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(ADRESSETTE)

Patientenname:

Geburtsdatum:

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## Anforderungsschein Molekulare Diagnostik

Eingangs-Nummer (intern)

Patienten-Name/Vorname

Datum

Tumorzellgehalt (intern)

Anmerkungen

Arzt/Ärztin

### ERREGENNACHWEIS

- HPV
- HCV
- Mycobacterien complex

### VERSCHIEDENES

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> IGH (Klonalität) | <input type="checkbox"/> 1p/19q FISH                | <input type="checkbox"/> miRNA PTC                         |
| <input type="checkbox"/> TCR (Klonalität) | <input type="checkbox"/> MGMT Promotor Methylierung | <input type="checkbox"/> Microsatelliteninstabilität (MSI) |
| <input type="checkbox"/> BCOR-ITD         |   | <input type="checkbox"/> Microsatellitenprofil             |

### NGSEQUENZIERUNG

- BRCA PANEL  
BRCA1 (1-24), BRCA2 (1-27)
- HTS1 PANEL  
APC (1-16), DICER1 (1-28), PRKAR1A (1-11), PTEN (1-9), TSHR (1-10), WRN (2-35)
- NPP1.0 PANEL  
ACVR1 (6-8), BRAF (11,15), CDKN2A (1-3), CDKN2B (1,2), CDKN2C (2,3), CIC (5,6,10,11,14,17,19,20), CTNNB1 (3,4,7,8,9), DICER1 (6,10,11,22,23,25,26,27), EGFR (2,7,8,15,18-21), FGFR1 (3,4,7,13,14,15,17), FUBP1 (1-20), H3F3A (2,3,4), H3F3B (2,3,4), HIST1H3B (1), HIST1H3C (1), HIST2H3C (1), IDH1 (3-10), IDH2 (1-10), KBTBD4 (3), MET (2,3,6,8,11,14,19), NFKBIA (1-6), NOTCH1 (3,6,7,8,9,26,34), NRAS (2,3,4), PDGFRA (5,7,12,14,18), PIC3CA (2,3,5,10,16,21), PIK3R1 (10,11,13,14), PTEN (1-9), RB1 (1-26), STK11 (1-9), TERT-Promotor, TP53 (2-11)
- CCP3 PANEL  
BRAF (11,15), EGFR (18-21), ERBB2 (2,3,12,17,20,26), FGFR1 (3-7,10,12-15,17), FGFR2 Tr-A (6,8,10,11,13-15), FGFR2 Tr-B (8,9,12,18), FGFR3 (3,6,7,9,10,12,14,16,18), HRAS (2-4), IDH1 (4), IDH2 (4), KIT (9,10,11,13,14,17,18), KRAS (2-4), MET (3,8,11,14,19), NRAS (2-4), PDGFRa (12,14,18), PIK3CA (3,5,8,10,16,21), RET (7,10,11,13-16), STK11 (1-9), TERT-Promotor, TP53 (2-11)
- MAPK0 PANEL  
Gesamter codierender Bereich von BRAF, GNA11, GNAQ, KRAS, MAP2K1, MAP2K2, NRAS

## MAPK1 PANEL

AKT1, AKT2, ARID1A, ARID1B, ATM, BAP1, BCLAF1, BRAF (11,15), BRCA1, BRCA2, CRAF, EGFR (18,19,20,21), ERBB2 (5,6,15,20,23,29), GNA11, GNAQ, GNAS, IDH1 (4), IDH2 (4) KDM6A, KIT (9,10,11,13,17,18), KRAS (2,3,4), MAP2K1, MAP2K2, MAPK1, MAPK3, MDM2, MET (3,8,11,14,19), MLH1, MSH2, NF1, NRAS (2,3,4), PALB2, PBRM1, PDGFRa (12,14,18), PIK3CA (3,5,10,16,21), PTEN, RNF43, RPA1, SF3B1 (14,15,16), SMAD4, SMARCA2, SMARCA4, SMARCB1, STK11, TP53, TSC1, TSC2

