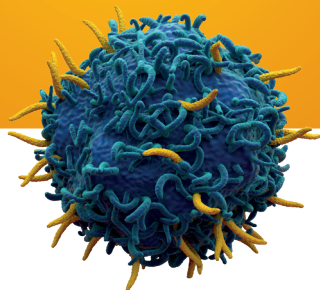
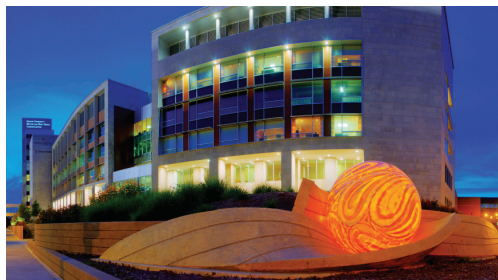


3rd Joint Symposium
based on the collaboration between IU-SCCC and NCI

CONVERSATIONS ABOUT IMMUNOONCOLOGY



 **November 13th, 2024,**
2:00 PM – 5:00 PM CET
 **National Cancer Institute,**
Klenova 1, Bratislava, Slovakia + online



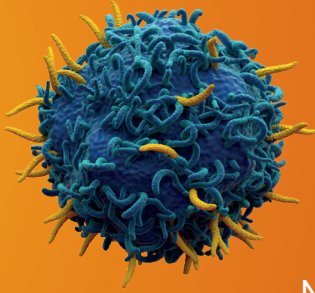
CONVERSATIONS ABOUT IMMUNOONCOLOGY



*Dear Colleagues,
As the Director of the Indiana University Simon Comprehensive Cancer Center, it is my honor to welcome you to the 3rd Annual NCI-Bratislava - IUSCCC Joint Symposium. We are proud of our long-standing partnership with the National Cancer Institute in Bratislava and have truly enjoyed our collaborations with our Slovakian colleagues. The focus of this year's symposium, immunotherapy, is an area of tremendous clinical advances over a very short time—advances that have fundamentally changed the lives of cancer patients. New understanding and developments in treatment approaches continue to race forward, as you will hear in this symposium from leading researchers from Indiana and Slovakia. These are truly exciting times in cancer research and cancer care, and I have no doubt that the 3rd Annual Joint Symposium will be outstanding!*

Prof. Kelvin P. Lee, M.D.

Director of IU Simon Comprehensive Cancer Center, Indianapolis



3rd Joint Symposium based on the collaboration between IU-SCCC and NCI

November 13th, 2024
National Cancer Institute, Klenova 1, Bratislava



Dear Attendees,

I am delighted to invite you to the 3rd Symposium, at which renowned Slovak and American experts from two leading institutions will share their experiences, latest knowledge, and innovations in the field of immuno-oncology—the National Cancer Institute (NCI), the leading oncology institution in Slovakia, and the Simon Comprehensive Cancer Center (IU-SCCC) in Indianapolis, which is among the leading cancer centers in the USA. We formalized our partnership based on respect and mutual cooperation with a Memorandum of Understanding in June 2022. I am glad that we managed to organize the 3rd Annual Symposium, which will be held under the auspices of NCI and IU-SCCC, on November 13, 2024.

Tomas Alscher, MBA, MPH

Director of National Cancer Institute, Bratislava



3rd Joint Symposium

CONVERSATIONS ABOUT IMMUNOONCOLOGY



Dear Attendees,

Welcome to the 3rd Annual NCI-Bratislava – IU Simon Comprehensive Cancer Center (IU-SCCC) Joint Symposium. This year's focus on immunotherapy reflects the transformative impact this field has had on cancer care, offering new hope and treatment options. We are honored to feature insights from Slovak and American experts, including IU-SCCC's Dr. Kelvin P. Lee and Dr. Huda S. Salman, renowned for their work in immunology and CAR T-cell therapy. The collaboration between our institutions highlights the global nature of cancer research, and we hope this symposium sparks new ideas and advances in cancer treatment. Thank you for joining us.

Prof. Michal Mego, M.D., D.Sc.

