Bayerisches Zentrum für Krebsforschung

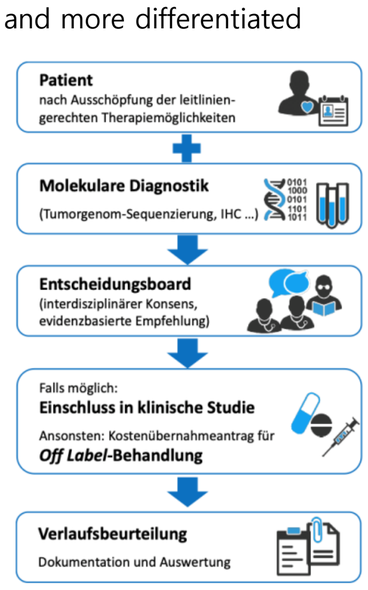
Working group Molecular Tumor Board/Molecular Medicine (MOLTB)

The working group Molecular Tumor Board (MTB) of the BZKF is concerned with the further development and implementation of personalized therapy approaches in oncology and is grouped around the central infrastructure of the Molecular Tumor Board.

Speaker: Prof. Dr. Wilko Weichert, München

Activities & Achievements

For more than two decades, the treatment of all cancer patients has been centered around the interdisciplinary tumor board. All disciplines (oncologists, surgeons, radiation therapists, radiologists, pathologists, human geneticists, and others) meet there to coordinate the individual approach for each patient before any change in therapy and to jointly determine the best possible treatment. To date, Personalized Medicine (PM) therapy concepts have only been partially incorporated here and not yet across the board. Due to the highly complex data and more differentiated

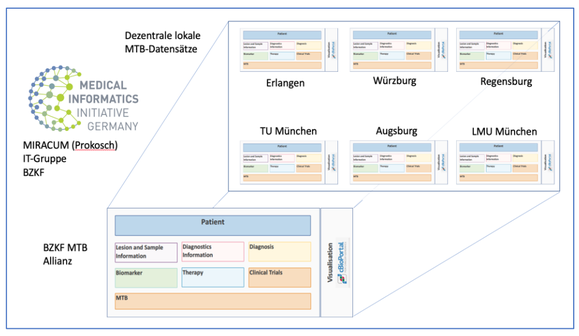


treatment options now being generated essentially by molecular PM approaches, therapy discovery in this context is becoming increasingly challenging. At the same time, addressing PM concepts in the treatment of almost every patient with advanced cancer at some point in their disease is becoming increasingly indispensable. To address this development, so-called interdisciplinary Molecular Tumor Boards (MTB) have been introduced at major centers in recent years, in which patients with clinically and/or biologically challenging constellations of findings are discussed across entities and the tumor data are discussed, in part organ-agnostically, by physicians with specific molecular oncology training from the treating disciplines and pathology, together with human geneticists, radiologists, molecular biologists, and bioinformaticians. Molecular tumor boards thus form currently the core element of future PM developments in cancer medicine. The essential structural elements of an MTB include:

1. Identification of suitable patients for inclusion in molecular tumor boards based on standardized criteria.
2. Performance of advanced molecular diagnostics including bioinformatics-based interpretation of molecular data.
3. Joint clinical-molecular diagnostic interpretation of the findings and determination of individual therapy strategies (study, off-label-use if necessary).
4. Follow-up of patients and (cross-center) pooling of data of individualized treatment approaches for knowledge-based therapy optimization and quality control within a registry.

In order to achieve these goals in a quality-controlled and harmonized manner across all sites in Bavaria, the processes of the regional MTBs of all sites must be aligned and the data for research questions must be merged (see Goals).

With the consolidation of all diagnostic approaches and linkage with the study groups of the BZKF, an internationally highly competitive infrastructure for translational research in the field of Personalized Medicine will be created.



Long-term goals at all BZKF sites

» **Establish a common BZKF-MTB data infrastructure covering clinical parameters, molecular profiles and structural information.**

» **Harmonize procedures for clinical recommendations and follow-up for BZKF MTBs.**

» **Harmonization with other German MTB initiatives such as DKTK and ZPM.**

» **Develop strategies for overarching BZKF access to MTB datasets for use for research and clinical trial purposes.**

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