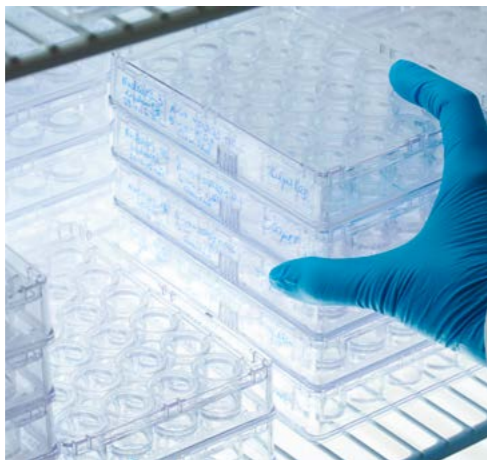




Strengthen excellence – Share knowledge





Working groups

ensure that standardized infrastructure is established at all six university hospitals, in order to create the same conditions at each of the six BZKF sites to conduct clinical trials and studies, among other things.



Lighthouse structures

are a requirement for complex developments of specific strengths of the BZKF sites in each respective field, and take on service functions for the whole Center.



Trials and studies groups

conduct clinical trials and studies with respect to individual characteristics of specific cancers, with the aim of conveying the results of basic research into new forms of therapy and thus into clinical application (translation).



PublicCancerHotline

is a free telephone hotline throughout Bavaria on the subject of cancer for patients, relatives, and friends and acquaintances, doctors, as well as the interested general public.

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Foreword

The Bavarian Cancer Research Center (BZKF) is a coalition of all the six university sites in Bavaria: Augsburg, Erlangen, Munich (Ludwig-Maximilians-University and Technical University), Regensburg, and Würzburg, as well as the affiliated university hospitals. The aim of the BZKF is to provide all cancer patients in the Free State of Bavaria with access to high quality oncological care near to where they live, thus offering them the best possible state-of-the-art cancer treatment available.

The BZKF gives absolute priority to the clinical translation of results from basic research. Here lies a focus on conducting clinical trials and studies collectively. To this end, clinical trials and studies on numerous tumor entities have been established. The structures created within the BZKF also enable us

to interact optimally with Bavarian medical technology and pharmaceutical industries, strengthening Bavaria as a location for business and innovation.

In addition to developing new methods of treatment for cancer, we would also like to be the point of contact for all citizens. The free telephone service **PublicCancerHotline** helps those affected with questions on the subject of cancer.



I would like to take this opportunity to thank the entire BZKF team for their commitment and support. Sincere thanks also go to the Bavarian State Government, which supports us generously so that we can continue with building the BZKF in 2022. I hope that this brochure can give all interested readers an insight into our work within the BZKF.

Prof. Dr. Andreas Mackensen
Director of the Bavarian Cancer
Research Center (BZKF)



Welcoming

Despite constant progress in medical research, the diagnosis “cancer” has lost little of its terrifying effect. This is why we do everything we can to offer those affected and their relatives the best possible help with medical structures at the highest level. The Bavarian Cancer Research Center (BZKF) combines outstanding oncological research with high-performance cutting-edge medicine. In close coordination with each other, the BZKF sites at the six Bavarian university hospitals and their universities are developing specialized research infrastructures on various issues relating to the development and treatment of cancer that are visible far beyond Bavaria. As a result, our scientists find ideal conditions to set new standards in the fight against this dreadful disease.

One of the most important objectives is the rapid transfer of basic research results into broad clinical practice. Another goal is to provide the Bavarian population with direct access to information on the latest research findings and to diagnostic and therapeutic options. In order to succeed, close cooperation with medical technology companies is essential. So please take the opportunity to explore the possibilities of partnering with the Bavarian Cancer Research Center (BZKF). I wish you a fruitful and intensive exchange, in accordance with the motto of the BZKF: “Strengthen excellence – Share knowledge”.

Markus Blume
Bavarian State Minister
of Science and the Arts

The Bavarian Cancer Research Center (BZKF)



With the six university hospitals and the centers of research and healthcare supported by the universities, the Comprehensive Cancer Centers (CCC), Bavaria is excellently positioned in the fields of cancer research and therapy.

Comprehensive healthcare for the whole of Bavaria.

The Bavarian Cancer Research Center (BZKF) ensures that novel methods in the diagnosis and treatment of cancer are implemented throughout Bavaria and that the findings of cutting-edge oncological medicine are integrated into structures of healthcare rapidly.



