



Research Report 2011-2014

Department of Pediatrics and Adolescent Medicine

Contents

PrefacePreface	4
Research Profile – Summary	
Research Groups	7
Large Collaborative Research Projects Coordinated	16
Additional Collaborative Research Projects	19
Event Organization	22
Prizes and Awards	25
Guest Scientists	26
Doctorates Conferred	28
Habiliations Conferred	31
Publications	32
Sources of Funding	48

Imprint

Publisher

Prof. Dr. Klaus-Michael Debatin, Director Department of Pediatrics and Adolescent Medicine, Ulm University

Editor and Design:

Nicolas Marschall, Research Management

Contents and Photos:

Cover picture: Gabriele Stautner; Research profile: Heiko Grandel; Other photos and illustrations: the respective researchers.

1st Edition; © 2015

No form of reproduction, either in whole or in part, is permitted without the prior authorization of the publisher.

Preface

University-based medicine provides optimal patientcare within the framework of state-of-the-art knowledge and aims at the same time to continuously develop this medical knowledge for its application in the future.

Innovation requires research and in particular the translation of scientific findings into clinical application as well as the analysis of clinical questions by employing methods and models of basic research.

Especially in Pediatric Oncology, which was the pioneer of interdisciplinary and multimodal treatment of leukemias and tumors on the whole, further progress in the already relatively successful therapy of our patients is only possible through further research.

Also, the analysis and characterization of the funda- Prof. Dr. Klaus-Michael Debatin mentals of rare diseases, the adaption of medical care to age-dependent factors like premature birth, and the prevention of metabolic and endocrinologic diseases require the combination of basic research, clinical research and innovative treatment strategies.

Research at our department is dedicated to these goals. With the establishment and successful conclusion of the DFG-funded clinical research unit "Regulation of Apoptosis and its Dysfunction in Human Diseases" our department has developed a profile in its field and within the Medical Faculty.

Our department participates in currently two Collaborative Research Centers (SFB) of the German Research Foundation (DFG) of Ulm University with Prof. Debatin as Co-Chair of the SFB 1074 "Experimental Models and Clinical Translation in Leukemia".

With this report, we inform you about the focuses and developments during the last five years. Special thanks go to all employees that have contributed to this top-class research in a clinical setting.



Director

Research Profile – Summary

Oncology is dedicated to understanding the role of cell death (apoptosis) and cell death signaling in diseases, such as cancer, with the aim of developing new therapies from this knowledge. Our lab was involved in the early discovery of one of the key apoptosis signaling pathways (CD95/APO/Fas in 1989 and 1990), while identifying and initially describing its role in cancer therapy in 1996. A particular focus lies on strategies to



overcome treatment resistance in leukemia, neuroblastoma and brain tumors. In doing so, we have addressed several issues dealing with apoptosis regulators and apoptosis signaling as prognostic factors and therapeutic targets, and have thereby contributed to the development of new drugs for cancer therapy. By using models of primary leukemias, we are in the process of analyzing aspects of leukemia stem cell function and apoptosis sensitivity of leukemia-initiating cells as well as parameters for treatment response and outcome in patients. The expertise of our work group has been introduced into the international study group (I-BMF) for the treatment of childhood leukemia. In the area of solid tumors, we study the molecular mechanisms which, for example, lead to the emergence of neuroblastoma from progenitor and stem cells.



In the field of Non-malignant Hematological Diseases, we also investigate pathological processes and the underlying molecular alterations as a basis for the development of specific treatment strategies, especially in the area of congenital and acquired erythrocytoses/polycythemias, as well as rare metabolic defects associated with the disruption of hematopoiesis.

In the area of Stem cell transplantation and Immunology, our work groups have significantly contributed to the development of blood stem cell and bone marrow transplantations and have characterized the genetic heirs of several forms of severe combined immune defects (SCID). In the late sixties one of the first ever bone marrow transplants in Europe was performed at our hospital. Novel therapies, such as haploidentical stem cell transplantations, cell-based immunotherapies and, most recently, radio immunotherapy-based conditioning for reduced toxicity during treatment of

severe combined immune defects, congenital hematological disorders and leukemias, have since been developed. The work group at Ulm University coordinates its focus on severe combined immune defects as part of the federal network on primary immunodeficiencies.

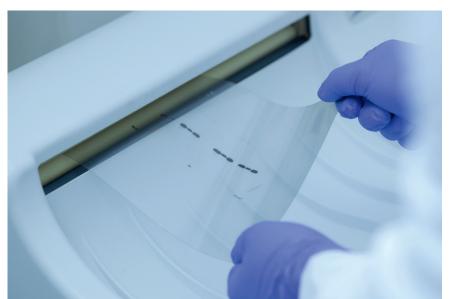
The Pediatric Endocrinology and Diabetes Section aims to elucidate the molecular causes of endocrine and metabolic diseases by focusing on monogenetic forms of obesity, special forms of diabetes mellitus



and rare adipose tissue disorders such as lipodystrophy. Furthermore, we study the causes and effects of obesity in childhood and adolescence and develop novel therapy strategies. The BMBF-supported federal network on juvenile extreme obesity is coordinated by us. Our experimental research concentrates on the biology of adipose tissue. We develop in vitro model systems for studying human fat cell functions. For example, the human SGBS preadipocyte cell strain was generated in our lab and is now used in more than 200 research laboratories worldwide. Current projects involve the endocrine function of fat cells and the regulation of adipose tissue homeostasis through cellular mechanisms such as apoptosis. Furthermore, we characterize the function of newly discovered obesity genes within the framework of the National Genome Research Network (NGFN).

The research of the Neonatology and Pediatric Intensive Care Section is dedicated to clinical studies related to primary care of neonates and preterm infants. Our center participates in a number of multicenter randomized trials, including the coordination of a European multicenter study on the use of inhalative NO treatment, and has initiated a study on permissive hypercapnia in very immature preterm infants.

In the Social Pediatrics and Child Neurology Section, we study the developmental prognosis of neonates after severe perinatal asphyxia and the long-term prognosis of premature babies



of very low birth weight. We are assessing the influence of longchain polyunsaturated fatty acids on characteristics and cognition in attention-deficit/hyperactivity disorder (ADHD). Finally, we study the long term development and outpatient care of children with ADHD.

Photos: Heiko Grandel

Research Groups

Apoptosis and Cancer Therapy

Heads: Prof. Klaus-Michael Debatin, Dr. Mike-Andrew Westhoff

Our work is focused on understanding mechanisms of sensitivity and resistance of tumor cells towards anticancer therapy. This includes the analysis of signaling pathways that may help to overcome resistance to molecular targeted therapy or conventional therapy using cytotoxic drugs and irradiation in human tumors with a particular focus on glioblastoma multiforme. Thus, our current work is directed at modulating signaling pathways (PI3-kinase, NF-kappaB) in glioblastoma tumor cell lines and primary ex vivo culture tumor cells to ellucidate two key aspects of glioblastoma multiforme tumor biology:

Identification of alterations in key signaling pathways

Identifying proteins which are either mutated or exhibit altered expression in GBM and to further understand their role in the various signalling networks. This is of particular interest, as these proteins are

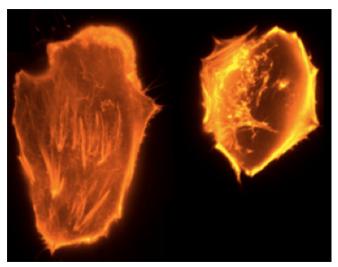


Photo: Actin was stained with TRIC-phalloidin. The left glioblastoma cell clearly exhibits a well-structured cytoskeleton. In the right cell, a signaling pathway has been blocked, which hithero had not been considered to be connected with cell organisation and motility. The destruction of F-actin fibers can clearly be seen. Photos by Claudia Jennewein [see Westhoff et al, 2013 MCR for details]

frequently involved in multiple, partially overlapping signalling cascades, and thus their individual contributions to a given pathway is often difficult to identify. We aim to better understand the basic tumor biology and this should give us powerful tools to predict the behavior of GBM subtypes with respect to proliferation, invasion/metastasis and response to treatment. Furthermore, we thus hope to also identify novel potential targets for therapeutic intervention.

Novel therapeutic approaches

The current trend in treatment of cancer has moved towards metronomic therapy, whereby lower doses of drugs are given continuously or at frequent intervals, with the aim of reducing cytotoxic side-effects and increasing treatment efficacy. In close cooperation with the doctors treating patients at our clinic, we constantly work at improving existing treatment protocols and at identifying novel promising approaches. One such approach is the so-called combination therapy, whereby individual pharmacological inhibitors of cell signalling (sensitizers) are combined with low doses of more conventional chemotherapy to enhance tumor-specific apoptosis (programmed cell death), while concomitantly reducing side effects. Recently, we have successfully expanded this idea further to the complex combination therapy, where several sensitizers are given in an optimized temporal sequence.

Experimental Pediatric Oncology Section

Head: Prof. Dr. Christian Beltinger

We concentrate on two research areas. In our focus "Pathogenesis of Embryonic Tumors" we investigate the interaction of oncogenes with tumor suppressors and enhancers in cells of origin and stem cells of embryonic tumors, in particular neuroblastoma.

Our second focus "Experimental Cancer Therapy" aims at developing novel preclinical strategies utilizing small molecules and genetic or viral cytotoxic effectors.

The molecular analysis of apoptosis and other cell death modes plays an important role in both research foci.

■ Focus "Pathogenesis of Embryonic Tumors"

Neuroblastoma, an embryonic tumor, is the most common extracranial solid tumor in childhood. The aggressiveness of neuroblastoma is determined in part by the amplification of MYCN. MYCN both promotes and suppresses growth of neuroblastoma. The tumor-suppressive (e.g. proapoptotic) or tumor-promoting (e.g. antiapoptotic) mechanisms that have to be inactivated or activated, respectively, in neuroblastoma for MYCN to preferentially exert its oncogenic action remain an enigma. We therefore investigate the interaction of MYCN with dysfunctional tumor suppressors and activated oncogenes in the genesis, progression and aerobic glycolysis (Warburg effect) of neuroblastoma.

We isolate and characterize cells of origin and stem cells of neuroblastoma and other embryonic tumors. Our activities in this field are integrated into the research consortium "Tumor Stem Cells" of the Deutsche Krebshilfe (German Cancer Aid), which we coordinate.

■ Focus "Experimental Cancer Therapy"

Specifity and efficiency are major obstacles in targeted tumor therapy. We develop novel approaches to overcome these hurdles. To this end we investigate small molecules that intervene specifically in signaling pathways crucial for survival of pediatric tumors. In addition, we test oncolytic measles virus and anti-cancer gene therapies. Analysis and modulation of apoptosis or cell lysis induced by these experimental therapies are integral parts of this focus.

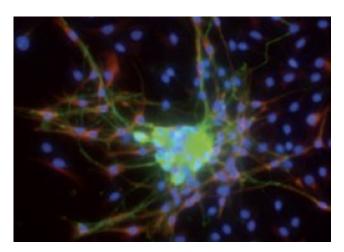


Photo: Peripheral sympathetic progenitors (green), potential cells of origin of neuroblastoma and its stem cells.

Leukemia

Head: PD Dr. Lüder-Hinrich Meyer, Prof. Dr. Klaus-Michael Debatin

The main research interests of the Leukemia group are focussed on acute lymphoblastic leukemia (ALL), the most common malignant disease in childhood and adolescence. The aims of our work are to characterize and understand leukemia biology in order to develop novel treatment strategies comprising novel markers for risk stratification and new therapeutic approaches and substances including preclinical validation in an in vivo model system.

By combining comprehensive molecular and functional analyses we were able to identify leukemia-specific biological characteristics, which could serve as possible starting points for new therapies for high-risk leukemia. In order to evaluate these new therapy options preclinically, we have established a xenograft leukemia model that mimics the disease of the patient and thus allows to investigate the effectivity of new agents. With this model we have provided evidence for a good efficacy of several substances alone and in combination with conventional chemotherapy against high-risk ALL. In additional projects we are currently developing test procedures in order to identify the patients which can profit from a new form of therapy, with the aim to realize clinical application in a next step.

Immunoregulation and GVHD

Head: PD Dr. Gudrun Strauß

A functional immune system protects from disease development and autoimmunity. The immune response therefore requires a tight control to ensure that immune cells eliminate invading pathogens but do not attack the body's own cells. Various molecular processes and cell types are involved in the regulation of the immune response.

The main focus of our research group deals with the regulation of the T cell immune response and the development of new treatment strategies for graft-versus-host disease (GVHD) prevention. GVHD is the major complication after allogeneic bone marrow transplantation leading to increased morbidity and mortality. T cells in the donor transplant, which are activated by antigens of the recipient, expand and subsequently attack and destroy recipient tissues thereby inducing GVHD. During the last years we have established several murine models of GVHD mimicking the human transplantation situation.

Currently we are working on the following projects:

■ Modulation of the T cell immune response by death receptors

Death receptors were initially characterized to induce apoptosis after ligation with their cognate death ligand. Nowadays, however, it is clear that death receptors have additional functions. We have recently investigated the influence of death receptors CD95 and TRAIL on T cell activation and define for the first time, that CD95 and TRAIL-receptors suppress T cell activation when stimulated by death ligands during T cell priming. This mechanism might contribute to immune evasion of viruses or other pathogens, which induce death ligand expression in target cells after infection.

Development of new treatment strategies for GVHD prevention

GVHD is characterized by recipient organ destruction induced by activated T cells. Since activated T cells strongly up-regulate death ligands we are exploring whether blocking of death

ligand functions might serve as a possible treatment option in GVHD prevention. Destructive functions of activated T cells, however, can also be abrogated by suppressor cells. Myeloid-derived suppressor cells (MDSCs) are an immature population of myeloid cells inhibiting T cell activation, proliferation and function and are therefore under investigation for GVHD-prophylaxis. T cells do not represent a uniform population of cells but are subdivided in different subpopulations due to their phenotype and function. The impact of different T cell subpopulations especially Th9 cells on GVHD development is studied.

Function of myeloid-derived suppressor cells (MDSCs) in trauma

The immune response after traumatic injuries is predominated in the beginning by on over-whelming pro-inflammatory response of the innate immune system, followed by a suppression of the adaptive immunity leading to immunosuppression and an enhanced risk for all types of infections. At present, the impact of MDSCs on the course of disease and the immune response after trauma is not well defined. Using murine trauma models we determine the influence of trauma on the induction of MDSCs, define their potential to modulate T cell-mediated immune responses in order to clarify whether interference with MDSC development might be a therapeutic option after trauma.

Obesity and adipose tissue biology – experimental and clinical studies

Heads: Prof. Dr. Martin Wabitsch, PD Dr. Pamela Fischer-Posovszky

Obesity is a worldwide growing epidemic. The accumulation of fat tissue can lead to severe co-morbidities such as insulin resistance, type 2 diabetes mellitus, liver steatosis, and cardio-vascular disease. Many underlying causes have been described with the heritability of body weight ranging between 40 to 70%.

The Pediatric Endocrinology and Diabetes Section is a center for monogenetic forms of obesity. We identified new mutations leading to congenital leptin deficiency. Affected patients are treated with human recombinant leptin (Metreleptin) leading to rapid normalization of body weight.

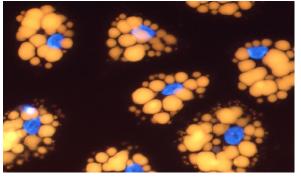


Photo: SGBS adipocytes. Lipids were stained with Nile Red, nuclei were visualized with DAPI.

The experimental research at the Pediatric Endocrinology and Diabetes Section centers on adipose tissue. The number of fat cells is determined in childhood and remains constant for the rest of the life. Yet adipose tissue is a dynamic organ with about 10 percent of fat cells being replaced every year. Our group investigates the role of programmed cell death (apoptosis) in this remodeling process. Obesity is associated with an accumulation of macrophages into adipose tissue preceding the development of insulin resistance. We have shown that apoptotic fat cells attract macrophages to adipose tissue and that these immune cells interact with fat cells and cause insulin resistance. The vision of our research was to find a way to eliminate excessive fat cells by apoptosis. Based on our results we now think it may be more reasonable to prevent the apoptosis of fat cells subsequently preventing the infiltration of macrophages. In more recent projects we study the non-apoptotic functions of death ligands and death receptors in human fat cells.

Immunology, Regulation of dendritic cells

Head: PD Dr. Dorit Fabricius

Regulation of interferon-α and granzyme B in human plasmacytoid dendritic cells

Plasmacytoid dendritic cells (pDC) are crucial mediators of innate and adaptive immune responses. A better understanding of pDC regulation may improve immunotherapeutic approaches to cancer, infectious diseases and autoimmunity. Apart from production of IFN-alpha and TNF-alpha we showed that pDC can secrete large amounts of the serine protease granzyme B (GrB), but no perforin. In the last years we investigated the regulation of GrB in pDC based on our finding that pDC-GrB effectively suppresses T cell proliferation. While the cytokines IL-3 and IL-10 played a key role for GrB induction, toll-like-receptor agonists and CD40 ligand inhibit GrB secretion. To characterize the physiological function of pDC-GrB, we explored the effect of commonly used antiviral vaccines on pDC and found that particularly TBEV vaccine was able not only to induce marked IFN-alpha secretion, but also to efficiently suppress pDC-derived GrB, which allowed for an efficient T cell response. PDC of healthy individuals after TBEV vaccination produced less GrB than before vaccination, a mechanism possibly contributing to a successful cellular immune response to the vaccine. Our data point to a potential involvement of GrB-secreting pDC in suppression of tumor-specific T cells and suggest that pDC can have a regulatory role, mediated by GrB in the absence of perforin; a mechanism that has also been described for regulatory T cells. Since IL-3 and IL-10 can also be found in the environment of malignant tissues, pDC-GrB may be involved in suppression of tumor-specific T cells. Interestingly TBEV was used in a tumor vaccination study as natural agonist and we assume that suppression of GrB contributed to the observed anti-tumor-effect. We intend to continue elucidating in more detail the role of pDC-derived GrB and intend to utilize an in-vitro culture model of immune responses against B cell leukemias. By including pDC from healthy subjects and from patients with B cell leukemias, we hope to achieve a better understanding of the role pDC play in health and disease and how this potent immunomodulating cell population may be manipulated therapeutically.

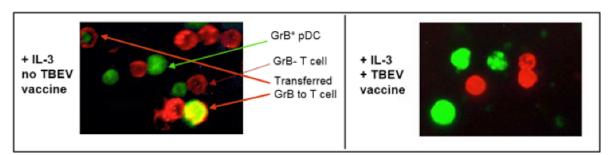


Figure: Plasmacytoid dendritic cells incubated with Tickborn-encephalitis vaccine do not transfer Granzyme B to T cells anymore.

Immunogenisation of ALL cells as tumor vaccination approach

Acute lymphoblastic leukemia (ALL) is the most common pediatric malignancy. Although the vast majority of patients initially respond to chemotherapy, relapses occur in approximately 20% of cases and have a poor prognosis. Thus, novel therapeutic strategies are required to treat minimal residual disease and improve long-term survival. B cell precursor (BCP)-ALL cells express low levels of costimulatory and antigen-presenting molecules and therefore are poorly recognized by the immune system. Previous reports show that CpG oligodeoxynucleotides (CpG) can induce immunogenicity of non-Hodgkin's lymphomas including B-CLL and in certain B cell leukemias. In our study on the effect of various combinations of known potent B cell

stimulators including CpG, interleukin (IL)-2 family cytokines and CD40 ligand (CD40L) on the immunogenicity of BCP-ALL cells we could show that the combination of CpG, IL-4 and CD40L was not only able to enhance expression of costimulatory and antigen-presenting molecules on BCP-ALL cells, but also enabled BCP-ALL cells to induce proliferative T cell responses and to generate cytotoxic T cells (CTLs). Of note, these CTLs exhibited significantly enhanced antileukemic cytotoxicity not only towards treated but also towards untreated BCP-ALL cells. Untreated control BCP-ALL cells induced only minimal T cell proliferation and cytotoxicity even in an allogeneic setting. Our results demonstrate that combined treatment with CpG, IL-2 family cytokines and CD40L is more efficient than CpG alone in inducing an immunogenic phenotype in BCP-ALL cells. In vitro CTL generation shall now be further optimized by additional stimulation of tumor-lysate-loaded activated pDC and the role of pDC in anti-leukemic immunity shall be further characterized. Apart from in vitro studies we will utilize a humanized leukemia mouse model that will be transplanted with BCP-ALL. In this xenotransplantation model we will test the anti-leukemic immune response of beforehand in vitro generated specific CTL. The planned in vivo study may provide novel insights in mechanisms of immunogenization and contribute to the development of immunotherapeutic vaccination approaches in the management of therapy-resistant BCP-ALL.

Social Pediatric Center and Child Neurology Section

Head: Prof. Dr. Harald Bode

Long-chain polyunsaturated fatty acids and ADHD

Investigators: Dr. Katharina Widenhorn-Müller, PhD (TransferCenter for Neuroscience and Learning), Prof. Dr. Harald Bode

In a randomized placebo-controlled intervention trial with 95 children 6-12 years of age with ADHD, the supplementation with long-chain polyunsaturated fatty acids increased the concentration of the fatty acids in erythrocyte membranes and improved working memory function, compared to the control group.

■ Long-term outcome at age 7-10 years or premature babies born before the 25th week of pregnancy

Investigators: Dr. Susanne Herber-Jonat (Neonatology, Hospital of the Ludwig-Maximilians-University Munich), Prof. Dr. Harald Bode

Of 79 originally very small premature babies, 76 showed no or mild motoric or intellectual impairment. The gestational age was no risk factor for frequency or severity of the impairment. Many children showed difficulties at school, behavioral problems and a long-term need for coaching.

