

April 18th to 20th 2024



Workshop & Symposium

"Tumor Immunology meets Oncology XVIII"

Medical School "Theodor Fontane" Brandenburg Institute of Translational Immunology Martin Luther University Halle-Wittenberg Medical Faculty Prof. Dr. Barbara Seliger









WELCOME TO BrandenburgAltstädtisches Rathaus 10

FOREWORD GENERAL INFORMATION

Dear colleagues and friends,

it is a great pleasure for us to welcome you for the first time in Brandenburg an der Havel for our meeting "Tumor immunology meets oncology (TIMO XVIII)". We expect 2024 again an exceptional participation due to the growing interest in immunotherapies.

Topics of the meeting are next to different immune escape mechanisms, immune tolerance and the role of immune cell composition of the tumor microenvironment. Novel therapeutic strategies including combination treatments as well as resistance mechanisms. This knowledge will allow to revert the immune escape and improve the efficacy of these immunotherapies.

The aim of this meeting is to link basic, translational with clinical research. Despite the success of the implementation of immunotherapy for the treatment of many tumor entities, only a limited number of patients does respond. Thus, an increase in therapy response and reprogramming of immune inhibitory properties of the tumor and its immune suppressive environment is urgently required.

TIMO brings together an extraordinary group of international and national scientists and clinicians, but also young researchers in this field to discuss novel aspects of anti-tumor immune responses and treat different cancers with distinct immunotherapeutic approaches thereby promoting the participants to present their own work.

We would like to thank you for coming to Brandenburg and we hope that you leave the conference with novel insights for your own basic and translational research but also with impressions of the beauty and hospitality of the city.

We express our gratitude to all who were involved in the organization as well as to the sponsors of this event. Thank you for the meeting attendees to join TIMO!

General information

The TIMO registration desk is located in the lobby of the Old Town Hall. Faculties and/ or companies are required to upload their presentation not later than half an hour before the session starts.

Poster session will take place at the 18th of April from 05.30 to 07.00 p.m. It offers an opportunity for continued network and provides education in a relaxed atmosphere, where attendees can interact with poster presenters one by one. The three best talks in the workshop and posters will be selected by a jury and awarded prizes.



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Workshop program TIMO XVIII

<u>Date:</u> 18th of April 2024 <u>Venue:</u> Old Town Hall

12.00 - 12.15 p.m.

Introduction

Barbara Seliger

Chair: Michael Bachmann (Dresden, GER)

12.15 - 12.30 p.m.

Effect of the MEK inhibitor cobimetinib on BRAF V600E mutated thyroid carcinoma

Mario Udinotti (Halle, GER)

12.30 - 12.45 p.m.

Potential immune regulatory role of the local tumor vitamin D3 metabolism

Michael Althammer (Regensburg, GER)

12.45 - 01.00 p.m.

PSGL-1 and other markers of tumor-associated macrophages and microglial cells exhibit high intratumoral heterogeneity in human glioblastoma tissue

Eric Freund (Vienna, AUT)

01.00 - 01.15 p.m.

Altered IFN- γ signaling remodels the bone marrow tumor microenvironment in MPN and is associated with disease progression

Marcus Bauer (Halle, GER)

01.15 - 01.30 p.m.

Altered ACE2 and interferon landscape in COVID-19 microenvironment correlates with anti-PD-1 response in solid tumors

Karthikeyan Subbarayan (Halle, GER)

01.30 - 01.45 p.m.

Lipid gene-based clustering of clear cell renal cell carcinoma tumors predicts outcome and suggests T cell regulation by tumor fatty acid metabolism

Peter Siska (Regensburg, GER)

01.45 - 02.00 p.m.

The role of anti-inflammatories including the IMiDs and low dose naltrexone (LDN) in optimizing the anti-tumor immune response

Angus Dalgleish (London, GBR)

02.00 - 02.15 p.m.

The herpes virus entry mediator (HVEM) axis as a potential target for radioimmunotherapy of breast cancer

Ann-Sophie Flohr (Erlangen, GER)

02.15 - 02.45 p.m. Coffee break

Chair: Chiara Massa (Brandenburg, GER)

02.45 - 03.00 p.m.

Patient-derived organoid/NK cell co-cultures: Deciphering mechanisms to increase anti-colon cancer NK cell reactivity Andreas von Kries (Heidelberg, GER)

03.00 - 03.15 p.m.

CD8+ NKs as a potential biomarker of complete response and survival with lenalidomide plus R-GDP in the R2-GDP-GOTEL trial in recurrent/refractory diffuse large B cell lymphoma Silvia Silva Romeiro (Seville, ESP)

03.15 - 03.30 p.m.

Unravelling differential response rates to immune checkpoint inhibitor therapy in upper gastrointestinal cancer

Aoife Kilgallon (Dublin, IRE)

03.30 - 03.45 p.m.

Establishing a PDX mouse model for HBV-induced liver cancer and assessing the effectivity of HBV-specific TCR-based T cell therapy Janine Kah (Brandenburg, GER)

03.45 - 04.00 p.m.

