



# ANA LYSEN

Molekularpathologie



VIOLLIER

# Cancer Panels

## **Oncomine™ Comprehensive Assay v3 DNA, Thermo Fisher – 145 Gene**

### Hotspot-Mutationen

AKT1, AKT2, AKT3, ALK, AR, ARAF, AXL, BRAF, BTK, CBL, CCND1, CDK4, CDK6, CHEK2, CSF1R, CTNNB1, DDR2, EGFR, ERBB2 (=HER2), ERBB3, ERBB4, ERCC2, ESR1, EZH2, FGFR1, FGFR2, FGFR3, FGFR4, FLT3, FOXL2, GATA2, GNA11, GNAQ, GNAS, H3F3A, HNF1A, HRAS, IDH1, IDH2, JAK1, JAK2, JAK3, KDR, KIT, KNSTRN, KRAS, MAGOH, MAP2K1 (=MEK1), MAP2K2 (=MEK2), MAP2K4, MAPK1, MAX, MDM2, MDM4, MED12, MET, MTOR, MYC, MYCL, MYCN, MYD88, NFE2L2, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PDGFRB, PIK3CA, PIK3CB, PPP2R1A, PTPN11, RAC1, RAF1, RET, RHEB, RHOA, ROS1, SF3B1, SMAD4, SMO, SPOP, SRC, STAT3, TERT, TOP1, U2AF1, XPO1

### Komplettgensequenzierung

ARID1A, ATM, ATR, ATRX, BAP1, BRCA1, BRCA2, CDK12, CDKN1B, CDKN2A, CDKN2B, CHEK1, CREBBP, FANCA, FANCD2, FANCI, FBXW7, MLH1, MRE11, MSH2, MSH6, NBN, NF1, NF2, NOTCH1, NOTCH2, NOTCH3, PALB2, PIK3R1, PMS2, POLE, PTCH1, PTEN, RAD50, RAD51, RAD51B, RAD51C, RAD51D, RB1, RNF43, SETD2, SLX4, SMARCA4, SMARCB1, STK11, TP53, TSC1, TSC2

### Kopienzahlveränderungen (CNVs)

AKT1, AKT2, AKT3, ALK, AR, AXL, BRAF, CCND1, CCND2, CCND3, CCNE1, CDK2, CDK4, CDK6, EGFR, ERBB2, ESR1, FGF19, FGF3, FGFR1, FGFR2, FGFR3, FGFR4, FLT3, IGF1R, KIT, KRAS, MDM2, MDM4, MET, MYC, MYCL, MYCN, NTRK1, NTRK2, NTRK3, PDGFRA, PDGFRB, PIK3CA, PIK3CB, PPARG, RICTOR, TERT

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## **Oncomine™ Comprehensive Assay RNA, Thermo Fisher – 51 Fusionspartner**

### Genfusionen

AKT2, ALK, AR, AXL, BRAF, BRCA1, BRCA2, CDKN2A, EGFR, ERBB2, ERBB4, ERG, ESR1, ETV1, ETV4, ETV5, FGFR1, FGFR2, FGFR3, FGR, FLT3, JAK2, KRAS, MDM4, MET, MYB, MYBL1, NF1, NOTCH1, NOTCH4, NRG1, NTRK1, NTRK2, NTRK3, NUTM1, PDGFRA, PDGFRB, PIK3CA, PPARG, PRKACA, PRKACB, PTEN, RAD51B, RAF1, RB1, RELA, RET, ROS1, RSPO2, RSPO3, TERT

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## **Oncomine™ Precision Assay DNA, Thermo Fisher – 46 Gene**

### Hotspot-Mutationen

AKT1, AKT2, AKT3, ALK, AR, ARAF, BRAF, CDK4, CDKN2A, CHEK2, CTNNB1, EGFR, ERBB2 (=HER2), ERBB3, ERBB4, ESR1, FGFR1, FGFR2, FGFR3, FGFR4, FLT3, GNA11, GNAQ, GNAS, HRAS, IDH1, IDH2, KIT, KRAS, MAP2K1 (=MEK1), MAP2K2 (=MEK2), MET, MTOR, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PIK3CA, PTEN, RAF1, RET, ROS1, SMO, TP53

