west german
cancer center consortium

Targeted towards the future

Annual Report 2023

UKM
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Personal

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Innovative

Milestones

What happened in 2023, and what topics are important in 2024? Prof. Annalen Bleckmann, Director of WTZ Münster, and Prof. Dirk Schadendorf, Director of WTZ Essen, are joined by General Managers Prof. Philipp Lenz (Münster) and Dr Stefan Palm (Essen) in looking back at the milestones achieved last year and at the highlights of this year.

Prof. Annalen Bleckmann

In September, all the Oncological Centers of Excellence in North Rhine-Westphalia (NRW) – including WTZ with its sites Münster and Essen – joined together in setting up the North Rhine-Westphalia Network of Excellence. As a result, another big step has been taken in providing everyone in NRW with access to the best possible cancer treatment, as well as in increasing the quality of care available."

2023 demonstrated how well the two WTZ sites now work together in the field of molecular tumour diagnostics. The joint conferences on preparing cases and doing the follow-up work on them, including the recommendation of therapies based on this, guarantees a highly professional approach at both sites."

Prof. Dirk Schadendorf

Again in 2024 our aim is to be recognised and funded as an Oncological Center of Excellence by the German Cancer Aid organisation (Deutsche Krebshilfe). This means that a strong focus in 2023 was on drawing up a new application to be submitted to the organisation, providing evidence of the excellent collaboration within the WTZ Consortium in the fields of research and care."

Prof. Annalen Bleckmann

With the establishment of NCT West, NRW now has its own site as part of the National Center for Tumour Diseases. This new NCT, under the responsibility of the University Clinics of Essen and Cologne, will be one of the six established NCT centers in Germany and will be receiving long-term funding from the national and regional state governments. This will also have a positive impact on research and patient care in the WTZ Consortium."

Prof. Dirk Schadendorf

Prof. Philipp Lenz

Therapies which are aimed at making individual molecular mutations in the tumour – so-called targeted therapies – are being increasingly used in everyday work at clinics. They are often more effective than conventional chemo-therapies and, at the same time, have fewer side effects. In order to be able to offer all our patients the option of such targeted therapy, we set up the Center for Personalised Medicine in 2023. Here, experts at the WTZ sites examine specific molecular mutations in the tumour tissue and evaluate the best possible options for treatment."

Cancer medicine is an important focus of the work done at the Universities of Essen and Münster. Specialised professorships strengthen our position, as do investments in buildings devoted to oncology. A central component is the promotion of innovation and excellence at WTZ, which can be seen in the form of numerous cancer-related research groups, consortia and junior researcher programmes for physicians and natural scientists."

Dr Stefan Palm

At WTZ, our work focuses on our patients, and this includes holistic treatment and care during the entire targeted therapy. We have therefore continued developing our patient support programmes in our Consortium so that we can take a 'targeted' approach here, too."

Prof. Philipp Lenz

Involving patients more is a key issue at our center, not only in their role as patients but also as experts on their own individual situation, in which they take an active part in shaping the fortunes of the center – in research as much as in patient care. 'Nothing about us without us' is the philosophy of our WTZ Patients Advisory Committee which, since its inception, has been recognised as an important driver of patient involvement, and whose ideas and concepts have been setting examples for the whole country."

Dr Stefan Palm

The WTZ Consortium: a working alliance

The two centers in Essen and Münster have been collaborating now in the WTZ Consortium for a good four years. What have been the results?

The Oncological Centers at University Medicine Essen (UME) and University Hospital Münster (UKM) have been working together at the West German Cancer Center (WTZ) since October 2019. The aims are twofold: the continuing development of cancer medicine, and the best possible care for patients in the Ruhr Area and in Westphalia. In the following interview, Prof. Annalen Bleckmann, Director of WTZ Münster, and Prof. Dirk Schadendorf, Director of WTZ Essen, look back on the collaboration so far and talk about the most important alliance projects currently being worked on.

How has the collaboration between the two centers developed over the past few years?

Prof. Annalen Bleckmann: At the beginning, the most important thing was to create structures. What form should the collaboration take? How do we want to jointly carry out clinical studies? How can we ensure that there is patient involvement across the locations? Today, the results of this structural collaboration can also be seen at the content level: we benefit from scientific exchanges with one another and together we have been creating things which one location alone would not be able to manage.

Prof. Dirk Schadendorf: The added value for research and patient care is something which we have made very clear in our renewed application submitted to German Cancer Aid so that we continue to receive funding in 2024 as a joint Center of Oncological Excellence.

Can you give a few examples of things which one location alone would not be able to manage?

Prof. Dirk Schadendorf: Patient involvement at both sites has experienced a significant boost: since 2020, we have had a Patients Advisory Committee which is composed of experienced patients and family members and which actively promotes structural patient involvement in all areas. Patients' representatives also played a decisive role in planning and carrying out the Ruhr and Westphalian Cancer Days.

Prof. Annalen Bleckmann: We have also, for example, doubled the numbers of patients in studies, and together we can acquire much more external funding for the continued development of patient care.

Working together across locations in Germany's most densely populated state, North Rhine-Westphalia, provides all patients with access to the best possible cancer medicine."

Prof. Annalen Bleckmann
Director of WTZ Münster

Which of the projects that you are currently engaged in together in the field of patient care are especially worth mentioning?

Prof. Annalen Bleckmann: One milestone in individual patient care is our molecular tumour board **(see page 12)**: a multidisciplinary team from both sites gets together once a week to develop new diagnosis- and therapy-related options for cases in which the cancer is resisting treatment.

Prof. Dirk Schadendorf: To this end, modern molecular analyses and imaging methods are used in our Centers for Personalised Medicine to record individual mutations in the genetic material of tumour cells, and these are discussed in meetings in relation to innovative options for therapy tailored to the individual patient.

Prof. Annalen Bleckmann: WTZ is also part of the "National Network of Genomic Medicine (nNMG) for Lung Cancer". Via this network, people with lung cancer at an advanced stage have access to molecular diagnostics and innovative therapies, also as part of clinical studies.

Prof. Dirk Schadendorf: And since 2023, WTZ Essen and University Clinic Cologne have constituted the National Center for Tumour Diseases known as NCT West **(see page 15)**. This means long-term funding on the part of the national and regional state governments, which is an excellent precondition for the optimum linking of research and care for the benefit of patients.

Are there also any projects which deal specifically with patients' everyday lives and quality of life?

Prof. Dirk Schadendorf: Our research project called **"Optilater"** which is being funded by the Federal Ministry of Health, is concerned with the mental and physical impacts of contracting cancer. The aim is to record the requirements relating to care and communication which patients have and to create diversity-sensitive and culturally aware structures covering information and counselling for cancer survivors.

Prof. Annalen Bleckmann: Since spring 2023, we at WTZ have also been working on the development of a digital solution for providing support for patients' symptomatology **(see page 34)**. The project, which is called "DigiCare" and is being funded by the Federal Ministry of Education and Research, serves to establish a cross-sector care structure.

Prof. Dirk Schadendorf: From 2024, moreover, approved national network applications will lead not only to improved networking between Comprehensive Cancer Centers all over Germany but also to improved access to second opinions.

Speaking of care structure: what challenges will the planned reform of German hospitals present? How is WTZ prepared for that?

Prof. Annalen Bleckmann: Hospital reform will have an impact on funding and patient numbers. At the moment, we cannot yet assess this at all – but we will certainly feel it.

Prof. Dirk Schadendorf: We will have to wait and see what it means for our practical work and for the hospital landscape. At any rate the reform will drive networking – and thus benefit the cross-location collaboration within WTZ.

The numerous joint research projects being funded will mean decisive progress for oncological diagnostics and therapies and will ensure that the quality of patient care will continue to be improved."

Prof. Dirk Schadendorf
Director of WTZ Essen

Excellent

New therapy options thanks to personalised medicine

The options for treating cancer have increased exponentially in the last ten years, and this was made possible through a comprehensive understanding of the biology of cancer diseases.

Thanks to intensive basic research, the experts at WTZ today know much more about the specific properties of various types of tumour than they did just ten years ago. And: the more exact their knowledge of the weak points in each case, the more targeted can be their reaction using specific medication. For this reason, the specialist term used is “personalised medicine”.

“Personalised medicine is the adaptation of cancer treatment on the basis of acquired genetic mutations in each patient’s tumour cells, or of other biological characteristics in the respective tumour,” explains Prof. George Lenz, Director of Department of Medicine A at UKM and Scientific Director of WTZ Münster. Before personalised medicine was introduced, all patients were treated the same – with a combination of the three cornerstones of cancer treatment: operation, chemotherapy, radiation treatment. “Today we have a much more comprehensive understanding of the different types of tumour diseases,” adds Prof. Martin Schuler, Director of the Clinic of Internal Medicine (Tumour Research) at UME and Deputy Director of WTZ Essen. “We have already been able to identify a large number of clinical and molecular subgroups, and that opens up new approaches for much more effective options for treatment with fewer side effects.” Basically, these approaches can be divided into two categories: one involves the activation of the immune system; in the other, growth signals are inhibited directly in the cancer cell.

“Unfortunately, not every case of cancer can currently be cured yet. However, personalised medicine provides a real benefit for patients as regards both the length and the quality of their lives.”

Prof. Georg Lenz
Director of Department of Medicine A at UKM
and Scientific Director of WTZ Münster

Role of AI in early detection

“Cancer cells are often not recognised by the body’s own defence system, because these cells make use of a kind of built-in safety mechanism which the body has – the so-called checkpoints – and, with their help, they hide themselves away from the immune system,” explains Prof. Annalen Bleckmann, Head of Internal Oncology at Department of Medicine A at UKM and Director of WTZ Münster. By means of newly developed antibodies, so-called checkpoint inhibitors, the function is, as the name suggests, inhibited, with the result that the body’s own immune system is able to detect the malignant mutations and tackle them.” These checkpoint inhibitors were initially used very successfully in the treatment of melanoma, but nowadays they are an option for treating many of the most frequent forms of cancer. “A new development in the field of immuno-oncology is the CAR T cell therapy,” adds George Lenz. CAR stands for Chimeric Antigen Receptor. “In this method of treatment, the body’s own defence cells are genetically modified outside the body, thus upgrading and arming them for the fight against the cancer, and they are then returned to the patient.” So far, this innovative therapy has been approved, for example, for use in cases of aggressive lymphatic cancer, multiple myeloma and certain forms of leukaemia.”

Prof. Annalen Bleckmann
Director of WTZ Münster

“Today we no longer treat all patients the same way, but first look to see which option for treatment is promising, or possibly ineffective – and this leads to much more efficient and tolerable therapies.”

