

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](#), Raghuv eer 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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

- 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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

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 Serman, 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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

B59 The combined effects of piperlongumine, vitamin C, and vitamin D on *Caenorhabditis elegans* and *Volvox carter* 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 Ansel, 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 Currier, 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](#), Nial 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.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

- 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- Δ 24-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 Gercel Taylor.

Tumor Immunology and Immunotherapy: A New Chapter
Poster Session B, Wednesday, December 3, 2014, 12:30-2:45 p.m.

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 Shakhar](#), 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.