interdisziplinäres Zentrum für Klinische Forschung

Clinician Scientist Programme - Biosketch Module Step 2

Title/ First Name/ Last Name

Dr. med. Benedikt Jacobs

Clinic

Medizinische Klinik 5

CV (Current position, academic career, achievements and extracurricular activities, languages)

10/2003-07/2010 Medical Study at the Heinrich Heine University, Düsseldorf

09/2006-03/2007 Student apprentice in the group of Prof. Dr. L. Zitvogel, Institut Gustave Roussy, Villejuif Paris

23.11.2011 Medical degree from the Heinrich Heine University, Düsseldorf

08/2010-12/2014 and Resident at the Department of Internal Medicine 5 –
since 01/2018 Haematology/ Oncology, Erlangen

01-12/2013 Gerok Scholarship of the KFO group 262 for "analysing the effect of tumour metabolites on the immune system"

01/2015-06/2017 Post-doc fellowship in the group of Prof. Dr. Karl-Johan Malmberg, Institute for Cancer Research, Oslo

07-12/2017 Laboratory rotation funded by the Center for Clinical Research Erlangen (IZKF)

01-07/2020 Laboratory rotation of the SFB Transregio 221 (DFG)

05/2021 IZKF Junior Project Grant

Research Area

Oncology

Immunology

CSP Project Outline

In our recent work, we demonstrated that the metabolism of reconstituting NK cells upon high-dose chemotherapy/ autologous stem cell transplantation (HDCT/auto-SCT) is altered in lymphoma patients who experience an early relapse upon transplantation. Therefore, we intend to decipher the underlying cellular and molecular mechanism behind these results to identify factors leading to an increased relapse risk upon HDCT/ auto-SCT and to reveal potential opportunities to modify them.

Methods, Skills and Know-How

Our group is specialized in the analysis of phenotypical, immune-metabolic and functional properties of NK cells from healthy donor and patient samples using multicolor flow cytometry techniques. Moreover, in order to optimize staining quality and reduce false antibody pipetting, we apply live- and fixed-cell fluorescent cell barcoding techniques.

Current Funding

IZKF Junior Project grant

Intended Funding Applications

DFG Erstantrag

Most important publications (3)

Jacobs B. et al. 2020 Front. Immunol.: The Oncometabolite 5'-Deoxy-5'-Methylthioadenosine Blocks Multiple Signaling Pathways of NK Cell Activation.

Jacobs B. et al. 2019 Journal of Immunology: Induction of the BIM Short Splice Variant Sensitizes Proliferating NK Cells to IL-15 Withdrawal.

Jacobs et al. 2015 Front. Immunol.: NK Cell Subgroups, Phenotype, and Functions After Autologous Stem Cell Transplantation.