

Analysen

Molekularpathologie

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

**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

### 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

### 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, ATM 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

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