Prof. Martin Schuler
Director Clinic of Internal Medicine (Tumour Research) at UME and Deputy Director of WTZ Essen

Tackling cancer cells from within

“Low-molecular-weight inhibitors can be absorbed directly by cancer cells and can intervene in damaged growth signals,” explains Martin Schuler. An example of this is the recently approved medication sotorasib, which is used to treat a subtype of lung cancer. As this cancer often triggers no complaints – or only very non-specific ones – it often remains undetected until the metastatic stage. “Up to today,” says Schuler, “lung cancer is worldwide the most frequent form of cancer leading to death.” Sotorasib blocks a mutated form of KRAS, a protein which transmits growth signals within cells. “If the mutation KRAS p.G12C is found to exist in a patient’s tumour, sotorasib is able to inhibit specifically the growth of cancer cells.” Sotorasib has been approved for treating patients with non-small-cell lung carcinomas which display this mutation and in which the tumour has continued to grow, despite previous treatment involving a standard therapy, or in which new metastases have formed. But sotorasib can, in combination with an antibody, also be effective in patients with bowel cancer displaying this mutation.

Benefits for patients

“Working with biomarkers has been part of reality in oncology for many years now,” explains Prof. Sebastian Bauer, Professor of Personalised Tumour Therapy, and Senior Physician at the Sarcoma Center at UME. Biomarkers can be determined both from the tumour itself and also indirectly through a blood sample. In many patients, DNA fragments from the tumour can be determined in the circulation and used for sequencing, for example. “Ideally, these markers help in selecting precisely the right methods of treatment and customising therapies for individual patients, for example when the tumour mutates over time,” says Bauer. “The low-threshold sequencing available involves risks, though – especially when they identify markers whose relevance for the therapy we don’t completely understand. For this reason, it’s important for us that we inform patients that established methods of treatment, including traditional chemotherapies, are often more important than genetic tests. In addition to analytical work in the lab, modern imaging methods such as positron emission tomography (PET) are used increasingly often to detect tumours in the body. In the coming years we also expect to see more treatment methods
involving nuclear medicine – so-called theranostics – based on the results of these imaging methods in order to provide targeted treatment for tumours.”
“Looking to the future, treatments for cancer in the coming years will expand, or even replace, the conventional mainstays – chemotherapy and radiation therapy – for some tumours,” says Georg Lenz.
“Already today, chemotherapeutics are not playing any further role in the case of some lymphomas.”

Prof. Sebastian Bauer
Professor of Personalised Tumour Therapy, and Senior Physician at the Sarcoma Center at UME

The power of networking and data

At WTZ, the various options for treatment are explored in over 40 interdisciplinary and multiprofessional tumor boards every week. “This is where we see all the power of the WTZ Consortium,” says Annalen Bleckmann. The Network also benefits patients in highly complex situations which cannot be understood using just the human brain. “The more people involved who collate their data from imaging, lab results and patients’ self-assessments, the better the decisions that can be taken – and the better the results,” Martin Schuler argues.

The molecular tumour board at WTZ

Once a week, in discussions of individual cases, experts from a variety of disciplines draw up recommendations relating to diagnoses and treatments for cancer diseases which resist therapy.

Although there are many effective options for treatment today, it is not always possible to permanently prevent, or to hold up, the spread of a tumour. This is where personalised medicine comes into play. With the help of modern molecular analyses, individual mutations in the genetic material of the tumour cells are recorded and discussed in cross-locational meetings at WTZ. The aim is to draw up options relating to diagnoses and therapies which are tailor-made as far as possible for the individuals concerned.

These things take place at the Centers for Personalised Medicine (ZPM) at both of the WTZ sites, in **Essen** and **Münster**. As an Oncological Center of Excellence, WTZ is a member of the German Network for Personalised Medicine (DNPM), and it focuses in particular on taking the personalised approach in research and treatment. “For most cancer diseases there are standard therapies or so-called guideline-based therapies with sound evidence,” explains Dr Ina Pretzell, Senior Physician, Molecular Tumour Board and Molecular Diagnostics at UME. “If this guideline therapy doesn’t work, or no longer works, the doctors in charge can present their patients to the WTZ molecular tumour board.” Here, once a week, experts from a very wide range of disciplines – oncology, pathology, human genetics, bioinformatics, molecular biology – come together and discuss individual cases. “In these sessions, all the knowledge from two sites and numerous disciplines comes together,” says Prof. Eva Wardelmann, Director of the Gerhard Domagk Institute of Pathology at UKM. “There is always someone who has heard something somewhere or who has an idea regarding a specific case – and it’s not only the patients who benefit from this: we do, too, as we learn a great deal from one another.”

ZPM Essen

ZPM Münster

Tracking down a tumour's genetics

There are always two questions which are discussed in the molecular tumour board: Which individual molecular diagnostic makes sense in any particular case? And, if a diagnostic has already been made: From what additional molecular information might a new therapy option be derived? To answer these questions, the experts draw on the latest doctor's letter, all available pathology findings and, if possible or necessary, any available molecular pathology findings. "If paraffin-embedded material is already present from previous examinations, it is often the case that not even a further biopsy needs to be carried out," explains Dr Klaus Wethmar, Senior Physician at Department of Medicine A at UKM. The aim of any extended diagnostic is to find specific mutations in the tumour tissue at the molecular level. "In detailed genetic analyses, we track down the molecular motor of the tumour and can then, if possible, treat it with tailor-made therapies." What sometimes transpires is that the mutation not only affects the tumour tissue itself but can be detected in all the body's cells. "This means that the cancer is genetically determined, and other members of the family may also be at increased risk. In such cases we refer patients to counselling and diagnostic services relating to human genetics," says Eva Wardelmann.

"In the past ten years, we have learned that the various types of tumour are a mixed bag of subtypes. Personalised medicine enables us to match the therapy perfectly to the individual case in question."

Prof. Eva Wardelmann
Director of the Gerhard Domagk Institute of Pathology at UKM

Dr Klaus Wethmar
Senior Physician at Department of Medicine A at UKM

Cooperation in diagnostics, therapy and research

“Our task is to recommend the best possible diagnostics and therapy for each individual person,” says Klaus Wethmar in describing how the WTZ team sees its work. “In 2023, with the aid of the molecular tumour board, we were able to give around 600 patients an individual recommendation for a diagnosis and/or therapy – and therefore a new perspective.” The way the various disciplines worked together played a major role here: “In the molecular tumour board we deal with very restricted therapeutical options – right across all the organ systems,” says Pretzell. “Differentiated applications of molecular pathology examinations, including high-throughput sequencing and diagnostic methods based on individual biomarkers, as well as interdisciplinary collaboration, all enable us to make precise analyses in order to identify targeted therapies,” says Prof. Jens Siveke, Director of the Brückeninstitut für Experimentelle Tumortherapie (Institute for Developmental Cancer Therapeutics) at WTZ Essen. “Modern analytical systems support discussions on various types of tumour and make it possible to draw up personalised recommendations for treatment which are supported by studies and scientific evidence.” Research, too, profits from the cross-locational collaboration at WTZ: “Our growing understanding of different subtypes of tumour and the individualisation of treatment means that groups of patients are becoming smaller and smaller. This means that it is imperative that we work together if we carry out studies.”

The cross-locational collaboration in the WTZ molecular tumour board enables us to provide a larger number of patients with access to personalised medicine and to give a new perspective to people who have cancer at an advanced stage or who have a rare form of the disease.”

Dr Ina Pretzell
Senior Physician, Molecular Tumour Board and Molecular Diagnostics at UME

Prof. Jens Siveke
Director of the Brückeninstitut für Experimentelle Tumortherapie (Institute for Developmental Cancer Therapeutics) at UME; Deputy Director and Scientific Director at WTZ Essen

The National Center for Tumour Diseases (NCT) sets up a site in NRW

The Center for Integrated Oncology (CIO) in Cologne and WTZ Essen make up NCT West.

The National Center for Tumour Diseases (NCT) is a long-term collaboration between the German Cancer Research Center (DKFZ), partners of excellence in university medicine and other outstanding research partners at a number of locations in Germany. The aim is a speedy and safe transfer of promising results from cancer research to clinical applications. NCT has six sites in Germany, and one of them is NCT West with the Universities of Essen and Cologne.

"Transferring findings from basic research to clinical testing is something that the USA in particular – but increasingly China, too – is currently well-known for," explains Prof. Martin Schuler, Director of the Clinic of Internal Medicine (Tumour Research) at UME, Deputy Director of WTZ Essen, and Managing Director of NCT West, Essen Campus. "In order that Germany can catch up with the world's best in clinical cancer research, the Federal Ministry of Education and Research and the Federal states involved are funding an expansion of the NCT to a total of six locations." Since 2023, NCT West – under the responsibility of WTZ Essen and CIO Cologne, together with the German Cancer Research Center – has been one such location, the others being Heidelberg, Dresden, Berlin, SüdWest (Tübingen-Stuttgart/Ulm) and WERA (Würzburg, Erlangen, Regensburg and Augsburg). An international committee of experts decided on which sites were to be selected.

The support for NCT West is a great success, as well as a huge recognition for the work being done by the cancer researchers in North Rhine-Westphalia."

Prof. Martin Schuler
Director of the Clinic of Internal Medicine (Tumour Research) at UME and Deputy Director of WTZ Essen

The signatories to the agreement between the national and the regional state governments in Germany on the expansion of the NCT: Bettina Stark-Watzinger (Federal Minister of Education and Research), Petra Olschowski (Minister of Science, Research and the Arts in the State of Baden-Württemberg), Ina Brandes (Minister of Culture and Science in the State of North Rhine-Westphalia), Sebastian Gemkow (Science Minister in the State of Saxony), and Eckart Würzner (Mayor of Heidelberg).

Long-term institutional funding to benefit patients

Since 1 January 2024, there has been institutional funding for building up the new NCT sites. The annual amount of funding for all six sites will increase to 98 million euros within six years. “This gives us the opportunity to transfer innovative approaches in personalised cancer medicine to scientifically controlled application,” Martin Schuller explains. “This means, for example, that we can take a close look at rare forms of cancer or embark on research projects in modern surgery or diagnostics which didn’t previously receive much funding.” With the focus on innovative clinical studies, NCT West makes it possible to carry out clinical testing quickly and safely on new developments from the laboratory – with the aim of making better options for diagnostics and treatment available for cancer patients. The major research areas at NCT West are precision diagnostics, local and systemic therapies, and translational data management and computer-assisted cancer biology. These competences are closely linked to innovative, multidimensional analyses which characterise the tumour, the host and their reactions to treatment.

What is unique in North Rhine-Westphalia is that all six university clinics in the state are connected to NCT West. In this way, patients at WTZ Münster will also have direct access to NCT studies. “We can therefore ensure that all patients in Germany’s most densely populated state have access to innovations in cancer medicine,” comments Prof. Annalen Bleckmann, Director of WTZ Münster.

NCT
NATIONAL CENTER FOR TUMOR DISEASES

A new building for NCT West. The Essen site will have 8,200 m² of floor space for therapy areas, a seminar area for teaching, and various laboratory facilities for research.

