin Lin, Ching-Chow Chen.

A93 STAT3 inhibition enhances the activity of immune checkpoint inhibitors in murine syngeneic tumor models by creating a more immunogenic tumor microenvironment. Rich Woessner, Patricia McCoon, Kirsten Bell, Rachel DuPont, Mike Collins, Deborah Lawson, Prasad Nadella, Lourdes Pablo, Corinne Reimer, Vasu Sah, Paul Lyne.



Poster Session B

Wednesday, December 3, 2014, 12:30-2:45 p.m.

Adoptive T-Cell Therapy

B01 In vivo testing of the efficacy of glioblastoma immunotherapy using T cells expressing a humanized chimeric antigen receptor against EGFRvIII. Alina C Boesteanu, Jennifer Brogdon, Andreas Loew, Alexandria Cogdill, Joseph Fraietta, John Scholler, Carl June, Marcela V Maus, Laura A Johnson.

B02 Construction and validation of an activating and inhibitory chimeric antigen receptor (CAR) system. Leonardo Chicaybam, Martin Bonamino.

B03 Donor-derived EBV+CD8+ T cells transduced with a WT1-specific TCR persist long-term with minimal toxicity in patients with high-risk leukemias. Aude Chapuis, Merav Bar, Thomas Schmitt, Hieu Nguyen, Natalie Duerkopp, Felecia Wagener, Colette Chaney, Kieu-Thu Bui, Mark Tom, Rachel Perret, Philip D Greenberg.

B04 Quantitative high throughput TCR β chain sequencing identifies and tracks adoptively transferred CD8+ T-cell subsets in vivo. Aude Chapuis, Cindy Desmarais, Kendall Shibuya, Felecia Wagener, Cassian Yee.

B05 A biologic screen to evaluate potential toxicity of chimeric antigen receptor modified T cells against primary normal human tissues. Alexandria P Cogdill, Alina Boesteanu, Kathleen Haines, Joseph Fraietta, John Scholler, Andreas Loew, Pramod Thekkat, Jennifer Brogdon, Marcela V Maus, Carl June, Laura A Johnson.

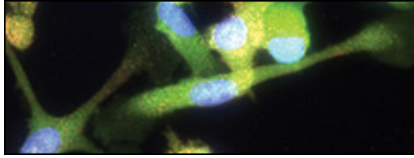
B06 Imaging regulatory mechanisms that limit intratumoral CTL function in a mouse melanoma model. Tali Feferman, Natalia G Zabolinsky, Yoav Manaster, Anat Hutzler, Guy Shakhar.

B07 Characterization of T-cell therapy enhancing oncolytic adenoviruses with human cytokine expression. Riikka Havunen, Suvi Parviainen, Mikko Siurala, Akseli Hemminki.

B08 Invariant NKT Cells as a platform for cancer immunotherapy with chimeric antigen receptors. Andras Heczey, Daofeng Liu, Gengwen Tian, Ekaterina Marinova, Xiuhua Gao, Linjie Guo, John Hicks, Gianpietro Dotti, Leonid Metelitsa.

B09 PD1 blockade is able to augment NY-ESO-1 directed T cell receptor engineered adoptive human T cell therapy (ACT). Edmund K Moon, Raghuvveer Ranganathan, Linda Snyder, Yangbing Zhao, Steven M Albelda.

B10 Individual CAR-T cells, when activated via their CAR or TCR, kill tumor cells with similar kinetics and can kill multiple sequential tumor targets. Alex J Davenport, Misty R Jenkins, Ryan S Cross, S Yong Carmen, H Miles Prince, David S Ritchie, Joseph A Trapani, Michael H Kershaw, Phillip K Darcy, Paul J Neeson.



B11 Ad-RTS-hIL-12 + veledimex regulation of IL-12 expression in advanced breast cancer (BC) and melanoma patients. [John J Nemunaitis](#), Gerald P Linette, Haythem Ali, Francois Lebel, John A Barrett, Thomas Reed, Suma Krishnan, Jonathan Lewis.

B12 Inhibition of the transcription factor Ikaros augments the tumoricidal capacity of CD8+ T cells expressing chimeric antigen receptor. [Shaun O'Brien](#), Rajan M Thomas, Steven M Albelda, Andrew D Wells, Liang-Chuan S Wang.

B13 Prostate cancer immunotherapy development using tumor-specific CAR design. [Victor Prima](#), Sergei Kusmartsev, Johannes Vieweg.