Psychic trauma in children with cerebral palsy and spina bifida

Investigators: Dipl. Psych. Katy Kohleis, Prof. Markus Storck (Ostfalia University of Applied Sciences, Suderburg), Prof. Dr. Harald Bode

The multicentric study with 355 children and adolescents with cerebral palsy and spina bifida displayed more frequent emotional and behavioral problems as in a reference sample. The health-related quality of life was rated as lower. Familial stress was rated higher in children with cerebral palsy. Emotional and behavioral problems have a negative influence on the quality of life and thus are important starting points for interventions.

■ Inclusion of children with learning disabilities and handicaps in regular schools Investigators: cand. med. Viola Hirner, Prof. Dr. Harald Bode

Parents of 209 preschool and school children expressed different experiences and expectations concerning the school of their children. They partly wished for special needs schools, partly for integrative regular schools. Many parents experienced anguish and problems prior to the choice of a school. The severity of disability was rated similar by parents and by professionals. In spite of a rather similar assessment of the degree of the child's disability, there was only a moderate relation between the wish of the parents and the recommendation of the professionals from the social pediatrics center concerning the desired type of school. In line with the sociopolitical development towards more integration, the pedagogic and social-pedagogic advice needs to be intensified.

Non-malignant hematological diseases

Head: Prof. Dr. Holger Cario

Cooperations: Molecular Diagnostics and Therapy Group at IKT Ulm (Dr. K. Schwarz), European Congenital Erythrocytosis Consortium (ECE) and MPN&MPNr Euronet (COST)

Congenital erythrocytoses

In patients without underlying cardiac or pulmonary diseases, erythrocytoses are a very rare, heterogenic group of diseases. There is only few systematically collected data on basic principles, presentation and therapy of these etiologically in many cases unclear disease patterns, neither on polycythemia vera in pediatric patients. On these grounds, a register for these diseases was established in Germany, in which patients from other European countries are included as well. It now forms the basis for a European register (www.erythrocytosis.org).

In the recent years we identified several hitherto unknown mutations which, occasionally in connection with other genetic or epigenetic alterations, contribute to primary and secondary congenital erythrocytosis. These efforts are currently continued with a focus on secondary congenital erythrocytosis. In cooperation with the MPN&MPNr Euronet (B. Gardie, Nantes; D. Neumann, Tel Aviv), there are furthermore functional analyses of the potential pathogenetic role of the identified mutations.

Polycythemia vera in childhood and adolescence

As part of an international cooperation we collected clinical and molecular genetic data of eight pediatric patients with polycythemia vera, which is the largest cohort so far that was analyzed systematically and published in literature. The analysis of this data and of other published cases revealed several characteristics specific to pediatric patients with polycythemia vera, as well as insights into the molecular changes.

Hemoglobin diseases

The department is a center for the treatment of patients with hemoglobin disorders, in particular thalassemia and sickle-cell disease. It has laid important foundations for clinical scientific and epidemiological works on thalassemia and sickle-cell disease in Germany. The German Society for Pediatric Oncology and Haematology established a consortium coordinating a new register study on sickle-cell disease in which Ulm is participating.

Immunodeficiency and Stem Cell Transplantation

Head: Prof. Dr. Ansgar Schulz; Investigators: PD Dr. Manfred Hönig, Dr. Catharina Schütz

Primary Immunodeficiencies

Through our long lasting experience with diagnosis and therapy of primary immunodeficiencies — particularly stem cell transplantations in severe combined immunodeficiencies (SCID) — a unique cohort of patients has grown. Our scientific points of interest are 1. Individualized therapy through an as exact as possible characterization of the clinical phenotype; 2. Identification of the underlying genetic causes of the disease; 3. Long-term course of disease after successful stem cell transplantation under consideration of non-immunological symptoms of the disease. Our work in all three areas cumulated in successful publications.

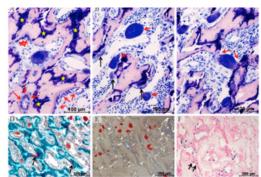
Our group closely cooperates with Dr. Schwarz (Molecular Diagnostics and Therapy at IKT Ulm). We are part of a BMBF-funded nationwide research network (PID-NET) on phenotypic and genetic characterization of inborn immunodeficiencies. Currently, we are collecting data from worldwide sources on clinical presentation and therapy of patients with reticular dysgenesis, a rare subgroup of the severe combined immunodeficiency and granulopenia.

Osteopetrosis

The Department of Pediatrics and Adolescent Medicine of Ulm University has long standing experience with diagnosis and therapy of the various forms of osteopetrosis. Our group contributed to the identification of additional genetic variants. In addition, we were able to further optimize various therapeutic approaches in the field of hematopoietic stem cell transplantation. Our hospital is now one of the leading contacts in the area of osteopetrosis.



Characteristic x-ray of a baby with infantile osteopetrosis (TCIRG1 mutation)



Bone marrow biopsy from an infant with LAD-III syndrome and osteopetrosis

In order to further pursue the goal of improving diagnosis and therapy of this rare disease, a network of basic scientists and clinicians from many European countries was established by the E-RARE initiative of the European Union. The following goals of the sub-project from Ulm were reached and are now widened: a) the registration of European patients with infantile osteopetrosis in a central register and b) the development of recommendations for diagnosis, therapy and clinical monitoring of patients with osteopetrosis.

Neonatology and Pediatric Intensive Care Section

Head: Prof. Dr. Helmut Hummler

Clinical Research

The Division of Neonatology is actively participating in scientific clinical studies to improve patient care. We participated in multicenter studies on the effects of automated adjustment of the inspired oxygen on fluctuations of oxygen saturation together with University Hospital Tübingen and an international consortium coordinated by the University of Miami, USA.

Currently we participate in two large international studies (SAIL-Trial, Presox-Trial) with special focus on delivery room care. Furthermore, we are working together with Stephan Medizintechnik GmbH with the aim to improve non-invasive respiratory support of newborns. These studies are funded by the Federal Ministry of Economic Affairs and Energy.

Additional studies are supervised by Dr. Schmid and primarily target cerebral oxygenization and with fluctuations of arterial and regional cerebral tissue oxygenation, and with the tissue oxygen saturation of various other organs.

Experimental Neonatology

In close collaboration with several physicians and guest scientists, we perform studies with laboratory animals on resuscitation of newborns. The animal lab is supervised by Dr. Mendler who conducts studies on resuscitation after circulatory collapse due to asphyxia together with his team of physicians and students. One focus in on the respiratory support during cardiac massage. These studies are funded by the German Research Foundation (DFG).

Pediatric Gastroenterology

Head: Dr. Carsten Posovszky

We perform single- and multi-center clinical studies in Pediatric Gastroenterology. For example, we assess the immunization status in children with inflammatory bowel disease and autoimmune hepatitis and evaluate effectiveness of varicella immunization under immunosuppressive therapy in a multi-center trial.

In addition, we conduct an abdominal pain interventional multi-center study funded by the German Research Foundation (DFG) to improve



treatment of children 7-12 years of age with functional abdominal pain (FAP) and evaluate the diagnostic criteria for this entity.

Our basic research focuses on the cellular and molecular pathogenesis of congenital enteropathies. We recently elucidated pathomechanisms involved in the gastrointestinal manifestations found in Autoimmune Polyendocrinopathy-Candidiasis-Ectodermal Dystrophy (APECED) and Familial Hemophagocytic Lymphohistiocytosis (FHL) Type 5.

Large Collaborative Research Projects Coordinated

KFO 167 – Regulation of Apoptosis and its Dysfunction in Human Diseases

Speaker: Prof. Dr. Klaus-Michael Debatin **Head:** Prof. Dr. Christian Beltinger

Funding: German Research Foundation (DFG)

Duration: 2006-2014

Partners: Several Institutes and Departments of Ulm University, see below

Apoptosis is the major form of cell death in humans and is thus tightly regulated. Too much apoptosis causes disease, as, for example, in HIV infection, tissue injury or neurodegeneration. Too little apoptosis, as in cancer, is also detrimental. Although the molecular basis of apoptosis is increasingly understood, the clinical translation of this knowledge remains a challenge. The DFG-funded clinical research unit "Regulation of Apoptosis and its Dysfunction in Human Diseases" addresses this challenge by bringing together eight apoptosis research projects that focus on human disease in the areas of cancer, infection and aging. By forming an interdisciplinary consortium, both preclinicaltheoretical institutes (Legal Medicine, Molecular Medicine, Physiological Chemistry, and Molecular Virology) and clinical departments of the Medical

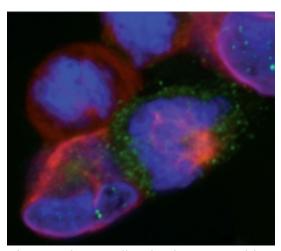


Photo: Abnormally dividing neuroblastoma cells about to undergo apoptosis after treatment with a novel anti-cancer drug

Faculty (Pediatrics and Adolescent Medicine, Internal Medicine III and the Section of Gynecological Oncology) have joined forces in research with the ultimate aim of benefiting patients.

■ Targeting Apoptosis for Cancer Therapy: Preclinical and Clinical Evaluation of Betulinic Acid Derivate BA10 as a novel Lysosomotropic Anticancer Drug

Speakers: Prof. Dr. Klaus-Michael Debatin, Prof. Dr. Simone Fulda **Funding:** Federal Ministry for Education and Research (BMBF)

Duration: 2007-2013

Partners: Goethe University Frankfurt, BioSolutions Halle GmbH

Despite aggressive protocols, the inefficacy of established treatments remains a major problem in oncology and highlights the need for novel strategies. In response to this demand, this consortium aims to develop betulinic acid (BA) as a novel class of anticancer drugs with a wide therapeutic index that triggers apoptosis and lysosomal membrane permeabilization, two intrinsic cell death programs. BA is a natural product extracted from the bark of the birch tree. Since it exerts its antitumor action in a manner different from conventional anticancer drugs, it is able to overcome resistance. This joint project combines the expertise of an industrial partner, a preclinical partner and a clinical partner. It aims at pharmacodynamically optimizing a BA derivative, evaluating its preclinical toxicity profile and producing it under good medical practice (GMP) conditions for evaluation in a clinical trial in malignant brain tumors.

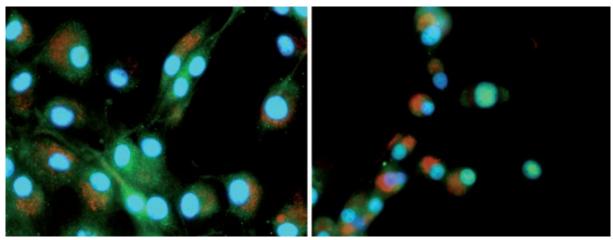


Photo: After treatment with B10, key components of both the apoptosis and the lysosomal cell death signaling cascade are redistributed within the cells. Left: untreated cells; right: treated with B10.

Research Consortium "Tumor Stem Cells"

Speaker: Prof. Dr. Christian Beltinger

Funding: German Cancer Aid (Deutsche Krebshilfe)

Duration: 2005-2013

Partners: German Cancer Research Center Heidelberg, Heinrich-Pette-Institute

Hamburg, University of Regensburg, University of Cologne, University Hospital Bonn, University of Würzburg, Technical University of Munich,

Institute of Molecular Medicine at Ulm University

Most tumors are heterogeneous and many are organized in a hierarchical fashion with so-called tumor stem cells or tumor-initiating cells giving rise to more differentiated tumor cells. The Research Consortium "Tumor Stem Cells" was founded in 2005 as a national consortium that aimed to isolate and characterize tumor stem cells in solid tumors. The consortium was financed by Deutsche Krebshilfe (German Cancer Aid) and has recently completed its final funding period. A broad spectrum of solid tumors from different organs that spans embryonic tumors to cancers in old age was investigated by several groups in Germany. The common links between the projects

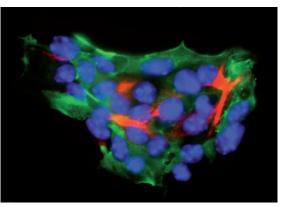


Photo: Neural crest stem cells, shown here to differentiate, can give rise to neuroblastoma and its tumor stem cells.

were to develop generic methods to enrich and isolate tumor stem cells, to find molecular mechanisms shared by the tumor stem cells of these diverse tumor entities and to define therapeutic targets within the tumor stem cells.

Consortium "Adolescents with Extreme Obesity" (Competence Network Obesity, CNO)

Speaker: Prof. Dr. Martin Wabitsch

Funding: Federal Ministry for Education and Research (BMBF)

Duration: 2012-2018

Partners: University Children's Hospitals at Essen, Witten-Herdecke, Berlin

and Leipzig; Institute for Epidemiology and Medical Biometry of Ulm

University, Helmholtz Center Munich

Extremely obese adolescents are at a strongly elevated risk of early death, somatic comorbidities, psychiatric disorders, and social isolation, including unemployment, due to both functional impairment and stigmatization. Despite the dire implications of extreme obesity in adolescents and the frequently overt (e.g. orthopedic disorders) and non-overt (e.g. hypertension) comorbidity, these adolescents are difficult to reach and treat in medical terms. Thus, only a small percentage actively seeks treatment.

The underlying reasons are poorly understood and may presumably be attributed to the young age, a predominantly low educational and socioeconomic status, as well as to functional impairment due to inactivity and psychiatric comorbidity. Unsuccessful attempts to lose weight on their own and/or within the medical system may have led to frustration with respect to their behavior in seeking treatment.

In acknowledgement of this, we have developed the "Medical and psychosocial implications of extreme obesity in adolescents - acceptance and effects of structured care study", which is known by its abbreviated title as: "Youth with Extreme obesity Study (YES)". YES aims at improving the medical care and social support structures for this so far widely ignored patient group.

We focus on the identification of these subjects (baseline examination) and their acceptance of diagnostic and subsequent treatment procedures. In a randomized controlled trial we investigate the effectiveness of a low key group intervention by not focusing on







weight loss but by aiming at the provision of obesity-related information, alleviation of social isolation, school and vocational integration, and improvement of self-esteem in comparison to a control group treated in a conventional way by focusing on weight loss. Interested individuals who fulfill current recommended criteria for weight loss surgery are provided with a structured preparation and follow-up programs. All subjects are subsequently monitored within a long-term observational study to elucidate the medical and psychosocial outcome. Results of this study will improve the medical care and social support structures for youths with extreme obesity in Germany.

Additional Collaborative Research Projects

■ GSC 270: International Graduate School in Molecular Medicine Ulm (IGradU)

Faculty from our department: Prof. Dr. Christian Beltinger, Prof. Dr. Klaus-Michael Debatin, PD Dr. Pamela Fischer-Posovszky, PD Dr. Lüder H. Meyer, PD Dr. Gudrun Strauß

Coordinator: Prof. Dr. Michael Kühl, Institute of Biochemistry and Molecular Biology **Funding:** Excellence Initiative of the German Federal and State Governments

Duration: 2007-2017

Partners: Additional Departments and Institutes of Ulm University

■ Collaborative Research Center 1149: Danger Response, Disturbance Factors and Regenerative Potential after Acute Trauma

Subproject Role of myeloid-derived suppressor cells in trauma (PD Dr. Gudrun Strauß)

Subproject *Role of severe obesity in healing of muscle injuries* (Prof. Dr. Uwe Knippschild, Prof. Dr. Martin Wabitsch)

Coordinator: Prof. Dr. Florian Gebhard, Dept. of Orthopaedic Trauma, Hand, Plastic,

and Reconstruction Surgery

Funding: German Research Foundation (DFG)

Duration: 2015-2018

Partners: Additional Departments and Institutes of Ulm University

Collaborative Research Center 1074: Experimental Models and Clinical Translation in Leukemia

Subproject Attenuated oncolytic measles virus against ALL of childhood: preclinical proof-of-principle and molecular mechanisms (Prof. Dr. Christian Beltinger)

Subproject The NOD/SCID/huALL xenotransplant model: characterization and prognostic impact of distinct engraftment properties (time to leukemia, TTL) of primary ALL cells (PD Dr. Lüder H. Meyer)

Coordinator: Prof. Dr. Hartmut Döhner, Department of Internal Medicine III

Vice Coordinator: Prof. Dr. Klaus-Michael Debatin
Funding: German Research Foundation (DFG)

Duration: 2012-2016

Partners: Additional Departments and Institutes of Ulm University

Research Training Group GRK 1041: Molecular Diabetology and Endocrinology in Medicine

Subproject Regulation of RBP4 in human fat cells and its role for adipose tissue inflammation and insulin resistance (Prof. Dr. Martin Wabitsch, PD Dr. Pamela Fischer-Posovszky)

Coordinator: Prof. Dr. Bernhard Böhm, formerly Department of Internal Medicine I

Funding: German Research Foundation (DFG)

Duration: 2009-2012

Partners: Additional Departments and Institutes of Ulm University

Boehringer Ingelheim Ulm University BioCenter (BIU)

Subproject *Regulation of proliferation, differentiation and function of human brown adipocytes* (Dr. Daniel Tews, PD Dr. Pamela Fischer-Posovszky, Prof. Dr. Martin Wabitsch)

Coordinator: Prof. Dr. Klaus-Michael Debatin (on behalf of the Medical Faculty) **Funding:** State of Baden-Württemberg, Boehringer Ingelheim, Medical Faculty

Duration: 2011-2015

Partners: Groups from Ulm University and from Boehringer Ingelheim, Biberach

■ Else Kröner Research College Ulm – Stem cells, aging and malignant transformation

Fellows at our department: Dr. Melanie Schirmer, Dr. Felix Seyfried (Supervisors: Prof. Dr. Klaus-Michael Debatin, PD Dr. Lüder H. Meyer)

Coordinator: Prof. Dr. Stephan Stilgenbauer, Department of Internal Medicine III

Funding: Else Kröner-Fresenius Stiftung

Duration: 2012-2017

Partners: Additional Departments and Institutes of Ulm University

Preclinical Comprehensive Cancer Center (PCCC)

Work package *Preclinical models for AML and ALL* (Prof. Dr. Klaus-Michael Debatin, PD Dr. Lüder H. Meyer, Dr. S. Enzenmüller)

Coordinator: Prof. Dr. Hellmut Augustin, German Cancer Research Center, Heidel-

berg

Funding: Helmholtz Association

Duration: 2013-2016

Partners: Additional Departments and Institutes of Ulm University; Helmholtz

Centers DKFZ, HMGU, MDC; EMBL, Max-Planck Institute for Brain Research, and the Universities of Heidelberg, Munich (TU) and Cologne

■ Life Course Approach to Obesity Research: From Epidemiology to Future Strategies of Prevention — EPI Germany

Subproject Determinants and consequences of an excessive gain of body weight, waist circumference and body fat mass in specific phases of life in children and adolescents (Prof. Dr. Martin Wabitsch, Dr. Stephanie Brandt)

Coordinators: Prof. Dr. Manfred J. Müller, University of Kiel

Prof. Dr. Heiner Boeing, German Institute of Human Nutrition

Funding: Federal Ministry for Education and Research (BMBF)

Duration: 2012-2015

Molecular Mechanisms of Adiposity

Subproject *Clinical Studies* and Subproject *Functional Studies* (Prof. Dr. Martin Wabitsch, PD Dr. Pamela Fischer-Posovszky)

Coordinator: Prof. Dr. Johannes Hebebrand, University of Duisburg-Essen **Funding:** Federal Ministry for Education and Research (BMBF) – NGFNplus

Duration: 2008-2013

■ Longitudinal Childhood Obesity Research in Germany (LARGE Consortium)

Subproject *Risk factors for overweight and obesity and their adverse metabolic consequences during childhood – Birth Cohort Study* (Prof. Dr. Martin Wabitsch)

Coordinator: Prof. Dr. Wieland Kiess, University of Leipzig

Funding: Federal Ministry for Education and Research (BMBF)

Compentence Network Adiposity

Dauer: 2008-2012

miRNA – Novel markers to predict the development of obesity-related disorders?