Through its links with all university clinics in North Rhine-Westphalia, NCT West ensures that patients all over the state have access to innovative studies in personalised cancer medicine.”

Prof. Annalen Bleckmann
Director of WTZ Münster

News from the Consortium

First certification for the Centers for Testicular Cancer, Anal Cancer and Bowel Cancer

In 2023, three cancer centers at WTZ Essen received their first certification by the German Cancer Society (Deutsche Krebsgesellschaft, DKG). The Uro-Oncological Center is expanded by the addition of a fourth entity, testicular cancer (in addition to prostate cancer, bladder cancer and renal cancer). Representing it is the management – Prof. Boros Hadaschik (Director of the Urology Clinic) and Center Coordinator Dr Lukas Püllen. “This further certification shows that we offer our uro-oncology patients treatment in line with the highest quality standards in every phase of their illness. Patients can rely on getting comprehensive, excellent care,” says a delighted Hadaschick. At the Center for Visceral Oncology, the Center for Anal and Bowel Cancer has been added to the Centers for Pancreatic, Stomach and Liver Cancer since 2023. “The expanded certification confirms the high quality of the work done by our staff, and it is an important advertisement for our Clinic,” says the Head of both Centers, Prof. Andreas Rink (Head of the Department of Minimally Invasive Oncology Surgery at the Clinic for General, Visceral and Transplant Surgery). The Coordinator for both Centers is Prof. Stefan Kasper-Virchow, who is also the Head of the Visceral Oncology Center at WTZ Essen.

First certification for the Uro-Oncology Center

In addition to the Prostate Center, which has been certified regularly since 2012, the Center for Renal Cancer – and, with it, at the level above, the Uro-Oncology Center at UKM – were certified for the first time in 2023 by the German Cancer Society (DKG). Representing the Uro-Oncology Center are its Head, Prof. Martin Bögemann, and Prof. Andres Jan Schrader, Director of the Clinic for Urology and Paediatric Urology at UKM. The Coordinator for the Uro-Oncology Center is Christiane Bothe. The Renal Cancer Center is headed by Dr Katrin Schlack, and her deputy is Dr Dorothee Tiedje.

“The basis for the certification is the annual verification that, at every stage of their illness, we are able to offer our patients treatment which is defined by the highest quality standards,” says Clinic Director Schrader. “This means that they can rely on receiving excellent care, both from doctors and from nursing staff, also as regards any psychosocial aspects of their illness. The certification is both proof and an acknowledgement that – day in, day out – all our teams perform outstanding interdisciplinary work.”

Precision oncology: research team studies aggressive tumours

Cancer occurs as a result of mutations which affect patients to varying degrees. Some mutations are insignificant, others drive the growth of cancer cells. One important example is BAP1, a tumour suppressor which often mutates in the case of aggressive forms of cancer such as uveal melanoma, renal and bile duct cancer and malignant mesothelioma. So far, there have not been any specific forms of treatment for these BAP1-mutated cancers. Working together with the German Cancer Research Center (DKFZ) and Munich Technical University, and under the aegis of WTZ Essen, two teams at Essen University Hospital and the Medical Faculty of the University of Duisburg-Essen, headed by Dr Samuel Peña-Llopis and Dr Silvia Vega-Rubin-de-Celis, are researching into new possibilities for treatment. The project is receiving funding of 1.3 million euros from the German Cancer Aid organisation. As the head of the consortium, Dr Peña-Llopis from the Ophthalmology Clinic at UME, explains, “Our research shows that BAP1 mutations influence new signalling pathways, so a number of teams in Germany are investigating these pathways at different levels, e.g. with cell lines, mouse models and tumour organoids taken from patients.” The aim is to collect robust preclinical data before any clinical trials begin. One special aspect is that no one in the project management team is a professor. The research and the excellent preliminary work carried out by the young team were enough to convince an international committee of experts from German Cancer Aid to approve and fund the project. This young team structure is an unusual one, as around 97 percent of coordinators in the Translational Oncology priority programme are professors.

EU project “HEPINIB” receives funding of 437,000 euros

Can growth and metastasis in cancer cells be halted by inhibition of the enzyme heparanase? This is being investigated by a team headed by Prof. Martin Götte, a researcher at the University of Münster and research associate at the Gynaecology and Midwifery Clinic at UKM. “Heparan sulphate is a carbohydrate with a multifaceted structure. It docks onto proteins on the cell’s surface as well as in the gel-like structure between the cells – the so-called extracellular matrix,” Götte explains. There are indications, he says, that, when cancer occurs, this mechanism loses its balance and impacts on the interaction between the cancer cells and the tumour’s micro-surroundings, as well as that between the cancer cells and the immune system. “This can then lead to tumour growth and metastasis,” he says.

In the EU project “HEPINIB”, which is receiving funding of 437,000 euros from the Marie Skłodowska Curie Actions, researchers are now looking at the enzyme heparanase as a potential target for therapies. This enzyme splits the carbohydrate heparan sulphate and, as a result, influences the restructuring of the extracellular matrix. The aim is to demonstrate that inhibiting the enzyme heparinase could be effective at different levels, curbing not only metastasis but also the formation of new blood vessels (angiogenesis) and inflammatory processes.

BMBF provides funding for Paediatric Oncology Research Center

The Federal Ministry of Education and Research (BMBF) is providing funding of 2.3 million euros for the West German Paediatric Study Center (WPSZ). Prof. Dirk Reinhardt, the Director of Paediatric Clinic III, is the spokesperson of the Study Center as well as of the North Rhine-Westphalian (NRW) research alliance for clinical research and care in paediatric oncology centers. He emphasises the importance of this alliance, established five years ago, of paediatric oncology centers at the University Hospitals of Essen (WTZ Essen), Aachen, Bonn, Cologne and Homburg as well as a further six paediatric clinics in NRW. The aims of the project are not only the optimisation of the research projects being carried out, and of the complex diagnostics involved, but also access to the best possible treatment for all children and adolescents in NRW, the Saarland and beyond. New offers of therapies and early clinical studies are often available only at large university hospitals, which, as a result, makes it necessary to transfer patients to these centers. Therefore, comprehensive support for families is a major concern in the project. At all locations, case managers are there to support families, and they also involve patients' and parents' representatives. In addition, there is a tumour board, a central record of new therapy options and diagnostic methods, and joint research projects.

Built for the future: the new Interdisciplinary Extension Building at UKM

Large pillars, light-filled atria, an escalator and a glass elevator: after a long construction phase, the new Interdisciplinary Extension Building (IEB) at UKM went into operation in early 2023. It is located in the west of the Central Clinic and provides a new home in modern, light rooms for several clinics and departments.

On three different levels there are the Breast Center (initially temporarily), the Gynaecology Clinic, the Pre-Natal Outpatients Department and the Clinic for Neurology/Institute for Translational Neurology, as well as the Clinic for Paediatric and Adolescents Medicine. New inpatient areas, among others, are due to be added in 2024.

"I'm delighted that we can offer not only our patients but also our staff a modern, contemporary atmosphere," says Dr Christoph Hoppenheit, Commercial Director at UKM, who has nothing but praise for the concept of the extension building, which brings with it many innovations and improvements. Roof gardens, for example, were converted into atria, so that the rooms facing inwards also have access to daylight. In addition to the light furniture and the spacious, extensive corridors, there is a further bonus for patients: almost all patient rooms have their own spacious balcony. After the moving-in phase at the IEB is over and the refurbishment work on the façades of both towers of the Central Clinic has been completed, the next job in the modernisation plan, says Stephan Triphaus, the UKM's chief architect and managing director of UKM Infrastructure Management, will be refurbishment of the interior.

Funding for research into exercise therapy for cancer patients

German Cancer Aid (DKH) is providing 560,000 euros of funding for the BREATH study on exercise therapy during palliative tumour therapy for patients who have incurable lung cancer. In the study being carried out at WTZ Essen, research is being conducted into capabilities, quality of life, fatigue and cardiological parameters, both with and without exercise therapy. Patients often suffer as a result of the considerable restrictions they have on what they can physically cope with and, in consequence, because of their reduced quality of life. Exercise therapy can bring relief. As Nico De Lazzari, sports scientist in the Palliative Medicine Department at WTZ Essen, says, “People who have lung cancer find that there are severe restrictions in their everyday life due to the heavy burden of symptoms they have. Regular workshops and the involvement of patients’ representatives in the study enable those taking part in the study to take up the offer of individual, meaningful exercise therapy.” De Lazzari is in charge of the BREATH exercise therapy, in close cooperation with colleagues in physiotherapy. “What patients benefit from most is the fact that a variety of professions and disciplines work together here in order specifically to obtain the best possible results for their needs,” adds Dr Mitra Tewes, Medical Director of Palliative Medicine at UME.

New, modern rooms for intensive care ward at UKM’s Surgical Clinic

Larger, lighter, more modern: the new extension to the Surgical Clinic at UKM offers patients and staff not only optical improvements but, above all, technical and functional advantages. In addition to Intensive Therapy Ward II with a total of ten beds, there are three floors which provide space for a central recovery ward with 11 places, and a new care unit with 18 beds. The first step into the new building was taken in July 2023 by Intensive Therapy Ward II of the Clinic for Anaesthesiology, Operative Intensive Medicine and Pain Management, where mainly patients are treated from the Clinic for Trauma, Hand and Reconstructive Surgery and the Clinic for General, Visceral and Transplant Surgery.

The new rooms not only offer more space and a lot of daylight but are also equipped with cutting edge technology. The technical infrastructure is state-of-the-art – with especially the monitoring and documentation technology and the oxygen-vacuum-compressed air supply meeting the most up-to-date standards of patient care. This means that the staff working on-site are at all times able to register, and automatically document, all the vital signs as well as enhanced haemodynamic monitoring. Also, many organs can be supported and monitored artificially. One particular highlight is the innovative lighting system in patients’ rooms. “With this new system we can simulate a day-and-night rhythm in order in particular to give patients who display delirious tendencies a little more structure,” explains Martin Bückmann, ward manager on Intensive Therapy Ward II.

The new rooms offer space for ten intensive care patients. After the moving-in phase is over, the old intensive therapy ward is to be refurbished and modernised so that in future a total of 25 intensive-care beds will be available in the Surgery Clinic.

Well-positioned

Some new appointments in the WTZ Consortium.

In 2023 **Prof. Carsten Weishaupt** was appointed Professor of Dermato-Oncology at the Skin Disease Clinic at UKM. He studied Medicine at the Universities of Münster and Vienna and completed his doctoral thesis at Münster. Since 2012 he has been in charge of the UKM Skin Tumour Center and has been teaching at the Faculty of Medicine. Weishaupt began his research career with immunological work on the presentation of antigens, before he extended his immunological focus to include tumour immunology during a two-year research stay at the Harvard Skin Disease Research Center in Boston. His team have set themselves the task of identifying new tumour escape mechanisms by means of projects on the induction of inflammation in melanoma tissue, the role of pro-hormone convertases in melanomas, and the role of neutrophils in the tumour environment.