B14 CD4+CD25+ regulatory T lymphocytes: prognostic indicator of Chinese breast cancer patients receiving dendritic cells-cytokine induced killer cells infusion. [Qing-Kun Song](#), Jun Ren, Xiao-Li Wang, Xin-Na Zhou, Hua-Bing Yang, Yu-Chen Li, Jiang-Ping Wu.

B15 Transgenic antigen-specific, allogeneic HLA-A*0201-restricted cytotoxic T cells recognize tumor-associated target antigen STEAP1 with high specificity. David Schirmer, Dirk H Busch, Wolfgang Uckert, Angela Krackhardt, Richard Klar, Stefan Burdach, [Günther HS Richter](#).

B16 Development of a high-throughput imaging screen for the functional assessment of cell-linking moieties using effector and target cells in a cell kill assay. [Jeffrey Rosenbloom](#), Jason Isaacson, Srinivas Rengarajan, Paul Szymanski, Jennifer Buenviaje, Kristi Elliott, Francois Lebel, John A Barrett, Richard Einstein.

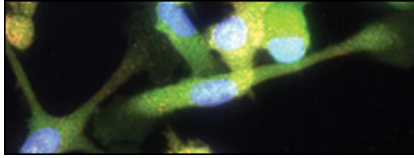
B17 Banked Epstein-Barr virus specific T-cells for treatment of EBV+ lymphoma. [Rayne H. Rouce](#), Serena K. Perna, Gayatri Vyas, Sandhya Sharma, Natalia Lapteva, Ann Leen, Cliona M. Rooney, Helen E. Heslop.

B18 Adoptive T-cell transfer combined with murine cytokine-armed adenoviruses for the treatment of melanoma. [Mikko Siurala](#), Riikka Havunen, Simona Bramante, Dipongkor Saha, Siri Tähtinen, Markus Vähä-Koskela, Akseli Hemminki.

B21 Combination of adenovirus and adoptive T-cell therapy breaks tumor tolerance by recruiting immune cells to and promoting their activity in the tumor. [Siri Tähtinen](#), Susanna Grönberg-Vähä-Koskela, Dave Lumen, Mikko Siurala, Anu J. Airaksinen, Markus Vähä-Koskela, Akseli Hemminki.

B22 A Chimeric antigen receptor (CARs) based upon a killer immunoglobulin-like receptor (KIR) triggers robust cytotoxic activity in solid tumors. [Enxiu Wang](#), Liang-Chuan Wang, Ching-Yi Tsai, Vijay Bhoj, Steven Albelda, Edmund Moon, Michael C Milone.

B23 An effective one-two punch: Whole body irradiation in combination with anti-CD40 conditioning facilitates adoptive T cell therapy of murine neuroendocrine pancreatic cancer. [Lindsay K Ward-Kavanagh](#), Timothy K Cooper, Todd D Schell.



B24 Construction and validation of a RheoSwitch® (RTS®) regulated CD19 chimeric antigen receptor. Dina Schneider, Darong Wu, Paul Szymanski, Nadia Sinitsyna, Jennifer Buenviaje, Srinivas Rengarajan, Gustaf Angelborg, Catherine Tran, John Beaber, Stephen Schauer, Charles Reed, Jonathan Carson, Kristi Elliott, John Barrett, Francois Lebel, Daniel Bednarik.

B25 Controlled production of a bispecific antibody by a genetically-modified stem cell triggers T cell activation and cytolysis in non-small cell lung carcinoma. Amy Wesa, Yumei Xiong, Tim Chan, Jeff Rosenbloom, Srinivas Rengarajan, Paul Szymanski, John A Barrett, Francois Lebel, Farzad Haerizadeh, Richard Einstein.

Biology of Vaccination

B26 Translation of cancer vaccine strategies from mice to clinical trials. Jay A. Berzofsky, Masaki Terabe, Lauren V. Wood.

B27 IL-12-dependent downregulation of PD-1 as a mechanism of antitumor function of CpG immune adjuvant. Jeffrey Jian, Courtney Malo, Haidong Dong.

B28 Development of a novel rapid and semi-quantitative method for detection of cellular immune responses. Keisuke Fujii, Yoshihiro Miyahara, Kazuko Shirakura, Naohiro Seo, Naozumi Harada, Hiroshi Shiku.

