

Genpanellist / Genliste

Lungen-Panel (DNA/RNA)	
DNA Genmutationsanalyse - 72 Gene	<i>AKT1, ALK, AMER1, APC, ARID1A, ATM, BAI3, BAP1, BRAF, CDKN2A, CDKN2B, CREBBP, CTNNA1, DDR2, EGFR, EPHA5, ERBB2, ERBB4, FBXO7, FBXW7, FGFR1, FGFR2, FGFR3, FHIT, GRM8, HRAS, JAK2, KDR, KEAP1, KIT, KMT2D, KRAS, LRP1B, MAP2K1, MDM2, MET, MGA, MLH1, MUC16, MYC, NF1, NFE2L2, NOTCH1, NRAS, NTRK1, NTRK2, NTRK3, PDGFRA, PIK3CA, PIK3CG, PIK3R1, PIK3R2, PKHD1, PTEN, PTPRD, RARB, RASSF1, RB1, RBM10, RET, RIT1, ROS1, RUNX1, SETD2, SMAD4, SMARCA4, SOX2, STK11, TNFAIP3, TP53, TSC1, U2AF1</i>
RNA Genfusionsanalyse - 73 Gene	<i>ALK, ARL17A, BAG4, BAIAP2L1, BCL11A, BRAF, BRD4, CCDC6, CD74, CLIP4, CRTCI, CUX1, DCBLD1, DNAH5, EGFR, EGFR-AS1, EML4, ETV6, EZR, FER, FGFR1, FGFR2, FGFR3, GCC2, GLRX5, GOPC, HIP1, HLA-DRB1, IRF2BP2, KANSL1, KIAA1217, KIF5B, KLC1, LOC101929386, LOC105375492, LOC107984219, LOC107985874, LOC112268460, LRIG3, LRRC37A2, MAML2, MAN2A1, MET, MPRIP, NCOA4, NRG1, NSD3, NTRK1, NTRK2, NTRK3, NUTMI, PBX1, PTPRK, RAD51, RET, ROS1, RSPO3, RUNX1, SDC4, SLC34A2, SLC3A2, SND1, SQSTM1, STARD3NL, STRN, TACC3, TCF3, TFG, TPM3, TPR, TRA2B, TRIM33, VSNL1</i> <u>Folgende Fusionen sind unter anderem untersucht werden:</u> <i>BAG4-FGFR1, BCL11A-ALK, BRD4-C15orf55, CCDC6-RET, CD74-NRG1, CD74-NTRK1, CD74-ROS1, CLIP4-VSNL1, CRTCI-MAML2, CUX1-RET, EGFR-EGFR, EGFR-RAD51, EML4-ALK, ETV6-NTRK3, EZR-ROS1, FGFR2-CCAR2, FGFR2-CIT, FGFR3-BAIAP2L1, FGFR3-TACC3, GCC2-ALK, GOPC-ROS1, HIP1-ALK, IRF2BP2-NTRK1, KANSL1-ARL17A, KIAA1217-RET, KIF5B-ALK, KIF5B-MET, KIF5B-RET, KLC1-ALK, LRIG3-ROS1, MAML2-CRTCI, MAN2A1-FER, MET-MET, MPRIP-NTRK1, NCOA4-RET, NSD3-NUTMI, PTPRK-RSPO3, RUNX1-GLRX5, SDC4-ROS1, SLC34A2-ROS1, SLC3A2-NRG1, SND1-BRAF, SQSTM1-NTRK1, MAML2-CRTCI, MAN2A1-FER, AML2-CRTCI</i>

Multigen (PAN)- Panel (DNA/RNA)	
DNA Genmutationsanalyse - 523 Gene	<i>ABL1, ABL2, ABRAXAS1, ACVR1, ACVR1B, ADGRA2, AKT1, AKT2, AKT3, ALK, ALOX12B, AMER1, ANKRD11, ANKRD26, APC, AR, ARAF, ARFRP1, ARID1A, ARID1B, ARID2, ARID5B, ASXL1, ASXL2, ATM, ATR, ATRX, AURKA, AURKB, AXINI, AXIN2, AXL, B2M, BAP1, BARD1, BBC3, BCL10, BCL2, BCL2L1, BCL2L11, BCL2L2, BCL6, BCOR, BCORL1, BCR, BIRC3, BLM, BMP1A, BRAF, BRCA1, BRCA2, BRD4, BRIP1, BTG1, BTK, CALR, CARD11, CASP8, CBF3, CBL, CCN6, CCND1, CCND2, CCND3, CCNE1, CD274, CD276, CD74, CD79A, CD79B, CDC73, CDH1, CDK12, CDK4, CDK6, CDK8, CDKN1A, CDKN1B, CDKN2A, CDKN2B, CDKN2C, CEBPA, CENPA, CHD2, CHD4, CHEK1, CHEK2, CIC, COP1, CREBBP, CRKL, CRLF2, CSF1R, CSF3R, CSNK1A1, CTCF, CTLA4, CTNNA1, CTNNA1, CTNNA1, CUL3, CUX1, CXCR4, CYLD, DAXX, DCUN1D1, DDR2, DDX41, DHX15, DICER1, DIS3, DNABP1, DNMT1, DNMT3A, DNMT3B, DOT1L, E2F3, EED, EGFL7, EGFR, EIF1AX, EIF4A2, EIF4E, ELOC, EML4, EMSY, EP300, EPCAM, EPHA3, EPHA5, EPHA7, EPHB1, ERBB2, ERBB3, ERBB4, ERCCI, ERCC2, ERCC3, ERCC4, ERCC5, ERG, ERFF1, ESRI, ETS1, ETV1,</i>