Coordinators: PD Dr. Fischer-Posovszky, Prof. Dr. M. Wabitsch

Funding: European Society for Paediatric Endocrinology (ESPE) Research Unit

Grant Duration: 2013-2015

Partners: Prof. Dr. Stefano Cianfarani, Prof. Dr. Nobili

(University of Rome Tor Vergata)

Dr. Primoz Kotnik, Prof. Dr. Tadej Battelino (University of Ljubljana)

MPN&MPNr Euronet (COST Action)

Prof. Dr. Holger Cario

Coordinator: Dr. Sylvie Hermouet, University of Nantes ongoing (externally funded 2009-2013)

Funding: COST Association

Partners: 128 Members in 28 Countries

■ European Congenital Erythrocytosis Consortium (ECE-C)

Prof. Dr. Holger Cario

Curators: Celeste Bento (Portugal), Holger Cario (Ulm),

Mary Frances McMullin (UK), François Girodon (France)

Duration: Ongoing since 2004

Partners: 15 Laboratories from Europe

German Network on Primary Immunodeficiency Diseases (pid.net)

Subproject *Genetics of human (severe) combined immunodeficiency (S)CID* (PD Dr. Manfred Hönig)

Coordinator: Prof. Dr. Christoph Klein, Munich Funded 2009-2012, network ongoing

Funding: Federal Ministry for Education and Research (BMBF)

Partners: Universities of Munich (LMU), Freiburg, Dresden, Berlin and Hannover

OSTEOPETR: New Genes and Therapeutic Approaches to Osteopetrosis

Manager of the International registry of patients suffering from osteopetrosis: Prof. Dr. Ansgar Schulz

Coordinator: Dr. Alberto Giovanni Ugazio, Rome

Duration: ERA-NET funding received in 2007, registry ongoing

Partners: Universities of Paris, Hamburg and Berlin

Funding: ERA-Net for Research Programmes on Rare Diseases

Event Organization

2014

■ Boehringer Ingelheim Ulm University BioCenter (BIU) – 3rd Symposium

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: Medical Faculty, Boehringer Ingelheim

Date, Venue: 07.03.2014, Ulm

■ 50th Workshop for Pediatric Research

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: German Society of Pediatrics and Adolescent Medicine (DGKJ)

Date, Venue: 20.-21.03.2014, Göttingen

Clinical Seminar: The Use of Oxygen, and Respiratory Pharmacotherapy

Organizer: Prof. Dr. Helmut Hummler Partner: IPOKRaTES Foundation 13.-15.03.2014, Ulm

■ Half-yearly symposium of the South German Pediatric Endocrinologists

Organizers: Dr. Christian Denzer, Prof. Dr. Martin Wabitsch

Date, Venue: 22.02.2014, Ulm

7th Neuropediatrics Workshop

Organizer: Prof. Dr. Harald Bode Date, Venue: 11.01.2014, Ulm

2013

Advanced training course of the German speaking Society for Pediatric Gastroenterology and Nutrition

Organizer: Dr. Carsten Posovszky, Dr. Christoph Schick

Partner: German speaking Society for Pediatric Gastroenterology and Nutrition

Date, Vanue: 06.-08.11.2013, Bonn

■ 49th Workshop for Pediatric Research

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: German Society of Pediatrics and Adolescent Medicine (DGKJ)

Date, Venue: 12.-13.09.2013, Düsseldorf

Half-yearly symposium of the South German Pediatric Endocrinologists

Organizers: Dr. Christian Denzer, Prof. Dr. Martin Wabitsch

Date, Venue: 06.07.2013, Ulm

16th Socialpediatric Afternoon

Organizer: Prof. Dr. Harald Bode Date, Venue: 12.06.2013, Ulm

■ Boehringer Ingelheim Ulm University BioCenter (BIU) – 2nd Symposium

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: Medical Faculty, Boehringer Ingelheim

Date, Venue: 03.06.2013, Ulm

Nutricia Allergy Academy Workshop

Organizer: Dr. Carsten Posovszky

Partner: Nutricia GmbH Date, Venue: 26.04.2013, Ulm

2nd Symposium of Hematology Today: Rare Anemia

Organizer: Prof. Dr. Holger Cario

Partner: Dr. Stephan Lobitz (Charité, Berlin)
Date, Venue: 18.-20.04.2013, Stadthaus Ulm

Meeting of BMBF Network "Adolescents with Extreme Obesity", YES-Study

Organizer: Prof. Dr. Martin Wabitsch

Partner: Federal Ministry for Education and Research (BMBF)

Date, Venue: 21.-22.02.2013, Ulm

2012

Symposium "Disorders of Sex Development"

Organizers: Prof. Dr. Martin Wabitsch, Dr. Clothilde Leriche **Partner:** Network on Rare Diseases, Ulm University

Date, Venue: 07.12.2012, Ulm

48th Workshop for Pediatric Research

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: German Society of Pediatrics and Adolescent Medicine (DGKJ)

Date, Venue: 12.-13.09.2012, Hamburg

6th Neuropediatrics Workshop

Organizer: Prof. Dr. Harald Bode
Date, Venue: 27.06.2012, Ulm

Hematology and Oncology Retreat

Organizer: Prof. Dr. Christian Beltinger

Partner: International Graduate School in Molecular Medicine Ulm

Date, Venue: 22.-23.06.2012, Bregenz

Boehringer Ingelheim Ulm University BioCenter (BIU) Kick-Off Meeting and 1st Symposium

Organizer: Prof. Dr. Klaus-Michael Debatin

Partner: Medical Faculty, Boehringer Ingelheim

Date, Venue: 30.05.2012, Ulm

■ Half-yearly symposium of the South German Pediatric Endocrinologists

Organizers: Dr. Christian Denzer, Prof. Dr. Martin Wabitsch

Date, Venue: 31.03.2012, Ulm, and 15.12.2012, Ulm

■ German Competence Network Obesity, Kick-Off Meeting of 2nd Funding Period

Organizer: Prof. Dr. Martin Wabitsch

Partner: Federal Ministry for Education and Research (BMBF)

Date, Venue: 26.-27.03.2012, Ulm

■ Meeting of BMBF Network "Adolescents with Extreme Obesity", YES-Study

Organizer: Prof. Dr. Martin Wabitsch

Partner: Federal Ministry for Education and Research (BMBF)

Date, Venue: 26.03.2012, Ulm

■ Training Event "The endocrinologic consultation"

Organizer: Prof. Dr. Martin Wabitsch

Partner: Ipsen company

Date, Venue: 17.-18.02.2012, Günzburg

2011

■ 15th Socialpediatric Afternoon

Organizer: Prof. Dr. Harald Bode Date, Venue: 06.07.2011, Ulm

Half-yearly symposium of the South German Pediatric Endocrinologists

Organizers: Dr. Christian Denzer, Prof. Dr. Martin Wabitsch

Date, Venue: 19.03.2011, Ulm, and 22.10.2011, Ulm

■ 47th Workshop for Pediatric Research

Organizer: Prof. Dr. Klaus-Michael Debatin Date, Venue: 24.-25.02.2011, Göttingen

Prizes and Awards

2014

Dr. Andrea Kresz

Poster Prize for the poster First experience in the use of carbon dioxide insufflation for pediatric colonoscopy German speaking Society for Pediatric Gastroenterology and Nutrition

Joanna Meßmann

Research Stipend 2014+2015
José Carreras Leukaemia Foundation

Verena Zoller

STEPS-Award 2014 Poster Prize German Society for Pediatric Endocrinology and Diabetology (DGKED)

2013

PD Dr. Pamela Fischer-Posovszky and Prof. Dr. Martin Wabitsch

ESPE Research Unit Grant Award European Society for Paediatric Endocrinology (ESPE)

PD Dr. Pamela Fischer-Posovszky

Travel Grant 2013 for the ESPE Joint Meeting, Milan Forum Wachsen

M.Sc. Jan-Bernd Funcke

Poster Prize for the poster TRAIL (TNFrelated apoptosis-inducing ligand) promotes human preadipocyte proliferation via ERK1/2 activation German Adiposity Society (DAG)

Dr. Julia von Schnurbein

Leonard-Thompson Memorial Prize for the project Diabetes and Social Jet Lag Study Group for Pediatric Diabetology (AGPD)

Joanna Meßmann

Research Stipend 2013
José Carreras Leukaemia Foundation

Joanna Meßmann

Travel Grant 2013
German Society for Immunology

Dr. Dorit Fabricius, Dr. Catharina Schütz

Rosemarie Germscheid Fellowship Rosemarie Germscheid Foundation

Dr. Dorit Fabricius

Hertha-Nathorff Fellowship Medical Faculty of Ulm University

2012

Dr. Pamela Fischer-Posovszky

Jürgen-Bierich Prize 2012 German Society for Pediatric Endocrinology and Diabetology (DGKED)

Dr. Julia von Schnurbein, Dr. Anja Moss, Dr. Stella Nagel, Prof. Dr. Klaus-Michael Debatin, Prof. Dr. Martin Wabitsch, et al.

Karger Prize 2013, for the publication Leptin Substitution Results in the Induction of Menstrual Cycles in an Adolescent with Leptin Deficiency and Hypogonadotropic Hypogonadism, Horm Res Paediatr., 2012; 77(2):127-33. European Society for Paediatric Endocrinology (ESPE)

Dr. Julia von Schnurbein

Leonard-Thompson Memorial Prize German Pediatric Diabetology Study Group (AGPD)

PD Dr. Manfred Hönig

Poster Prize European Society for Immunodeficiencies (ESID) 15th Biannual Meeting, Florence

2011

Prof. Dr. Klaus-Michael Debatin German Cancer Aid Prize 2011 German Cancer Aid

Prof. Dr. Klaus-Michael Debatin Career Award European Cell Death Organization (ECDO)

■ Dr. Stephanie Brandt STEPS-Award 2011 Poster Prize

German Society for Pediatric Endocrinology and Diabetology (DGKED)

Dr. Pamela Fischer-Posovszky Research Award German Adiposity Society (DAG)

Natalie Hartmann and team members of the Strauß Group

Poster Prize for the poster: In vitroestablished alloantigen-specific CD8+ CTLs mediate graft-versus-tumor activity in the absence of graft-versus-host disease

Association for Cancer Immunotherapy (CIMT) Meeting in Mainz

■ Dr. Lüder H. Meyer, Dr. Sarah M. Eckhoff Kind Philipp Prize 2010 for research in pediatric oncology Society for Paediatric Oncology and Haematology (GPOH)

Dr. Michaela Keuper

STEPS-Award 2010 Poster Prize for her poster: Obesity-associated macrophage infiltration in human adipose tissue is linked to apoptosis of fat cells German Society for Pediatric Endocrinology and Diabetology (DGKED)

Guest Scientists

2014

Prof. Dr. Thomas Kietzmann

Faculty of Biochemistry and Molecular Medicine, University of Oulu, Finland July 2014

Dr. Huang Li

Southeast University, Nanjing, China 2011-2014

Dr. Mohammed Hassan

Sohag University, Sohag, Egypt 2012-2014

Ismaeli Elbeshlawi

Egypt

November to December 2014

Mohab Ragab

Egypt

December 2013 to February 2014

Olga Ovcarov

May to August 2014

Maher Halak

Syria

July to September 2014

■ Tobias Rieder

January to March 2014

Johannes Müller

August 2014

Christine Schwarz

Medical Center Heidenheim August 2014 to July 2015

Nicole Berens-Riha

2014

Thomas Franke

2014

Dr. Jaida Manzoor

Childrens Hospital and Institute of Childhealth, Department of Endocrinology, Lahore, Pakistan November 2014

Dr. Saquib Mahmood

Department of Human Genetics & Molecular Biology, University of Health and Sciences, Lahore, Pakistan November 2014

■ Chun Xu, M.Sc.

China 2014-2015

2013

Dr. Luca Trentin

Università di Padova September 2011 to February 2014

Dr. Azahara Ruperez Cano

University of Granada, Spanien April - July 2012; April - June 2013

Prof. Daniel Konrad

University Children's Hospital Zürich April 2013

Dr. Florian Kiefer

Medical University of Vienna, Department of Internal Medicine III, Division of Endocrinology and Metabolism January 2013

Raghavendra Mysore

Minerva Foundation Institute for Medical Research, Helsinki, Finnland January 2013

2012

Dr. Nele Gheldorf

Nestlé Institute of Health Sciences SA, Lausanne, Schweiz November 2012

Meng Yang (Sunny) Xia

McMaster University, Toronto, Kanada May to June 2012

■ Dr. Eija Pöllänen

University of Jyväskylä, Finnland March 2012

Dr. Patrick Gonzalez

Hôpitaux universitaires Paris-Sud 2011/2012

Dr. Georg Karpel-Massler

Department of Neurosurgery, Ulm University 2011/2012

2011

Dr. Ez-Zoubir Amri

Institute of Biology, Valrose, Université de Nice Sophia Antipolis 2011

■ Prof. Dr. Philipp Scherer

Director of the Touchstone Center, UT Southwestern Medical Center, Dallas, Texas 2011

■ Dr. Carolina Biz Rodrigues Silva

University of Sao Paulo, Brazil October 2010 to September 2011

■ Prof. Primoz Kotnik

Pediatric Endocrinology, University Children's Hospital Ljubljana, University Medical Center Ljubljana, Slovenia September 2010 to August 2011

Doctorates Conferred

Dr. med. = MD; Dr. rer. nat. / Dr. biol. hum. = PhD

2014

Markus Herrmann, Dr. med.

A model of reversible dasatinib resistance in c-KIT-mutated acute myeloid leukemia with t(8;21)

Katrin Himpel, Dr. med.

Evaluation of a transcutaneous bilirubinometer

Nora Hipp, Dr. rer. nat. (Institute of Physiological Chemistry)

Mechanisms of MYC-Induced Tumorigenesis

Li Huang, Dr. med.

Non-invasive Intermittent Mandatory Ventilation in Preterm Infants with RDS Immediately after Extubation – a Controlled Study on Synchronized Non-invasive Mechanical Ventilation and Review of the Literature

Melanie Kohler, Dr. med.

Link between maternal smoking habits during pregnancy and the filial BMI at the age of 8 years – Results from the Ulm Study

Marc Robin Mendler, Dr. med.

Influence of permissive hypercapnia on gas exchange, lung damage, and hemodynamics on laboratory animals with severe "Acute Respiratory Distress Syndrome (ARDS)"

Elisa Parys, Dr. med.

Pulmonary morbidity in very premature preterm infants when non-invasive first line treatment and respiration strategies are applied

Nadja Rauh, Dr. med.

Course of the hospitalizations of pregnant women with potential preterm delivery in the perinatal center of Ulm University Medical Center

Julia Schoss, Dr. med.

Non-invasive respiration for the treatment of respiratory failure in children with hemato-oncologic diseases or after stem cell transplantation

■ Simone Serra, Dr. med.

Investigations on the effectiveness of the Iron(III)-hydroxide polymaltose complex for the treatment of Iron-deficiency anemia in children and adolescents

2013

Carmen Dorneburg, Dr. rer. nat.

Notch in the molecular pathogenesis and therapy of neuroblastoma

Stefanie Enzenmüller, Dr. rer. nat.

PI3-Kinase inhibition primes cancer cells for lysosomotropic agents

■ Viola Hirner, Dr. med.

Children with learning disorders and disabilities in integrative schools or in special schools? Perception of parents and professionals

Christian Jörg Huse, Dr. med.

Frequency of methyphenidate prescriptions in children with a migratory background and conception of the elective course "Transcultural Medicine"

Lisa Lehmann, Dr. med.

Relations between the parental weight status, selected behavioural factors and the development of overweight and abdominal adiposity of the child – Results of the Ulm birth cohort

Nadine Muschel, Dr. med.

Influcence of the prevention program URMEL-ICE on anthropometric parameters, intra-abdominal fat and cardiovascular risk factors

Benedikt Nußbaum, Dr. med.

Effects of commonly used antiviral vaccines on human plasmacytoid dendritic cells

Amelie Rieser, Dr. med.

Clinical relevance of sonographically determined intra-abdominal fat depots in school children from Ulm; Results of the URMEL-ICE Study

Ina Rupprecht, Dr. med.

The relation between psychopathologic abnormalities and eating habits under consideration of sex differences and BMI in children

Shobit Saxena, Dr. biol. hum.

Neural crest-derived sympathoadrenergic-like progenitors of the postnatal murine adrenal gland

Christina Schlieske, Dr. med.

Sonographic und anthropometric body fat parameters as predictors for metabolic syndrome and fatty liver disease in overweight children and adolescents

Katharina Seiter, Dr. med.

The relation between infantile bodymass-index and depression, behavioural abnormality, ADHS phenotype and impulsivity

2012

Franziska Alff (Jena), Dr. rer. nat.

Prevention of excess weight and adiposity in childhood and adolescence

Davida Blasius, Dr. med.

Effects of medicinal and non-medicinal therapeutic interventions on the symptomatology and quality of life of children with ADHD – Results from a multicentric long-term study at six social pediatric centers in Baden-Württemberg

Stephanie Brandt, Dr. biol. hum.

Identification of early childhood and family factors associated with cardiovascular risk factors in pre-pubertal age

Ursula Doblanzki, Dr. med.

Influence of body weight on the left ventricular muscular mass under special consideration of body weight distribution – results of the URMEL-ICE Study –

Stefanie Dorn (geb. Geiger), Dr. med.

Perinatal Asphyxia of full-term newborns – prognostic factors for the psychomotoric development and resulting actions

Simon Grewendorf, Dr. med.

Radioimmunotherapy-based conditioning as part of hematopoietic stem cell transplantation in children with malignant and non-malignant diseases

Stella Nagel, Dr. med.

Characterization of apoptosis resistance in human preadipocytes and adipocytes

■ Claudia Jennewein, Dr. rer. nat.

Identification of a new proapoptotic role of Nuclear Factor kB in death receptorand drug induced apoptosis

■ Stefan Kammerl (München), Dr. med.

Insulin resistance as risk factor for cardiovascular diseases and tumors and their association with smoking and alcohol consumption

Susanne Moschner, Dr. med.

Investigation of the Immature Platelet Fraction (IPF) in pediatric patients with primary and secondary thrombocytopenia

Dorothee Müller, Dr. med.

Prevalence and risk factors for small for gestational age neonates – Investigations on a birth cohort of the Department of Gynecology and Obstetrics of Ulm University

Sophie Papcke-Bodet (Münster), Dr. med.

Conversion rate of the pathological glucose tolerance of type 2 diabetes mellitus in overweight children and adolescents

Veronika Reisinger, Dr. med.

Relevance of NOD2 gene polymorphisms in pediatric and adult patients with chronic inflammable bowel diseases for disease activity, bone density and therapy

■ Dirk Rosentreter, Dr. biol. hum.

CD95-resistance in long-term-activated cytotoxic T lymphocytes

Annemarie Schlitter, Dr. med.

CD57high neuroblastoma cells have characteristics of tumor-initiating cells

■ Dominic Stadel, Dr. rer. nat.

Targeting IAPs in pancreatic cancer therapy

Liane Wagner, Dr. rer. nat.

Smac mimetic sensitizes glioblastoma cells to Temozolomide-induced apoptosis in a RIP1- and NF- κ B-dependent manner independently of TNF α

■ Benedikt Winter, Dr. med.

Epidemiological and socio-medical aspects of tungiasis in northeastern Brazil

2011

Annette Bangert, Dr. rer. nat.

Sensitization of glioblastoma to TRAILinduced apoptosis by histone deacetylase inhibitors

Kerstin Hammer-Röll, Dr. med.

Influence of a year-long school-based prevention program on anthropometric parameters, cardiovascular risk factors, left ventrical muscular mass and intimamedia thickness – results of the URMELICE study

■ Natalie Hartmann, Dr. rer. nat.

Role of apoptosis-resistant T cells in allogeneic bone marrow transplantation

Sulamith Hefele, Dr. med.

Analysis of the influence of Ghrelin on the biology of the fat cell

Joachim Hepp, Dr. med.

The therapy with recombinant growth hormone and the effect in the initial year of treatment under special consideration of patients with growth hormone deficiency

Annemarie Huber, Dr. med.

Prevalence and risk factors for premature birth – Investigation on a birth cohort of the Department of Gynecology and Obstetrics of Ulm University from May 2007 to June 2008

Michaela Keuper, Dr. rer. nat.

The role of fat cell apoptosis during obesity-associated adipose tissue inflammation

Ivonne Naumann, Dr. rer. nat.

Bortezomib sensitizes neuroblastoma for TRAIL-induced apoptosis

Thomas Unterkircher, Dr. rer. nat.

Bortezomib-mediated sensitization for TRAIL-induced apoptosis in glioblastoma

Pengfei Xu, Dr. med.

Obesity and colorectal cancer: Gene expression analysis in omental adipose tissue and characterization of adiponectin specific regulation mechanisms

Lena Dietrich, Dr. med. dent.
Immunohistological biomarkers as gender-specific indicators of cellular senescence

Habiliations Conferred

2014

Dorit Fabricius, PD Dr. med.

Immune modulation of human plasmacytoid dendritic cells

2013

Pamela Fischer-Posovszky, PD Dr. rer. nat.

> Regulation of adipose tissue homeostasis by adipocyte apoptosis Subject: Experimental Medicine

Lüder H. Meyer, PD Dr. med.

Prognostic impact of leukemia biology in pediatric acute lymphoblastic leukemia

2011

■ Manfred Hönig, PD Dr. med.

The phenotypic variability of severe combined immunodeficiency (SCID): Basic principles and therapeutic consequences

Publications

Upcoming highlights in 2015

Biologically inactive leptin and early-onset extreme obesity.

N Engl J Med. 2015; 372(1): 48-54 (IF=54.42) Wabitsch M, Funcke JB, Lennerz B, Kuhnle-Krahl U, Lahr G, Debatin KM, Vatter P, Gierschik P, Moepps B, Fischer-Posovszky P

2014

 Interdisziplinäre Leitlinie der Qualität S3 zur "Prävention und Therapie der Adipositas"
 Adipositas. 2014; 8(4): 179-221
 Hauner H, Moss A, Bischoff SC, Colombo-

Hauner H, <u>Moss A</u>, Berg A, Bischoff SC, Colombo-Benkmann M, Ellrott T, Heintze C, Kanthak U, Kunze D, Stefan N, Teufel M, <u>Wabitsch M</u>, Wirth A

 Therapie der Adipositas in Deutschland.
 Möglichkeiten und Grenzen von der Diagnostik bis zur Kostenübernahme

Adipositas. 2014; 8(3): 119-125 Holzapfel C, Plachta-Danielzik S, Hilbert A, <u>Wabitsch M</u>, Müller MJ, Hauner H, Kompetenznetz Adipositas, Integriertes Forschungs- und Behandlungszentrum Adipositaserkrankungen, Deutsche Adipositas-Gesellschaft e.V.

 Manual-basiertes Vorgehen zur Vorbereitung und Nachsorge von bariatrisch-chirurgischen Eingriffen bei Jugendlichen

Adipositas. 2014; 8(1): 5-11 <u>Lennerz BS</u>, <u>Wabitsch M</u>, Geisler A, Hebebrand J, Kiess W, <u>Moss A</u>, Mühlig Y, Singer V, Uysal Y, Wiegand S, Reinehr T

 Nachhaltige Wirkung eines Aktivitätssensors auf die Gewichtsabnahme im Rahmen eines strukturierten ambulanten Schulungsprogramms

Adipositas. 2014; 8(3): 126-136 Moss A, Wabitsch M

 Artesunate Enhances the Antiproliferative Effect of Temozolomide on U87MG and A172 Glioblastoma Cell Lines.