Head of the 2nd Department of Oncology,
Faculty of Medicine, Comenius University and National Cancer
Institute, Bratislava



Dear Colleagues,

On behalf of our Department of Oncohematology, I am pleased and honored to join, with my colleagues, this symposium on immuno-oncology as part of the well-established partnership between IU-SCCC and NCI in Bratislava. This topic is extremely exciting for onco-hematology, not only from a scientific point of view but also from a practical perspective, as many innovative therapies based on immunotherapy are already available for our patients. We would like to share our experiences and discuss with our honored guests the possibilities, limitations, and future of immunotherapy. Furthermore, we are approaching a milestone—2,000 HSC transplants performed at our department. We will strive to showcase the history and the present of our transplant program. I believe that the 3rd Annual NCI-Bratislava - IUSCCC Joint Symposium will fulfill your expectations.

Assoc. Prof. Lubos Drgona, M.D., Ph.D., MPH, FECMM

Head of the Oncohematology Clinic,
Medical Faculty Comenius University and
National Cancer Institute, Bratislava

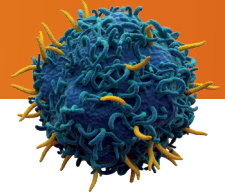


Dear Colleagues,

We are genuinely excited and honored to welcome Dr. Kelvin P. Lee, the director of IU-SCCC, who is nationally recognized for his work in immunology and multiple myeloma, to the 3rd Symposium based on the collaboration between IU-SCCC and NCI in Bratislava. Dr. Lee has tremendous experience in clinical work, research, and leadership. Together with him, we are incredibly honored to welcome his colleague, Dr. Huda S. Salman, the executive director of the Brown Center for Immunotherapy, who is an expert in hemato-oncology and has recently focused on CAR T-cell therapy and immunotherapy. Both distinguished guests from Indiana University will discuss immuno-oncology with our Slovak experts. We look forward to welcoming everybody interested in this critical field of medicine.

Maria Reckova, M.D., Ph.D.

Medical Guarantor, National Oncology Institute, Bratislava, Medical Guarantor of National Oncology Institute, Bratislava



Indiana University Simon Comprehensive Cancer Center in Indianapolis, USA

is a research center within Indiana University School of Medicine and serves as a central hub of cancer research across Indiana University. The center has nearly 250 researchers who conduct all phases of cancer research, from laboratory studies to clinical trials to population-based studies that address environmental and behavioral factors that contribute to cancer. The center's physician-scientists care for Indiana patients through a partnership with IU Health, the state's largest and most comprehensive health system. In addition to directing treatment at the Simon Comprehensive Cancer Center in downtown Indianapolis, IU Simon Comprehensive Cancer Center members oversee the care of Indiana children with cancer at Riley Hospital for Children, and influence care at the health system's 16 hospitals across the state.



National Cancer Institute in Bratislava, Slovakia

is a specialized hospital focusing on providing complex oncological healthcare, specifically in terms of inpatient and outpatients healthcare, common examination and treatment units, and intensive healthcare in corresponding medical specialties. National Cancer Institute acts as a coordinating center and methodically manage, coordinate, monitor, and evaluate the professional level of oncology care throughout the Slovak Republic. It offers consultations in oncology for oncological facilities, provides preventive care, and evaluates the expert level of delivering cancer care throughout the Slovak Republic. In research and development, it participates in clinical trials and education of cancer researchers. Importantly, the National Cancer Institute cooperates with other health, academic and scientific institutions at the national and international levels.



National Oncology Institute, Slovakia

serves as a clinical research, academic and educational platform. The main mission of the institute is comprehensively and independently participate in the implementation of the goals of the National Oncology Program in cooperation with other stakeholders, including the Ministry of Health of the Slovak Republic, in five specific areas: primary prevention, screening, diagnosis, and treatment, research, and development, use of health data and information. The priority of the National Oncology Institute is coordinating and evaluating cancer screening programs in Slovakia. In the domain of research and education, it has established Cancer Trials Register in Slovakia, and regularly announces a call for grant applications for short-term international fellowships for physicians working in the field of oncology.