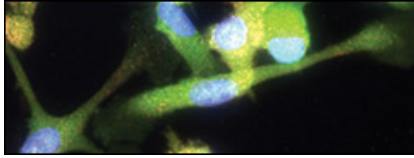
B29 Improving the efficacy of dendritic cell-based human papillomavirus vaccines in mice using a natural lignin-carbohydrate complex and/or synthetic lignin-like polyphenol polymers. Soichi Haraguchi, Tina Pastoor, William Guy Bradley, Akiko Tanaka.

B30 Signal peptide mediated immunization against mouse mammary tumor virus (MMTV)-associated tumors. Ori Braitbard, Tamar Gross, Maayan Roniger, Allan Bar-Sinai, Nira Hochman, Jacob Hochman.

B31 Identification of target T cell epitopes for a therapeutic HPV16 vaccine. Stephanie Hoppe, Jan Winter, Renata Blatnik, Julia Schessner, Lisa Dressler, Alina Steinbach, Hadeel Khallouf, Martin Wuehl, Alexandra Klevenz, Angelika B. Riemer.

B32 Evaluation of toll-like receptor ligands as adjuvants for an epitope-based therapeutic HPV vaccine. Hadeel Khallouf, Jasmin Mangei, Renata Blatnik, Stephanie Hoppe, Alina Steinbach, Angelika B Riemer.

B33 Endoplasmic reticulum stress enhances the antigen-specific T cell immune responses and therapeutic antitumor effects generated by therapeutic HPV vaccines. Sung Yong Lee, JaeJeong Shim, Kang Kyung Ho, Kye Young Lee, Chien-Fu Hung, T.-C. Wu.



B34 Signal transducing adaptor protein 2 (STAP2) has the crucial role in maintaining the CTL function of memory T cells. Daisuke Muraoka, Naohiro Seo, Tae Hayashi, Naozumi Harada, Hiroshi Shiku.

B36 mRNA and dendritic cell based immunotherapy. Kris Thielemans.

B37 VSV-GP: A vaccine vector and oncolytic virus. Alexander Muik, Janine Kimpel, Reinhard Tober, Carles Urbiola, Dorothee von Laer.

B38 Pilot study of combination PSMA peptide and TARP peptide vaccine with poly-IC:LC adjuvant in HLA-A2 positive patients with elevated PSA after initial definitive treatment of prostate cancer. Matthew Whitehurst, Xiuhua Zhao, Michael Schell, Esteban Celis, Andres Salazar, Mayer Fishman.

Immunometabolism and Immunoregulation

B39 Neutrophils G-CSF stimulated promotes specific protection against graft vs. host disease and keeps the graft vs. leukemia effect. Suelen Martins Perobelli, Ana Carolina Terra Mercadante, Triciana Gonçalves-Silva, Rômulo Galvani, Antônio Pereira-Neves, Marlene Benchimol, Alberto Nobrega, Adriana Bonomo.

B40 Inflammatory mediators are reduced two days after a radical cystectomy in bladder cancer patients consuming immune modulating drinks. Misty Bechtel, Thomas Yankee, Seth Atchison, Jeffrey Holzbeierlein, Eugene Lee, Moben Mirza, Prabhakar Chalise, Jill Hamilton-Reeves.

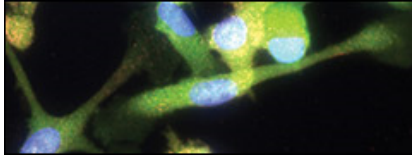
B41 Expression of programmed cell death ligand 1/2 and BCG immunotherapy in bladder cancer. Jun Hyeok Heo, Hye Young Kim, Ki Chung Park, Sung Joon Hong, Kang Su Cho, Kyung Seok Han.

B42 Cyclic dinucleotides (CDNs) activated DC and NK cells in anti-tumor immunotherapy. Juan Fu.

B43 The degree of adrenergic stress signaling regulates the severity of graft versus host disease following allogeneic hematopoietic cell transplantation. Nicholas D Leigh, Kathleen M Kokolus, Jason W-L Eng, Jingxin Qiu, George L Chen, Philip L McCarthy, Xuefang Cao, Elizabeth A Repasky.

B44 The role of CD4 T cells in murine model of NASH-promoted HCC. Chi Ma, Miaojun Han, Masaki Terabe, Jay Berzofsky, Dean Felsher, Tim Greten.

B45 Mitochondrial Ca²⁺ transport fine-tunes functional cross-talk between anti-tumor CD8⁺T lymphocytes and natural killer cells. Roman V Uzhachenko, J Shawn Goodwin, Lino Costa, Alexander Terekhov, Menaka C Thounaojam, William H Hofmeister, Anil Shanker.