Anticancer Agents Med Chem. 2014; 14(2): 313-8 (IF=2.939)

Karpel-Massler G, <u>Westhoff MA</u>, Kast RE, Dwucet A, <u>Nonnenmacher L</u>, Wirtz CR, <u>Debatin KM</u>, Halatsch ME

6. Phosphoinositide 3-kinases upregulate system xc(-) via eukaryotic initiation factor 2α and activating transcription factor 4 - A pathway active in glioblastomas and epilepsy.

Antioxid Redox Signal. 2014; 20(18): 2907-22 (IF=7.667)

Lewerenz J, Baxter P, Kassubek R, Albrecht P, Van Liefferinge J, <u>Westhoff MA</u>, Halatsch ME, Karpel-Massler G, Meakin PJ, Hayes JD, Aronica E, Smolders I, Ludolph AC, Methner A, Conrad M, Massie A, Hardingham GE, Maher P Urticaria, fever, and hypofibrinogenemia.
 Arthritis Rheumatol. 2014; 66(5): 1377
 Mohr V, Schulz A, Lohse P, Schumann C, Debatin KM, Schuetz C

 Unexpected plateauing of childhood obesity rates in developed countries.

BMC Med. 2014; 12: 17 (IF=7.276) Wabitsch M, Moss A, Kromeyer-Hauschild K

 Jugendliche mit extremer Adipositas: Behinderung nach Sozialgesetzbuch IX und XII
 Berufliche Rehabilitation. 2014; 28(1): 32-43
 Bode H, Wabitsch M

 Prognose und Perspektiven für Jugendliche mit extremer Adipositas

Berufliche Rehabilitation. 2014; 28(1): 52-57 <u>Lennerz B</u>, Mühlig Y, Hebebrand J, <u>Wabitsch M</u>

11. Ätiologie und Genese

Berufliche Rehabilitation. 2014; 28(1): 12-17 Lennerz B, Wabitsch M

12. Definitionen und Vorkommen

Berufliche Rehabilitation. 2014; 28(1): 7-11 Moß A, Wabitsch M

 Versorgungskonzepte für Jugendliche mit extremer Adipositas und aktuell notwendige Anpassungen Berufliche Rehabilitation. 2014; 28(1): 58-65 Wabitsch M, Eser KH, Moss A

 SCID patients with ARTEMIS vs RAG deficiencies following HCT: increased risk of late toxicity in ARTEMIS-deficient SCID.

Blood. 2014; 123(2): 281-9 (IF=9.775)
Schuetz C, Neven B, Dvorak CC, Leroy S, Ege MJ,
Pannicke U, Schwarz K, Schulz AS, Hoenig M, Sparber-Sauer M, Gatz SA, Denzer C, Blanche S, Moshous
D, Picard C, Horn BN, de Villartay JP, Cavazzana M,
Debatin KM, Friedrich W, Fischer A, Cowan MJ

15. KIT mutations in primary mediastinal B-cell lymphoma.

Blood Cancer J. 2014; 4: e241 (IF=2.884) Nagel PD, Stenzinger A, Feld FM, Herrmann MD, Brüderlein S, Barth TF, Marienfeld R, Endris V, Weichert W, <u>Debatin KM</u>, <u>Westhoff MA</u>, Lessel D, Möller P, Lennerz JK

16. Successful HLA haploidentical hematopoietic SCT in chronic granulomatous disease.

Bone Marrow Transplant. 2014; 49(10): 1337-8 (IF=3.466)

<u>Hoenig M</u>, Niehues T, Siepermann K, <u>Jacobsen EM</u>, <u>Schütz C</u>, <u>Furlan I</u>, Dückers G, <u>Lahr G</u>, Wiesneth M, <u>Debatin KM</u>, <u>Friedrich W</u>, <u>Schulz A</u>

 Polycythaemia-inducing mutations in the erythropoietin receptor (EPOR): mechanism and function as elucidated by epidermal growth factor receptor-EPOR chimeras.

Br J Haematol. 2014; 165(4): 519-28 (IF=4.959) Gross M, Ben-Califa N, McMullin MF, Percy MJ, Bento C, <u>Cario H</u>, Minkov M, Neumann D

 MYCN and survivin cooperatively contribute to malignant transformation of fibroblasts.
 Carcinogenesis. 2014; 35(2): 479-88 (IF=5.266) Hipp NI, Christner L, Wirth T, Mueller-Klieser W,

Walenta S, Schröck E, <u>Debatin KM</u>, <u>Beltinger C</u>

 Opioid receptor activation triggering downregulation of cAMP improves effectiveness of anti-cancer drugs in treatment of glioblastoma.

Cell Cycle. 2014; 13(10): 1560-70 (IF=5.006) Friesen C, Hormann I, Roscher M, Fichtner I, Alt A, Hilger R, <u>Debatin KM</u>, Miltner E

 Prospective validation of a new method of monitoring minimal residual disease in childhood acute myeloid leukemia

Clin Cancer Res. 2014; (IF=8.193)
Steinbach D, Bader P, Willasch A, Bartholomae S,
Debatin KM, Zimmermann M, Creutzig U, Reinhardt
D, Gruhn B

- Entwicklungsförderung und therapeutische Ansätze Consilium Pädiatrie. 2014; 2014(3): 17-20 Bode H,
- 22. Clinical characteristics and outcome of 467 patients with a clinically recognized eating disorder identified among 52,215 patients with type 1 diabetes: a multicenter german/austrian study.

Diabetes Care. 2014; 37(6): 1581-9 (IF=8.57) Scheuing N, Bartus B, Berger G, Haberland H, Icks A, Knauth B, Nellen-Hellmuth N, Rosenbauer J, Teufel M, Holl RW, DPV Initiative, German BMBF Competence Network Diabetes Mellitus

23. Contrasting the clinical care and outcomes of 2,622 children with type 1 diabetes less than 6 years of age in the United States T1D Exchange and German/Austrian DPV registries.

Diabetologia. 2014; 57(8): 1578-85 (IF=6.88) Maahs DM, Hermann JM, DuBose SN, Miller KM, Heidtmann B, DiMeglio LA, Rami-Merhar B, Beck RW, Schober E, Tamborlane WV, Kapellen TM, Holl RW, DPV Initiative, T1D Exchange Clinic Network

24. Weight loss in children and adolescents. **Dtsch Arztebl Int.** 2014; 111(48): 818-24 (IF=3.608)

Mühlig Y, <u>Wabitsch M</u>, <u>Moss A</u>, Hebebrand J

25. In reply

Dtsch Arztebl Int. 2014; 111(4): 58 (IF=3.608) Schmid MB

- 26. The prevention and treatment of obesity.

 Dtsch Arztebl Int. 2014; 111(42): 705-13 (IF=3.608)

 Wirth A, Wabitsch M, Hauner H
- 27. Gegen Diskriminierung und für die Förderung von Kindern und Jugendlichen mit Adipositas Ernährung im Fokus. 2014; 14(05-06): 130-133 Wabitsch M
- 28. Clinical utility gene card for: Hereditary thrombocythemia.

Eur J Hum Genet. 2014; 22(2) (IF=4.225) Hussein K, Percy M, McMullin MF, Schwarz J, Schnittger S, Porret N, Martinez-Aviles LM, Paricio BB, Giraudier S, Skoda R, Lippert E, Hermouet S, <u>Cario H</u>

Darwinian Principles in Cancer Therapy
 European Oncology & Haematology. 2014; 10(2): 116–20
 Stroh S, Debatin KM, Westhoff MA

 Transitory dasatinib-resistant states in KIT(mut) t(8; 21) acute myeloid leukemia cells correlate with altered KIT expression.

Exp Hematol. 2014; 42(2): 90-100 (IF=2.806)

Herrmann MD, Lennerz JK, Bullinger L, Bartholomae S, Holzmann K, Westhoff MA, Corbacioglu S, Debatin KM

- Spare mitochondrial respiratory capacity permits human adipocytes to maintain ATP homeostasis under hypoglycemic conditions.
 - FASEB J. 2014; 28(2): 761-70 (IF=5.48) Keuper M, Jastroch M, Yi CX, <u>Fischer-Posovszky P,</u> <u>Wabitsch M</u>, Tschöp MH, Hofmann SM
- Treosulfan-based conditioning regimen for children and adolescents with hemophagocytic lymphohistiocytosis.

Haematologica. 2014; 99(1): 180-4 (IF=5.868) Lehmberg K, Albert MH, Beier R, Beutel K, Gruhn B, Kröger N, Meisel R, <u>Schulz A</u>, Stachel D, Woessmann W, Janka G, Müller I

- 33. Attenuated measles virus controls pediatric acute B-lineage lymphoblastic leukemia in NOD/SCID mice. Haematologica. 2014; 99(6): 1050-61 (IF=5.868) Lühl NC, Zirngibl F, Dorneburg C, Wei J, Dahlhaus M, Barth TF, Meyer LH, Queudeville M, Eckhoff S, Debatin KM, Beltinger C
- 34. Erythrocytosis associated with a novel missense mutation in the BPGM gene.
 Haematologica. 2014; 99(10): e201-4 (IF=5.868)
 Petousi N, Copley RR, Lappin TR, Haggan SE, Bento CM, Cario H, Percy MJ, WGS Consortium, Ratcliffe PJ,
- 35. A New (G)γ-Globin Variant Causing Low Oxygen
 Affinity: Hb F-Brugine/Feldkirch [(G)γ105(G7)Leu→His;
 HBG2: c.317T>A].

 Hemoglobin. 2014; 38(2): 84-7 (IF=0.955)
 Saller E, Kohne E, Dutly F, Frischknecht H
- 36. Regulation of Appetite, Satiation, and Body Weight by Enteroendocrine Cells. Part 1: Characteristics of Enteroendocrine Cells and Their Capability of Weight Regulation.

Horm Res Paediatr. 2014; (IF=1.713) <u>Posovszky C, Wabitsch M</u>

Robbins PA, McMullin MF

 Genetic basis of congenital erythrocytosis: mutation update and online databases.

Hum Mutat. 2014; 35(1): 15-26 (IF=5.05)
Bento C, Percy MJ, Gardie B, Maia TM, van Wijk
R, Perrotta S, Della Ragione F, Almeida H, Rossi C,
Girodon F, Aström M, Neumann D, Schnittger S,
Landin B, Minkov M, Randi ML, Richard S, Casadevall
N, Vainchenker W, Rives S, Hermouet S, Ribeiro ML,
McMullin MF, Cario H, ECE-Consortium, Chauveau
A, Gimenez-Roqueplo AP, Bressac-de-Paillerets
B, Altindirek D, Lorenzo F, Lambert F, Dan H, GadLapiteau S, Catarina Oliveira A, Rossi C, Fraga C,
Taradin G, Martin-Nuñez G, Vitória H, Diaz Aguado H,
Palmblad J, Vidán J, Relvas L, Ribeiro ML, Luigi Larocca
M, Luigia Randi M, Pedro Silveira M, Percy M, Gross
M, Marques da Costa R, Beshara S, Ben-Ami T, Ugo V

38. Surveillance von nosokomialen Infektionen mit Benchmarking: ein Instrument zur Verbesserung des klinischen Ergebnisses bei Frühgeborenen mit sehr niedrigem Geburtsgewicht

HygMed. 2014; 39(7/8): 274-280 <u>Lindner W, Hummler HD</u>, Schmid S, von Baum H

39. B-CLL cells acquire APC- and CTL-like phenotypic characteristics after stimulation with CpG ODN and IL-21.

Int Immunol. 2014; 26(7): 383-95 (IF=3.181) Hagn M, Blackwell SE, Beyer T, Ebel V, <u>Fabricius D</u>, Lindner S, Stilgenbauer S, Simmet T, Tam C, Neeson P, Trapani JA, Schrezenmeier H, Weiner GJ, Jahrsdörfer B

 Killing me softly--future challenges in apoptosis research.

Int J Mol Sci. 2014; 15(3): 3746-67 (IF=2.339) <u>Westhoff MA</u>, Brühl O, <u>Nonnenmacher L</u>, Karpel-Massler G, <u>Debatin KM</u>

- 41. Bariatric surgery in adolescents and young adults-safety and effectiveness in a cohort of 345 patients.

 Int J Obes (Lond). 2014; 38(3): 334-40 (IF=5.386)

 Lennerz BS, Wabitsch M, Lippert H, Wolff S, Knoll C, Weiner R, Manger T, Kiess W, Stroh C
- 42. Calcium-dependent release of adipocyte fatty acid binding protein from human adipocytes.
 Int J Obes (Lond). 2014; 38(9): 1221-7 (IF=5.386)
 Schlottmann I, Ehrhart-Bornstein M, Wabitsch M, Bornstein SR, Lamounier-Zepter V
- 43. Comparison of outcomes of hematopoietic stem cell transplantation without chemotherapy conditioning by using matched sibling and unrelated donors for treatment of severe combined immunodeficiency.

 J Allergy Clin Immunol. 2014; 134(4): 935-943.e15
 (IF=11.248)

 Dvorak CC, Hassan A, Slatter MA, Hönig M, Lankester

AC, Buckley RH, Pulsipher MA, Davis JH, Güngör T, Gabriel M, Bleesing JH, Bunin N, Sedlacek P, Connelly JA, Crawford DF, Notarangelo LD, Pai SY, Hassid J, Veys P, Gennery AR, Cowan MJ

44. Haploidentical T-cell alpha beta receptor and CD19-depleted stem cell transplant for Wiskott-Aldrich syndrome.

J Allergy Clin Immunol. 2014; 134(5): 1199-201 (IF=11.248)

Kharya G, Nademi Z, Leahy TR, Dunn J, Barge D, <u>Schulz A</u>, Cant A, Gennery A, Slatter M

45. Lesson from hypomorphic recombination-activating gene (RAG) mutations: Why asymptomatic siblings should also be tested.

J Allergy Clin Immunol. 2014; 133(4): 1211-1215.e2 (IF=11.248)

Schuetz C, Pannicke U, <u>Jacobsen EM</u>, Burggraf S, Albert MH, <u>Hönig M</u>, Niehues T, Feyen O, Ehl S, <u>Debatin KM</u>, <u>Friedrich W</u>, <u>Schulz AS</u>, Schwarz K

46. De novo synthesis of steroids and oxysterols in adipocytes.

J Biol Chem. 2014; 289(2): 747-64 (IF=4.6) Li J, Daly E, Campioli E, <u>Wabitsch M</u>, Papadopoulos V 47. CLCN7 and TCIRG1 Mutations Differentially Affect Bone Matrix Mineralization in Osteopetrotic Individuals

J Bone Miner Res. 2014; 29(4): 982-91 (IF=6.589) Barvencik F, Kurth I, Koehne T, Stauber T, Zustin J, Tsiakas K, Ludwig CF, Beil FT, Pestka JM, Hahn M, Santer R, Supanchart C, Kornak U, Fattore AD, Jentsch TJ, Teti A, Schulz A, Schinke T, Amling M

48. Head Injury in Children: Has a Change in Circumstances Caused an Increase in Treatment Numbers?

J Child Neurol. 2014; (IF=1.666) Pal'a A, Kapapa M, <u>Posovszky C</u>, Röderer G, König R, Woischneck D, Wirtz CR, Kapapa T

49. TTC7A mutations disrupt intestinal epithelial apicobasal polarity.

J Clin Invest. 2014; 124(1): 328-37 (IF=13.765)
Bigorgne AE, Farin HF, Lemoine R, Mahlaoui N,
Lambert N, Gil M, Schulz A, Philippet P, Schlesser P,
Abrahamsen TG, Oymar K, Davies EG, Ellingsen CL,
Leteurtre E, Moreau-Massart B, Berrebi D, BoleFeysot C, Nischke P, Brousse N, Fischer A, Clevers H,
de Saint Basile G

 Nebulized voriconazole in infections with Scedosporium apiospermum--case report and review of the literature.

J Cyst Fibros. 2014; 13(4): 400-2 (IF=3.82) Holle J, Leichsenring M, Meissner PE

 TRAIL-receptor costimulation inhibits proximal TCR signaling and suppresses human T cell activation and proliferation.

J Immunol. 2014; 193(8): 4021-31 (IF=5.362) <u>Lehnert C, Weiswange M</u>, Jeremias I, Bayer C, Grunert M, <u>Debatin KM</u>, <u>Strauss G</u>

52. Long-term outcome at age 7-10 years after extreme prematurity - a prospective, two centre cohort study of children born before 25 completed weeks of gestation (1999-2003).

J Matern Fetal Neonatal Med. 2014; 27(16): 1620-6 (IF=1.208)

Herber-Jonat S, <u>Streiftau S</u>, Knauss E, Voigt F, Flemmer AW, <u>Hummler HD</u>, Schulze A, <u>Bode H</u>

53. Impaired Point-of-Care Blood Testing by Photometry in a Neonate with Congenital Cyanosis and Haemoglobin F-M-Osaka

J Neonatal Intensive Care. 2014; 2014: ePub Hütten MC, Heimann K, Schoberer M, <u>Brintrup J</u>, Wintgens J, Orlikowsky TW, <u>Kohne E</u>

54. Olanzapine inhibits proliferation, migration and anchorage-independent growth in human glioblastoma cell lines and enhances temozolomide's antiproliferative effect.

J Neurooncol. 2014; (IF=2.787)

Karpel-Massler G, Kast RE, <u>Westhoff M</u>, Dwucet A, Welscher N, <u>Nonnenmacher L</u>, Hlavac M, Siegelin MD, Wirtz CR, <u>Debatin K</u>, Halatsch M 55. Tracking of metabolic control from childhood to young adulthood in type 1 diabetes.

J Pediatr. 2014; 165(5): 956-61.e1-2 (IF=3.736)
Hofer SE, Raile K, Fröhlich-Reiterer E, Kapellen T, Dost
A, Rosenbauer J, Grulich-Henn J, Holl RW, <u>Austrian/</u>
German Diabetes Patienten Verlaufsdokumentation
DPV Initiative, German Competence Network for
Diabetes Mellitus

56. Effects of a sustained inflation in preterm infants at hirth

J Pediatr. 2014; 165(5): 903-908.e1 (IF=3.736) van Vonderen JJ, Hooper SB, <u>Hummler HD</u>, Lopriore E, Te Pas AB

 Health-related quality of life in children with abdominal pain due to functional or organic gastrointestinal disorders.

> J Pediatr Psychol. 2014; 39(1): 45-54 (IF=2.541) Warschburger P, Hänig J, Friedt M, <u>Posovszky C</u>, Schier M, Calvano C

58. Mitophagy enhances oncolytic measles virus replication by mitigating DDX58/RIG-I-like receptor signaling.

J Virol. 2014; 88(9): 5152-64 (IF=4.648) Xia M, <u>Gonzalez P</u>, Li C, Meng G, Jiang A, Wang H, Gao Q, <u>Debatin KM</u>, <u>Beltinger C</u>, Wei J

Behavioural problems and learning impairments at age 7-10 after extreme prematurity
 Kindh Entwickl. 2014; 23(4): 239-247 (IF=3.518)
 Streiftau S, Bode H, Voigt F, Hummler HD, Schulze A,

 Unusual malposition of a peripherally inserted central catheter (PICC) in a very low birth weight infant (VLBW Infant).

Klin Padiatr. 2014; 226(4): 248-9 Baranowski ST, Hummler H, Hopfner RJ

Herber-Jonat S

61. [Treatment of neonatal asphyxia with a special focus on therapeutic hypothermia].

Klin Padiatr. 2014; 226(1): 29-37 Flemmer AW, Maier RF, <u>Hummler H</u>

62. Successful haploidentical hematopoietic stem cell transplantation in a patient with SCID due to CD3¢ deficiency: need for IgG-substitution 6 years later.

Klin Padiatr. 2014; 226(3): 149-53 Fuehrer M, Pannicke U, <u>Schuetz C</u>, <u>Jacobsen EM</u>, <u>Schulz A</u>, <u>Friedrich W</u>, Schwarz K, <u>Hönig M</u>

63. Automated adjustments of inspired fraction of oxygen to avoid hypoxemia and hyperoxemia in neonates - a systematic review on clinical studies.

Klin Padiatr. 2014; 226(4): 204-10 <u>Hummler H</u>, Fuchs H, <u>Schmid M</u>

64. Up-regulation of Bcl-2 during adipogenesis mediates apoptosis resistance in human adipocytes.
Mol Cell Endocrinol. 2014; 382(1): 368-76 (IF=4.241)
Nagel SA, Keuper M, Zagotta I, Enlund E, Ruperez AI, Debatin KM, Wabitsch M, Fischer-Posovszky P

65. Comparative gene array analysis of progenitor cells from human paired deep neck and subcutaneous adipose tissue.

Mol Cell Endocrinol. 2014; 395(1-2): 41-50 (IF=4.241) <u>Tews D</u>, <u>Schwar V</u>, Scheithauer M, Weber T, Fromme T, Klingenspor M, Barth TF, Möller P, Holzmann K, <u>Debatin KM</u>, <u>Fischer-Posovszky P</u>, <u>Wabitsch M</u> 66. Molecular and Cellular Pediatrics Molecular and Cellular Pediatrics. 2014; 1(1): 4 Debatin KM

67. Monogenic forms of childhood obesity due to mutations in the leptin gene

Molecular and Cellular Pediatrics. 2014; 1(1): 3 Funcke JB, von Schnurbein J, Lennerz B, Lahr G, Debatin KM, Fischer-Posovszky P, Wabitsch M

Cancer therapy: know your enemy?
 Molecular and Cellular Pediatrics. 2014; 1(1): 10
 Westhoff MA, Bruhl O, <u>Debatin KM</u>

69. A critical evaluation of PI3K inhibition in Glioblastoma and Neuroblastoma therapy

Molecular and cellular therapies. 2014; 2(1): 32 Westhoff MA, Karpel-Massler G, Brühl O, Enzenmüller S, La Ferla-Brühl K, Siegelin MD, Nonnenmacher L, Debatin KM

Identification of platelet function defects by multiparameter assessment of thrombus formation.
 Nat Commun. 2014; 5: 4257 (IF=10.742) de Witt SM, Swieringa F, Cavill R, Lamers MM, van Kruchten R, Mastenbroek T, Baaten C, Coort S, Pugh N, Schulz A, Scharrer I, Jurk K, Zieger B, Clemetson KJ,

71. Evidence of inappropriate cardiovascular risk assessment in middle-age women based on recommended cut-points for waist circumference.