### Kopienzahlveränderungen (CNVs)

ALK, AR, CD274, CDKN2A, EGFR, ERBB2, ERBB3, FGFR1, FGFR2, FGFR3, KRAS, MET, PIK3CA, PTEN

## **Oncomine™ Focus Assay RNA, Thermo Fisher – 23 Fusionspartner**

Genfusionen

ABL1, ALK, AKT3, AXL, BRAF, EGFR, ERBB2, ERG, ETV1, ETV4, ETV5, FGFR1, FGFR2, FGFR3, MET, NTRK1, NTRK2, NTRK3, PDGFRA, PPARG, RAF1, RET, ROS1

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## **NGS Kolorektalkarzinom**

Hotspot-Mutationen

KRAS, NRAS, BRAF, PIK3CA

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## **NGS Lungenkarzinom**

Hotspot-Mutationen

EGFR, KRAS, BRAF, HER2, MET

Genfusionen

ALK1, ROS1, RET, NTRK1, NTRK2, NTRK3, MET Exon-14-Skipping

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## **NGS Melanom**

Hotspot-Mutationen

BRAF, KIT, NRAS, HRAS

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## **NGS Gastrointestinaler Stromatumor (GIST)**

Hotspot-Mutationen

KIT, PDGFRA

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## **NGS Schilddrüsenkarzinom**

Hotspot-Mutationen

AKT1, BRAF, CTNNB1, HRAS, KRAS, NRAS, PIK3CA, PTEN, RET, TERT, TP53

Genfusionen

RET, PPARG, NTRK1, NTRK2, NTRK3

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## **NGS Endometriumkarzinom**

Komplettgensequenzierung

POLE, TP53, MLH1, MSH2, MSH6, PMS2

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## **NGS Urothelkarzinom**

Hotspot-Mutationen und Fusionen

FGFR1, FGFR2, FGFR3, FGFR4

Komplettgensequenzierung

TP53

## NGS Ovarialkarzinom

TruSight Oncology 500 HRD powered by Myriad, Illumina  
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, PALB2  
Auswertung des Genomic Instability Score (GIS)

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## NGS Mammakarzinom grosses Panel

TruSight Oncology 500, Illumina  
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, PALB2  
Inkl. PIK3CA, AKT1, PTEN, ESR1

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## NGS Mammakarzinom kleines Panel

Oncomine™ Comprehensive Assay v3 DNA, Thermo Fisher  
PIK3CA, AKT1, PTEN, ESR1

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## Liquid Biopsy Mammakarzinom

Oncomine™ Precision Assay GX, Thermo Fisher  
ESR1, PIK3CA, AKT1

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## NGS Prostatakarzinom

TruSight Oncology 500, Illumina  
Mutationen in BRCAness assoziierten Genen inkl. BRCA1, BRCA2, PALB2  
Inkl. Mikrosatelliteninstabilitätsanalyse und CDK12

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Weitere Analysen:

**BRCA1, BRCA2** Komplettgensequenzierung

**Genomic Instability Score (GIS)** TruSight Oncology 500 HRD powered by Myriad

**Mikrosatelliten-Instabilität (MSI)** Fragmentlängenanalyse

**MLH1-Promotormethylierung** Fragmentlängenanalyse

**Tumormutationslast (TMB)** TruSight Oncology 500, Illumina

Alle aufgeführten Analysen sind bei Viollier nach SN EN ISO 15189 akkreditiert.

## Information

Dr. rer. nat. Henriette Kurth, Spezialistin für Labormedizin FAMH, Leiterin Molekularbiologie  
Dr. med. Katharina Marston, FMH Pathologie, Molekularpathologie, Med. Leitung Molekularpathologie  
Dr. med. Sophie Diebold Berger, FMH Pathologie, Zytopathologie, Leiterin Viollier Genève SA Pathologie  
PD Dr. med. Andreas Zetti, FMH Pathologie, Kandidat Molekularpathologie, Leiter Pathologie

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