Prof. Barbara T. Grünwald has been Professor of Tumour Heterogeneity and Translational Systems Biology at UME since 1 August 2023. At WTZ she is developing new types of cancer treatment. After studying Molecular Biotechnology she completed her doctoral thesis at Munich Technical University. After that, she undertook research in Canada at the Princess Margaret Cancer Center, Toronto – initially as a postdoc, then as an Affiliate Scientist. Since 2023 she has been an Adjunct Scientist there. At WTZ Essen, Barbara Grünwald wants to gain a deeper understanding of tumour tissue, as the composition and function of the tissue varies considerably in different tumour areas. Her aim is to understand the interactions between tissue components in order to understand, in turn, the malignant behaviour of tumours and to be able to manipulate them effectively.

In October 2023, **Prof. Tim Lämmermann** took over as Head of Medical Biochemistry at the Center for the Molecular Biology of Inflammations (ZMBE) at Münster. After studying Molecular Medicine at the University of Erlangen-Nuremberg, he completed his doctoral thesis at the University of Munich. After that, he worked in Bethesda, USA, as a postdoc at the National Institute of Allergy and Infectious Diseases within the National Institutes of Health. In his research he is trying to understand what requirements individual immune cells need to have in order to orient themselves and move in the complex surroundings of inflamed or infected tissue. At the same time, he is studying how individual immune cells communicate with one another and influence one another in order to ensure a rapid, optimum immune response.

Since 1 January 2023, Senior Lecturer **Dr Miriam Götte,** who studied Sports Science, has headed the Department of Oncological Sport and Exercise Therapy at UME. Since the beginning of the year, she has been developing a range of central exercise therapy offers to provide support during and after any cancer treatment. The focus is on a variety of targeted forms of exercise which are scientifically supervised. Götte and her team are developing a programme which is tailor-made for patients. This means that after discussing a patient's medical history and counselling, the sports and exercise scientists also look at age, diagnosis, symptoms, fitness, interests and resources. There are then a variety of modules available for patients, such as taking part in individual or group training, inclusion in exercise therapy studies, being allocated to sports groups organised by the patients themselves, or courses with cooperation partners in clubs.

Since November 2023, **Prof. Kornelius Kerl** has been Professor of Paediatric Haematology and Oncology and Head of Paediatric Neuro-Oncology at the Clinic for Paediatric Haematology and Oncology at UKM. He studied Medicine at the University of Marburg and completed his doctoral dissertation there at the Institute of Tumour Biology. After his training to become a specialist for paediatrics at Münster University Hospital, he worked as a postdoc at the Institute of Molecular Tumour Biology in Münster. Kerl specialises in the treatment of children and adolescents with brain tumours. He also specialises in counselling for families with genetic syndromes pointing to a predisposition for tumours. The focus of his research is on the detection of mechanisms of cellular heterogeneity and of cellular communication in tumours.

Prof. Ulf Peter Neumann has been the new Director of the Clinic for General, Visceral and Transplant Surgery at UME since 1 October 2023. Neumann originally came from Aachen University Hospital, where he headed the Clinic for General, Visceral and Transplant Surgery. At the same time, he was also Director of General Surgery at the University Medical Center in Maastricht, the Netherlands. An experienced transplant and visceral surgeon, Neumann also used to work at the Charité Hospital in Berlin, where he completed his habilitation. UME has gained an outstanding visceral surgeon and transplant physician who, with his experienced team in Essen, will continue to expand the focus which UME has had for many years now.

Prof. Tanja Grammer has headed the Institute of General Medicine at the University of Münster as a professor since December 2023. Born in Wels, Austria, Grammer studied Medicine in Graz and Lyon, wrote her doctoral dissertation in Medical Chemistry on oxidative stress and completed her practical training as General Practitioner in Austria. During her training as a specialist for laboratory medicine in Austria and Heidelberg, she worked in particular on genetic and other biomarkers for the evaluation of risks of cardiovascular diseases. In addition to epidemiological association studies relating to biomarkers for the prediction of risks of cardiovascular diseases, Grammer is developing innovative concepts for primary medical care, including the integration of digital options and interprofessional care.

Since July 2023, **Prof. Alpaslan Tasdogan** from the Institute of Tumour Metabolism at the Clinic and Polyclinic for Dermatology, Allergology and Venereology at UME has held the title of Endowed Peter Hans Hofschneider Professor from the Experimental Biomedicine Foundation. This professorship is awarded every two years in honour of the life's work of Prof. Peter Hans Hofschneider. Tasdogan received it for his innovative research ideas on melanomas. The aim of his research at WTZ Essen is to detect new metabolic weak points and to use the findings to prevent the growth of cancer cells which have spread to organs further away. In December 2023 Tasdogan received further funding: the European Research Council (ERC) will be providing funding until 2028 of 1.5 million euros for skin cancer research at the Medical Faculty of the University of Duisburg-Essen. The ERC awards "Starting Grants" to oncologists and dermatologists. It is the first time that the award has gone to a researcher in Essen.

Highlights month by month

14.1.
Ruhr Cancer Day:
Patient's Day of the WTZ Consortium in Essen

February
Establishment of the Center for Personalised Medicine in **Essen and Münster**

See news on page 12

31.3.
German Cancer Prize for Prof. Christian Reinhardt,
Director of the Clinic for Haematology and Stem Cell Transplants (UME) and Vice-Director of WTZ Essen

21.4.
"Prostate – the Wonder Gland":
Patients information evening held by the UKM Prostate Center at the **Münster Castle**.

January

February

March

April

24.2.
Münster oncology trainees come to attend the **4th Oncology Care Symposium** in Essen

16.3.
Recognition for outstanding care:
UKM confers first DAISY AWARD

19.4.
2nd Thorax Oncology Symposium
organised by the Westphalian Lung Cancer Center UKM

9.5.
First certification
of UKM Renal Cancer Center and of the superordinate UKM Uro-Oncology Center

See news on page 17

24.5.
New team of two
to head Pathology at UKM: Prof. Wolfgang Hartmann and Prof. Eva Wardelmann

12./13.6.
OnkoZert audit
of the Oncology Center at UME

May

22.5.
Setting up of a new self-help group
for leukaemia and lymphoma patients at UKM

June

29.5.
Ten years of proton therapy treatment
at the West German Proton Therapy Center at UME.

July

13.6.
First certification of Center for Anal, Testicular and Bowel Cancer
at WTZ Essen

See news on page 17

22.8.
Start of the 1st dancing course at WTZ Münster
for patients and their dancing partners

August

9.9.
18th Sarcoma Tour organised by WTZ Essen
for research into sarcomas, with 124,000 euros raised through donations

October
Establishment of the **NCT Research Council**

NCT
NATIONAL CENTER FOR TUMOR DISEASES

26.10.
"3 Nikoläuse" over the roofs of Münster: kick-off event by WTZ Münster for a new series of charity events

15.11.
5th Münster Autumn Symposium

13.12.
"Zoom on Cancer":
start of online discussions with the WTZ Patients Advisory Committee

September

18.9.
2nd benefit regatta "Rowing to fight cancer"
on Lake Baldeney in Essen raises 14,000 euros in donations for sport and exercise therapies at WTZ Essen

October

21.10.
2nd "WTZ Day of Action"
at WTZ Essen, in 2023 under the motto "Living with goodbyes – Knowledge as a source of strength"

November

16.11.
World Pancreatic Cancer Day:
information event organised by the interdisciplinary Pancreas Team at UKM in cooperation with the Working Group of Pancreatectomised Patients (AdP)

December

Personal

Nutrition for cancer patients

How nutrition impacts on the success of any treatment and on cancer patients' quality of life is something which is experienced, and researched into, every day at WTZ.

How can I counteract weight loss incurred through radiation therapy or chemotherapy? What options for artificial nutrition can also be used long-term at home? And how might I even, through my nutrition, be able to prevent metastases forming? These are just some of the questions which nutrition experts in the WTZ Consortium deal with.

What symptoms and methods do you work on in nutritional medicine?

Dr Reinhold Gellner (Head of Nutritional Medicine, Medical Clinic B, UKM): 50 percent of our patients have oncological diseases. As a result of operations, chemotherapy or radiation therapy they have to contend with weight loss or functional disorders in the entire digestive tract – from the nasopharynx to the rectum.

Katharina Bohlen (Head of Clinical Nutritional Medicine, Clinic for Gastroenterology, Hepatology and Transplantational Medicine, UME): At every stage of their treatment – from the operation to radiation treatment and/or chemotherapy – patients lose an average of around five kilos of body weight. We counteract malnutrition either by optimising the oral nutrition or by ensuring good nutrition by means of feeding tubes or parenteral nutrition via a port which is often already in place. In this way, much improved mobility and quality of life can be attained.

Dr Reinhold Gellner: Generally, it is hugely underestimated what can be achieved after the hunger stage has ended. Even the range of therapies which oncologists can use is increased when a patient puts on weight because some forms of treatment cannot be applied at all when the patient's overall state of health is poor.

Dr Torid Jacob
Specialist in Internal Medicine,
Medical Clinic B, UKM

Dr Reinhold Gellner
Head of Nutritional Medicine,
Medical Clinic B, UKM

Katharina Bohlen
Head of Clinical Nutritional Medicine,
Clinic for Gastroenterology, Hepatology
and Transplantational Medicine, UME

How are patients who need individual support recorded?

Dr Torid Jacob (Specialist in Internal Medicine, Medical Clinic B, UKM): Here in Münster we carry out a so-called nutritional risk scoring for every patient who is admitted to hospital. They give answers to standardised questions on nutrition and weight loss. If a certain value is exceeded, the nutritional medicine team is brought in.

Katharina Bohlen: In Essen, this scoring is part of the daily care-screening, and the latest score is entered on the front of the patient's file. In the gastroenterology department we're currently engaged on a project to improve the recognition and treatment of malnutrition. The project is due to be gradually extended to other wards, too.

What happens after a patient is discharged? How is malnutrition prevented during outpatient care?

Katharina Bohlen: We offer all patients an opportunity to make an appointment for our consultation hours if need be – especially if artificial nutrition is necessary. We carry out special examinations – in particular in the case of longer-term outpatient treatment – such as bioelectrical impedance analysis (measuring the body's composition) and determining grip strength to see whether our treatment is successful.

Dr Torid Jacob: As a result of regular aftercare appointments and our close collaboration with home-care providers, we can respond speedily to any problems and adapt the individual composition of nutritional solutions.

Can nutrition itself have any influence on cancer? What does current research say?