Nutr Metab Cardiovasc Dis. 2014; 24(10): 1112-9 (IF=3.875)

Florath I, Brandt S, Weck MN, Moss A, Gottmann P,

Farndale RW, Heemskerk JW, Cosemans JM

Rothenbacher D, <u>Wabitsch M</u>, Brenner H

2. Potential clinical implications of BRAF mutations in histiocytic proliferations.

Oncotarget. 2014; 5(12): 4060-70 (IF=6.627) Bubolz AM, Weissinger SE, Stenzinger A, Arndt A, Steinestel K, Brüderlein S, <u>Cario H</u>, <u>Lubatschofski A</u>, Welke C, Anagnostopoulos I, Barth TF, Beer AJ, Möller P, Gottstein M, Viardot A, Lennerz JK

73. Mitophagy switches cell death from apoptosis to necrosis in NSCLC cells treated with oncolytic measles virus

Oncotarget. 2014; 5(11): 3907-18 (IF=6.627) Xia M, Meng G, Jiang A, Chen A, <u>Dahlhaus M</u>, Gonzalez P, <u>Beltinger C</u>, Wei J

74. Klassische und neuere Parameter im Überblick -Veränderungen im roten Blutbild pädiatrie hautnah. 2014; 26(3): 182-190 Lobitz S, <u>Cario H</u>

 Improving maternal and newborn health: effectiveness of a community health worker program in rural Kenya.

PLoS ONE. 2014; 9(8): e104027 (IF=3.534) Adam MB, <u>Dillmann M</u>, Chen MK, Mbugua S, Ndung'u J, Mumbi P, Waweru E, <u>Meissner P</u>

 Establishment of lipofection for studying miRNA function in human adipocytes.

PLoS ONE. 2014; 9(5): e98023 (IF=3.534)
Enlund E, Fischer S, Handrick R, Otte K, Debatin KM,
Wabitsch M, Fischer-Posovszky P

 Restrained and external-emotional eating patterns in young overweight children-results of the Ulm Birth Cohort Study.

PLoS ONE. 2014; 9(8): e105303 (IF=3.534) Hirsch O, Kluckner VJ, <u>Brandt S</u>, <u>Moss A</u>, Weck M, Florath I, <u>Wabitsch M</u>, Hebebrand J, Schimmelmann BG, Christiansen H

78. PARP Inhibition Restores Extrinsic Apoptotic Sensitivity in Glioblastoma.

PLoS ONE. 2014; 9(12): e114583 (IF=3.534) Karpel-Massler G, Pareja F, Aimé P, Shu C, Chau L, Westhoff M, Halatsch M, Crary JF, Canoll P, Siegelin MD

79. Mitochondrial DNA variants in obesity.

PLoS ONE. 2014; 9(5): e94882 (IF=3.534)
Knoll N, Jarick I, Volckmar AL, Klingenspor M, Illig T,
Grallert H, Gieger C, Wichmann HE, Peters A, Wiegand
S, Biebermann H, <u>Fischer-Posovszky P, Wabitsch M,</u>
Völzke H, Nauck M, Teumer A, Rosskopf D, Rimmbach
C, Schreiber S, Jacobs G, Lieb W, Franke A, Hebebrand
J, Hinney A

80. Age-specific influence of wheezing phenotypes on pre-adolescent and adolescent health-related quality of life.

Pediatr Allergy Immunol. 2014; 25(8): 781-7 (IF=3.859)

Braig S, <u>Brandt S</u>, <u>Wabitsch M</u>, Florath I, Brenner H, Rothenbacher D, Genuneit J

81. Infant atopic eczema and subsequent attentiondeficit/hyperactivity disorder - A prospective birth cohort study.

Pediatr Allergy Immunol. 2014; 25(1): 51-6 (IF=3.859) Genuneit J, Braig S, <u>Brandt S</u>, <u>Wabitsch M</u>, Florath I, Brenner H, Rothenbacher D

82. Plasma insulin levels in childhood are related to maternal factors - results of the Ulm Birth Cohort Study.

Pediatr Diabetes. 2014; 15(6): 453-63 (IF=2.129) Brandt S, Moß A, Lennerz B, Koenig W, Weyermann M, Rothenbacher D, Brenner H, <u>Wabitsch M</u>

83. Association of pre- and post-natal parental smoking with offspring body mass index: an 8-year follow-up of a birth cohort.

Pediatr Obes. 2014; 9(2): 121-34 (IF=3.025) Florath I, Kohler M, Weck MN, <u>Brandt S</u>, Rothenbacher D, Schöttker B, <u>Moß A</u>, Gottmann P, <u>Wabitsch M</u>, Brenner H

84. Sonographically measured suprailiac adipose tissue is a useful predictor of non-alcoholic fatty liver disease in obese children and adolescents.

Pediatr Obes. 2014; (IF=3.025) Schlieske C, <u>Denzer C, Wabitsch M</u>, Oeztuerk S, Mason RA, <u>Thiere D</u>, Kratzer W

85. Closed-loop automatic oxygen control (CLAC) in preterm infants: a randomized controlled trial.

Pediatrics. 2014; 133(2): e379-85 (IF=5.297) Hallenberger A, Poets CF, Horn W, Seyfang A, Urschitz MS, CLAC Study Group, Miksch S, Mueller-Hansen I, <u>Hummler H, Schmid M, Essers J, Mendler M,</u> Hentschel R, Freisinger P, Schneider HC 86. Effect of supplementation with long-chain ω -3 polyunsaturated fatty acids on behavior and cognition in children with attention deficit/hyperactivity disorder (ADHD): A randomized placebo-controlled intervention trial.

Prostaglandins Leukot Essent Fatty Acids. 2014; 91(1-2): 49-60 (IF=1.984) Widenhorn-Müller K, <u>Schwanda S</u>, Scholz E, Spitzer M, Bode H

 Zerebrale Gewebeoxygenierung bei Frühgeborenen Pädiatr Prax. 2014; 82: 549-558 Waitz M, Hummler HD, Schmid MB

88. Stop the pain: study protocol for a randomized-controlled trial.

Trials. 2014; 15: 357 (IF=2.117) Warschburger P, Calvano C, Becker S, Friedt M, Hudert C, <u>Posovszky C</u>, Schier M, Wegscheider K

 Übergewicht bei Kindern: Prävention statt Therapie UGBforum. 2014; 2014(3): 137-139 Wabitsch M

90. Guest Comment Quality of Results in Perinatal Centres

Z Geburtshilfe Neonatol. 2014; 218(4): 164-164 (IF=0.458)

Hummler HD

91. Prof. Dr. Adolf Valls i Soler (1942-2013) OBITUARY
Acta Paediatr. 2014; 103(5): 568-568 (IF=1.842)
Hummler H, Garcia AA, Cuttini M, Weindling M

2013

92. Biallelic SZT2 mutations cause infantile encephalopathy with epilepsy and dysmorphic corpus callosum.

Am J Hum Genet. 2013; 93(3): 524-9 (IF=11.202) Basel-Vanagaite L, Hershkovitz T, Heyman E, Raspall-Chaure M, Kakar N, Smirin-Yosef P, Vila-Pueyo M, Kornreich L, Thiele H, Bode H, Lagovsky I, Dahary D, Haviv A, Hubshman MW, Pasmanik-Chor M, Nürnberg P, Gothelf D, Kubisch C, Shohat M, Macaya A, Borck G

 Non-lethal non-mosaic male with Conradi-Hunermann syndrome caused by a novel EBP c.356T>G mutation.

Am J Med Genet A. 2013; 161(9): 2385-8 (IF=2.304) Bode H, Galm C, Hummler H, Teller C, Haas D, Gencik M

94. [Current concepts of weaning children from invasive ventilation].

Anasthesiol Intensivmed Notfallmed Schmerzther. 2013; 48(10): 622-5 (IF=0.388) Fuchs H, Nicolai T, <u>Schmid MB</u>, Krüger M

 Chloroquine overcomes resistance of lung carcinoma cells to the dual PI3K/mTOR inhibitor PI103 by lysosome-mediated apoptosis.

Anticancer Drugs. 2013; 24(1): 14-9 (IF=2.232) Enzenmüller S, Gonzalez P, Debatin KM, Fulda S

96. Benchmarking in neonatal intensive care: obstetrical and neonatal practices and registration policies may influence outcome data.

Arch Dis Child Fetal Neonatal Ed. 2013; 98(2): F96-7 (IF=3.451)

<u>Hummler H</u>

 Cerebral desaturations in preterm infants: a crossover trial on influence of oxygen saturation target range.

Arch Dis Child Fetal Neonatal Ed. 2013; 98(5): F392-8 (IF=3.451)

Schmid MB, Hopfner RJ, Lenhof S, Hummler HD, Fuchs H

 Incidence of hypo- and hyper-capnia in a crosssectional European cohort of ventilated newborn infants.

Arch Dis Child Fetal Neonatal Ed. 2013; 98(4): F323-6 (Impact(2012)=3.451)

van Kaam AH, De Jaegere AP, Rimensberger PC, Neovent Study Group (including <u>Hummler H</u>)

 Age-of-onset-dependent influence of NOD2 gene variants on disease behaviour and treatment in Crohn's disease.

BMC Gastroenterol. 2013; 13: 77 (IF=2.11) <u>Posovszky C, Pfalzer V, Lahr G,</u> Niess JH, Klaus J, Mayer B, <u>Debatin KM</u>, von Boyen GB

100. Medical and psychosocial implications of adolescent extreme obesity - acceptance and effects of structured care, short: Youth with Extreme Obesity Study (YES).

BMC Public Health. 2013; 13: 789 (IF=2.076) <u>Wabitsch M, Moss A</u>, Reinehr T, Wiegand S, Kiess W, Scherag A, Holl R, Holle R, Hebebrand J

101. Recombinant CD95-Fc (APG101) prevents graft-versus-host disease in mice without disabling antitumor cytotoxicity and T-cell functions.
Blood. 2013; 121(3): 556-65 (IF=9.06)
Hartmann N, Messmann JJ, Leithäuser F, Weiswange
M, Kluge M, Fricke H, Debatin KM, Strauss G

102. Lentiviral gene transfer of TCIRG1 into peripheral blood CD34(+) cells restores osteoclast function in infantile malignant osteopetrosis.

Bone. 2013; 57(1): 1-9 (IF=3.823) Moscatelli I, Thudium CS, Flores C, <u>Schulz A</u>, Askmyr M, Gudmann NS, Andersen NM, Porras O, Karsdal MA,

103. Long-term follow-up of children conditioned with Treosulfan: German and Austrian experience.

Villa A, Fasth A, Henriksen K, Richter J

Bone Marrow Transplant. 2013; 48(4): 491-501 (IF=3.541)

Beier R, <u>Schulz A</u>, <u>Hönig M</u>, Eyrich M, Schlegel PG, Holter W, Stachel KD, Ehlert K, Greil J, Nürnberger W, Wößmann W, Bader P, Urban C, Müller I, Suttorp M, Sauer M, Gruhn B, Meisel R, Zimmermann M, Sykora

104. Allo-SCT using BU, CY and melphalan for children with AML in second CR.

Bone Marrow Transplant. 2013; 48(5): 651-6 (IF=3.541)

Beier R, Albert MH, Bader P, Borkhardt A, Creutzig U, Eyrich M, Ehlert K, Gruhn B, Greil J, Handgretinger R, Holter W, Klingebiel T, Kremens B, Lang P, Mauz-Körholz C, Meisel R, Müller I, Peters C, Reinhardt D, Sedlacek P, Schulz A, Schuster FR, Schrauder A, Strahm B, Sykora KW, Wössmann W, Zimmermann M, Sauer MG

105. Alternative donor SCT for the treatment of MHC Class II deficiency.

Bone Marrow Transplant. 2013; 48(2): 226-32 (IF=3.541)

Small TN, Qasim W, <u>Friedrich W</u>, Chiesa R, Bleesing JJ, Scurlock A, Veys P, <u>Sparber-Sauer M</u>

106. [Non-alcoholic fatty liver disease in obese children and adolescents].

Bundesgesundheitsblatt Gesundheitsforschung, Gesundheitsschutz. 2013; 56(4): 517-27 (IF=0.722) Denzer C

107. [Hormonal alterations in obese children and adolescents].

Bundesgesundheitsblatt Gesundheitsforschung, Gesundheitsschutz. 2013; 56(4): 500-3 (IF=0.722) Wabitsch M, Reinehr T

108. GDC-0941 enhances the lysosomal compartment via TFEB and primes glioblastoma cells to lysosomal membrane permeabilization and cell death.

Cancer Lett. 2013; 329(1): 27-36 (IF=4.258) Enzenmüller S, Gonzalez P, Karpel-Massler G, Debatin KM, Fulda S

109. Interleukin 21-induced granzyme B-expressing B cells infiltrate tumors and regulate T cells.

Cancer Res. 2013; 73(8): 2468-79 (IF=8.65) Lindner S, Dahlke K, Sontheimer K, Hagn M, Kaltenmeier C, Barth TF, Beyer T, Reister F, <u>Fabricius D</u>, Lotfi R, Lunov O, Nienhaus GU, Simmet T, Kreienberg R, Möller P, Schrezenmeier H, Jahrsdörfer B

110. TRAIL (TNF-related apoptosis-inducing ligand) regulates adipocyte metabolism by caspase-mediated cleavage of PPARgamma.

Cell Death Dis. 2013; 4: e474 (IF=6.044)
Keuper M, Wernstedt Asterholm I, Scherer PE,
Westhoff MA, Möller P, Debatin KM, Strauss G,
Wabitsch M, Fischer-Posovszky P

111. High content analysis of differentiation and cell death in human adipocytes.

Cytometry A. 2013; 83(10): 933-943 (IF=3.711) Doan MX, Sarvari AK, <u>Fischer-Posovszky P</u>, <u>Wabitsch M</u>, Balajthy Z, Fesus L, Bacso Z

112. Overweight and Diabetes mellitus

Diabetologie und Stoffwechsel. 2013; 8(S02): S159-S164 (IF=0.427) Hauner H, Buchholz G, Hamann A, Husemann B, Koletzko B, Liebermeister H, <u>Wabitsch M</u>, Westenhofer J, Wirth A, Wolfram G

113. Quality analysis is overdue.

Dtsch Arztebl Int. 2013; **110(7)**: **117-8** (IF=3.542) <u>Hummler H</u>

114. Prospective risk factor monitoring reduces intracranial hemorrhage rates in preterm infants. Dtsch Arztebl Int. 2013; 110(29-30): 489-96 (IF=3.542) <u>Schmid MB</u>, Reister F, Mayer B, <u>Hopfner RJ</u>, <u>Fuchs H</u>, <u>Hummler HD</u>

115. FTO deficiency induces UCP-1 expression and mitochondrial uncoupling in adipocytes.

Endocrinology. 2013; 154(9): 3141-51 (IF=4.717)

Tews D, Fischer-Posovszky P, Fromme T, Klingenspor M, Fischer J, Rüther U, Marienfeld R, Barth TF, Möller P, Debatin KM, Wabitsch M

116. Subclinical hypothyroidism and dyslipidemia in children and adolescents with type 1 diabetes mellitus.

Eur J Endocrinol. 2013; 168(4): 601-8 (IF=3.136) <u>Denzer C</u>, Karges B, Näke A, Rosenbauer J, Schober E, Schwab KO, Holl RW, DPV Initiative and the BMBF-Competence Network Diabetes Mellitus

117. Economic evaluation of URMEL-ICE, a school-based overweight prevention programme comprising metabolism, exercise and lifestyle intervention in children.

Eur J Health Econ. 2013; 14(2): 185-95 (IF=2.095) Kesztyüs D, Schreiber A, Wirt T, Wiedom M, Dreyhaupt J, Brandstetter S, Koch B, Wartha O, Muche R, <u>Wabitsch M</u>, Kilian R, Steinacker JM

118. Heterogeneous clinical presentation in ICF syndrome: correlation with underlying gene defects.

Eur J Hum Genet. 2013; 21(11): 1219-25 (IF=4.319) Weemaes CM, van Tol MJ, Wang J, van Ostaijen-ten Dam MM, van Eggermond MC, Thijssen PE, Aytekin C, Brunetti-Pierri N, van der Burg M, Graham Davies E, Ferster A, Furthner D, Gimelli G, Gennery A, Kloeckener-Gruissem B, Meyn S, Powell C, Reisli I, Schuetz C, Schulz A, Shugar A, van den Elsen PJ, van der Maarel SM

119. Regulation and function of C1Q/TNF-related protein-5 (CTRP-5) in the context of adipocyte biology.

Exp Clin Endocrinol Diabetes. 2013; 121(5): 310-7 (IF=1.555)

Schmid A, Kopp A, Aslanidis C, <u>Wabitsch M</u>, Müller M, Schäffler A

120. Adipositas in der Kindheit

Gynäkologische Endokrinologie. 2013; 11(1): 37-42 <u>Lennerz B, Wabitsch M</u>

121. Rapid improvement of hepatic steatosis after initiation of leptin substitution in a leptin-deficient girl.

Horm Res Paediatr. 2013; 79(5): 310-7 (IF=1.553) von Schnurbein J, Heni M, Moss A, Nagel SA, Machann J, Muehleder H, Debatin KM, Farooqi S, Wabitsch M

- 122. Influence of Tyrphostin AG490 on the expression of diabetes-associated markers in human adipocytes. Immunogenetics. 2013; 65(1): 83-90 (IF=2.894) Davoodi-Semiromi A, Wasserfall CH, Hassanzadeh A, Cooper-Dehoff RM, Wabitsch M, Atkinson M
- 123. The dual PI3K/mTOR inhibitor NVP-BEZ235 and chloroquine synergize to trigger apoptosis via mitochondrial-lysosomal cross-talk.
 Int J Cancer. 2013; 132(11): 2682-93 (IF=6.198)
 <u>Seitz C</u>, Hugle M, <u>Cristofanon S</u>, Tchoghandjian A, <u>Fulda S</u>
- **124.** Mycophenolate mofetil versus cyclosporin A in children with frequently relapsing nephrotic syndrome.

J Am Soc Nephrol. 2013; 24(10): 1689-97 (IF=8.987) Gellermann J, Weber L, Pape L, Tönshoff B, Hoyer P, Querfeld U, Gesellschaft für Pädiatrische Nephrologie (GPN), Gellermann J, Querfeld U, Franke I, Rüth EM, Rascher W, Arbeiter A, Hoyer P, Pohl M, Pape L, Feneberg R, Tönshoff B, Misselwitz J, Wygoda S, Fehrenbach H, Benz M, Weber L, Schofer O, Wigger M, Rudolph A, Beringer O

125. SNX10 mutations define a subgroup of human autosomal recessive osteopetrosis with variable clinical severity.

J Bone Miner Res. 2013; 28(5): 1041-9 (IF=6.128) Pangrazio A, Fasth A, Sbardellati A, Orchard PJ, Kasow KA, Raza J, Albayrak C, Albayrak D, Vanakker OM, De Moerloose B, Vellodi A, Notarangelo LD, Schlack C, Strauss G, Kühl JS, Caldana E, Lo Iacono N, Susani L, Kornak U, Schulz A, Vezzoni P, Villa A, Sobacchi C

126. Genomic Basis of Aromatase Excess Syndrome:
Recombination- and Replication-Mediated
Rearrangements Leading to CYP19A1 Overexpression.

J Clin Endocrinol Metab. 2013; 98(12): E2013-21
(IF=6.43)
Fukami M, Tsuchiya T, Vollbach H, Brown KA, Abe
S, Ohtsu S, Wabitsch M, Burger H, Simpson ER,
Umezawa A, Shihara D, Nakabayashi K, Bulun SE,

127. Antiviral vaccines license T cell responses by suppressing granzyme B levels in human plasmacytoid dendritic cells.

J Immunol. 2013; 191(3): 1144-53 (IF=5.52)

<u>Fabricius D</u>, <u>Nußbaum B</u>, <u>Busch D</u>, <u>Panitz V</u>, <u>Mandel B</u>, <u>Vollmer A</u>, <u>Westhoff MA</u>, Kaltenmeier C, Lunov O, Tron K, Nienhaus GU, Jahrsdörfer B, <u>Debatin KM</u>

128. A novel missense mutation in the CLCN7 gene linked to benign autosomal dominant osteopetrosis: a case series.

J Med Case Reports. 2013; 7(1): 7 Rashid BM, Rashid NG, <u>Schulz A</u>, <u>Lahr G</u>, Nore BF

129. Organized sports, overweight, and physical fitness in primary school children in Germany.

J Obes. 2013; 2013: 935245 Drenowatz C, Steiner RP, Brandstetter S, Klenk J, <u>Wabitsch M</u>, Steinacker JM

130. Estimation of parameters for the elimination of an orally administered test substance with unknown absorption.

J Pharmacokinet Pharmacodyn. 2013; 40(2): 177-87 $(\mbox{\sc if} = 1.808)$

Vogt JA, <u>Denzer C</u>

Shozu M, Ogata T

- 131. Akute Niereninsuffizienz im Neugeborenenalter Kinder- und Jugendmedizin. 2013; 13(6): 417-422 Beringer O, Moewes AK
- 132. Wirksamkeit des Eisen(III)-hydroxid-Polymaltose-Komplexes bei Eisenmangel. Ein Praxisbericht zur Behandlung der Eisenmangelan+ñmie bei Kindern und Jugendlichen

Kinder- und Jugendmedizin. 2013; 13(5): 362-366 Serra S, Gross HJ, <u>Cario H</u>

133. [Addiction and violence in immigrants]. Kinderkrankenschwester. 2013; 32(8): 314-6 Bode H

134. [Children with learning disabilities and handicaps in inclusive schools or in special schools? The view of parents and professionals].