The distribution of the sites across Bavaria guarantees comprehensive and interdisciplinary care for cancer patients, regardless of where they live.

Tasks of the BZKF

- » Improve the care of cancer patients in Bavaria significantly
- » Enable access to the best possible, latest, and innovative therapies
- » Drive preclinical cancer research forward
- » Translate findings into clinical application rapidly
- » Place the focus on cancer prevention, diagnostics, therapy, and informing citizens
- » Conduct clinical trials spread across all six locations
- » Provide with PublicCancerHotline a cancer information telephone service free of charge

Working groups



Through the working groups, standardized infrastructure is to be established at all six university hospitals, in order to create the same conditions to conduct clinical trials and studies at all the BZKF sites.

- » **German Medicines Act (AMG) / German Medical Devices Act (MPG)**
- » **Biobank**
- » **Information technology (IT)**
- » **Interdisciplinary unit for early clinical trials**
- » **Molecular tumor board/molecular medicine (MOLTB)**
- » **Public relations and social media**

AMG / MPG

The AMG / MPG working group is the initial point of contact for inquiries from the pharmaceutical industry and medical technology firms, and coordinates the exchange with the trials and studies groups and lighthouse groups in the BZKF. The core task of the working group is to collect and prioritize the innovative research approaches developed in the trials and studies groups and lighthouse groups, in order to present them to the pharmaceutical industry further along their course of development. The trials and studies groups thus get the opportunity to conduct phase I clinical trials, among other things, together with the pharmaceutical industry. In this way, the working group ensures that industry and the research groups of the BZKF collaborate optimally.



Prof. Dr. Julia Mayerle

Director of the Department of Internal Medicine II,
LMU Hospital Munich

Biobank

Biobanks store large quantities of biological materials, such as blood or tissue samples. The availability of biomaterials is a requirement of application-oriented cancer research. In order to make optimum use of the valuable biomaterials in cancer research and to make them available to all the BZKF sites for research purposes, the Biobank Working group within the BZKF has set itself the following goals: create uniform standards of quality for the collection and archiving of biomaterials; create interfaces that enable the exchange of sample-related information, thus forming the basis for future, innovative research approaches.



Prof. Dr. Martin Trepel

Director of the Department of Internal Medicine II,
Director of Comprehensive Cancer Center Augsburg,
University Hospital Augsburg

Information technology (IT)

The IT working group was tasked with establishing a uniform IT infrastructure within the BZKF network. This includes in particular the creation of a common trials and studies registry, into which all the sites feed data on the clinical trials and studies conducted, and which will then be accessible to the public via a website. The working group is also working towards harmonizing biobanks and creating interfaces for the exchange of clinical and molecular biological data. The extensive data collection created in this process aims to form the basis for clinical and bioinformatics analyses.



Prof. Dr. Claus Belka

Director of the Department of Radiotherapy and Radio-oncology, LMU Hospital Munich

Interdisciplinary unit for early clinical trials and studies

In addition to preclinical research, the development of drugs and therapies for cancer also requires testing in early clinical trials. In a so-called "Early Clinical Trial Unit" (ECTU), patients with various cancers are treated within the framework of early clinical trials, in which innovative and novel therapeutic approaches are tested for the first time (first-in-human). The primary aim of the ECTU network at the BZKF is to improve patient access to innovative tumor therapy, to design a common trial/study portfolio, and to harmonize and improve the recruitment activities for these early clinical trials.



Prof. Dr. Ralf C. Bargou

Chair for Translational Oncology,
Director of Comprehensive Cancer Center
Mainfranken, University Hospital Würzburg

Molecular tumor board/molecular medicine (MOLTB)

Physicians from different specialties come together on tumor boards. The aim of the cross-cancer molecular tumor board is to provide patients suffering from advanced-stage cancer, for whom promising treatment options are no longer available, access to a broad molecular characterization of their tumor and thus enable tailored treatment strategies. The working group wishes to standardize the processes within the MTBs, including patient consent, the definition of standardized molecular analysis, the harmonization of data evaluation and documentation, as well as the development of standardized treatment pathways.