Prof. Alpaslan Tasdogan (Professor of Tumour Metabolism at the Clinic and Polyclinic for Dermatology, Allergology and Venereology at UME): Unfortunately, there are persistent reports in the media that, for example, a Mediterranean diet is helpful in the case of cancer. What is correct is that healthy food is good for healthy people. We now know from studies, for example, that antioxidants help not only healthy cells but also cancer cells.

At WTZ Essen we are currently looking in-depth at tumour metabolism. We suspect that a change in the metabolism of cancer cells is the reason for the formation of metastases and their resistance to treatment. Using mice as models, for example, we have found that the removal of certain amino acids leads to a significant decrease in tumours in the bowel cancer model. The aim we have in our research is to detect the metabolic Achilles heel of metastases and then identify new methods of treatment. We'll have some new findings on this in just a few years.

Prof. Alpaslan Tasdogan
Professor of Tumour Metabolism at the
Clinic and Polyclinic for Dermatology,
Allergology and Venereology at UME

Counselling for children of parents with cancer

When cancer is diagnosed, it is always a shock – not only for those affected, but also for the entire family. There are many questions that have to be answered and many decisions that have to be made – and often the adults discuss everything among themselves. At such times, however, children and young people also need support. And this they get in the WTZ Consortium.

Prof. Eva-Maria Skoda
Leading Senior Physician at the Clinic for Psychosomatic Medicine and Psychotherapy Medicine and Psychotherapy, Head of Psycho-Oncology at the WTZ Essen and Deputy Director of the Clinic for Psychosomatic Medicine

What options are there for treatment, and what are the chances of recovery? What are the next steps as regards health and work? Who will organise everything when I'm in hospital? Anyone who contracts cancer has to make countless decisions within a short space of time – and they receive support from the family, from friends and from specialists.

In the process, the children of cancer patients are often forgotten. They, too, have their fears, worries and questions, but they are often left out of the discussions that take place. On the one hand, this has something to do with the parents' uncertainty and the children's bravery, and on the other hand with the fact that the subject of cancer is a taboo. "In older people, the illness is accepted, but in middle age, people are often very reluctant to talk about their diagnosis," explains Prof. Georg Romer, Director of the Clinic for Psychiatry, Psychosomatics and Psychotherapy for Children and Young People at UKM. "Children see the illness as a family matter and don't like to talk about it outside the home."

Therapeutic support as part of the routine

Open offers are, accordingly, seldom taken up. "At WTZ Essen we started offering open group sessions for young people with parents who have cancer, and we were regularly sitting in an empty room," reports Prof. Eva-Maria Skoda. As the young people found it difficult to join the group sessions of their own accord, the team in Essen decided to adopt a different approach and visit the many wards in their care, where they ask patients

specifically whether the members of their family, including children and young people, need support. It is then made easy for them to talk about things, with or without their sick relatives being present, in a special counselling session for family members held at the LVR University Clinic. Romer has had similar experiences – not only at UKM but back during his time at the Hamburg-Eppendorf University Clinic, too. It was for this reason that there he developed the preventive counselling programme known as COSIP (Children of Somatically Ill Parents), which is now also part of patient care in the WTZ Consortium. “Neither the parents concerned, nor their children, need to declare any needs; the psycho-oncological support is simply implemented as part of the routine: 90 percent of the families take up the offer. Previously, when those concerned needed to declare ‘We need help’, the figure was only 10 percent.”

Support for the system instead of for the individual

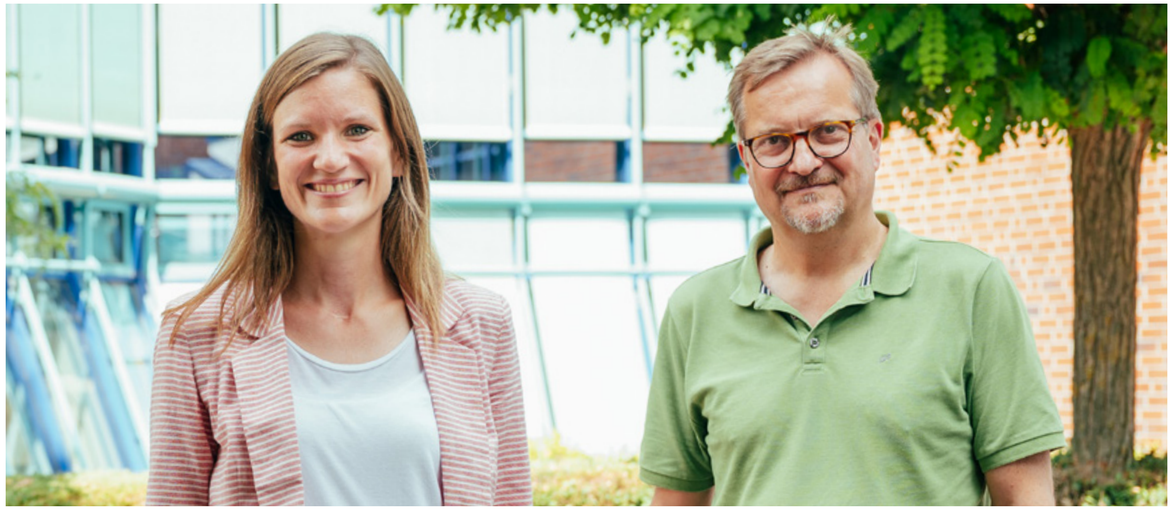
What this help looks like varies from case to case. “Our team consists of a good dozen specialists, has a presence on every ward and looks in regularly on the rooms,” says Skoda. In Münster, a special post was even created, funded by donations: since mid-2022, Melanie Ramm, a psychotherapist trained for working with children and young people, has been providing support for families both on various wards and in an outpatients setting. She works closely with the palliative care service and can be brought in, if necessary, in all other areas. It is always the parents who are addressed first: “We look and see how they’re managing in this situation in their role as parents, and we help them to overcome their difficulties in talking about it and help them to be there for their children in this difficult phase.”

Depending on need, more talks with the children subsequently take place – individually, with siblings, or together with the parents. “Being sad is not pathological,” says Skoda. “We merely give parents strength in their function as support for their children, and we serve as contacts for the children for all the questions which they cannot, or do not want to, ask their parents.”

The approach taken always proceeds from the child’s perspective and is adapted to the child’s cognitive abilities. “Sound knowledge of developmental psychology is necessary when selecting a cognitive approach appropriate to both age and stage of development,” Romer explains. “If this is successful, the children and young people will also be able to come out with questions such as ‘Can my mum die of this?’ – questions which, as a rule, they do not wish to burden their parents with.” The psycho-oncological team also steps in in acute crisis situations: “I remember one child who didn’t want to come to the clinic anymore because it had seen its mother lying in bed in terrible pain,” Skoda recalls.

“It was important for the father, though, that the child should be able to say goodbye to the mother before she died – so we first spoke to the child alone and then accompanied it on the way to the hospital room and during the conversation with the mother, who was quite consciously not lying in bed.”

In most cases, just a few conversations are enough to stabilise the family system. “In the face of illness and fears, this is a time not for therapists but for family members,” Romer explains. “In order to cope, what is needed above all are close relatives and just a little therapeutic support for the family system in the serious phase of the illness.”



Psychologist Melanie Ramm, psychotherapist for children and young people, and Prof. Georg Romer, Director of the Clinic for Psychiatry, Psychosomatics and Psychotherapy for Children and Young People at UKM.

Improved quality of life for cancer patients

Acknowledged care specialists support cancer patients at WTZ in coping with symptoms arising from their illness and therapy.

Not only the cancer itself but also the treatments it requires – such as operations, chemotherapy and/or radiation therapy – often lead to disagreeable side effects. The nursing staff in the WTZ Consortium help patients cope with these with the aid of analogue and digital measures – both in hospital and also during the time at home.

“We are there from the time when the diagnosis is made through to the end of the therapy,” says Rigo Fangemann, Advanced Practice Nurse at UKM. “At our first contact, the patient usually still feels OK: the treatment has not yet begun, and the advice being given revolves mostly around topics such as managing pain caused by the tumour.” If necessary, the side effects of chemotherapy and/or radiation therapy are also talked about at this stage – but for many patients it is still too abstract. “When the first symptoms occur and the need for support becomes acute – that is when we come in again.” At both WTZ sites, both personal discussions and written information material are used. “We are available every day for patients who want to talk, whether they are on a ward or are outpatients. We can be called on by medical staff, patients and family members for counselling or for oncological

Timo Gottlieb
Advanced Practice Nurse at UME

nursing visits, and we issue information for patients and their relatives which we have drawn up and which has been checked by the Patients Advisory Committee,” says Timo Gottlieb, Advanced Practice Nurse at UME. When they are admitted to hospital, many patients also fill out a digital questionnaire which, since 2022, has also included questions relating to nursing and side effects. “In this way, we also register those people who need our counselling services but who display no particularly conspicuous features when being assessed by medical and nursing staff, and who express no needs when they are admitted, but who indicate a high symptomatology in the questionnaire.” If necessary, staff also act across locations here. Gottlieb and Fangemann, for example, jointly provided support for a patient who was operated on in Essen and given chemotherapy in Münster. “We’re also now working on standardising information for patients and family members at both sites,” says Fangemann.

Rigo Fangemann
Advanced Practice Nurse at UKM

Through the continuous care they provide and the holistic approach they take, nursing experts, advanced practice nurses and healthcare specialists all contribute to tackling not only the physical but also the psychological and emotional aspects of the illness in an interprofessional team."

Thomas van den Hooven
Director of Nursing and member of the UKM Board

Nina Kolbe
Head of the Nursing Science Department at UKM

Multiprofessional advice and counselling

The issues they deal with are as wide-ranging as the forms of cancer and treatment. "The most frequent issues are fatigue, polyneuropathies, nausea and vomiting, weight loss, oral mucosa infections and gastrointestinal problems," explains healthcare scientist Nina Kolbe, Head of the Nursing Science Department at UKM. "Haematological patients have a great need for our advice on topics such as germ-free nutrition, and in sarcoma surgery there is often a demand for advice on aids for improving mobility."

It needs a multiprofessional team to manage all these issues, which means that, when necessary, specialists are called in from the fields of physiotherapy, nutritional medicine, psycho-oncology, palliative medicine, self-help, care for the family, medical social work or pastoral care. The aim they all have is always to provide the best possible care for the individual person. "Cancer treatment takes a long time and is always a process – one or two counselling sessions are not enough," comments Rigo Fangemann.

Petra Flick
Healthcare and paediatric nurse specialising in oncology (DKG) and oncological counselling at WTZ Münster

This is why the team attaches particular importance to being available for people also while they are being treated as outpatients. "For cancer patients, the care provided for them is taking place more and more as outpatients – which means that it is all the more important that the patients should be well prepared and well informed when they are discharged to go home," says Petra Flick, a healthcare and paediatric nurse specialising in oncology and oncological counselling at WTZ Münster. "If any questions or problems arise at home, an email is sufficient for arranging a phone call or a meeting in the outpatients department."