Klin Padiatr. 2013; 225(2): 57-63 (IF=1.904) Bode H, <u>Hirner V</u> 135. Key treatment questions in childhood acute lymphoblastic leukemia: results in 5 consecutive trials performed by the ALL-BFM study group from 1981 to 2000

Klin Padiatr. 2013; 225 Suppl: S62-72 (IF=1.904) Schrappe M, Möricke A, Reiter A, Henze G, Welte K, Gadner H, Ludwig WD, Ritter J, Harbott J, Mann G, Klingebiel T, Gruhn B, Niemeyer C, Kremens B, Niggli F, <u>Debatin KM</u>, Ratei R, Stanulla M, Beier R, Cario G, Schrauder A, Zimmermann M

- 136. Near-drowning during Baby Swimming Lesson.

 Klin Padiatr. 2013; 225(1): 45 (IF=1.904)

 Wölfle LM, Hopfner RJ, Debatin KM, Hummler HD,
 Fuchs HW, Schmid MB
- 137. Effects of short sustained lung inflations on cerebral blood flow and cerebral tissue oxygenation in the juvenile rabbit.

Minerva Anestesiol. 2013; 79(7): 733-40 (IF=2.818) <u>Fuchs H</u>, Scharnbeck D, <u>Mendler MR</u>, Singh D, <u>Lindner W</u>, <u>Hummler HD</u>

138. Inhibition of NF-κB Signaling Ablates the Invasive Phenotype of Glioblastoma.

Mol Cancer Res. 2013; 11(12): 1611-23 (IF=4.353) Westhoff MA, Zhou S, Nonnenmacher L, Karpel-Massler G, Jennewein C, Schneider M, Halatsch ME, Carragher NO, Baumann B, Krause A, Simmet T, Bachem MG, Wirtz CR, Debatin KM

139. Combined inhibition of HER1/EGFR and RAC1 results in a synergistic antiproliferative effect on established and primary cultured human glioblastoma cells.
Mol Cancer Ther. 2013; 12(9): 1783-95 (IF=5.599)
Karpel-Massler G, Westhoff MA, Zhou S,
Nonnenmacher L, Dwucet A, Kast RE, Bachem MG,
Wirtz CR, Debatin KM, Halatsch ME

140. Differential induction of apoptosis and senescence by the DNA methyltransferase inhibitors 5-azacytidine and 5-aza-2'-deoxycytidine in solid tumor cells. Mol Cancer Ther. 2013; 12(10): 2226-36 (IF=5.599) Venturelli S, Berger A, Weiland T, Essmann F, Waibel M, Nuebling T, <u>Häcker S</u>, Schenk M, Schulze-Osthoff K,

141. Absence of CC chemokine receptors 2a and 2b from human adipose lineage cells.

Bitzer M

Mol Cell Endocrinol. 2013; 369(1-2): 72-85 (IF=4.039) Koenig C, <u>Fischer-Posovszky P</u>, Rojewski MT, <u>Tews D</u>, Schrezenmeier H, <u>Wabitsch M</u>, Gierschik P, Moepps B

Salih HR, Fulda S, Sipos B, Johnstone RW, Lauer UM,

142. Kinderkrippen in der DDR - Was können wir heute davon lernen?

Monatsschr Kinderheilkd. 2013; 161(10): 886-887 (IF=0.193) Bode H,

143. Evaluation of energy intake in children and adolescents. Review of retrospective and prospective methods

Monatsschr Kinderheilkd. 2013; 161(9): 823-832 (IF=0.193)

Brandt S, Kersting M, Wabitsch M

144. Osteopetrosis: genetics, treatment and new insights into osteoclast function.

Nat Rev Endocrinol. 2013; 9(9): 522-36 (IF=11.025) Sobacchi C, <u>Schulz A</u>, Coxon FP, Villa A, Helfrich MH **145.** Cerebral near-infrared spectroscopy during transition of healthy term newborns.

Neonatology. 2013; 103(4): 246-51 (IF=2.573) Almaazmi M, Schmid MB, Havers S, Reister F, Lindner W, Mayer B, Hummler HD, Fuchs H

146. Plasma exchange is effective in a 13-year-old girl with steroid-resistant bilateral optic neuritis.

Neuropediatrics. 2013; 44(5): 272-5 (IF=1.192) Michaelis I, Bender B, <u>Beringer O</u>, Melms A, Krägeloh-Mann I, Wolff M

147. Even and carbon dioxide independent distribution of nitrite between plasma and erythrocytes of healthy humans at rest.

Nitric Oxide. 2013; 31: 31-7 (IF=3.265) Tsikas D, Sutmöller K, Maassen M, Nacke M, Böhmer A, Mitschke A, Konrad H, Starke H, <u>Hummler H</u>, Maassen N

148. Impaired HDL function in obese adolescents: Impact of lifestyle intervention and bariatric surgery.
Obesity (Silver Spring). 2013; 21(12): E687-95 (IF=3.922)
Matsuo Y, Oberbach A, Till H, Inge TH, Wabitsch M, Moss A, Jehmlich N, Völker U, Müller U, Siegfried W, Kanesawa N, Kurabayashi M, Schuler G, Linke A, Adams V

149. RIP1 is required for IAP inhibitor-mediated sensitization for TRAIL-induced apoptosis via a RIP1/FADD/caspase-8 cell death complex.
Oncogene. 2013; 32(27): 3263-73 (IF=7.357)
Abhari BA, Cristofanon S, Kappler R, von Schweinitz D, Humphreys R, Fulda S

150. Smac mimetic sensitizes glioblastoma cells to Temozolomide-induced apoptosis in a RIP1- and NF-κB-dependent manner.

Oncogene. 2013; 32(8): 988-97 (IF=7.357)
Wagner L, Marschall V, Karl S, Cristofanon S, Zobel K,
Deshayes K, Vucic D, Debatin KM, Fulda S

151. Cell death sensitization of leukemia cells by opioid receptor activation.

Oncotarget. 2013; 4(5): 677-90 (IF=6.636) Friesen C, Roscher M, Hormann I, Fichtner I, Alt A, Hilger RA, <u>Debatin KM</u>, Miltner E

152. Resveratrol suppresses PAI-1 gene expression in a human in vitro model of inflamed adipose tissue. Oxid Med Cell Longev. 2013; 2013: 793525 (IF=3.393) Zagotta I, Dimova EY, Funcke JB, Wabitsch M, Kietzmann T, Fischer-Posovszky P

153. Mining the human phenome using allelic scores that index biological intermediates.

PLoS Genet. 2013; 9(10): e1003919 (IF=8.517)
Evans DM, Brion MJ, Paternoster L, Kemp JP,
McMahon G, Munafò M, Whitfield JB, Medland
SE, Montgomery GW, GIANT Consortium, CRP
Consortium, TAG Consortium, Timpson NJ, St Pourcain
B, Lawlor DA, Martin NG, Dehghan A, Hirschhorn J,
Davey Smith G

154. Causal relationship between obesity and vitamin D status: bi-directional Mendelian randomization analysis of multiple cohorts.

PLoS Med. 2013; 10(2): e1001383 (IF=15.253) Vimaleswaran KS, Berry DJ, Lu C, Tikkanen E, Pilz S, Hiraki LT, Cooper JD, Dastani Z, Li R, Houston DK, Wood AR, Michaëlsson K, Vandenput L, Zgaga L, Yerges-Armstrong LM, McCarthy MI, Dupuis J, Kaakinen M, Kleber ME, Jameson K, Arden N, Raitakari O, Viikari J, Lohman KK, Ferrucci L, Melhus H, Ingelsson E, Byberg L, Lind L, Lorentzon M, Salomaa V, Campbell H, Dunlop M, Mitchell BD, Herzig KH, Pouta A, Hartikainen AL, Genetic Investigation of Anthropometric Traits-GIANT Consortium, Streeten EA, Theodoratou E, Jula A, Wareham NJ, Ohlsson C, Frayling TM, Kritchevsky SB, Spector TD, Richards JB, Lehtimäki T, Ouwehand WH, Kraft P, Cooper C, März W, Power C, Loos RJ, Wang TJ, Järvelin MR, Whittaker JC, Hingorani AD, Hyppönen E

155. Long-term stabilization effects of leptin on brain functions in a leptin-deficient patient.
PLoS ONE. 2013; 8(6): e65893 (IF=3.73)

Frank S, Heni M, <u>Moss A</u>, <u>von Schnurbein J</u>, Farooqi S, Häring HU, Fritsche A, Preissl H, <u>Wabitsch M</u>

156. Interleukin-1β downregulates RBP4 secretion in human adipocytes.

PLoS ONE. 2013; 8(2): e57796 (IF=3.73) Kotnik P, Keuper M, Wabitsch M, Fischer-Posovszky P

157. Generation of murine sympathoadrenergic progenitor-like cells from embryonic stem cells and postnatal adrenal glands.

PLoS ONE. 2013; 8(5): e64454 (IF=3.73)
Saxena S, Wahl J, Huber-Lang MS, Stadel D, Braubach
P, Debatin KM, Beltinger C

158. Sequential Dosing in Chemosensitization: Targeting the PI3K/Akt/mTOR Pathway in Neuroblastoma.

PLoS ONE. 2013; 8(12): e83128 (IF=3.73)

Westhoff MA, Faham N, Marx D, Nonnenmacher L,

Jennewein C, Enzenmüller S, Gonzalez P, Fulda S,

Debatin KM

159. HIV protease inhibitors disrupt lipid metabolism by activating endoplasmic reticulum stress and inhibiting autophagy activity in adipocytes.

PLoS ONE. 2013; 8(3): e59514 (IF=3.73) Zha BS, Wan X, Zhang X, Zha W, Zhou J, <u>Wabitsch M</u>, Wang G, Lyall V, Hylemon PB, Zhou H

160. Erythrocytosis in children and adolescentsclassification, characterization, and consensus recommendations for the diagnostic approach. Pediatr Blood Cancer. 2013; 60(11): 1734-8 (IF=2.353) Cario H, McMullin MF, Bento C, Pospisilova D, Percy MJ, Hussein K, Schwarz J, Aström M, Hermouet S, MPN&MPNr-EuroNet

161. Persistent defective membrane trafficking in epithelial cells of patients with familial hemophagocytic lymphohistiocytosis type 5 due to STXBP2/MUNC18-2 mutations.

Pediatr Blood Cancer. 2013; 60(7): 1215-22 (IF=2.353) Stepensky P, Bartram J, Barth TF, Lehmberg K, Walther P, Amann K, Philips AD, <u>Beringer O</u>, Zur Stadt U, <u>Schulz A</u>, Amrolia P, Weintraub M, <u>Debatin KM</u>, <u>Hoenig M</u>, <u>Posovszky C</u> 162. Differences in health behavior, physical fitness, and cardiovascular risk in early, average, and late mature children.

Pediatr Exerc Sci. 2013; 25(1): 69-83 (IF=1.574) Drenowatz C, Wartha O, Klenk J, Brandstetter S, Wabitsch M, Steinacker J

- 163. Two-year outcomes of a randomized controlled trial of inhaled nitric oxide in premature infants.
 Pediatrics. 2013; 132(3): e695-703 (IF=5.119)
 Durrmeyer X, Hummler H, Sanchez-Luna M, Carnielli VP, Field D, Greenough A, Van Overmeire B, Jonsson B, Hallman M, Mercier JC, Marlow N, Johnson S, Baldassarre J, European Union Nitric Oxide Study Group
- 164. Haemolysis risk in methylene blue treatment of G6PDsufficient and G6PD-deficient West-African children with uncomplicated falciparum malaria: a synopsis of four RCTs.

Pharmacoepidemiol Drug Saf. 2013; 22(4): 376-85 (IF=2.897)

Müller O, Mockenhaupt FP, Marks B, <u>Meissner P</u>, Coulibaly B, Kuhnert R, Buchner H, Schirmer RH, Walter-Sack I, Sié A, Mansmann U

165. Inklusiver Unterricht für Kinder mit chronischen Erkrankungen oder Behinderungen Pädiatrische Praxis. 2013; 81: 459-469 Bode H

166. Infantile hepatische Hämangiomatose Pädiatrische Praxis. 2013; 81: 437 Winkler A, Baranowski S, Posovszky C

167. The development and validation of a health-related quality of life questionnaire for pre-school children with a chronic heart disease.

Qual Life Res. 2013; 22(10): 2877-88 (IF=2.412) Niemitz M, Seitz DC, Oebels M, Schranz D, Hövels-Gürich H, Hofbeck M, Kaulitz R, <u>Galm C</u>, Berger F, Nagdymann N, Stiller B, Borth-Bruhns T, Konzag I, Balmer C, Goldbeck L

- 168. Grundlagen und Besonderheiten der Transfusionstherapie bei Hämoglobinopathien Transfusionsmedizin. 2013; 3(2): 92-110 Cario H, Weinstock C, Mayer B, Lobitz S
- 169. [Neurodevelopmental outcome of very low birth weight infants born at the Perinatal Centre in Ulm, Germany].

Z Geburtshilfe Neonatol. 2013; 217(2): 65-71 (IF=0.556)

<u>Struck A, Almaazmi M, Bode H</u>, Sander S, Hay B, <u>Schmid M, Hummler H</u>

2012

170. Protocol for effective differentiation of 3T3-L1 cells to adipocytes.

Anal Biochem. 2012; 425(1): 88-90 (IF=2.996) Zebisch K, Voigt V, <u>Wabitsch M</u>, Brandsch M

171. HIV-1 Tat protein impairs adipogenesis and induces the expression and secretion of proinflammatory cytokines in human SGBS adipocytes.

Antivir Ther. 2012; 17(3): 529-40 (IF=3.161) Díaz-Delfín J, Domingo P, <u>Wabitsch M</u>, Giralt M, Villarroya F 172. TNF- α inhibits PPAR β/δ activity and SIRT1 expression through NF- κB in human adipocytes.

BBA - MOL CELL BIOL L. 2012; 1821(9): 1177-85 (IF=5.269)

Serrano-Marco L, Chacón MR, Maymó-Masip E, Barroso E, Salvadó L, <u>Wabitsch M</u>, Garrido-Sánchez L, Tinahones FJ, Palomer X, Vendrell J, Vázquez-Carrera M

173. Mutation screen in the GWAS derived obesity gene SH2B1 including functional analyses of detected variants.

BMC Med Genomics. 2012; 5: 65 (IF=3.693) Volckmar AL, Bolze F, Jarick I, Knoll N, Scherag A, Reinehr T, Illig T, Grallert H, Wichmann HE, Wiegand S, Biebermann H, Krude H, <u>Fischer-Posovszky P</u>, Rief W, <u>Wabitsch M</u>, Klingenspor M, Hebebrand J, Hinney A

174. Toll-like 4 receptor variant, Asp299Gly, and reduced risk of hemorrhagic cystitis after hematopoietic stem cell transplantation.

Biol Blood Marrow Transplant. 2012; 18(6): 958-63 (IF=3.873)

Gruhn B, Klöppner N, Pfaffendorf-Regler N, Beck J, Zintl F, <u>Bartholomä S</u>, <u>Debatin KM</u>, <u>Steinbach D</u>

175. Transplantation in patients with SCID: mismatched related stem cells or unrelated cord blood?

Blood. 2012; 119(12): 2949-55 (IF=9.898)

Fernandes JF, Rocha V, Labopin M, Neven B, Moshous D, Gennery AR, Friedrich W, Porta F, Diaz de Heredia C, Wall D, Bertrand Y, Veys P, Slatter M, Schulz A, Chan KW, Grimley M, Ayas M, Gungor T, Ebell W, Bonfim C, Kalwak K, Taupin P, Blanche S, Gaspar HB, Landais P, Fischer A, Gluckman E, Cavazzana-Calvo M, Eurocord and Inborn Errors Working Party of European Group

176. Outcome of hematopoietic stem cell transplantation for adenosine deaminase-deficient severe combined immunodeficiency.

for Blood and Marrow Transplantation

Blood. 2012; 120(17): 3615-24; quiz 3626 (IF=9.898) Hassan A, Booth C, Brightwell A, Allwood Z, Veys P, Rao K, Hönig M, Friedrich W, Gennery A, Slatter M, Bredius R, Finocchi A, Cancrini C, Aiuti A, Porta F, Lanfranchi A, Ridella M, Steward C, Filipovich A, Marsh R, Bordon V, Al-Muhsen S, Al-Mousa H, Alsum Z, Al-Dhekri H, Al Ghonaium A, Speckmann C, Fischer A, Mahlaoui N, Nichols KE, Grunebaum E, Al Zahrani D, Roifman CM, Boelens J, Davies EG, Cavazzana-Calvo M, Notarangelo L, Gaspar HB, Inborn Errors Working Party of the European Group for Blood and Marrow Transplantation and European Society for Immunodeficiency

177. A specific subtype of osteoclasts secretes factors inducing nodule formation by osteoblasts.

Bone. 2012; 51(3): 353-61 (IF=4.023) Henriksen K, Andreassen KV, Thudium CS, Gudmann KN, Moscatelli I, Crüger-Hansen CE, <u>Schulz AS</u>, Dziegiel MH, Richter J, Karsdal MA, Neutzsky-Wulff AV 178. Immunological reconstitution in a patient with ZAP-70 deficiency following transfusion of blood lymphocytes from a previously transplanted sibling without conditioning.

Bone Marrow Transplant. 2012; 47(2): 305-7 (IF=3.746)

Hönig M, Schuetz C, Schwarz K, Rojewski M, Jacobsen E, Lahr G, Debatin KM, Schulz A, Friedrich W

- 179. Intramural duodenal haematoma after endoscopic biopsy: case report and review of the literature.
 Case Rep Gastroenterol. 2012; 6(1): 5-14
 Grasshof C, Wolf A, Neuwirth F, Posovszky C
- 180. Impairment of lysosomal integrity by B10, a glycosylated derivative of betulinic acid, leads to lysosomal cell death and converts autophagy into a detrimental process.

Cell Death Differ. 2012; 19(8): 1337-46 (IF=8.849) Gonzalez P, Mader I, Tchoghandjian A, Enzenmüller S, Cristofanon S, Basit F, Debatin KM, Fulda S

181. ABT-737 promotes tBid mitochondrial accumulation to enhance TRAIL-induced apoptosis in glioblastoma cells

Cell Death Dis. 2012; 3: e432 (IF=5.333) <u>Cristofanon S</u>, <u>Fulda S</u>

- 182. Rapid engraftment of human ALL in NOD/SCID mice involves deficient apoptosis signaling.
 Cell Death Dis. 2012; 3: e364 (IF=5.333)
 Queudeville M, Seyfried F, Eckhoff SM, Trentin L, Ulrich S, Schirmer M, Debatin KM, Meyer LH
- 183. Patient-centred screening for primary immunodeficiency, a multi-stage diagnostic protocol designed for non-immunologists: 2011 update. **Clin Exp Immunol.** 2012; 167(1): 108-19 (IF=3.36) de Vries E, European Society for Immunodeficiencies (ESID) members, de Vries E, Alvarez Cardona A, Abdul Latiff AH, Badolato R, Brodszki N, Cant AJ, Carbone J, Casper JT, Čižnár P, Cochino AV, Derfalvi B, Driessen GJ, Elfeky R, El-Ghoneimy D, Espanol T, Etzioni A, Gambineri E, Gilmour K, Gonzalez-Granado LI, Haverkamp MH, Helminen M, Hönig H, Kanariou MG, Kirschfink M, Klein C, Kuijpers TW, Kutukculer N, Martire B, Meyts I, Niehues T, Pignata C, Reda SM, Renner ED, Rezaei N, Rizzi M, Sampalo Lainz MA, Sargur RB, Sediva A, Seidel MG, Seneviratne SL, Soler-Palacín P, Tommasini A, Warnatz K
- 184. Comparison of inversion recovery and contrast-enhanced T1-weighted fat-suppressed sequences for the staging of cervical lymphoma.
 Clin Imaging. 2012; 36(5): 568-73 (IF=0.746)
 Freund W, Seifarth A, Stuber G, Cario H, Puig S, Aschoff AJ
- 185. An outbreak of Shiga toxin-producing Escherichia coli O104:H4 hemolytic uremic syndrome in Germany: presentation and short-term outcome in children. Clin Infect Dis. 2012; 55(6): 753-9 (IF=9.154) Loos S, Ahlenstiel T, Kranz B, Staude H, Pape L, Härtel C, Vester U, Buchtala L, Benz K, Hoppe B, Beringer O, Krause M, Müller D, Pohl M, Lemke J, Hillebrand G, Kreuzer M, König J, Wigger M, Konrad M, Haffner D, Oh J, Kemper MJ

- **186.** Targeting the Epidermal Growth Factor Receptor in Glioblastoma Treatment
 - **Curr Signal Transduct Ther.** 2012; **7**(1): 3-13 (IF=0.5) Merkur N, <u>Westhoff MA</u>, Karpel-Massler G, Halatsch ME
- 187. The cytotoxic potential of interleukin-15-stimulated cytokine-induced killer cells against leukemia cells. Cytotherapy. 2012; 14(1): 91-103 (IF=3.627) Rettinger E, Kuçi S, Naumann I, Becker P, Kreyenberg H, Anzaghe M, Willasch A, Koehl U, Bug G, Ruthardt M, Klingebiel T, Fulda S, Bader P
- 188. Obesity and Diabetes mellitus

Diabetologie und Stoffwechsel. 2012; 7 2: S130-S135 (IF=0.359)

Hauner H, Buchholz G, Hamann A, Husemann B, Koletzko B, Liebermeister H, <u>Wabitsch M</u>, Westenhofer J, Wirth A, Wolfram G

189. NOD2 polymorphism predicts response to treatment in Crohn's disease--first steps to a personalized therapy.

Dig Dis Sci. 2012; 57(4): 879-86 (IF=2.117) Niess JH, Klaus J, Stephani J, Pflüger C, Degenkolb N, Spaniol U, Mayer B, <u>Lahr G</u>, von Boyen GB

190. Glucose-6-phosphate dehydrogenase deficiency and safety of methylene blue.

Drug Saf. 2012; 35(1): 85; author reply 85-6 (IF=3.634) Müller O, <u>Meissner P</u>, Mansmann U

 Correspondence (letter to the editor): New recommendations.