	<p><i>ETV4, ETV5, ETV6, EWSR1, EZH2, FANCA, FANCC, FANCD2, FANCE, FANCF, FANCG, FANCI, FANCL, FAS, FAT1, FBXW7, FGF1, FGF10, FGF14, FGF19, FGF2, FGF23, FGF3, FGF4, FGF5, FGF6, FGF7, FGF8, FGF9, FGFR1, FGFR2, FGFR3, FGFR4, FH, FLCN, FLII, FLT1, FLT3, FLT4, FOXA1, FOXL2, FOXO1, FOXP1, FRS2, FUBP1, FYN, GABRA6, GATA1, GATA2, GATA3, GATA4, GATA6, GEN1, GID4, GLII, GNA11, GNA13, GNAQ, GNAS, GPS2, GREM1, GRIN2A, GRM3, GSK3B, H1-2, H2BC5, H3-3A, H3-3B, H3-4, H3-5, H3C1, H3C10, H3C11, H3C12, H3C13, H3C14, H3C15, H3C2, H3C3, H3C4, H3C6, H3C7, H3C8, HGF, HLA-A, HLA-B, HLA-C, HNF1A, HNRNPK, HOXB13, HRAS, HSD3B1, HSP90AA1, ICOSLG, ID3, IDH1, IDH2, IFNGR1, IGF1, IGF1R, IGF2, IKBKE, IKZF1, IL10, IL7R, INHA, INHBA, INPP4A, INPP4B, INSR, IRF2, IRF4, IRS1, IRS2, JAK1, JAK2, JAK3, JUN, KAT6A, KDM5A, KDM5C, KDM6A, KDR, KEAP1, KEL, KIF5B, KIT, KLF4, KLHL6, KMT2A, KMT2B, KMT2C, KMT2D, KRAS, LAMP1, LATS1, LATS2, LMO1, LRP1B, LYN, LZTR1, MAGI2, MALTI, MAP2K1, MAP2K2, MAP2K4, MAP3K1, MAP3K13, MAP3K14, MAP3K4, MAPK1, MAPK3, MAX, MCL1, MDC1, MDM2, MDM4, MED12, MEF2B, MEN1, MET, MGA, MITF, MLH1, MLLT3, MPL, MRE11, MSH2, MSH3, MSH6, MST1, MST1R, MTOR, MUTYH, MYB, MYC, MYCL, MYCN, MYD88, MYOD1, NAB2, NBN, NCOA3, NCOR1, NEGRI, NF1, NF2, NFE2L2, NFKBIA, NKX2-1, NKX3-1, NOTCH1, NOTCH2, NOTCH3, NOTCH4, NPM1, NRAS, NRG1, NSD1, NTRK1, NTRK2, NTRK3, NUP93, NUTMI, PAK1, PAK3, PAK5, PALB2, PARP1, PAX3, PAX5, PAX7, PAX8, PBRM1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PDK1, PDPK1, PGR, PHF6, PHOX2B, PIK3C2B, PIK3C2G, PIK3C3, PIK3CA, PIK3CB, PIK3CD, PIK3CG, PIK3R1, PIK3R2, PIK3R3, PIMI, PLCG2, PLK2, PMAIP1, PMS1, PMS2, PNRC1, POLD1, POLE, PPARG, PPMID, PPP2R1A, PPP2R2A, PPP6C, PRDM1, PREX2, PRKARIA, PRKCI, PRKDC, PRKN, PRSS8, PTCH1, PTEN, PTPN11, PTPRD, PTPRS, PTPRT, QKI, RAB35, RAC1, RAD21, RAD50, RAD51, RAD51B, RAD51C, RAD51D, RAD52, RAD54L, RAF1, RANBP2, RARA, RASAI, RBI, RBM10, RECQL4, REL, RET, RHEB, RHOA, RICTOR, RITI, RNF43, ROS1, RPS6KA4, RPS6KB1, RPS6KB2, RPTOR, RUNX1, RUNX1T1, RYBP, SDHA, SDHAF2, SDHB, SDHC, SDHD, SETBP1, SETD2, SF3B1, SH2B3, SH2D1A, SHQ1, SLIT2, SLX4, SMAD2, SMAD3, SMAD4, SMARCA4, SMARCB1, SMARCD1, SMC1A, SMC3, SMO, SNCAIP, SOCS1, SOX10, SOX17, SOX2, SOX9, SPEN, SPOP, SPTA1, SRC, SRSF2, STAG1, STAG2, STAT3, STAT4, STAT5A, STAT5B, STK11, STK40, SUFU, SUZ12, SYK, TAF1, TBX3, TCF3, TCF7L2, TENT5C, TERC, TERT, TET1, TET2, TFE3, TFRC, TGFBRI, TGFBRII, TMEM127, TMPRSS2, TNFAIP3, TNFRSF14, TOP1, TOP2A, TP53, TP63, TRAF2, TRAF7, TSC1, TSC2, TSHR, U2AF1, VEGFA, VHL, VTCN1, WT1, XIAP, XPO1, XRCC2, YAP1, YES1, ZBTB2, ZBTB7A, ZFHX3, ZNF217, ZNF703, ZRSR2</i></p>
<p>RNA Genfusionsanalyse - 56 Gene</p>	<p><i>ABLI, AKT3, ALK, AR, AXL, BCL2, BRAF, BRCA1, BRCA2, CDK4, CSF1R, EGFR, EML4, ERBB2, ERG, ESR1, ETS1, ETV1, ETV4, ETV5, EWSR1, FGFR1, FGFR2, FGFR3, FGFR4, FLII, FLT1, FLT3, JAK2, KDR, KIF5B, KIT, KMT2A, MET, MLLT3, MSH2, MYC, NOTCH1, NOTCH2, NOTCH3, NRG1, NTRK1, NTRK2, NTRK3, PAX3, PAX7, PDGFRA, PDGFRB, PIK3CA, PPARG, RAF1, RET, ROS1, RPS6KB1, TMPRSS2, TP53</i></p>