Our aim in the WTZ Consortium is to attain the highest possible quality of life for our cancer patients with the complexities of their illness. In future, our 'DigiCare' project will mean that the care provided by nursing staff and digital self-monitoring will be closely interlinked."

Andrea Schmidt-Rumposch
Director of Nursing and member of the UME Board

Digital support

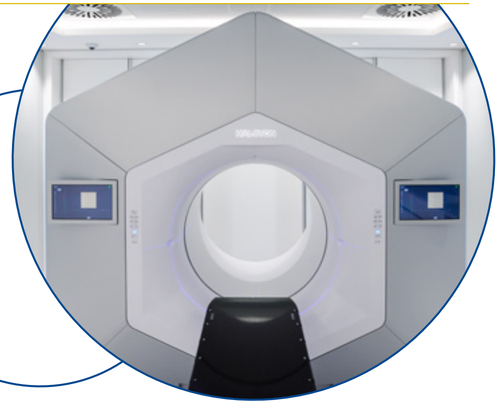
The increasing shift of care into the outpatients sector also poses challenges. "While patients are in hospital, we can structure individual counselling needs – but as soon as we no longer see patients regularly, we have no insights into their symptomatology and have to rely on them contacting us," explains Bernadette Hosters, head of the Care Development and Research Department at UME. Therefore, since spring 2023, this Care Development and Research Department, working with the Palliative Medicine Department and the Institute of Artificial Intelligence in Medicine (IKIM), have been working on a digital solution for the support of patients with symptomatological features. The project, called DigiCare and set to run for three years, is being funded by the Federal Ministry of Education and Research and serves to establish a cross-sector, interprofessional care structure. For this purpose, workshops were held in 2023 with nursing specialists, palliative care physicians and patients with the aim of documenting and prioritising typical symptoms. The next step will involve implementing offers of help relating to symptoms. "Patients regularly document their symptoms and are provided with specific offers of support which are tailored to these symptoms," Hosters explains.

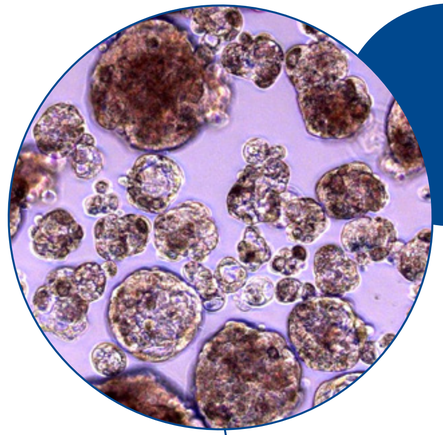
Bernadette Hosters
Head of the Care Development and Research Department at UME

DigiCare

"This might be a reference to information material specific to certain symptoms, or the offer of a video call with an advanced practice nurse." The integration of a chatbot is also being considered which can automatically provide answers to administrative questions in particular, leaving more time in face-to-face talks for individual challenges. It is due to be ready for use in 2026 and represents a further step on the part of WTZ towards optimised self-monitoring as a basis for a high quality of life for cancer patients.

Innovative





Treating uro-oncological tumours

Optimum care is provided in Essen and Münster, using not only all approved possibilities for treatment, but also new studies and an interdisciplinary approach.

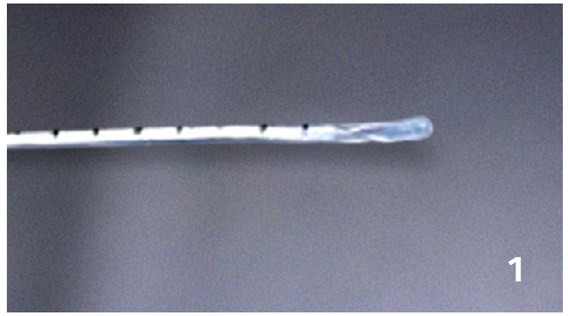
Prof. Boris Hadaschik
Director of the Urology Clinic at UME and Vice-Director of WTZ Essen

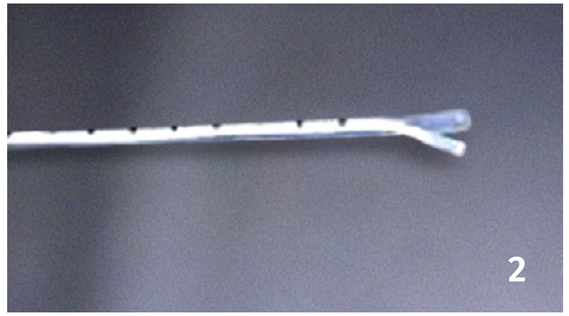
From the young man with a testicular tumour to the elderly lady with cancer of the bladder: in Germany, one in four illnesses involving a tumour concerns urology. At WTZ, various disciplines – urology, radiation therapy, nuclear medicine and internal oncology – work hand in hand in researching into, and treating, cancer of the kidneys, testicles, prostate and bladder.

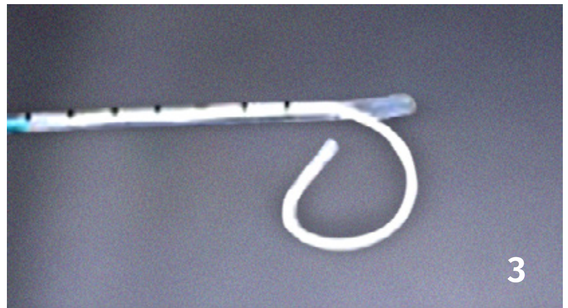
"The basis of our thinking is the illness and not the borders between disciplines," says Prof. Boris Hadaschik, Director of the Urology Clinic at UME and Vice-Director of WTZ Essen, in describing the interdisciplinary approach taken in the WTZ Consortium. "The focus is always on the best possible care for patients – and for this we need interdisciplinary collaboration and joint tumour conferences attended by experts from all disciplines." Numerous studies and innovative methods of treatment provide evidence of the effectiveness of this interdisciplinary and cross-locational collaboration.

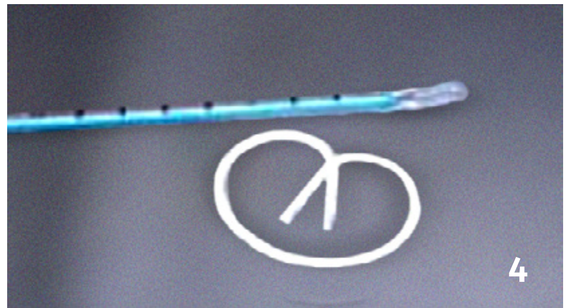
Ever gentler methods of treatment

At the WTZ sites Essen and Münster, for example, and as part of studies being carried out, a new type of treatment is being used for bladder tumours in which a small silicone 'pretzel' is used instead of the traditional instillation therapy. "This is placed directly in the bladder, where it continuously releases its active ingredient," explains Prof. Martin Bögemann, Senior Physician at the Clinic for Urology and Paediatric Urology at UKM, and Head of the Uro-Oncology Center there. As this active ingredient does not enter the bloodstream, but is put to work directly in the bladder, this treatment gives rise to only a few side effects – and it can often prevent the need to remove the bladder. "Conserving the organ and its function is the aim of this therapy," says Bögemann.









“Over the past ten years, treatment has developed further and further away from major operations and more towards laparoscopy and robotics,” explains Dr Martin Janssen, Deputy Head of the Prostate Center at UKM. Minimally invasive surgery on the kidneys and bladder are significantly gentler methods for patients. “Radiology can be used to provide three-dimensional images of the anatomical structures before surgery takes place and can be used in the model for planning the operation.” This makes for a gentle, organ-conserving operation, even in the case of tumours which are located directly at the ureter or at large blood vessels. In order for the quality to be just right in all cases when these innovative techniques are used, patients are monitored long-term in certified centers. WTZ is participating in a **study** being carried out across North Rhine-Westphalia, for example, which is looking at what influence it has on post-operative developments, after an operation to remove the prostate, when patients give regular feedback electronically on their quality of life. “The patient fills out a corresponding questionnaire, at the computer or on their smartphone, on issues such as continence, sexual function and moods. If anything is conspicuous, they are contacted and invited to come in to discuss it,” says Dr Philipp Papavassilis, Head of the Prostate Center at UKM. The aim is to detect, and treat, any problems in post-operative developments as early as possible without patients having to proactively mention topics which can sometimes give rise to feelings of shame.

Dr Martin Janssen
Deputy Head of the
UKM Prostate Center

Dr Philipp Papavassilis
Head of the UKM Prostate Center

Solutions-oriented studies

The prostate carcinoma is the most frequent form of cancer in men, and research into it at WTZ is correspondingly intensive. “One particular challenge with prostate cancer is that the immune system often doesn’t respond to it,” says Prof. Viktor Grünwald, Endowed Carolus Professor of Interdisciplinary Uro-Oncology at UME. This could change with the help of a **Phase 1 study** currently being carried out.

“In this study we work with artificial antibodies – so-called T-cell engagers – which, on the one hand, bond to the surface of the tumour and, on the other, to immune cells.” In this way, the body’s immune defence system is activated through direct contact with the cancer cell and can fight it. “The results are very promising – so much so, that we look forward to further activities as part of this study, with the aim of getting approval for this class of substance.”

The DAROBAT study, which was started in 2024 under the leadership of WTZ Münster, is dedicated to another problem in the treatment of prostate cancer: if a carcinoma has once been treated, it is unfortunately resistant to further treatment in the case of any recurrence. “However, if a hormone-sensitive carcinoma is treated with a high dose of testosterone, it appears to be resensitised to respond to renewed treatment,” Bögemann explains.

Pioneering basic research

In basic research, WTZ is also up there among the best. “We combine our databases on patients in the routine care we carry out and we analyse which of the five approved therapy options for renal cell carcinomas shows the best results,” says Grünwald. “This collaboration is a good example of the growing collaboration between the two sites and the benefits which that brings.” Essen and Münster also work hand in hand – for example, in analysing data from modern imaging such as PSMA-PET and from the so-called “liquid biopsy” – in the search for new biomarkers which allow conclusions to be drawn on an ideal therapy. “In this method, the blood is analysed for tumour components in order to diagnose, rule out or classify any cancer,” says Bögemann.

A molecular biological analysis of these components can show any resistances at an early stage, and consequences can be defined for therapy. The aim is to determine the optimum therapy for each patient and to identify at an early stage which patients are cured after the operation and need no further therapy.”

The two WTZ sites are growing ever further together, year by year. This is reflected very tangibly in the fields of research and patient care.”

Prof. Martin Bögemann
Head of the Uro-Oncology Center at UKM and
Vice-Director of WTZ Münster

After the first certification as a center for testicular cancer in Essen and the first certification as a center for renal cancer in Münster, the two WTZ sites are now uro-oncological centers and stand for the best possible care for patients with cancer of the kidneys, testicles, prostate and bladder.”