Dtsch Arztebl Int. 2012; 109(10): 190 (IF=2.92) Cario H

192. Peroxisome proliferator-activated receptors-α and -γ, and cAMP-mediated pathways, control retinol-binding protein-4 gene expression in brown adipose

Endocrinology. 2012; 153(3): 1162-73 (IF=4.459) Rosell M, Hondares E, Iwamoto S, Gonzalez FJ, <u>Wabitsch M</u>, Staels B, Olmos Y, Monsalve M, Giralt M, Iglesias R, Villarroya F

193. Declining prevalence rates for overweight and obesity in German children starting school.

Eur J Pediatr. 2012; 171(2): 289-99 (IF=1.879) Moss A, Klenk J, Simon K, Thaiss H, Reinehr T, Wabitsch M

194. Silent slipped capital femoral epiphysis in overweight and obese children and adolescents.

Eur J Pediatr. 2012; 171(10): 1461-5 (IF=1.879) <u>Wabitsch M</u>, Horn M, Esch U, Mayer H, <u>Moss A</u>, Günther KP, Nelitz M

- 195. Leptin substitution results in the induction of menstrual cycles in an adolescent with leptin deficiency and hypogonadotropic hypogonadism. Horm Res Paediatr. 2012; 77(2): 127-33 (IF=1.571) von Schnurbein J, Moss A, Nagel SA, Muehleder H, Debatin KM, Farooqi IS, Wabitsch M
- 196. Human B cells differentiate into granzyme B-secreting cytotoxic B lymphocytes upon incomplete T-cell help. Immunol Cell Biol. 2012; 90(4): 457-67 (IF=3.661) Hagn M, Sontheimer K, Dahlke K, Brueggemann S, Kaltenmeier C, Beyer T, Hofmann S, Lunov O, Barth TF, Fabricius D, Tron K, Nienhaus GU, Simmet T, Schrezenmeier H, Jahrsdörfer B

- 197. Pharmacokinetics, pharmacodynamics, safety and tolerability of APG101, a CD95-Fc fusion protein, in healthy volunteers and two glioma patients.
 Int Immunopharmacol. 2012; 13(1): 93-100 (IF=2.376)
 Tuettenberg J, Seiz M, Debatin KM, Hollburg W, von Staden M, Thiemann M, Hareng B, Fricke H, Kunz C
- 198. A case of phace syndrome and acquired hypopituitarism?

Int J Pediatr Endocrinol. 2012; 2012(1): 20 Denzer F, Denzer C, Lennerz BS, Bode H, Wabitsch M

199. Schönlein-Henoch Purpura presenting with multiple gastric ulcerations

Internistische Praxis. 2012; 52(1): 33 Schick C, <u>Posovszky C</u>

200. RANK-dependent autosomal recessive osteopetrosis: characterization of five new cases with novel mutations.

J Bone Miner Res. 2012; 27(2): 342-51 (IF=6.373) Pangrazio A, Cassani B, Guerrini MM, Crockett JC, Marrella V, Zammataro L, Strina D, <u>Schulz A</u>, Schlack C, Kornak U, Mellis DJ, Duthie A, Helfrich MH, Durandy A, Moshous D, Vellodi A, Chiesa R, Veys P, Lo Iacono N, Vezzoni P, Fischer A, Villa A, Sobacchi C

- 201. Satisfaction with genital surgery and sexual life of adults with XY disorders of sex development: results from the German clinical evaluation study. J Clin Endocrinol Metab. 2012; 97(2): 577-88 (IF=5.967)
 - Köhler B, Kleinemeier E, Lux A, Hiort O, Grüters A, Thyen U, <u>DSD Network Working Group</u>
- 202. Loss of enteroendocrine cells in autoimmune-polyendocrine-candidiasis-ectodermal-dystrophy (APECED) syndrome with gastrointestinal dysfunction. J Clin Endocrinol Metab. 2012; 97(2): E292-300 (IF=5.967)
 Posovszky C, Lahr G, von Schnurbein J, Buderus S, Findeisen A, Schröder C, Schütz C, Schulz A, Debatin KM, Wabitsch M, Barth TF
- 203. Methylseleninic acid is a novel suppressor of aromatase expression.
 J Endocrinol. 2012; 212(2): 199-205 (IF=3.548)
 Gao R, Zhao L, Liu X, Rowan BG, Wabitsch M, Edwards DP, Nishi Y, Yanase T, Yu Q, Dong Y
- 204. Trans-10, cis-12 conjugated linoleic acid decreases de novo lipid synthesis in human adipocytes.
 J Nutr Biochem. 2012; 23(6): 580-90 (IF=3.891)
 Obsen T, Faergeman NJ, Chung S, Martinez K, Gobern S, Loreau O, <u>Wabitsch M</u>, Mandrup S, McIntosh M
- 205. Infantile malignant osteopetrosis: a rare cause of neonatal hypocalcemia.

J Pediatr Endocrinol Metab. 2012; 25(11-12): 1205-7 (IF=0.875)

Engiz O, Kara S, Bagrul D, <u>Lahr G</u>, Alioglu B, Arikan I, Bilge YD

206. Brain oxygenation monitoring during neonatal resuscitation of very low birth weight infants.

J Perinatol. 2012; 32(5): 356-62 (IF=1.801)

<u>Fuchs H, Lindner W, Buschko A, Almazam M, Hummler HD, Schmid MB</u>

207. Resveratrol-induced changes of the human adipocyte secretion profile.

J Proteome Res. 2012; 11(9): 4733-43 (IF=5.113) Rosenow A, Noben JP, Jocken J, Kallendrusch S, Fischer-Posovszky P, Mariman EC, Renes J

208. Vitamin D-Versorgung im Säuglings-, Kindesund Jugendalter: aktuelle Empfehlungen der Ernährungskommission der DGKJ e.V. und der DGKED e V.

Kinder- und Jugendarzt. 2012; 8: 425-432 <u>Moss A</u>, Schnabel D, Koletzko B, <u>Wabitsch M</u>

209. Sickle cell disease

Kinder- und Jugendmedizin. 2012; 31: 314-321 Lobitz S, <u>Cario H</u>

210. BMI-abhängige Stufendiagnostik bei Übergewicht und Adipositas im Kindes- und Jugendalter Kinderarztl Prax. 2012; 83: 203-206
Lennerz BS, Wabitsch M

211. [Infantile hepatic hemangiomas: first-line propranolol monotherapy as new treatment strategy?].
Klin Padiatr. 2012; 224(6): 393-5 (IF=1.772)
Baranowski S, Winkler A, Kunzi-Rapp K, Schaal M, Hempel S, Debatin KM, Posovszky C

212. Defibrotide for prophylaxis of hepatic veno-occlusive disease in paediatric haemopoietic stem-cell transplantation: an open-label, phase 3, randomised controlled trial.

Lancet. 2012; 379(9823): 1301-9 (IF=38.278)

Corbacioglu S, Cesaro S, Faraci M, Valteau-Couanet
D, Gruhn B, Rovelli A, Boelens JJ, Hewitt A, Schrum
J, Schulz AS, Müller I, Stein J, Wynn R, Greil J, Sykora
KW, Matthes-Martin S, Führer M, O'Meara A, Toporski
J, Sedlacek P, Schlegel PG, Ehlert K, Fasth A, Winiarski
J, Arvidson J, Mauz-Körholz C, Ozsahin H, Schrauder
A, Bader P, Massaro J, D'Agostino R, Hoyle M, Iacobelli
M, Debatin KM, Peters C, Dini G

213. Favorable outcome in infants with AML after intensive first- and second-line treatment: an AML-BFM study group report.

Leukemia. 2012; 26(4): 654-61 (IF=9.561) Creutzig U, Zimmermann M, Bourquin JP, Dworzak MN, Kremens B, Lehrnbecher T, von Neuhoff C, Sander A, von Stackelberg A, Schmid I, Starý J, Steinbach D, Vormoor J, Reinhardt D

214. RIP1 is required for IAP inhibitor-mediated sensitization of childhood acute leukemia cells to chemotherapy-induced apoptosis (vol 26, pg 1020, 2012)

Leukemia. 2012; 26(7): 1742-1742 (IF=9.561) <u>Loeder S, Schirmer M</u>, Schoeneberger H, Cristofanon S, Leibacher J, Vanlangenakker N, Bertrand MJM, Vandenabeele P, Jeremias I, <u>Debatin KM</u>, <u>Fulda S</u>

215. RIP1 is required for IAP inhibitor-mediated sensitization of childhood acute leukemia cells to chemotherapy-induced apoptosis.

Leukemia. 2012; 26(5): 1020-9 (IF=9.561) <u>Löder S</u>, <u>Fakler M</u>, Schoeneberger H, Cristofanon S, Leibacher J, Vanlangenakker N, Bertrand MJ, Vandenabeele P, Jeremias I, <u>Debatin KM</u>, <u>Fulda S</u> 216. Differential function of Akt1 and Akt2 in human adipocytes.

Mol Cell Endocrinol. 2012; 358(1): 135-43 (IF=4.192) Fischer-Posovszky P. Tews D, Horenburg S, Debatin KM, Wabitsch M

217. Shared Copy Number Variation in Simultaneous Nephroblastoma and Neuroblastoma due to Fanconi Anemia.

Mol Syndromol. 2012; 3(3): 120-130 Serra A, Eirich K, Winkler AK, Mrasek K, Göhring G, Barbi G, <u>Cario H</u>, Schlegelberger B, Pokora B, Liehr T, Leriche C, Henne-Bruns D, Barth TF, Schindler D

218. Bariatric surgery in severely Overweight Adolescents Information and Opinion of the Association of Obesity in Childhood and Adolescence (AGA)

Monatsschr Kinderheilkd. 2012; 160(11): 1123-1126 (IF=0.274)

Hauner H, Hebebrand J, Kiess W, Kunze D, Reinehr T, Shang E, <u>Wabitsch M</u>, Widhalm K, Wiegand S, Weyhreter H, <u>Wolf A</u>

219. Congenital myotonic dystrophy with diaphragmatic paresis

Monatsschr Kinderheilkd. 2012; 160(12): 1236-1238 (IF=0.274)

Queudeville M, Lindner W, Hummler H, Hopfner R

220. Vitamin D supply in Infancy, Childhood and Adolescence Recommendation for Sun exposure - Response

Monatsschr Kinderheilkd. 2012; 160(11): 1164-1166 (IF=0.274) Wabitsch M, Moss A

221. Metabolic syndrome

Monatsschr Kinderheilkd. 2012; 160(3): 277-289 (IF=0.274)

Wabitsch M, Moss A, Denzer C, Fischer-Posovsky P

222. Denosumab for post-transplantation hypercalcemia in osteopetrosis.

N Engl J Med. 2012; 367(18): 1766-7 (IF=53.298) Shroff R, <u>Beringer O</u>, Rao K, Hofbauer LC, <u>Schulz A</u>

223. The 'Effects of Transfusion Thresholds on Neurocognitive Outcome of Extremely Low Birth-Weight Infants (ETTNO)' Study: Background Aims, and Study Protocol

Neonatology. 2012; 101(4): 301-305 (IF=2.656) ETTNO Investigators

224. Techniques and Devices to improve noninvasive ventilation in the delivery room

Neoreviews. 2012; 13: 353-363 <u>Fuchs H</u>, Schilleman K, <u>Hummler HD</u>, te Pas AB

225. NF-kB regulates DNA double-strand break repair in conjunction with BRCA1-CtIP complexes.

Nucleic Acids Res. 2012; 40(1): 181-95 (IF=8.026)
Volcic M, <u>Karl S</u>, Baumann B, Salles D, Daniel P, <u>Fulda</u>
S, Wiesmüller L

226. Overweight prevention implemented by primary school teachers: a randomised controlled trial.

Obes Facts. 2012; 5(1): 1-11 (IF=1.856) Brandstetter S, Klenk J, <u>Berg S</u>, <u>Galm C</u>, Fritz M, Peter R, Prokopchuk D, Steiner RP, Wartha O, Steinacker J, <u>Wabitsch M</u> 227. RIP1 is required for IAP inhibitor-mediated sensitization for TRAIL-induced apoptosis via a RIP1/FADD/caspase-8 cell death complex.

Oncogene. 2012; (IF=6.373)

<u>Abhari BA</u>, <u>Cristofanon S</u>, Kappler R, von Schweinitz D, Humphreys R, <u>Fulda S</u>

228. Histone deacetylase inhibitors sensitize glioblastoma cells to TRAIL-induced apoptosis by c-myc-mediated downregulation of cFLIP.

Oncogene. 2012; 31(44): 4677-88 (IF=6.373)

<u>Bangert A</u>, Cristofanon S, Eckhardt I, Abhari BA,

Kolodziej S, <u>Häcker S</u>, <u>Vellanki SH</u>, Lausen J, <u>Debatin KM</u>, <u>Fulda S</u>

229. Identification of a novel pro-apoptotic role of NF-κB in the regulation of TRAIL- and CD95-mediated apoptosis of glioblastoma cells.

Oncogene. 2012; 31(11): 1468-74 (IF=6.373)

Jennewein C, Karl S, Baumann B, Micheau O, Debatin

KM, Fulda S

230. Clinical and neurocognitive outcome in symptomatic isovaleric acidemia.

Orphanet J Rare Dis. 2012; 7: 9 (IF=5.074) Grünert SC, Wendel U, Lindner M, <u>Leichsenring M</u>, Schwab KO, Vockley J, Lehnert W, Ensenauer R

- 231. Gestational weight gain and body mass index in children: results from three german cohort studies.
 PLoS ONE. 2012; 7(3): e33205 (IF=4.092)
 Beyerlein A, Nehring I, Rzehak P, Heinrich J, Müller MJ, Plachta-Danielzik S, Wabitsch M, Weck M, Brenner H, Rothenbacher D, von Kries R
- 232. The tyrphostin agent AG490 prevents and reverses type 1 diabetes in NOD mice.

PLoS ONE. 2012; 7(5): e36079 (IF=4.092) Davoodi-Semiromi A, Wasserfall CH, Xia CQ, Cooper-DeHoff RM, <u>Wabitsch M</u>, Clare-Salzler M, Atkinson M

233. CD57(high) neuroblastoma cells have aggressive attributes ex situ and an undifferentiated phenotype in patients.

PLoS ONE. 2012; 7(8): e42025 (IF=4.092) Schlitter AM, Dorneburg C, Barth TF, Wahl J, Schulte JH, Brüderlein S, Debatin KM, Beltinger C

234. OSBP-related proteins (ORPs) in human adipose depots and cultured adipocytes: evidence for impacts on the adipocyte phenotype.

PLoS ONE. 2012; 7(9): e45352 (IF=4.092) Zhou Y, Robciuc MR, <u>Wabitsch M</u>, Juuti A, Leivonen M, Ehnholm C, Yki-Järvinen H, Olkkonen VM

235. Prediction model for the incidence and prevalence of type 1 diabetes in childhood and adolescence: evidence for a cohort-dependent increase within the next two decades in Germany.

Pediatr Diabetes. 2012; 13(1): 15-20 (IF=2.16)
Ehehalt S, Dietz K, Willasch AM, Neu A, DIARYGroup Baden-Wuerttemberg, Böckmann A, Brand U,
Döring C, Dürr R, Ecker D, Eichmeier F, Elpel U, Faller
U, Fedorcak M, Feldhahn L, Fitzke G, Grulich-Henn
J, Holder M, Jantzen D, Kelle M, Ketteler K, Krüger
M, Lippmann-Grob B, Müller E, Radlow U, Rappen
U, Ruland A, Sauter R, Schädel G, Schumacher A,
Schürmann U, Schwab KO, Trefz FK, Veigel A, Wabitsch
M, Wissert J

236. Liver iron content determined by MRI: spin-echo vs. gradient-echo.

Rofo. 2012; 184(5): 427-31 (IF=2.758) Juchems MS, Cario H, Schmid M, Wunderlich AP

2011

Halatsch ME

237. Dihydrofolate reductase deficiency due to a homozygous DHFR mutation causes megaloblastic anemia and cerebral folate deficiency leading to severe neurologic disease.

Am J Hum Genet. 2011; 88(2): 226-31 (IF=10.603) <u>Cario H</u>, Smith DE, Blom H, Blau N, <u>Bode H</u>, Holzmann K, Pannicke U, Hopfner KP, Rump EM, Ayric Z, <u>Kohne E</u>, <u>Debatin KM</u>, Smulders Y, Schwarz K

238. Erlotinib in glioblastoma: lost in translation?

Anticancer Agents Med Chem. 2011; 11(8): 748-55
(IF=2.862)
Karpel-Massler G, Westhoff MA, Kast RE, Wirtz CR,

239. Chemosensitization of glioblastoma cells by the histone deacetylase inhibitor MS275. Anticancer Drugs. 2011; 22(6): 494-9 (IF=2.407) Bangert A, Häcker S, Cristofanon S, Debatin KM, Fulda S

240. Mitochondria as therapeutic targets for the treatment of malignant disease.

Antioxid Redox Signal. 2011; 15(12): 2937-49 (IF=8.456) <u>Fulda S</u>, Kroemer G

- 241. Long term survival in children with acute leukaemia and complications requiring mechanical ventilation. Arch Dis Child. 2011; 96(11): 1026-32 (IF=2.881) Steinbach D, Wilhelm B, Kiermaier HR, Creutzig U, Schrappe M, Zimmermann M, Debatin KM, Gruhn B, von Stackelberg A, Jürgens H, Strahm B, Reinhardt D, Möricke A
- 242. Predictors of early nasal CPAP failure and effects of various intubation criteria on the rate of mechanical ventilation in preterm infants of <29 weeks gestational age.

Arch Dis Child Fetal Neonatal Ed. 2011; 96(5): F343-7 (IF=3.045)

<u>Fuchs H</u>, <u>Lindner W</u>, <u>Leiprecht A</u>, <u>Mendler MR</u>, <u>Hummler HD</u>

- 243. Juvenile dermatomyositis sine myositis
 Arthritis Rheum. 2011; 5: 343-345 (IF=7.866)
 Schuetz C, Mohr V, Pfeiffer C, Debatin KM
- 244. NF-kappaB inhibition improves the sensitivity of human glioblastoma cells to 5-aminolevulinic acidbased photodynamic therapy.

Biochem Pharmacol. 2011; 81(5): 606-16 (IF=4.705) Coupienne I, Bontems S, Dewaele M, Rubio N, Habraken Y, <u>Fulda S</u>, Agostinis P, Piette J

245. A novel type of congenital hypochromic anemia associated with a nonsense mutation in the STEAP3/ TSAP6 gene.

Blood. 2011; 118(25): 6660-6 (IF=9.898) Grandchamp B, Hetet G, Kannengiesser C, Oudin C, Beaumont C, Rodrigues-Ferreira S, Amson R, Telerman A, Nielsen P, <u>Kohne E</u>, Balser C, Heimpel H

- 246. ETV6/RUNX1-positive relapses evolve from an ancestral clone and frequently acquire deletions of genes implicated in glucocorticoid signaling.
 Blood. 2011; 117(9): 2658-67 (IF=9.898)
 Kuster L, Grausenburger R, Fuka G, Kaindl U, Krapf G, Inthal A, Mann G, Kauer M, Rainer J, Kofler R, Hall A, Metzler M, Meyer LH, Meyer C, Harbott J, Marschalek R, Strehl S, Haas OA, Panzer-Grümayer R
- 247. Long-term outcome and lineage-specific chimerism in 194 patients with Wiskott-Aldrich syndrome treated by hematopoietic cell transplantation in the period 1980-2009: an international collaborative study.