## NNGML1 PANEL

ALK (22-25), BRAF (11,15), CTNNB1 (3), EGFR (18-21), ERBB2 (8,19,20), FGFR1 (4-7,10,12-15), FGFR2 (Transcript A:6-15,18; Transcript B: 8), FGFR3 (3,6,7,9,10,12,14,16,18), FGFR4 (3,6,9,12,13,15,16), IDH1 (4), IDH2 (4), KRAS (2-4), MAP2K1 (2,3), MET (14, 16-19), NRAS (2-4), PIK3CA (10,21), PTEN (1-8), ROS1 (34-41), TP53 (4-8)

## GENFUSIONSPRODUKT-NACHWEIS

### ARCTL PANEL

Auf Fusionen untersuchte Gene (*Exone in Klammern*):

ALK (2, 4, 6, 10, 16-23, Intron 19), AXL (18-20), BRAF (7-11), CCND1 (1-4), FGFR1 (2, 8-10, 17), FGFR2 (2, 5, 7, 8-10, 17), FGFR3 (3, 5, 8-10, 17, Intron 17), MET (2, 4-6, 13-17, 21), NRG1 (1-3, 6), NTRK1 (2, 4, 6, 8, 10-13), NTRK2 (5, 7, 9, 11-17), NTRK3 (4, 7, 10, 13-16), PPARG (1-3, 5), RAF1 (4-7, 9-12), RET (2, 4, 6, 8-14), ROS1 (2, 4, 7, 31- 37), THADA (24-30, 36, 37)

### ARSAR 2 PANEL

Auf Fusionen untersuchte Gene (*Exone in Klammern*):

ALK (19-22), BCOR (6-8,12,14,15), CAMTA1 (8-10), CCNB3 (2-6), CIC (19,20), EPC1 (9-11), EWSR1 (4-13), FOXO1 (1-3), FUS (4-11,14), GLI1 (4-7), HMGA2 (1-5), JAZF1 (2-4), MEAF6 (4,5), MKL2 (11-13), NCOA2 (11-14), NTRK1 (2, 4, 6, 8, 10-13), NTRK2 (5, 7, 9, 11-17), NTRK3 (4, 7, 10, 12-16), PAX3 (6-8), PDGFB (2,3), PLAG1 (1-4), ROS1 (2, 4, 7, 31-37), SS18 (4-6, 8-11), STAT6 (1-7, 16-19), TAF15 (5-7), TCF12 (4-6), TFE3 (3-6), TFG (4-7), USP6 (1-3), YWHAE (5)

## KIAA1549-BRAF-GENFUSIONSPRODUKT-NACHWEIS

## SEQUENZIERUNG SANGER

ALK (20-25)	HFE (1,4)	PIK3CA (10,21)
BRAF (11,15)	HIST1H3B (1)	PTEN (1-9)
CTNNB1 (3)	IDH1 (4)	RET (10,11,13-16)
DDR2 (15-18)	IDH2 (1)	TP53 (4-9)
EGFR (18-21)	KIT (9,11,13,17)	TERT-Promotor
GNAS1 (7,8)	KRAS (2-4)	
H3F3A (2)	NRAS (2-4)	
H3F3B (2)	PDGFRa (12,14,18)	

## IN SITU HYBRIDISIERUNG

ALK Break Apart	EWS Break Apart	NTRK2 Break Apart
BRAF Break Apart	FGFR1 Amplifikation	NTRK3 Break Apart
BCL2 Break Apart	FGFR2 Amplifikation	PHF1 Break Apart
BCL6 Break Apart	FOXO1 Break Apart	PIK3CA Amplifikation
BCR-ABL1 Fusion	FUS Break Apart	RB1 Deletion/Amplifikation
CDKN2A/B Deletion/Amplifikation	HER2 (ERBB2) Amplifikation	RET Break Apart
CIC Break Apart	JAZF1 Break Apart	ROS1 Break Apart
MET Amplifikation	MDM2 Amplifikation	SS18 (SYT) Break Apart
COL1A1 Break Apart	MYC Amplifikation	TFE3 Break Apart
COL1A1/PDGFRb Fusion	MYC Break Apart	USP6 Break Apart
CFS1R Break Apart	MYCN Amplifikation	VHL Deletion (LOH)
DDIT3 Break Apart	NR4A3 Break Apart	WWTR1 Break Apart
EGFR Amplifikation	NTRK1 Break Apart	YWHAE Break Apart

## 850K-METHYLIERUNGSANALYSE

## ANDERE UNTERSUCHUNGEN: .....