Prof. Viktor Grünwald
Endowed Carolus Professor of Interdisciplinary
Uro-Oncology at UME

Radioligand therapy for prostate carcinomas

From the pivotal study to clinical trials, WTZ played a decisive role in developing a life-prolonging treatment of metastatic prostate carcinomas.

The prostate carcinoma is the most frequent form of cancer in men. In Germany, 12,000 to 14,000 people die of it every year. At WTZ a new, targeted therapy was developed which is characterised by good tolerability and which demonstrably prolongs the life of men with metastatic, castration-resistant prostate cancer.

"The crux of the therapy is the prostate-specific membrane antigen (PSMA) – a molecule which is present in large numbers on the surface of prostate tumours and metastases," explains Prof. Kambiz Rahbar, Executive Senior Physician at the Clinic for Nuclear Medicine at UKM.

Previously, it was used above all for diagnostics: to this end, small molecules which bond with PSMA (so-called "PSMA ligands") were marked radioactively and injected into the patient. With the aid of a special imaging process, the PET scan, these molecules can then be demonstrated in the body, making it possible to see exactly where in the body any tumours and metastases are present.

The new therapy now also uses this method in the therapy. "For this purpose, the ligands are marked with a therapeutically effective substance – in this case, radioactive Lutetium-177," says Prof. Martin Bögemann, Head of the Uro-Oncology Center at UKM and Vice-Director of WTZ Münster. The ligands bond to the surface of the cancer cell and take effect only there, in the form of a targeted interior radiation of the tumour cells. "We see what we are treating, and we treat what we see," is how Prof. Ken Herrmann, Director of the Clinic for Nuclear Medicine at UME, sums up the advantages.

The introduction of radioligand therapy is a real WTZ success story: both sites were top recruiters for the pivotal study and have treated several hundred patients with it since then."

Prof. Kambiz Rahbar
Executive Senior Physician at the
Clinic for Nuclear Medicine at UKM

Targeted, tolerable and personalised

Another advantage of this innovative approach is its good tolerability. “We carry out our treatment in up to six cycles in intervals of six weeks – and for this, patients have to spend two to three nights in the clinic solely for reasons of radiological protection,” says Prof. Boris Hadaschik, Director of the Urology Clinic at UME and Vice-Director of WTZ Essen. “As the radiation is applied right at the target area, and the surrounding tissue is treated gently, the treatment is generally well tolerated.” The important thing is to check before the treatment begins whether it is actually the right option for that particular patient – and this is where personalised medicine comes into play. “We check beforehand whether the PSMA molecule is at all present,” says Dr Robert Seifert, a specialist physician in the Clinic for Nuclear Medicine at UME and at UKM until the end of 2023. If the molecule has been shown to exist, one-third of patients respond very well to the treatment, and the quality and the length of their lives increase markedly. In the case of a further one-third of patients, the treatment stabilises the current state of health or has no effect, in which case other alternatives are sought. Seifert’s team is engaged in continuous research, using artificial intelligence, with the aim of being able to make predictions regarding the success of any treatment and the chances of survival. **(link to publication)**

“With targeted radiological treatment of tumours and metastases inside the body, we now have an alternative to the traditional treatment of metastatic prostate carcinomas – an alternative which is gentler on the tissue and has only a few side effects.”

Prof. Boris Hadaschik
Director of the Urology Clinic at UME
and Vice-Director of WTZ Essen

Prof. Ken Herrmann
Director of the Clinic for Nuclear Medicine at UME

Innovative and successful

Radioligand therapy was approved in late 2022 and has shown itself to be a real breakthrough in the treatment of prostate carcinomas. At WTZ alone in 2023, several hundred patients were treated using this method. WTZ Essen has even taken over an additional ward in a hospital in Duisburg in order to be able to offer the treatment there, too. WTZ played an important role on the path from individual attempts to cure patients to a method of treatment approved worldwide. “All the pivotal studies and clinical trials were fitted out and carried out jointly,” says Herrmann.

Prof. Martin Bögemann
Head of the Uro-Oncology Center at UKM
and Vice-Director of WTZ Münster

The Phase 3 study VISION demonstrated that – compared to standard treatment alone – radioligand therapy plus standard treatment led to a significant improvement in the time that transpired until any worsening of the quality of life and the appearance of any skeletal-related occurrences. “This means that we have an effective new alternative for treating patients with metastatic, castration-resistant prostate cancer,” Bögemann concludes.

How talent is promoted at WTZ

In Münster and Essen, targeted funding programmes support doctors who wish to do research in addition to their hospital work.

Medical progress needs doctors who have received the best possible training, both in patient care and in research, and who are active in both. This is why WTZ actively supports Clinician Scientist programmes. Anyone who is interested submits an application with a project idea and, if they are successful, they are granted protected research time while someone stands in for them in the clinic. In Essen, for this purpose, there is the University Medicine Essen Clinician Scientist Academy (UMEA) – funded by the German Research Foundation (DFG) and the Federal Ministry of Education and Research (BMBF) – and in Münster the Clinician Scientist programme “CareerS”, which is likewise funded by the DFG. Some of the talents who have received support are presented here.

We have a huge need for well-trained Clinician Scientists to build the bridge between medical care and basic research. This is a fundamental requirement for the continued development of the application-oriented research which is essential for the Faculty of Medicine.”

Prof. Luisa Klotz
Vice-Dean for Research and Junior Researchers at UKM (until April 2024)

Clinical work and research should go hand in hand. For this, it is essential that doctors have sufficient time for research. Fortunately, in Essen we were able to acquire funding for a variety of programmes for junior researchers – from the DFG, the BMBF and the Else Kröner-Fresenius Foundation (EKFS) – in order to make research time available. The EKFS supports medical scientists who, ideally, work together on joint projects with Clinician Scientists.”

Prof. Anke Hinney
Vice-Dean for Academic Career Development and Diversity at UME

The CareerS programme is an enormous gain”

Dr Anna Kuntze
Junior doctor at the Gerhard Domagk Institute of Pathology at UKM

Dr Anna Kuntze is a junior doctor at the Gerhard Domagk Institute of Pathology at UKM and belongs to the first cohort in the CareerS Clinician Scientist programme at the Faculty of Medicine in Münster. Receiving support in the “Starter” module, she was so pleased at the link between clinical work and research that, since January 2024, she has gone on to do the “Boost” module.

Why did you apply for CareerS?

During my studies I already hoped that I wouldn’t have to choose between research and clinic in my career. In 2021, directly after completing my studies, I found a super position at the Institute of Pathology, where, at an early stage, I was able to participate in clinical studies and smaller research projects. What I wanted to do most of all was carry out my own project involving something close to basic research, but in my everyday work I didn’t have the time. I looked around for funding opportunities and then I came across CareerS. The Clinician Scientist programme is a relatively low-threshold opportunity to get into research of your own, and it not only offers financial support but also makes it possible to participate in helpful seminars and exchange views with other young researchers.

What does your current research involve?

I work in the team headed by Wolfgang Hartmann at the Institute of Pathology in Münster, and I’m looking at epigenetic mutations in synovial sarcomas. The synovial sarcoma is a rare tumour which proceeds from the connective tissue and occurs mostly in young adults. There is not as yet any targeted therapy for this tumour. The aim of my project is to gain a better understanding of the underlying mechanism of how tumours occur, in order to find possible therapeutic targets.

What plans do you have for the future?

During my studies I assumed I was going to become a GP – until I learnt more about pathology in my practical year and discovered my passion for histology and research. In future I would like to continue combining clinical work and research and, at some point, head a small research team.

The interface between clinical work and research is a real sweet spot for me”

Dr Emre Kocakavuk
Junior doctor and team leader at the Clinic for Haematology and Stem Cell Transplants at UME

Dr Emre Kocakavuk is a junior doctor and team leader at the Clinic for Haematology and Stem Cell Transplants at UME. Since his research stay in the USA, he has been systematically acquiring one grant after another in order to devote himself to the topic closest to his heart: tumour evolution analysis.

Dr Emre Kocakavuk

What sparked your enthusiasm for research?

During my medical studies, and after spending time studying in the UK, Switzerland and Turkey, I went to the US for a year, to a prestigious research laboratory. This rather unconventional path which I took, and the work I began there, has never lost its hold on me. So, at an early stage in my time as a junior doctor, I acquired research funding so that I could combine clinical work with research. The DFG-funded Clinician Scientist programme UMEA in Essen was my first point of contact, and shortly afterwards I was able to get a Gerok position in the DFG-funded Collaborative Research Center 1430. Since 1 February 2024 I have been receiving funding through a Memorial Grant from the Else Kröner-Fresenius Foundation. In addition, I have recently set up my own team and am currently in competitive selection processes for external funding in order to expand my team.

What does your current research involve?

The focus of my work at WTZ is tumour evolution analysis: how does the genome in cancer cells change after a therapy? One special emphasis is on radiation therapy: recurrences and metastases are often more resistant to this. If we can gain an understanding of the influence which the therapy has on the molecular properties of a tumour, I hope that we might be able to prevent these resistance mechanisms and continue to improve cancer treatment.

What plans do you have for the future?

My dream job is still that of the Clinician Scientist. I am absolutely fascinated by research and would like to transfer its findings to new types of diagnostics and therapies. In other words, my aim as a doctor and researcher is to improve my understanding of cancers and develop improved treatments.

I can't imagine research without a clinic"

Dr Halime Kalkavan
Specialist for Internal Medicine,
Haematology and Oncology at UME

Dr Halime Kalkavan is a specialist for Internal Medicine, Haematology and Oncology at UME, and the first participant at WTZ Essen in the Advanced Clinician Scientist programme UMEA2. Today she works at the interface between oncology, cell death and immunology.

How did your enthusiasm for research come about?

As a doctor I repeatedly come up against my limits and am no longer able to help patients, and this motivates me to develop new types of therapy and to transfer findings in the laboratory to a patient's bed. I can't imagine oncology without research, or research without a clinic.

What role does funding play in your scientific career?

After studying medicine in Essen, I spent a lot of time as a junior doctor in the Phase 1 unit at the Clinic for Internal Medicine (tumour research), and I did my doctoral dissertation in the laboratory at the Paediatric Clinic. As I wanted to continue concentrating on oncology research, I took leave of absence from work, initially for a year, with the aid of an internal research grant (IFORES) from the Medical Faculty and, after completing my specialist training, I went to Memphis for six years to carry out basic research in oncology. There I received funding from the German Research Foundation (DFG), among others. Then, when I was looking for returnee

Dr Halime Kalkavan

programmes, I came across the Advanced Clinician Scientist programme which had just been started up by our Faculty of Medicine and the Federal Ministry of Education and Research (BMBF). This programme was ideal for my situation as a medical specialist researching in oncology. This funding supports me in various ways so that I can divide my time between clinic and laboratory. In addition, I acquired funding from the Max Eder Junior Researcher Group programme offered by German Cancer Aid, which serves primarily to help me establish my own research focuses and set up my own research team.