Prof. Dr. Wilko Weichert

Director of the Institute of General Pathology
and Pathological Anatomy, TU Munich

Public relations and social media

The BZKF serves as an information hub for patients, their relatives, and for all professional groups in cancer medicine and research. The working group works to make the BZKF visible to the public and provides up-to-date information and offers on the subject of cancer. The latest findings in cancer research are published regularly via various channels and formats for interested citizens. All queries on the topic of cancer are answered via the free telephone service **PublicCancerHotline**. During information events with presentations held by experts, those affected and interested can find out about the latest developments.



Prof. Dr. Tobias Pukrop

Head of the Oncology Section,
Director of Comprehensive Cancer Center
Eastern Bavaria, University Hospital Regensburg

Lighthouse projects



The lighthouses are requirements for complex further developments in each respective area and assume service functions for the entire center.

The development and permanent establishment of infrastructure and lighthouse structures is one of the first tangible goals to be achieved in the Bavarian Cancer Research Center (BZKF) network. In the process, the expansion of the lighthouse structures, which are only planned at individual sites in each case, will take place step by step.

- » **Imaging, theranostics**
- » **AI, bioinformatics**
- » **Local therapies**
- » **Omics, genomics, liquid biopsy**
- » **Preclinical models**
- » **Cellular immunotherapies**

Imaging, theranostics

Bavarian universities are international leaders in novel imaging technologies that not only make tumor diseases visible at early stages, but also visualize the molecular properties of cancer cells. These innovative methods are used to plan treatment on an individual basis. The close link between therapy and diagnostics is referred to as "theranostics" and has already been implemented in patient care at Bavarian university hospitals successfully.



Prof. Dr. Wolfgang Weber

Director of the Department of Nuclear Medicine,
University Hospital Klinikum rechts der Isar,
TU Munich

AI, bioinformatics

The digitization of care/research processes at the BZKF results in clinical data, imaging data, biological sample information, and molecular data that are made available for use in innovative techniques in bioinformatics and distributed machine learning in artificial intelligence. Digitization will be used to optimize these processes and support medical decision-making. The aim is to integrate these data assets on a site-specific basis and to harmonize them across sites in accordance with international standards.



Prof. Dr. Hans-Ulrich Prokosch

Chair of Medical Informatics,
FAU Erlangen-Nürnberg

Local therapies

Local therapy forms, in addition to pharmaceutical approaches, are essential in the treatment of cancer. In this context, surgical, radiotherapeutic, and invasive radiological procedures are of particular significance. The introduction of local forms of therapy generally constitutes a particular challenge. The BZKF offers the ideal environment to address the problem areas and create networked solutions. Network structures will be established in an initial approach to optimize local therapy.



Prof. Dr. Claus Belka

Director of the Department of Radiotherapy and Radio-oncology, LMU Klinikum Munich

Omics, genomics, liquid biopsy

The omics/genomics/liquid biopsy lighthouse intends to bundle and further develop the molecular biological methods available in the BZKF network in a decentralized manner and to act as a central resource for all network members at the various sites. The use of multi-omics, focusing on proteogenomics and liquid biopsy in pioneering translational research projects in particular, is one of the specific goals of the lighthouse, as well as to make these technologies components of innovative individualized clinical care for all the BZKF network members.

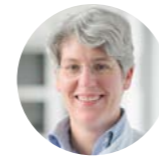


Prof. Dr. Rainer Claus

Consultant, Department of Internal Medicine II, University Hospital Augsburg

Preclinical models

This lighthouse develops: (1) resources (cell systems, mouse models, genetic tools, databases) and (2) methods, technologies, and SOPs to make preclinical models usable for all partners in the BZKF. The goal is to identify and validate pharmacological targets as well as genetic targeting and screening. The models and technologies are to be used along the entire "translational pipeline".



Prof. Dr. Julia Mayerle

Director of the Department of Internal Medicine II, LMU Hospital Munich

Cellular immunotherapies

In this lighthouse, novel immune cell therapeutics are being developed for clinical application in cancer patients. Special attention is given to T cells genetically modified with chimeric antigen receptors (CARs) and T-cell receptors (TCRs). As these are complex pharmaceutical products, the requirements for preparation, manufacturing, and clinical application are particularly stringent. To achieve rapid and effective development, five Bavarian university hospitals in the BZKF are collaborating by dividing responsibilities.



Prof. Dr. Wolfgang Herr

Director of the Department of Internal Medicine III, University Hospital Regensburg

Trials and studies groups



Clinical trials groups are responsible for conducting clinical trials in patients with specific characteristics of a cancer. Clinical trials groups may be grouped around a particular methodology or find their focus on treating disease at a specific stage. However, clinical trials groups often comprise a mixture of both aspects.