 Blood. 2011; 118(6): 1675-84 (IF=9.898)

 Moratto D, Giliani S, Bonfim C, Mazzolari E, Fischer A, Ochs HD, Cant AJ, Thrasher AJ, Cowan MJ, Albert MH, Small T, Pai SY, Haddad E, Lisa A, Hambleton S, Slatter M, Cavazzana-Calvo M, Mahlaoui N, Picard C, Torgerson TR, Burroughs L, Koliski A, Neto JZ, Porta F, Qasim W, Veys P, Kavanau K, Hönig M, Schulz A, Friedrich W, Notarangelo LD
- 248. Radioimmunotherapy-based conditioning for hematopoietic cell transplantation in children with malignant and nonmalignant diseases. Blood. 2011; 117(17): 4642-50 (IF=9.898) Schulz AS, Glatting G, Hoenig M, Schuetz C, Gatz SA, Grewendorf S, Sparber-Sauer M, Muche R, Blumstein N, Kropshofer G, Suttorp M, Bunjes D, Debatin KM, Reske SN, Friedrich W
- 249. Curative treatment of autosomal-recessive hyper-IgE syndrome by hematopoietic cell transplantation.
 Bone Marrow Transplant. 2011; 46(4): 552-6 (IF=3.746)
 - Gatz SA, Benninghoff U, Schütz C, Schulz A, Hönig M, Pannicke U, Holzmann KH, Schwarz K, Friedrich W
- 250. Successful second haploidentical SCT in osteopetrosis.

 Bone Marrow Transplant. 2011; 46(7): 1021-2
 (IF=3.746)
 Stepensky P, Schulz AS, Lahr G, Simanovsky N, Brooks R, Samuel S, Or R, Weintraub M, Resnick I
- 251. Mitochondrial genome variants in non-remitting ALL of childhood.
 - **Br J Haematol.** 2011; 155(5): 626-9 (IF=4.941)

 <u>Back C, Knauss H, Ludwig WD, Schrappe M, Debatin KM, Beltinger C</u>
- 252. [Evidence-based therapy guideline of the German Working Group on Obesity in Childhood and Adolescence].
 - **Bundesgesundheitsblatt Gesundheitsforschung, Gesundheitsschutz.** 2011; 54(5): 584-90 (IF=0.658)

 <u>Moss A</u>, Kunze D, <u>Wabitsch M</u>
- 253. Early relapse in ALL is identified by time to leukemia in NOD/SCID mice and is characterized by a gene signature involving survival pathways.
 Cancer Cell. 2011; 19(2): 206-17 (IF=26.566)

Meyer LH, Eckhoff SM, Queudeville M, Kraus JM, Giordan M, Stursberg J, Zangrando A, Vendramini E, Möricke A, Zimmermann M, Schrauder A, Lahr G, Holzmann K, Schrappe M, Basso G, Stahnke K, Kestler HA, Te Kronnie G, Debatin KM

254. Diversity of human leukemia xenograft mouse models: implications for disease biology. Cancer Res. 2011; 71(23): 7141-4 (IF=7.856) Meyer LH, Debatin KM

- 255. cIAP1 and TAK1 protect cells from TNF-induced necrosis by preventing RIP1/RIP3-dependent reactive oxygen species production.
 - Cell Death Differ. 2011; 18(4): 656-65 (IF=8.849) Vanlangenakker N, Vanden Berghe T, Bogaert P, Laukens B, Zobel K, Deshayes K, Vucic D, <u>Fulda S</u>, Vandenabeele P, Bertrand MJ
- **256.** Bortezomib primes neuroblastoma cells for TRAIL-induced apoptosis by linking the death receptor to the mitochondrial pathway.
 - Clin Cancer Res. 2011; 17(10): 3204-18 (IF=7.742)
 Naumann I, Kappler R, von Schweinitz D, Debatin KM,
 Fulda S
- 257. Targeting aberrant PI3K/Akt activation by PI103 restores sensitivity to TRAIL-induced apoptosis in neuroblastoma.
 - Clin Cancer Res. 2011; 17(10): 3233-47 (IF=7.742) Opel D, Naumann I, Schneider M, Bertele D, Debatin KM, Fulda S
- 258. Bortezomib primes glioblastoma, including glioblastoma stem cells, for TRAIL by increasing tBid stability and mitochondrial apoptosis.

 Clin Cancer Res. 2011; 17(12): 4019-30 (IF=7.742)

 Unterkircher T, Cristofanon S, Vellanki SH,

 Nonnenmacher L, Karpel-Massler G, Wirtz CR,

 Debatin KM, Fulda S
- 259. Activating mutations in the calcium-sensing receptor: genetic and clinical spectrum in 25 patients with autosomal dominant hypocalcaemia a German survey.
 - Clin Endocrinol (Oxf). 2011; 75(6): 760-5 (IF=3.168) Raue F, Pichl J, Dörr HG, Schnabel D, Heidemann P, Hammersen G, Jaursch-Hancke C, Santen R, Schöfl C, Wabitsch M, Haag C, Schulze E, Frank-Raue K
- 260. Childhood obesity.
 - **Curr Opin Lipidol.** 2011; 22(1): 21-5 (IF=6.086) Reinehr T, <u>Wabitsch M</u>
- 261. Kindern Gehör verschaffen. Systemtechnische und organisatorische Umsetzung des G-BA-Beschlusses "Neugeborenen-Hörscreening" am Universitätsklinikum Ulm.
 - Das Krankenhaus. 2011; 3: 243-247 Flämig G, Färber T, Brosch S, Zemmler T, <u>Hummler H</u>
- 262. Hämoglobinopathien: Klinische Erscheinungsbilder, diagnostische und therapeutische Hinweise Deutsches Ärzteblatt. 2011; 108(31-32): 532-540 Kohne E
- **263.** Approaches to the pharmacological modulation of plasmacytoid dendritic cells.
 - Endocr Metab Immune Disord Drug Targets. 2011; 11(2): 154-64 Fabricius D, Jahrsdörfer B
- 264. Targeted deletion of adipocytes by apoptosis leads to adipose tissue recruitment of alternatively activated M2 macrophages.
 - Endocrinology. 2011; 152(8): 3074-81 (IF=4.459) <u>Fischer-Posovszky P</u>, Wang QA, Asterholm IW, Rutkowski JM, Scherer PE
- 265. RBP4: a controversial adipokine. **Eur J Endocrinol.** 2011; 165(5): 703-11 (IF=3.423)

 <u>Kotnik P, Fischer-Posovszky P, Wabitsch M</u>

266. Downregulation of FLIP by cycloheximide sensitizes human fat cells to CD95-induced apoptosis.

Exp Cell Res. 2011; 317(15): 2200-9 (IF=3.58) <u>Fischer-Posovszky P. Keuper M. Nagel S.</u> Hesse D., Schürmann A., <u>Debatin KM., Strauss G.</u> <u>Wabitsch M.</u>

267. Impaired glucose tolerance in obese white children and adolescents: three to five year follow-up in untreated patients.

Exp Clin Endocrinol Diabetes. 2011; 119(3): 172-6 (IF=1.693)

Kleber M, deSousa G, Papcke S, <u>Wabitsch M</u>, Reinehr

268. Identification of c-FLIP(L) and c-FLIP(S) as critical regulators of death receptor-induced apoptosis in pancreatic cancer cells.

Gut. 2011; 60(2): 225-37 (IF=10.111) <u>Haag C, Stadel D</u>, Zhou S, Bachem MG, Möller P, <u>Debatin KM, Fulda S</u>

269. Inflammatory cytokines and signaling pathways are associated with survival of primary chronic lymphocytic leukemia cells in vitro: a dominant role of CCL2.

Haematologica. 2011; 96(3): 408-16 (IF=6.424) <u>Schulz A</u>, Toedt G, Zenz T, Stilgenbauer S, Lichter P, Seiffert M

270. HLA-haploidentical donor transplantation in severe combined immunodeficiency.

Hematol Oncol Clin North Am. 2011; 25(1): 31-44 (IF=2.637)

Friedrich W, Hönig M

271. Reorganization of the nuclear lamina and cytoskeleton in adipogenesis.

Histochem Cell Biol. 2011; 135(3): 251-61 (IF=2.588) Verstraeten VL, Renes J, Ramaekers FC, Kamps M, Kuijpers HJ, Verheyen F, <u>Wabitsch M</u>, Steijlen PM, van Steensel MA, Broers JL

272. Hypoxia induces apelin expression in human adipocytes.

Horm Metab Res. 2011; 43(6): 380-5 (IF=2.188) Geiger K, Muendlein A, Stark N, Saely CH, <u>Wabitsch M</u>, Fraunberger P, Drexel H

273. Differential expression of alternative Acyl-CoA binding protein (ACBP) transcripts in an inducible human preadipocyte cell line.

Horm Metab Res. 2011; 43(6): 440-2 (IF=2.188) Ludewig AH, Klapper M, <u>Wabitsch M</u>, Döring F, Nitz I

274. Regulation of FTO and FTM expression during human preadipocyte differentiation.

Horm Metab Res. 2011; 43(1): 17-21 (IF=2.188) Tews D, Fischer-Posovszky P, Wabitsch M

275. Renaissance of brown adipose tissue.

Horm Res Paediatr. 2011; 75(4): 231-9 (IF=1.571)

Tews D, Wabitsch M

276. Reference values and early determinants of intraabdominal fat mass in primary school children.

Horm Res Paediatr. 2011; 75(6): 412-22 (IF=1.571) <u>von Schnurbein J</u>, Klenk J, <u>Galm C</u>, <u>Berg S</u>, <u>Gottmann P</u>, Steinacker JM, Kratzer W, Brandstetter S, Wartha O, Peter R, Weiland S, <u>Wabitsch M</u> 277. Human growth hormone receptor (GHR) expression in obesity: II. Regulation of the human GHR gene by obesity-related factors.

Int J Obes (Lond). 2011; 35(12): 1520-9 (IF=4.691) Erman A, <u>Wabitsch M</u>, Goodyer CG

278. LIGHT (TNFSF14) inhibits adipose differentiation without affecting adipocyte metabolism.
Int J Obes (Lond). 2011; 35(2): 208-16 (IF=4.691)

Tiller G, Laumen H, <u>Fischer-Posovszky P</u>, Finck A, Skurk T, <u>Keuper M</u>, Brinkmann U, <u>Wabitsch M</u>, Link D, Hauner H

279. Leptin therapy in a congenital leptin-deficient patient leads to acute and long-term changes in homeostatic, reward, and food-related brain areas.

J Clin Endocrinol Metab. 2011; 96(8): E1283-7 (IF=5.967)

Frank S, Heni M, Moss A, von Schnurbein J, Fritsche A, Häring HU, Farooqi S, Preissl H, Wabitsch M

280. Childhood onset inflammatory bowel disease: predictors of delayed diagnosis from the CEDATA German-language pediatric inflammatory bowel disease registry.

J Pediatr. 2011; 158(3): 467-473.e2 (IF=4.115) Timmer A, Behrens R, Buderus S, Findeisen A, Hauer A, Keller KM, Kliemann G, Lang T, Lohr W, Rzehak P, Koletzko S, <u>CEDATA-GPGE Study Group</u>

281. Utilization of psychosocial care and oncological follow-up assessments among German long-term survivors of cancer with onset during adolescence. Klin Padiatr. 2011; 223(3): 152-8 (IF=1.772) Dieluweit U, Seitz DC, Besier T, Debatin KM, Grabow D, Kaatsch P, Goldbeck L

282. Hematopoietic stem cell transplantation for severe combined immunodeficiency.

Klin Padiatr. 2011; 223(6): 320-5 (IF=1.772) <u>Hönig M</u>, <u>Schulz A</u>, <u>Friedrich W</u>

283. Hereditary hyperferritinemia cataract syndrome: clinical, genetic, and laboratory findings in 5 families. Klin Padiatr. 2011; 223(6): 346-51 (IF=1.772)

Nonnenmacher L, Langer T, Blessing H, Gabriel H, Buchwald HJ, Meneksedag C, Kohne E, Gencik M, Debatin KM, Cario H

284. Acute lymphoblastic leukemia cells treated with CpG oligodeoxynucleotides, IL-4 and CD40 ligand facilitate enhanced anti-leukemic CTL responses.
Leukemia. 2011; 25(7): 1111-21 (IF=9.561)
Fabricius D, Breckerbohm L, Vollmer A, Queudeville M, Eckhoff SM, Fulda S, Strauss G, Debatin KM, Jahrsdörfer B, Meyer LH

285. In vitro-established alloantigen-specific CD8+ CTLs mediate graft-versus-tumor activity in the absence of graft-versus-host disease.

Leukemia. 2011; 25(5): 848-55 (IF=9.561) <u>Hartmann N</u>, Leithäuser F, Albers C, Duyster J, Möller P, <u>Debatin KM</u>, <u>Strauss G</u>

286. Deregulated apoptosis signaling in core-binding factor leukemia differentiates clinically relevant, molecular marker-independent subgroups.

Leukemia. 2011; 25(11): 1728-38 (IF=9.561) Lück SC, Russ AC, Botzenhardt U, Paschka P, Schlenk RF, Döhner H, <u>Fulda S</u>, Döhner K, Bullinger L

- 287. Stable and reproducible engraftment of primary adult and pediatric acute myeloid leukemia in NSG mice. **Leukemia.** 2011; 25(10): 1635-9 (IF=9.561) Malaisé M, Neumeier M, Botteron C, Döhner K,
 - Reinhardt D, Schlegelberger B, Göhring G, Gruhn B, Debatin KM, Corbacioglu S
- 288. NF-kB is required for Smac mimetic-mediated sensitization of glioblastoma cells for y-irradiationinduced apoptosis.
 - Mol Cancer Ther. 2011; 10(10): 1867-75 (IF=5.226) Berger R, Jennewein C, Marschall V, Karl S, Cristofanon S, Wagner L, Vellanki SH, Hehlgans S, Rödel F, Debatin KM, Ludolph AC, Fulda S
- 289. An inflammatory micro-environment promotes human adipocyte apoptosis.
 - Mol Cell Endocrinol. 2011; 339(1-2): 105-13 (IF=4.192) Keuper M, Blüher M, Schön MR, Möller P, Dzyakanchuk A, Amrein K, Debatin KM, Wabitsch M, Fischer-Posovszky P
- 290. Smac mimetic bypasses apoptosis resistance in FADDor caspase-8-deficient cells by priming for tumor necrosis factor α -induced necroptosis.
 - Neoplasia. 2011; 13(10): 971-9 (IF=5.946) Laukens B, Jennewein C, Schenk B, Vanlangenakker N, Schier A, Cristofanon S, Zobel K, Deshayes K, Vucic D, Jeremias I, Bertrand MJ, Vandenabeele P, Fulda S
- 291. Requirement of nuclear factor κB for Smac mimeticmediated sensitization of pancreatic carcinoma cells for gemcitabine-induced apoptosis.

Neoplasia. 2011; 13(12): 1162-70 (IF=5.946) Stadel D, Cristofanon S, Abhari BA, Deshayes K, Zobel K, Vucic D, Debatin KM, Fulda S

- 292. Refractory focal epilepsy in a patient with methylmalonic aciduria: case report on positive and long-lasting effect of rufinamide.
 - Neuropediatrics. 2011; 42(2): 71-3 (IF=0.937) von Stülpnagel C, Leichsenring M, Müller A, Staudt M, Kluger G
- 293. PI3K inhibitors prime neuroblastoma cells for chemotherapy by shifting the balance towards proapoptotic Bcl-2 proteins and enhanced mitochondrial apoptosis.

Oncogene. 2011; 30(4): 494-503 (IF=6.373) Bender A, Opel D, Naumann I, Kappler R, Friedman L, von Schweinitz D, Debatin KM, Fulda S

294. Histone deacetylase inhibitors prime medulloblastoma cells for chemotherapy-induced apoptosis by enhancing p53-dependent Bax activation.

Oncogene. 2011; 30(19): 2275-81 (IF=6.373) Häcker S, Karl S, Mader I, Cristofanon S, Schweitzer T, Krauss J, Rutkowski S, Debatin KM, Fulda S

295. Efficacy and outcome of expanded newborn screening for metabolic diseases--report of 10 years from South-West Germany.

Orphanet J Rare Dis. 2011; 6: 44 (IF=5.074) Lindner M, Gramer G, Haege G, Fang-Hoffmann J, Schwab KO, Tacke U, Trefz FK, Mengel E, Wendel U, Leichsenring M, Burgard P, Hoffmann GF

296. Muttermilch bei Säuglingsschnupfen. Pädiatrische Praxis. 2010/11; 76: 679-680 Schmid M, Hummler H

- 297. Kreißsaalerstversorgung von Neugeborenen. Pädiatrische Praxis. 2010/11; 76: 577-589 Schmid M, Hummler H
- 298. Therapie der arteriellen Hypotonie bei Frühgeborenen: Volumen, Katecholamine, Kortikosteroide.

Pädiatrische Praxis. 2011; 77: 98-100 Fuchs H, Hummler H

299. Genome-wide association analysis identifies variants associated with nonalcoholic fatty liver disease that have distinct effects on metabolic traits.

PLoS Genet. 2011; 7(3): e1001324 (IF=8.694) Speliotes EK, Yerges-Armstrong LM, Wu J, Hernaez R, Kim LJ, Palmer CD, Gudnason V, Eiriksdottir G, Garcia ME, Launer LJ, Nalls MA, Clark JM, Mitchell BD, Shuldiner AR, Butler JL, Tomas M, Hoffmann U, Hwang SJ, Massaro JM, O'Donnell CJ, Sahani DV, Salomaa V, Schadt EE, Schwartz SM, Siscovick DS, NASH CRN, GIANT Consortium, MAGIC Investigators, Voight BF, Carr JJ, Feitosa MF, Harris TB, Fox CS, Smith AV, Kao WH, Hirschhorn JN, Borecki IB, GOLD Consortium

- 300. Very low tidal volume ventilation with associated hypercapnia--effects on lung injury in a model for acute respiratory distress syndrome. PLoS ONE. 2011; 6(8): e23816 (IF=4.092) Fuchs H, Mendler MR, Scharnbeck D, Ebsen M, <u>Hummler HD</u>
- 301. Identification of hypoxia-induced genes in human SGBS adipocytes by microarray analysis. PLoS ONE. 2011; 6(10): e26465 (IF=4.092) Geiger K, Leiherer A, Muendlein A, Stark N, Geller-Rhomberg S, Saely CH, Wabitsch M, Fraunberger P, Drexel H
- 302. Allele-specific, age-dependent and BMI-associated DNA methylation of human MCHR1. PLoS ONE. 2011; 6(5): e17711 (IF=4.092) Stepanow S, Reichwald K, Huse K, Gausmann U, Nebel A, Rosenstiel P, Wabitsch M, Fischer-Posovszky P, Platzer M
- 303. Characterization of intestinal and pancreatic dysfunction in VPAC1-null mutant mouse. Pancreas. 2011; 40(6): 861-71 (IF=2.386) Fabricius D, Karacay B, Shutt D, Leverich W, Schafer B, Takle E, Thedens D, Khanna G, Raikwar S, Yang B, Desmond ME, O'Dorisio MS
- 304. Inflammation, regeneration, and transformation in the pancreas: results of the Collaborative Research Center 518 (SFB 518) at the University of Ulm. Pancreas. 2011; 40(4): 489-502 (IF=2.386) Giehl K, Bachem M, Beil M, Böhm BO, Ellenrieder V, Fulda S, Gress TM, Holzmann K, Kestler HA, Kornmann M, Menke A, Möller P, Oswald F, Schmid RM, Schmidt V, Schirmbeck R, Seufferlein T, von Wichert G, Wagner M, Walther P, Wirth T, Adler G
- 305. Educational and vocational achievement among longterm survivors of adolescent cancer in Germany. **Pediatr Blood Cancer.** 2011; 56(3): 432-8 (IF=1.891) Dieluweit U, <u>Debatin KM</u>, Grabow D, Kaatsch P, Peter R, Seitz DC, Goldbeck L

- 306. Cerebral oxygenation in very low birth weight infants supported with sustained lung inflations after birth.
 - Pediatr Res. 2011; 70(2): 176-80 (IF=2.7) <u>Fuchs H, Lindner W, Buschko A, Trischberger T, Schmid</u> M, Hummler HD
- **307.** Life satisfaction in adult survivors of cancer during adolescence: what contributes to the latter satisfaction with life?
 - **Qual Life Res. 2011**; 20(2): 225-36 (IF=2.3) Seitz DC, Hagmann D, Besier T, Dieluweit U, <u>Debatin KM</u>, Grabow D, Kaatsch P, Henrich G, Goldbeck L
- 308. Dose-dependent modulation of apoptotic processes by fluoxetine in maturing neuronal cells: an in vitro study.
 - World J Biol Psychiatry. 2011; 12(2): 89-98 (IF=2.385) Schaz U, Föhr KJ, Liebau S, <u>Fulda S</u>, Koelch M, Fegert JM, Boeckers TM, Ludolph AG
- 309. [Mortality of extremely low birthweight infants large differences between quality assurance data and the national birth/death registry].
 - **Z Geburtshilfe Neonatol.** 2011; 215(1): 10-7 Hummler HD, Poets C

Sources of Funding

Without financial support from external sources, our research would not be possible.

We cordially thank all organizations and individuals supporting us, in particular:

- German Research Foundation (DFG), including the Excellence Initiative of the German Federal and State Governments
- German Federal Ministry for Education and Research (BMBF)
- European Union
- Ministry of Science, Reseach and the Arts Baden-Württemberg
- Helmholtz Association
- Local charities, in particular Förderkreis für tumor- und leukämiekranke Kinder Ulm e.V.
- Medical Faculty of Ulm University (intramural programs)
- German Cancer Aid
- Boehringer Ingelheim Ulm University BioCenter (BIU)
- Else Kröner-Fresenius Foundation
- Wilhelm Sander Foundation
- German José Carreras Leukaemia Foundation
- Baden-Württemberg Foundation
- European Society for Paediatric Endocrinology
- German Adiposity Society
- COST Association
- Brunhilde von Hornstein Foundation
- Jeffrey Modell Foundation
- Juvenile Adiposity Foundation
- Individual Donors
- Industry