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November 13th, 2024, National Cancer Institute, Klenova 1, Bratislava

PROGRAM

2:00 PM – 2:10 PM

Opening – Leading representatives
from the NCI and IU-SCCC (T. Alscher, K. P. Lee)

2:10 PM – 2:40 PM

Immune Modulation in Multiple Myeloma
(K. P. Lee, IU-SCCC)

2:40 PM – 3:00 PM

CAR-T cell Therapy in Lymphoma with Bratislava NCI
Experiences (A. Vranovsky, NCI)

3:00 PM – 3:30 PM

Targeting T cell Malignancies and the Tumor
Microenvironment with CAR T-cell therapy
(H. S. Salman, IU-SCCC)

3:30 PM – 3:50 PM

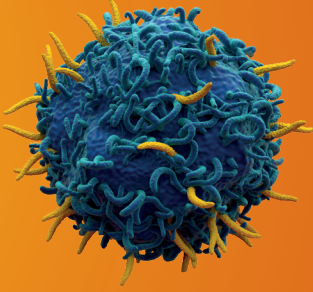
2,000 Transplantations at the NCI (L. Drgona, NCI)

3:50 PM – 4:50 PM

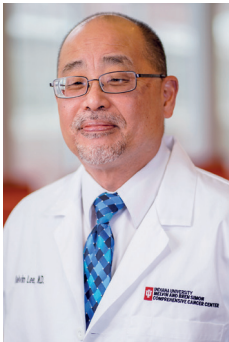
Discussion – Expert Panel (K. P. Lee, A. Vranovsky,
H. S. Salman, L. Drgona)

4:50 PM – 5:00 PM

Closing remarks (M. Mego, M. Reckova)



Introducing Panel of experts



Prof. Kelvin P. Lee, M.D.

Dr. Kelvin Lee was appointed the third Director of Indiana University Melvin and Bren Simon Comprehensive Cancer Center in February 2021. Dr. Lee is the HH Gregg Professor of Oncology and Associate Dean for Cancer Research in the IUSM and the System Oncology Medical Director in IUH. Lee received his medical degree from the University of Michigan, completed his internal medicine internship/residency at the University of Colorado, and trained in medical oncology at the University of Michigan with Dr. Craig Thompson. He then joined Dr. Carl June's Immune Cell Biology Program at the Naval Medical Research Institute in Bethesda, MD in 1992 and was an ICBP Branch Head (Stem Cell and Vaccine Development) and Assistant Professor of Medicine in the Uniformed Services University of the Health Sciences. In 1999, Lee joined the Department of Microbiology and Immunology as well as the Department of Medicine at the University of Miami (UM) Medical School. He was co-leader of the Clinical Oncology Research Program (2002-2005) and the Tumor Immunology Program (2005-2006) in the UM Sylvester Cancer Center. In 2006, Lee became the Jacob Family Chair of the Department of Tumor Immunology at the Roswell Park Comprehensive Cancer Center (RPCCC, Buffalo, NY). He was also co-leader of the CCSG Tumor Immunology and Immunotherapy Program from 2006 to 2019 and, in 2019, became the Senior VP for Basic Sciences. Dr. Lee is nationally recognized for his work in immunology and multiple myeloma and has been continually peer-review funded since 1999. Most recently, his research has focused on the biology of normal long-lived plasma cells as well as multiple myeloma, the transformed counterparts of these plasma cells, and is translating this research into investigator-initiated clinical trials.

Introducing Panel of experts



Andrej Vranovsky, M.D., Ph.D.

Dr. Andrej Vranovsky began his distinguished medical career after earning his Medical Doctor degree from the Faculty of Medicine at Comenius University in Bratislava in 1991. He initially worked as a physician in the Department of Internal Medicine at the National Cancer Institute in Bratislava from 1991 to 1992. In 1992, he fulfilled his military service as a physician in Martin, Slovakia. He returned to the National Cancer Institute in the Department of Internal Medicine, where he served from 1993 to 1994. During 1994 to 1995, Dr. Vranovský gained experience as a physician at the University Hospital in Bratislava as part of his pre-graduation practical experience.

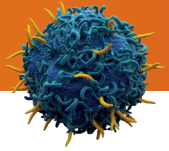
In 1995, he passed his board examination in Internal Medicine and continued to work in the Department of Internal Medicine at the National Cancer Institute until 2012. In 1998, he further advanced his qualifications by completing a board examination in Clinical Oncology at the Postgraduate Medical School in Bratislava. In 2013, Dr. Vranovský became the Head of the Department of Oncohematology at the National Cancer Institute, a position he holds to this day. In 2016, he completed a board examination in Health Care Management at Comenius University.

Dr. Vranovský's extensive career highlights his dedication and achievements in the fields of oncohematology and oncology, establishing him as a preeminent leader in his field in Slovakia.



Prof. Huda S. Salman, M.D., Ph.D.