Immunotherapeutic targeting of glioblastoma using Fn14-redirected RevCAR effector cells

Haidy A. Saleh Hassan (Dresden, GER)

04.00 - 04.15 p.m.

Reversal of tumor endothelial cell anergy by T cell and endothelial cell-engaging bispecific antibodies

Frank Momburg (Heidelberg, GER)

04.15 - 04.30 p.m.

Gas plasma technology in experimental immuno-oncology: mechanisms and prospects

Lea Miebach (Greifswald, GER)

04.30 - 04.45 p.m.

Glycoprotein 2 IgA as a predictor of disease severity and cholan-giocarcinoma in autoimmune liver diseases

Dirk Roggenbuck (Dahlewitz, GER)

04.45 - 05.00 p.m.

Next-generation flow cytometry: BD FACSDiscover $^{\text{TM}}$ S8 merging full spectral analysis with real-time imaging for cell sorting

Ali Gawanbacht-Anderer (Heidelberg, GER)

05.00 - 05.15 p.m.

'Mapping the Universe of Biology' with NanoString

Troels Meyer (München, GER)

05.15 - 05.30 p.m.

Tissue to single-cell data: Analyse tumor-immune microenvironment using Singleron's SCOPE technology

Aparna Sekar (Köln, GER)

05.30 - 07.00 p.m. - Poster session

Poster session TIMO XVIII

Date: 18th of April 2024, 05.30 – 07.00 p.m.

Venue: Old Town Hall

Chair: Jörg Wischhusen (Würzburg, GER)

1. Investigating immunogenicity driven by PRELP/toll-like receptor signaling in breast cancer cells

Lisa Neuder (Halle, GER)

- 2. HOCl sensitivity associates with a reduced p53 transcriptional network and calreticulin expression in 25 human cancer cell lines Sander Bekeschus (Greifswald, GER)
- 3. Association of eukaryotic initiation factor (eIF) expression with driver mutations in acute myeloid leukaemia (AML) and the role of CEBP/ α

Norbert Naß (Brandenburg, GER)

4. Lactic acid-mediated ROS induction favors lipid peroxidation in human T cells

Florian Voll (Regensburg, GER)

5. Identification of CREB-regulating microRNAs in HER2/neu-positive breast cancer

Dimitrios Kokoretsis (Halle, GER)

- 6. From suppression to T cell activation: Targeting immune checkpoints with the RevCAR system Eugenia Crespo (Dresden, GER)
- 7. Digital twin-assisted process design for NK cell therapies Werner Dammermann (Brandenburg, GER)
- 8. Humanized mouse models for the preclinical evaluation of novel immune cell therapies, checkpoint inhibitors and immune cell engagers

Maria Stecklum (Berlin, GER)

9. Correlation of PD-L1 dysregulation with SARS-CoV-2 spike priming protease, TMPRSS2 in lung cancer cells Helena Bieber (Halle, GER)

10. Improving the efficacy of whole tumor cell vaccines: Adjuvants enhance anti-tumor immune responses in a preclinical multimodal radioimmunotherapy approach

Teresa Tamara Irianto (Erlangen, GER)

11. The breast cancer tumor microenvironment in women living with HIV shows an altered T cell infiltration

Marcus Bauer (Halle, GER)

12. A novel L1CAM-CD3 directed bispecific antibody elicits T cell activity against pancreatic ductal adenocarcinoma cells

Charlotte Kayser (Kiel, GER)

13. Crosstalk between melanoma cells and tumor associated macrophages promote tumor metastasis via CXCR3-hnRNP C-MIF axis

Yuan Wang (Halle, GER)

14. Presence of microbially produced deoxycholic acid promotes experimental colonic tumorigenesis in gnotobiotic mice

Annika Oßwald (Potsdam, GER)

15. Germline BRCA mutation status influences the immune profile in HER2- negative breast cancer assessed by multispectral fluorescence imaging

Marius Wunderle (Halle, GER)

16. Targeting Ephrin type-B receptor 3 induces interferon signaling and MHC class I antigen processing machinery via NLRC5 in malignant cells

Pauline Hagedorn (Halle, GER)

17. Altered expression of CTLA-4 specific miRNAs indicates changes in T cell subpopulations in the periphery and tumor microenvironment in melanoma

Christoforos Vaxevanis (Halle, GER)

18. High-plex co-detection of RNA and protein to explore tumorimmune interactions utilizing RNAscope with imaging mass cytometry

Shaghayegh Derakhshani (München, GER)

SYMPOSIUM PROGRAM

Symposium program TIMO XVIII

<u>Date:</u> 19th of April 2024 <u>Venue:</u> Old Town Hall

08.30 a.m. Welcome and introduction

Steffen Scheller (Mayor of the City Brandenburg)
Markus Deckert (Dean of the MHB) & Barbara Seliger

Session: Immune escape mechanisms and tumor microenvironment

Chair: Lorenzo Galluzzi/ Joanne Lysaght

8.45 - 09.15 a.m.

Barbara Seliger (Brandenburg/Halle, GER)

Extracellular matrix components as regulators of immune escape and surveillance

09.15 - 09.45 a.m.

