MVZ TRIER
Histologie • Zytologie
Molekulare Diagnostik

BIOSCIENTIA

Surname, Name

Date of Birth

Patient ID Male Female

Physician Date

Molecular Pathology Trier

Request for tumor genetic analysis

Diagnosis - Request

Please send histopathology diagnosis if available

Report/ Clinical Data

Mamma Carcinoma
- ☐ HER2-Amplification
- ☐ PIK3CA-Mutation (Exon 9,20)

Gastric-/Ösophagus carcinoma
- ☐ HER2-Amplification

Colon cancer
- ☐ KRAS-Mutation (Exon 2,3,4)
- ☐ NRAS-Mutation (Exon 2,3,4)
- ☐ BRAF-Mutation (Exon 15)
- ☐ PIK3CA-Mutation (Exon 9,20)
- ☐ EGFR-Amplification
- ☐ MLH1-Methylation
- ☐ Repairenzyme MLH1,MSH2,MSH6,PMS2 (IHC)
- ☐ Microsatellite-PCR (Cancer and regular tissue)

Lung carcinoma
- ☐ KRAS-Mutation (Exon 2,3,4)
- ☐ EGFR-Mutation (Exon 18-21) ☐ T790M (TKI-Res.)
- ☐ BRAF-Mutation (Exon 15)
- ☐ ALK-Rearrangement (2p23.2-p23.1)
- ☐ ROS1 Rearrangement (6q22.1)
- ☐ RET-Rearrangement (10q11.21)
- ☐ MAML2-Rearrangement (11q21)
- ☐ FGFR1-Amplification
- ☐ MET-Amplification

Tumor entity - independent
- ☐ Complex NGS-Mutation analysis
  incl. NTRK1/2/3 Rearrangement (see next side)
- ☐ PD1-IHC
  PD-L1-IHC (Please cross entity):
  ☐ Mamma-Ca ☐ Urothel-Ca ☐ NSCLC ☐ Melanoma
  ☐ Other entities: _____

Urothel carcinoma/ Renal carcinoma (heriditarily)
- ☐ UroVysion-FISH
- ☐ MET-Mutation (Exon 16-19) (Cancer and regular tissue)
- ☐ TFE3-Rearrangement (Xp11.23)

Thyroid Carcinoma
- ☐ BRAF-Mutation (Exon 15)
- ☐ RET-Rearrangement (10q11.21)
- ☐ PPARG-Rearrangement (3p25.2)
- ☐ microRNA-Panel

GIST
- ☐ KIT-Mutation (Exon 9,11,13,17)
- ☐ PDGFRA-Mutation (Exon 12,18)

Malignant Melanoma
- ☐ BRAF-Mutation (Exon 15)
- ☐ KIT-Mutation (Exon 9,11,13,17)
- ☐ NRAS-Mutation (Exon 2,3,4)
- ☐ Melanoma-FISH

Prostate cancer
- ☐ ERG-Rearrangement (21q22.2)

Hematological Neoplasms
- ☐ Clonality Analysis B-Cell-Receptor IGH (FR1-3)
- ☐ Clonality Analysis T-Cell-Receptor γ (TCRG)
- ☐ κ/λ-Light Chain-SISH
- ☐ IGH- Rearrangement (14q32)
- ☐ BCL2-Rearrangement (18q21)
- ☐ BCL6-Rearrangement (3q27)
- ☐ MYC-Rearrangement (8q24)
- ☐ MALT1-Rearrangement (18q21.32)(MZL)
- ☐ Translocation (t11;14)(q13;q32) (MCL)
- ☐ Translocation (t14;18)(q32;q21) (FCL)
- ☐ Translocation t(9;22)(q34;q11) (CML)
- ☐ TP53-Deletion (17p13)
- ☐ KIT-Mutation D816V (Mastocytosis)
- ☐ JAK2-Mutation (Exon 14)
- ☐ MPL-Mutation (Exon 10)
- ☐ CALR-Mutation (Exon 9)

Sarcoma
- ☐ MDM2-Amplification
- ☐ EWSR1-Rearrangement (22q12.2)
- ☐ SYT- (SS18-)Rearrangement (18q11.2)
- ☐ FUS-Rearrangement (16p11.2)
- ☐ CHOP- (DDIT3-) Rearrangement (12q13.3)
- ☐ JAZF1-Rearrangement (7p15.2-p15.1)
- ☐ Translocation (t17;22)(q21;13)
- ☐ CTNNB1- (ß-catenin-) Mutation (Exon 3)
- ☐ MYC-Amplification

Brain tumor
- ☐ IDH1-Mutation (Exon 4)
- ☐ IDH2-Mutation (Exon 4)
- ☐ 1p/19q-Deletion
- ☐ MYCN- (N-Myc-) Amplification
- ☐ MGMT-Methylation

Ovarian Carcinoma
- ☐ BRCA1/2-Mutation (see next side)

Head-Neck and Squamous cell carcinoma/cervical carcinoma
- ☐ HPV-PCR/Chip (FFPE-sample)
- ☐ HPV Cobas4800-Test (Swab)

Eingangs-Datum:
(vom Molekularpathologen auszufüllen)
Vorbefunde:
_____

Leistungserfassung
(vom Molekularpathologen auszufüllen)

M ☐ **T** ☐

Materialannahme	
Erfassen	
allgem. Labor	
mol. Aufarbeitung	
mol. Auswertung	
Arzt	

Fallnummer extern:

Fallnummer MVZHZMD Trier:

Explanations

UroVysion-Multicolor-FISH-Test system

Simultaneous DNA hybridization test for the detection of aneuploidy of chromosomes 3, 7 and 17 as well as the region 9p21 in the case of suspected bladder carcinoma. Sensitivity and specificity > 90

Melanoma-Multicolor-FISH:

Simultaneous DNA hybridization test for numbers of copies, determination of genes RREB1, MYB, CCND1 and chromosome 6.
An investigation is considered as FISH positive for melanoma when:

1. the everage numbers of CCND1-Signals/Core or the everage numbers of fMYB-Signals/Core is ≥ 2,5, or
2. the percentage loss of MYB in relation to CEP6 ≥ 31% is, or
3. the percentage proportion atypical nuclei for RREB1 is ≥ 63%

The specificity is 94% with a sensitivity of 92%.

Complex NGS-Mutations analysis (ThermoFisher Oncomine Focus Panel, based on DNA/RNA)

Hotspot genes:	AKT1, ALK, AR, BRAF, CDK4, CTNNB1, DDR2, EGFR, ERBB (HER)2/3/4 ESR1, FGFR1/2, GNA11, GNAQ, HRAS, IDH1/2, JAK1/2/3, KIT, KRAS, MAP2K1/2, MET, MTOR, NRAS, PDGFRA, PIK3CA, RAF1, RET, ROS1, SMO
Copy number variants:	ALK, AR, BRAF, CCND1, CDK4/6, EGFR, ERBB2(HER2), FGFR1/2/3/4, KIT, KRAS, MET, MYC, MYCN, PDGFRA, PIK3CA
Fusion drivers:	ABL1, AKT3, ALK AXL, BRAF, ERG, ETV1/4/5, EGFR, ERBB2, FGFR1/2/3, MET, NTRK1/2/3, PDGFRA, PPARG, RAF1, RET, ROS1

BRCA1/2-Mutations analysis

The test neither intends nor enables the assessment of a genetic trait or a germline mutation and thus does not fall under the German Genetic Diagnosis Act (GenDG§).

Begutachtungsauftrag für Molekulare Diagnostik
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