B46 MAPK-activated protein kinase MK2 attenuates TH1 differentiation mediated by dendritic cells implications for autoimmunity and cancer immunotherapy. Klara Soukup, Angela Halfmann, Fiona Poyer, Thomas Felzmann, Alexander Michael Dohnal.

B47 Efferocytosis receptors modulate DC function in response to the tumor microenvironment. Antoine Antoine Tanne, Shaheen Ensanyat, Nina Bhardwaj.

B48 Homer3 regulates the establishment of neutrophil polarity. Julie Wu, Anne Pipathsouk, A Keizer-Gunnink, Wynand Alkema, Fabrizia Fusetti, Shanshan Liu, Steve Atschuler, Lani Wu, Arjan Kortholt, Orion Weiner.

B49 Metabolic stress within tumors lead to exhaustion of melanoma antigen-specific CD8+ T cells. Ying Zhang, Xiangyang Zhou, Raj Kurupati, Flavia Filisio, Abeer Hudaihed, Wynetta Giles-Davis, Hildegund CJ Ertl.

B50 The influence of chemotherapy on adenosine-producing B cells in patients with head and neck cancer. Andreas Ziebart, Ulrich Huber, Silke Schwarz, Simon Laban, Thomas K. Hoffmann, Patrick Schuler.

Other

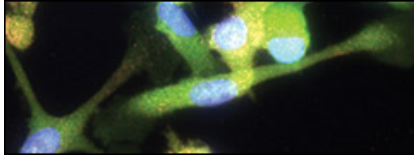
B51 Treatment of melanoma with a serotype 5/3 chimeric oncolytic adenovirus coding for GM-CSF: Results in vitro, in rodents and in humans. Simona Bramante, Johanna K. Kaufmann, Ville Veckman, Dirk M. Nettelbeck, Otto Hemminki, Ilkka Liikanen, Lotta Vassilev, Vincenzo Cerullo, Minna Oksanen, Raita Heiskanen, Timo Joensuu, Anna Kanerva, Sari Pesonen, Markus Vähä-Koskela, Anniina Koski, Akseli Hemminki.

B52 Humoral responses in immunotherapy treated cancer patients. Mark Branum, Paul Algate, Christy Boozer, Po-Ying Chan-Hui, Alison Fitch, Brad Greenfield, Claire Sutherland, Kristine Swiderek.

B53 Prevention of acute colitis and colitis-associated colorectal cancer by a small molecule targeting HMG-CoA reductase (HMGR) and histone deacetylases (HDACs). Yi-Ting Lin, Tzu-Tang Wei, Yu-Chin Lin, Jim-Min Fang, Ching-Chow Chen.

B54 Antagonizing CD47-SIRP alpha interaction with a bispecific antibody: A novel cancer immunotherapy approach. Krzysztof Masternak, Zoe Johnson, Vanessa Buatois, Francois Rousseau, Giovanni Magistrelli, Valery Moine, Ulla Ravn, Franck Gueneau, Lucile Broyer, Susana Salgado Pires, Maureen Deehan, Nicolas Fischer, Walter Ferlin, Marie Kosco-Vilbois.

B55 Natural killer cells expanded with PM21 particles are cytotoxic toward tumor cells. Jeremiah L. Oyer, Veethika Pandey, Rania Bassiouni, Robert Y. Igarashi, Ahmed Zakari, Melhem Solh, Annette R. Khaled, Deborah A. Altomare, Alicja J. Copik.



B56 An immuno-gene therapy clinical trial evaluating in situ vaccination of malignant pleural mesothelioma with intrapleural delivery of adenovirus-interferon-alpha-2b in combination with chemotherapy. D H Sterman, E Alley, J Friedberg, S Metzger, J Stevenson, E Moon, A R Haas, A Vachani, S I Katz, G Cheng, J Sun, D F Heitjan, L Litzky, K Cengel, C B Simone, M Culligan, M Culligan, S M Albelda.

B57 NK cell-mediated cytotoxicity detection can be miniaturized by direct imaging in assay wells using a Terasaki plate format using only 100,000 effector cells (PBMC). Srividya Sundararaman, Kinga Karacsony, Diana Roen, Jaya Ghosh, Paul V. Lehmann.

B58 Early safety assessment of single and combination therapy using TDAR. Amy L Volk, Mindi Walker, Kerry Brosnan, Dorie Capaldi, Patricia Rafferty, Daniel Weinstock, Eva Emmell.