Dr. Huda Salman was appointed the Director of the Brown Center for Immunotherapy at the Indiana University Melvin and Bren Simon Comprehensive Cancer Center in November of 2021. Dr. Salman is the Don Brown Professor of Immunotherapy. She received her medical degree from the University of Jordan, completed her internal medicine internship/residency at NYU and trained in medical oncology at the Albert Einstein College of Medicine with Drs Joseph Sparano and Scott Wadler. She then joined Memorial Sloan Kettering for a special post doctorate fellowship in Allogeneic Stem Cell transplant and Graft versus Tumor Alloreactivity. After that She progressed through the academic career from an assistant professor at Case Western to a professor at Indiana University. In addition to her clinical practice in cell therapy and stem cell transplant, Dr Salman leads a lab that is focused on cell engineering and studying the immune tumor microenvironment. She also oversees the GMP manufacturing facility.



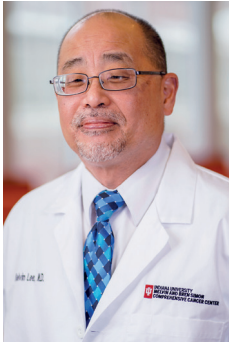
Assoc. Prof. Lubos Drgona, M.D., Ph.D., MHA, FECMM

Dr. Lubos Drgona received his MD at the Faculty of Medicine, Comenius University, Bratislava in 1991. He started his career at the Department of Chemotherapy at the National Cancer Institute, Bratislava, and at the Postgraduate Medical School, Bratislava. In 1994, he passed board examinations in Internal Medicine and in 1997 in Clinical Oncology. In 1996, he received his PhD degree from Comenius University, Bratislava. He was appointed to the position of associate professor at Comenius University in 2014. His current position is Head of the Department of Oncohematology at the Medical School of Comenius University and the National Cancer Institute, Bratislava. He is active in clinical research in the field of hemato-oncology (lymphoma) and infections in immunocompromised patients. He is a member of various international and national societies, including the EHA, ESCMID, ECIL, ECMM, Slovak Oncology Society, Slovak Hematological Society, Slovak Society of Infectious Diseases, Slovak Lymphoma Group (Chairman), and CELL (Czech Leukemia Study Group for Life), and serves on various advisory boards. Dr. Drgona is the author and co-author of more than 100 articles and chapters in national scientific journals and books and more than 100 international publications (H-index 26). He is active as a speaker at national and international meetings/conferences and has been involved in many clinical trials as an investigator. He is a member of the editorial board for the journals „Hematologie a Transfuziologie Dnes,“ „Onkologia,“ and „Klinicka Onkologie“ (Czech and Slovak).

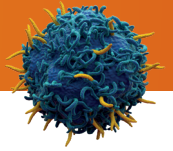
Immune Modulation in Multiple Myeloma

Prof. Kelvin P. Lee, M.D.

Indiana University Simon Comprehensive Cancer Center, Indianapolis, IN USA



Multiple myeloma (MM) is an incurable hematological malignancy of transformed plasma cells that is characterized in almost all patients by progressively acquired chemotherapy resistance resulting in unrelenting relapses and ultimately in treatment-refractory disease. Recent clinical trials of new immunotherapies, chimeric antigen-receptor T cells (CAR-T) and T cell-engaging bispecific monoclonal antibodies, have shown remarkable response rates even in highly treatment refractory MM. However, unlike the prolonged responses seen in CAR-T therapy against B cell malignancies, relapse in MM after CAR-T and bispecifics occur on average (median) with ~12 months, demonstrating MM resistance to immunotherapy. Thus, defining the mechanisms of this acquired resistance may be the key to durable responses/cures with immunotherapy in MM. We have found that MM cells express the prototypical T cell costimulatory receptor CD28, and MM CD28 expression predicts poor clinical outcome to CAR-T cell therapy. Additional studies demonstrate that MM CD28 activation both transduces multiple prosurvival signals to the MM cell as well as immunomodulating the microenvironment to suppress T cell activation. In a phase II clinical trial, blocking MM CD28 activation overcame treatment resistance and led to significantly better clinical responses, demonstrating the potential of targeting MM CD28 to reverse acquired resistance.



CAR-T cell Therapy in Lymphoma with Bratislava NCI Experiences

Andrej Vranovsky, M.D., Ph.D.