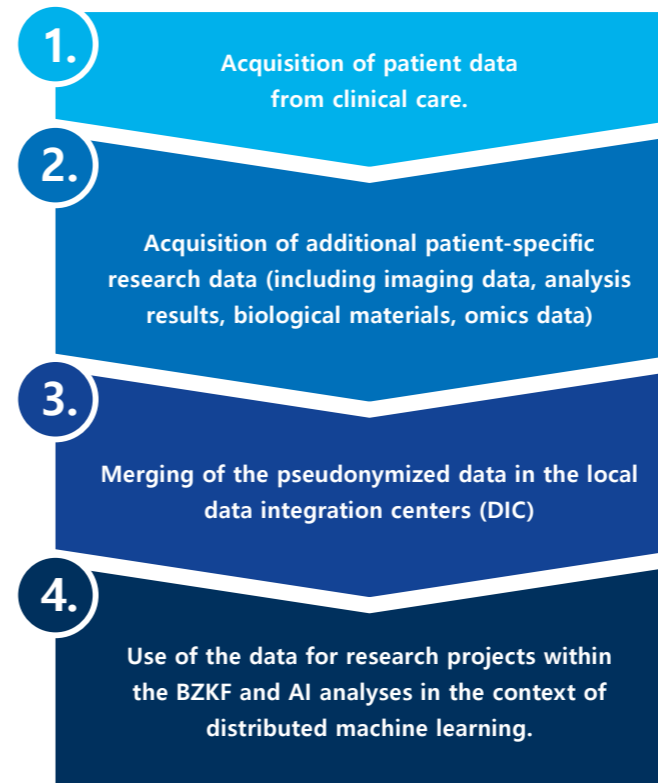
Tasks

- » conduct phase I/II clinical trials
- » validate promising approaches from phase I/II study designs in specific Medicines Act (AMG) or Medical Devices Act (MPG) trials/studies, also in co-operation with industrial partners
- » focus either on a disease or method, or both
- » interact with translational groups
- » build cross-site disease registries through the collection of clinical, genomic, radiological, and other data (depending on study design)
- » investigate the quality of life of cancer patients, with the aim of improving holistic care

Goal

- » Translation of results from basic research into clinical application.
- » Improvement of patient access through a structured and modern patient-doctor concept of care adopting personalized and innovative therapeutic approaches

Structure of the BZKF real-world-data integration platform



Topics, among others

- » Acute myeloid leukemia (AML)
- » Cancer of unknown primary (CUP)
- » Head and neck tumor
- » Colorectal cancer
- » Liver cancer
- » Lung tumor
- » Lymphoma
- » Stomach and upper GI-tract
- » Malignant melanoma
- » Breast cancer
- » Multiple myeloma
- » Kidney cancer
- » Ovarian cancer
- » Pancreatic cancer
- » Primary and secondary malignant brain tumors
- » Prostate cancer
- » R/R ALL
- » Sarcomas
- » Urothelial or transitional-cell cancer
- » CNS tumors in children and adolescents

The PublicCancerHotline



PublicCancerHotline is a Bavaria-wide free telephone service on the subject of cancer for patients, relatives, friends and acquaintances, physicians, and the interested general public. The PublicCancerHotline team is a direct point of contact for anyone seeking advice; translates medical terms in an understandable way; and advises patients and their relatives individually and in accordance with their needs.

**Diagnosed with cancer? –
1000 questions?**

Toll-free number

 **0800 85 100 80**

For more information,
please visit www.bzkgf.de

What can the PublicCancerHotline do?

- » Facilitate conversations on the topic of cancer
- » Provide personal advice, geared to the needs of those seeking advice
- » Listen and encourage callers to ask questions
- » “Translate” medical terminology and guide people through the healthcare system
- » Refer callers specifically to a specialist center close to their home and to experts
- » Air the possibilities of seeking a second opinion on diagnoses and therapies
- » Answer fundamental questions on screening / early detection, diagnosis, therapy, and aftercare of tumor disease
- » Send information brochures
- » Provide contact information on self-help groups and further support services

Do you have any questions regarding a research project or would you like to work on a project? Please do not hesitate to call us or send an e-mail.

Please support cancer research

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