MOLECULAR HEALTH
MH GUIDE

Therapeutic approaches using molecular tumor data

MH Guide: six questions and answers

Tailor-made cancer treatments based on molecular target structures – that's the premise of personalized tumor therapy. Software-supported solutions like MH Guide can help pinpoint addressable biomarkers as well as treatment options. Read on for answers to the most common questions about MH Guide.

What is MH Guide?

Molecular Health Guide (MH Guide) supports physicians in making clinical therapy decisions based on complex genetic tumor data. To do this, MH Guide translates the molecular tumor profiles into clinically-relevant information, then derives appropriately personalized treatment options and recommends possible clinical studies. The software is CE-marked as a medical device and approved as an in-vitro diagnostic (IVD) in the EU.[1,2]

Which patients benefit from an analysis with MH Guide?

An analysis with MH Guide can be used for all solid and hemato-oncological tumor diseases. The prerequisite is that sufficient material is available for a molecular tumor analysis. The MH Guide analysis can then point to valuable therapy options – particularly for patients with rare, advanced tumors and for patients who have exhausted standard therapies – and identify recruiting studies for the respective tumor profile.3

What are the benefits of MH Guide?

Among other advantages, MH Guide offers the following key benefits

...for molecular pathologists and diagnostic laboratories:

- Support in processing complex genetic tumor data, e. g. from next-generation sequencing (NGS).[4]
- Precise and comprehensive evaluation of molecular tumor data, with high analysis throughput.[4]
- Quick creation of quality-assured variant annotations, and simplified preparation of findings.[4]

…for treating oncologists:

- Support for treatment decisions in everyday clinical practice by evaluating the molecular patient information.[1,5]
- Overview of the identified treatment-relevant biomarkers and the available treatment options derived from them, as well as indications of recruiting clinical studies near the patient's home.[1,5]
- Complete transparency on the approval and development status of the therapy options, as well as the clinical validation of the biomarker.[5]

How does MH Guide analysis proceed in clinical practice?

Ordering molecular tumor diagnostics

- The treating oncologist provides the indication for molecular diagnostic testing. The oncologist then commissions the local pathologist to provide evidence of tumor-relevant mutations and sends the tumor material along with the referral and other accompanying information (physician's letter).[1,2]
- The local pathologist performs the comprehensive molecular tumor analysis, or commissions a molecular pathology laboratory to do so.[1,2]

Analysis with MH Guide

- The pathology laboratory uploads the tumor's genetic sequencing data to the web portal for MH Guide analysis. To analyze the genetic data, MH Guide uses information obtained from Dataome, a continuously updated knowledge database .[1,2]

Generating the findings report, selecting therapy options

- MH Guide automatically create a comprehensive patient report from the results, which the pathology laboratory can individually adapt, supplement, and then release.[1,2]
- The oncologist receives the molecular pathological findings from the pathologist along with the MH Guide report. The oncologist now has all of the key information about treatment options and possible clinical studies. This can serve as a basis for making a treatment decision in the tumor board, and can finally be discussed with the patient.[1,2]

Material required for MH Guide analysis

Tissue biopsies, for example, can be used as the starting material for obtaining the sequencing data, which is then analyzed with MH Guide.
MH Guide is vendor-independent and can thus process VCF data from a large number of established genetic and molecular tests. FASTQ data, if generated according to the MH Guide sequencing guidelines, can also be processed.[1,4]

Time frame for MH Guide analysis

Analyzing the sequence data with MH Guide – from uploading to the web portal, to annotating gene variants, to generating the final report – takes a few minutes (VCF) to a few hours (whole-exome FASTQ).[4] The sequencing process does not take place within MH Guide, but is performed by the molecular pathology laboratory in advance.[3]

Sources

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