National Cancer Institute Bratislava, Slovakia



The National Cancer Institute in Bratislava is a tertiary institution focused on diagnosing and treating patients with both solid tumors and hematologic malignancies. The Bone Marrow Transplant unit at our institution was established in 1992, and more than 2,000 autologous and allogeneic stem cell transplantations have been performed since then. Our CAR T-cell therapy clinical program started in 2023, and it is the only facility offering CAR T-cell therapy in Slovakia. This type of treatment is currently available in our country for patients with lymphoproliferative disorders such as large B-cell lymphoma, mantle cell lymphoma, and acute lymphocytic leukemia. We plan to expand to all CAR T-cell therapy-approved diagnoses, including follicular lymphoma, B-CLL, and multiple myeloma, and to participate in clinical trials in this rapidly evolving field.

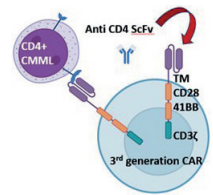
Targeting Hematological Malignancies and the Tumor Microenvironment with CAR T-cell Therapies

Prof. Huda Salman, M.D., Ph.D.

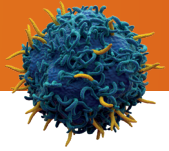
Indiana University Simon Comprehensive Cancer Center, Indianapolis, IN USA



CD4 is membrane bound protein. It is expressed on Helper T cells and Monocytes. Consequently, it is also expressed on malignancies of these cellular origin. This includes over 60% of all T cells leukemias and lymphomas, Myeloid leukemias with monocytic differentiation, both acute, AML and chronic CMML. CD4 is also expressed on T regs and myeloid derived suppressor cells, both are protumor and hostile suppressive cells, that helps tumor propagation, dampen the immune system against tumors and augment resistance to treatment.



CD4CAR is a third generation CART cell that is redirected to target CD4. It is expected to target tumor cells as well as the suppressive tumor ME. It is now in clinical trials.



2,000 transplantations at NCI

Assoc. Prof. Lubos Drgona, M.D., Ph.D., MPH, FECMM
National Cancer Institute Bratislava, Slovakia



The first autologous hematopoietic stem cell transplantation in Slovakia was performed at the National Cancer Institute (NCI) on a young patient with relapsed aggressive lymphoma in December 1992. Initially, the program focused predominantly on autologous transplantations, and the center remains the leader in the number of autologous SCTs performed annually in the country, with 70-90 transplants each year. The majority of patients who underwent autologous HSCT were those with lymphomas and multiple myeloma. In the late 1990s, there was a trend of transplanting patients with breast carcinoma as part of global practices, which was later discontinued. Subsequently, we began performing matched-related allogeneic HSCTs and, three years ago, started haploidentical transplants. We collaborate with colleagues in the GU Unit on the high-dose and autologous HSCT program and serve as a transplant unit for multiple sclerosis patients indicated for this therapy. In 2023, we achieved accreditation/certification for CAR T-cell therapy, becoming the first center in Slovakia to offer this treatment to our patients. Our future plans include further development of CAR T-cell therapy, establishing unrelated allogeneic HSCTs, and improving standard transplant procedures.

All these advancements were made possible by the collegiality, passion, and efforts of our nurses, doctors, and other staff, as well as the support from our patients and their families, who share in our vision.

CONVERSATIONS ABOUT IMMUNOONCOLOGY

Authors:

Prof. Kelvin P. Lee, M.D.,
Andrej Vranovsky, M.D., Ph.D.,
Prof. Huda S. Salman, M.D., Ph.D.,
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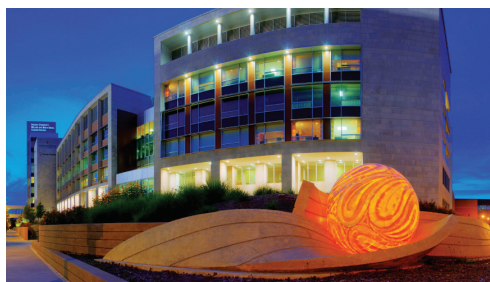
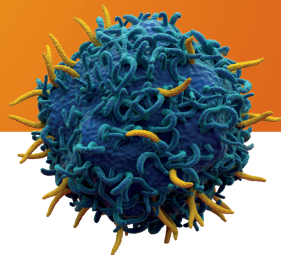
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