B59 The combined effects of piperlongumine, vitamin C, and vitamin D on *Caenorhabditis elegans* and *Volvox carteri* models. Ashley M Winters.

B60 Humanized mouse models for preclinical testing of antitumor immune therapy. Annika Wulf-Goldenberg, Maria Stecklum, Klaus Eckert, Iduna Fichtner, Jens Hoffmann.

B61 Exploratory analyses of the randomized phase 2 IMPACT study: Patients with response to prior induction chemotherapy have improved outcome when treated with the TLR-9 agonist MGN1703. Werner Scheithauer, Jorge Riera-Knorrenschild, Hans-Georg Kopp, Frank Mayer, Hendrik Kroening, Dieter Nitsche, Jan Kuhlmann, Reinhard Ziebermayr, Johannes Andel, Dirk Arnold, Alfredo Zurlo, Burghardt Wittig, Hans-Joachim Schmoll.

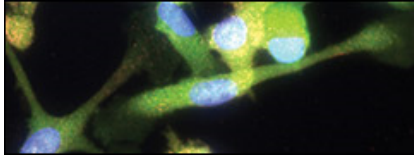
Tumor Microenvironment

B62 Modulating innate-adaptive immune cell interactions to achieve tumor rejection. Ana S Almeida, Tim Kees, Mikala Egeblad.

B63 The macrophage migration inhibitory factor promotes breast cancer metastasis through interaction with the host immune response. Kristen Balogh, Janet Cross.

B64 CSF1R-dependent tumor-associated macrophages arise from bone marrow-derived monocytes and promote gastrointestinal stromal tumor development. Michael J Beckman, Michael Cavnar, Adrian Seifert, Juan Santamaria-Barria, Jennifer Zhang, Adam Levy, Ferdinand Rossi, Shan Zeng, Ronald P DeMatteo.

B65 Dissecting the tumor myeloid compartment reveals rare activating antigen presenting cells, critical for T cell immunity. Miranda Broz, Mikhail Binnewies, Bijan Boldajipour, Amanda Nelson, Joshua Pollock, David Erle, Andrea Barczak, Michael Rosenblum, Adil Daud, Diane Barber, Sebastian Amigorena, Laura J. van 't Veer, Anne Sperling, Denise Wolf, Matthew F. Krummel.



B66 Tumor-specific differences in virus-induced inflammation may determine therapeutic response to HSV virotherapy in sarcoma models. Chun-Yu Chen, Brian J Hutzen, Pin-Yi Wang, Jennifer L Leddon, Mark A Carrier, Nicholas Denton, Timothy Eubank, Timothy P Cripe.

B67 A big role in tumor immune microenvironment of a small noncoding RNA: microRNA-200. Limo Chen, Sangeeta Goswami, Xiaohui Yi, Lauren Byers, Lixia Diao, Jonathon Roybal, Christin Ungewiss, David Peng, Jing Wang, Ignacio Wistuba, Lieping Chen, Stephen Ullrich, John Heymach, Jonathan Kurie, Xiao-Feng Qin, Don Gibbons.

B68 BAMLET in combination with the TLR7 agonist R848 protects against melanoma in a murine model. Lydia Dyck, Níal Harte, Kenneth Hun Mok, Kingston H.G. Mills.

B69 Activation of the IL6/STAT3 pathway in childhood ependymoma is associated with a pro-inflammatory tumor microenvironment and a poor prognosis. Andrea Griesinger, Andrew M Donson, Diane Birks, Vladimir Amani, Rebecca Josephson, Kathleen Dorris, Philip Reigan, Michael Handler, Nicholas Foreman.

B70 Combination of AT1R blockade with CD40 activation provides enhanced therapeutic efficacy for mouse pancreatic adenocarcinoma. Shiwei Han, Jelena Grahovac, Trupti Vardam, Yves Boucher.

B71 Heparanase enzyme links obesity-associated inflammation and breast cancer. Esther Hermano, Rachel Goldberg, Ariel Rubistein, Tamar Peretz, Michael Elkin.

B72 Environmental temperature-induced chronic stress drives therapeutic resistance in murine tumor models through β 2-adrenergic receptor activation. Jason W-L Eng, Chelsey B Reed, Kathleen Kokolus, Mark Bucsek, Rose Pitoniak, Adam T Utley, WenWee Ma, Elizabeth A Repasky, Bonnie L Hylander.