Vincenzo Bronte (Padova, ITA)

Immune evasion in pancreatic cancer

09.45 - 10.15 a.m.

Samir Khleif (Washington, USA)

Multi-dimensional CD8 T cell differentiation: Reprogramming of CD8 to overcome resistance

10.15 - 10.45 a.m.

Markus Maeurer (Lissabon, PRT)

Synthetic biology - the way out of an unfriendly TME: T cells directed against epithelial cancer

10.45 - 11.15 a.m. Coffee break

Session: Immune evasion, apoptosis and DNA damage

Chair: Stefan Glück/ Francesco Marincola

11.15 - 11.45 a.m.

Luis Zapata-Ortiz (London, GBR)

Immune evasion determines driver landscape and influences response to immunotherapy

11.45 – 12.15 p.m.

Dimitrios Mougiakakos (Magdeburg, GER)

DNA damage impacts the anti-leukemic activity of T cells

SYMPOSIUM PROGRAM SYMPOSIUM PROGRAM

12.15 - 12.45 p.m.

Lorenzo Galluzzi (New York, USA)

Immunogenic cell death driven by radiotherapy: mechanisms and implications

12.45 – 01.35 p.m. Lunch break and poster viewing

Key note lecture

01.35 - 01.45 p.m.

Introduction: Barbara Seliger

01.45 - 02.15 p.m.

Sumit Subudhi (Houston, USA)

IO strategies to overcome the immunosuppressive prostate tumor microenvironment

Session: NK cells

Chair: Mitchell Levesque/ Michele Maio

02.15 - 02.45 p.m.

Ofer Mandelboim (Jerusalem, ISR)

Recognition of fungi by NK cells

02.45 - 03.15 p.m.

Andreas Lundqvist (Stockholm, SWE)

Regulation of natural killer cell activity in solid tumors

03.15 - 03.45 p.m.

Ebba Sohlberg (Stockholm, SWE)

Unleashing the untapped power of adaptive NK cell therapy in cancer treatment

03.45 - 04.15 p.m. Coffee break

Session: Bioinformatics and IO

Chair: Bernard Fox/ Markus Maeurer

04.15 – 04.30 p.m.

Stefan Glück (Miami, USA)

New updated hallmarks of cancer. How does it change our view on immuno-oncology?

04.30 - 05.00 p.m.

Zlatko Trajanoski (Innsbruck, AUT)

Computing cancer immunity

05.00 - 05.30 p.m.

Marta Ligero Hernández (Dresden, GER)

Artificial intelligence for immunotherapy biomarkers

05.30 - 06.00 p.m.

Wim Vos (Liège, BEL)

Inter-tumor heterogeneities in IO therapy: A radiomic point of view

06.00 - 06.30 p.m.

Mitchell Levesque (Zurich, CH)

Integrating high-dimensional data in a clinical setting for precision oncology and discovery



Symposium program TIMO XVIII

<u>Date:</u> 20th of April 2024 Venue: Old Town Hall

Session: Immunotherapeutic approaches and biomarkers

Chair: Zlatko Trajanoski/ Maria Goulielmaki

08.00 - 08.30 a.m.

Joanne Lysaght (Dublin, IRE)

The complexity behind poor response rates to immune checkpoint inhibitors

08.30 - 09.00 a.m.

Thomas Gajewski (Chicago, USA)

Learning from failure to expand immunotherapy efficacy

09.00 - 09.30 a.m.

Francesco Marincola (Massachusetts, USA)

Shifting the paradigm:

Multi-cellular network (MCN) medicines for cancer therapy

09.30 - 10.00 a.m.

Michele Maio (Siena, ITA)

Immune modulatory potential of epigenetic drugs in melanoma

10.00 - 10.30 a.m. Coffee break

Session: Innovative immunotherapeutic strategies Chair: Ofer Mandelboim/ Dimitrios Mougiakakos

10.30 - 11.00 a.m.

Maria Goulielmaki (Athens, GRC)

TCR repertoire dynamics as a potential predictive biomarker in non-small cell lung cancer after anti-PD-1 treatment

11.00 - 11.30 a.m.

Ahmed Al-Samadi (Helsinki, FIN)

Role of IDO1 inhibitor in enhancing CD4 T cell migration towards cancer cells in head and neck cancer

11.30 - 12.00 a.m.

Christian Münz (Zurich, CH)

Immune control of human oncogenic gamma-herpesviruses

12.00 - 12.30 p.m.

Bernard Fox (Portland, USA)

Efforts to discover and exploit cancer's dark matter

12.30 - 12.45 p.m.

Jörg Wischhusen (Würzburg, GER)

Wrap up and closing remarks



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REGISTRATION FEE:

Payable until 31st of March 2024

industry without sponsoring: 500 €

participants: 300 €

MHB members and PhD students: 200 €

Bachelor/ Master/ MD students from the MHB: free

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The Medical Association of Brandenburg credits this educational activity with 3 points (workshop) and 12 points (symposium).

WE THANK OUR SPONSORS:

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