What does your current research involve?

At WTZ I'm looking into the question of how cancer cells avoid cell death, and what consequences are associated with this. Our research has shown that, in this process, they not only change their character but also emit signals to their surroundings. During cancer treatment, these therapy-resistant persister cells become temporarily insensitive to the medication used and, after the therapy has finished, can be responsible for recurrences and metastases.

Every day in patient care I see what research is actually about."

Dr Fabian Troschel
Junior doctor in the Radiation Therapy Clinic at UKM

Dr Fabian Troschel is a junior doctor in the Radiation Therapy Clinic at UKM. Since January 2023, and for the next three years, he began devoting 50 percent of his working time to basic research with his own team. Financially, this is being made possible through the Interdisciplinary Center for Clinical Research (IZKF), which is a partner in the CareerS programme at the Münster Faculty of Medicine.

Why did you apply for funding as a Clinician Scientist?

During my medical studies I spent a year doing research in a team at Massachusetts General Hospital in Boston. My enthusiasm was sparked by the intensive contact I had with scientific work. So for me it was only logical that, in order to set up my own research team, I should acquire external funding during my specialist training as a doctor at the Radiation Therapy Clinic. The funding came first from the Else Kröner-Fresenius Foundation and now, building on that, from IZKF. My laboratory head and the Clinic's Director both gave me a lot of support. In radiation therapy there are only a very few centers which carry out basic research, and the networking across locations and disciplines is a real bonus.

What does your current research involve?

At WTZ I'm looking into the so-called Musashi proteins in tumour cells. My research has shown that blocking them makes cancer cells significantly more sensitive to radiation treatment. I started with aggressive breast cancer cells, and now I'm doing research on other tumours, too.

What plans do you have for the future?

After I complete my training as a medical specialist I would still like to continue working as an Advanced Clinician Scientist, both in patient care and in research. Every day, in this dual function, I see very clearly at a patient's bed what my work is all about.

Immunotherapy for treating Merkel-cell carcinomas

A study produced under the leadership of WTZ Essen was able to demonstrate that treatment involving the use of the immune checkpoint inhibitor nivolumab for patients with Merkel-cell carcinomas reduces the risk of recurrence by 40 percent.

A reduction of 40 percent in the risk of recurrence represents remarkable progress with such an aggressive form of skin cancer. We're now watching to see how long-term these results are."

Prof. Jürgen Becker
Head of the Translational Skin Cancer Research Department at UME and in charge of the study

Merkel-cell carcinomas belong to the group of rare tumour diseases, with only about 800 people in Germany contracting this form of cancer each year. More than a third of patients die – despite therapies carried out in accordance with the guidelines – as the cancer recurs in 40 percent of cases, even after the tumour has been completely removed. The study, published in 2023, gives cause for hope that this can be changed.

Many types of tumour – including Merkel-cell carcinomas – make use of the signalling pathways in the immune system and, in this way, they escape being detected and tackled through the body's own defence system. This back door can be closed with the aid of so-called checkpoint inhibitors, with the result that the immune system can detect and tackle the cancer cells.

"For this reason, the checkpoint inhibitor nivolumab has already been used for treatment in the case of recurrences," says Prof. Jürgen Becker, Head of UME's Translational Skin Cancer Research Department – part of the German Consortium for Translational Cancer Research. "In a first randomised study on the Merkel-cell carcinoma, we have now tested nivolumab before any recurrence occurs."

Between 2014 and 2020, tests were carried out on 179 patients with Merkel-cell carcinomas who had a high risk of a recurrence after an operation to remove the tumour. Two-thirds of them each received monthly dosages of 480 milligrams of nivolumab over a period of twelve months, while the other one-third were observed in accordance with the guidelines. "The relative risk of experiencing a recurrence within one year was reduced by about 40 percent," is how Prof. Carsten Weishaupt, Head of the UKM Skin Tumour Center, sums up the results. Patients under the age of 65, especially, benefited from the adjuvant therapy with nivolumab – with side effects which are already familiar from treatment with other checkpoint inhibitors. "What is especially exciting now is to see whether this positive effect is only temporary or continues after the medication is no longer being administered," says Becker. "The next analysis has already been planned, as soon as all the patients have been observed for at least four years as part of the study."

Prof. Carsten Weishaupt
Head of the UKM Skin Tumour Center

Adjuvant treatment with apalutamide for high-risk prostate carcinomas

A study being carried out under the leadership of WTZ Münster is looking at whether hormone withdrawal therapy with apalutamide can prevent the recurrence of the illness in men with prostate cancer after a radical removal of the prostate and a high risk of such a recurrence.

50 percent of men with a high-risk prostate carcinoma experience a recurrence of the cancer even after a radical prostatectomy. In a study with funding of 4.7 million euros, WTZ Münster is looking at how far the early use of apalutamide tablets can significantly reduce this quota.

In most cases, prostate cancer needs the hormone testosterone, which is formed in the testicles, in order to grow. Therefore, using drugs to block the production of testosterone is a tried-and-tested method of putting the brakes on prostate cancer. Since 2019, the active ingredient apalutamide has been approved for treating men with non-metastasised high-risk prostate carcinomas in cases when the usual hormonal blockade no longer works. Prof. Martin Bögemann – Senior Physician at the Clinic for Urology and Paediatric Urology at UKM, Head of the Uro-Oncology Center there, and Vice-Director of WTZ Münster – initiated a study which is now looking at whether the early use of apalutamide after a radical prostatectomy can reduce the number of recurrences in patients with high-risk carcinomas.

"Normally, patients are discharged as being cancer-free after a radical prostatectomy and they are subjected to regular PSA-tests," says Bögemann. "If the value of this prostate-specific antigen increases in aftercare, this indicates the return of the cancer and appropriate diagnostic and therapeutic measures are undertaken." The snag is that medical staff cannot react until the cancer has already recurred. In the study being carried out, a hormonal blockade with apalutamide is already started for two years, in tablet form, immediately after the operation, in order to reduce the probability of any recurrence of the cancer.

Prof. Boris Hadaschik
Director of the Urology Clinic at UME and Vice-Director of WTZ Essen.

"In contrast to conventional hormone therapy, apalutamide does not block the production of testosterone but only the androgen receptors in the cancer cells," adds Prof. Boris Hadaschik, Director of the Urology Clinic at UME and Vice-Director of WTZ Essen. "This means that patients do not need to go without testosterone in the body." As one of several participating test centers, UME was involved in the recruitment phase which was completed in November 2023. The study is now carefully observing the patients included.

That apalutamide increases survival rates is something we have already known from its application in patients in whom a conventional hormonal blockade no longer works. In this study we are taking action at a much earlier stage of the cancer's development, and we hope we can act pre-emptively in preventing any recurrence of it and any occurrence of metastases."

Prof. Martin Bögemann
Senior Physician at the Clinic for Urology and Paediatric Urology at UKM, Head of the Uro-Oncology Centerat UKM, Vice-Director of WTZ Münster, and in charge of the study

Excellence in figures

University Hospital Essen and University Hospital Münster

81 clinics

73 institutes

22,356 employees

3,213 beds

60,000 patients undergoing surgery

321,216 outpatients

91,503 inpatients

38,400 cancer patients

15,800 cancer inpatients

35,900 cancer outpatients

Focus on oncology

(number of patients)

20,500 medical oncology

10,300 surgical oncology

8,400 haemato-oncology

7,400 radio-oncology

1,900 paediatric oncology

Cancer patients

15,300 newly diagnosed

Oncological care

151 skilled nursing staff with and undergoing further oncological training

10 care specialists / advanced practice nurses

173 skilled nursing staff with and undergoing further training in palliative care

6 care specialists for stoma, sores and incontinence

20 medical assistants with advanced oncological training

7 Breast-care nurses

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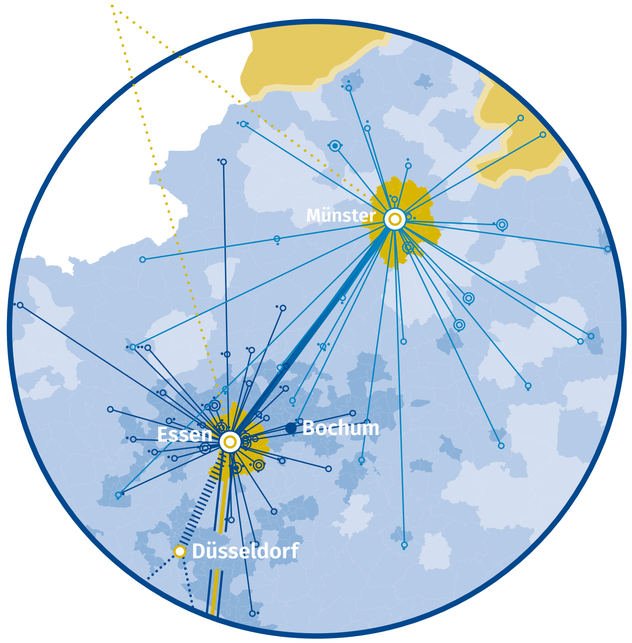

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  Essen, Münster, Cologne, Düsseldorf, Bonn, Aachen
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- CIO ABCD – Center for Integrated Oncology Aachen Bonn Cologne Düsseldorf
- DKTK-PARTNER LOCATION DÜSSELDORF/ESSEN
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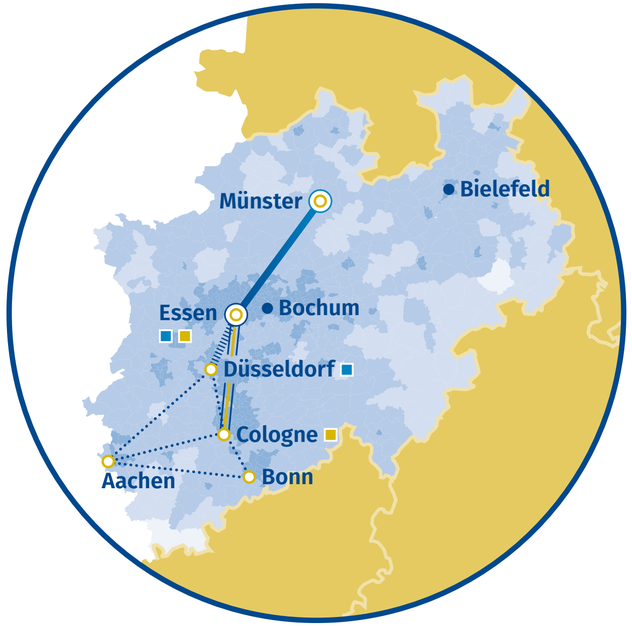

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