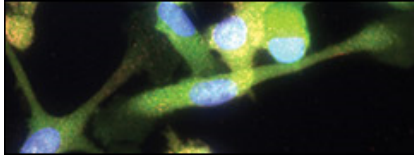
B73 Ketogenic diet enhances immunity to glioblastoma. John L Johnson, Eric Woolf, Danielle M Lussier, Ken S Brooks, Joseph N Blattman, Adrienne C Scheck.

B74 PTEN-deficiency in myeloid cells alters tumor immune surveillance in a murine model of inflammation driven colon cancer. Mario Kuttke, Julia Pisoni, Emine Sahin, Sophie Percig, Andrea Vogel, Daniel Kraemmer, Leslie Hanzl, Johannes Schmid, Gernot Schabbauer.

B75 CCL2 promotes epithelial-mesenchymal transition (EMT) in prostate cancer cells via downregulation of dual-specificity phosphatase 22. Wen-Jye Lin, Kouji Izumi, Showping Lin, Hui-Min Ho.

B76 Targeting Notch for myeloid reprogramming in murine pancreatic cancer. Florian Neff, David G Kirsch, Dieter Saur, Roland Schmid, Mathias F Heikenwalder, Jens T Siveke.

B77 Targeted nano-immune conjugates to melanoma: Pre-clinical testing of bevacizumab targeted nab-paclitaxel. Wendy K Nevala, Svetomir N Markovic.



- B78 Histamine dihydrochloride in the treatment of mesothelioma.** Kheng Newick, Shaun O'Brien, Veena Kapoor, Liang-chuan Wang, Edmund Moon, Andrew Haas, Evan Alley, Daniel Serman, Steven Albelda.
- B79 CXCR4 inhibition facilitates anti-PD-1 immunotherapy by reprogramming the tumor microenvironment during sorafenib treatment in hepatocellular carcinoma.** Yunching Chen, Thomas Reiberger, Rakesh Ramjiawan, Mei Rosa Ng, Tai Hato, Elizabeth C Unan, Tejaswini P Reddy, Hiroki Ochiai, Peigen Huang, Andrew X. Zhu, Rakesh K. Jain, Dan G. Duda.
- B80 Patients treated with oncolytic adenovirus Ad5/3-hTERT-E2F-Δ24-GMCSF induce immunological anti-tumor responses.** Otto Hemminki, Suvi Parviainen, Akseli Hemminki.
- B81 Combretastatin (CA)-4 and its novel analogue CA-432 impair T-cell migration through the Rho/ROCK signalling pathway.** Jade Kirstin Pollock, Navin K Verma, Mary J Meegan, Daniela Zisterer.
- B82 Exosomes derived from ascitic fluid of patients with ovarian carcinoma induce IL-4 gene expression in T lymphocytes.** Ergin Sahin, Douglas D Taylor, Cicek Gerçel Taylor.
- B83 Quantitative recovery of aspartyl (asparaginy) beta hydroxylase (HAAH) from an exosomal fraction of human sera from cancer patients.** Mark A Semenuk, Eleanor B Ghanbari, Michael S Lebowitz, Hossein A Ghanbari.
- B84 Live imaging reveals hypoxia to be a limiting factor in CTL-mediated tumor rejection.** Guy Shakh, Tali Feferman, Yoav Manaster, Anat Hutzler.
- B85 Tertiary lymphoid structures in chemotherapy-treated and untreated lung squamous cell carcinoma patients.** Karina Silina, Alex Soltermann, Holger Moch, Aija Line, Maries van den Broek.
- B86 The NF- κ B p65 and p50 homodimer cooperate with pSTAT1 to synergistically activate iNOS transcription.** Priscilla Simon, Sarah Sharman, Chunwan Lu, Dafeng Yang, Amy Paschall, Kebin Liu.
- B87 CCL2 and CXCL16 are novel biomarkers to predict cancer metastasis to bone.** Qiong Song, Lihui Wang, Qiuyan Chen, Xin Huang, Xin Yang, Chaonan Qian, Atsushi Mizokami, Evan T Keller, Jian Zhang, Yi Lu.
- B88 Combination therapy of reovirus and checkpoint inhibition.** Shane Zaidi, Kevin Shim, Karishma Rajani, Rosa Diaz, Elizabeth Ilett, Timothy Kottke, Jill Thompson, Peter Selby, Kevin Harrington, Hardev Pandha, Alan Melcher, Matt Coffey, Richard Vile.
- B89 Characterization of melanoma metastases and the immune microenvironment by infrared imaging.** Noémie Wald, Daniel E Speiser, Pu Yan, Erik Goormaghtigh.