HRR/ HRD- Panel (DNA)	
DNA Genmutationsanalyse - 15 Gene	<i>ATM, BARD1, BRCA1, BRCA2, BRIP1, CDK12, CHEK1, CHEK2, FANCL, PALB2, PPP2R2A, RAD51B, RAD51C, RAD51D, RAD54L</i>

Mamma- Panel (DNA)	
DNA Genmutationsanalyse - 93 Gene	<i>ACVR1, AKT1, APC, AR, ATM, ATR, AXIN2, BAP1, BARD1, BLM, BMPR1A, BRCA1, BRCA2, BRIP1, CASP8, CFBF, CCND, CDHI, CDK4, CDK6, CDKN2A, CHEK2, CSMD1, CTNBN1, DIRAS3, EGFR, EP300, EPCAM, ERBB2, ERBB3, ERCC4, ESR1, EXOC2, EXT2, FAMI75A, FANCC, FBXO32, FGFR1, FGFR2, GATA3, GEN1, HERC, HOXB13, IRAK4, ITCH, KMT2C, KRAS, MAP2K4, MAP3K1, MDM2, MED12, MEN1, MLH1, MRE11A, MSH2, MSH6, MUC16, MUTYH, MYC, NBN, NCOR1, NEK2, NF1, PALB2, PALLD, PBRM1, PCGF2, PIK3CA, PIK3R1, PMS1, PMS2, PPMIL, PTEN, PTGFR, RAD50, RAD51, RAD51C, RAD51D, RB1, RET, SEPT9, SMAD4, SMARCA4, STK11, SYNE1, TGFBI, TP53, TRAF5, VHL, WEE1, XRCC2, XRCC3, ZBED4</i>

Multigen (CCP)- Panel	
DNA Genmutationsanalyse - 275 Gene	<i>ABL1, ACVR1, AKT1, AKT2, AKT3, ALK, AMER1, APC, AR, ARAF, ARID1A, ARID1B, ARID2, ASXL1, ATM, ATR, ATRX, AURKA, AURKB, AURKC, AXIN1, AXIN2, B2M, BAP1, BCL2, BCL2L1, BCL6, BCOR, BCORL1, BCR, BIRC3, BLM, BRAF, BRCA1, BRCA2, BRIP1, BTK, CALR, CARD11, CBL, CBLB, CBLC, CCND1, CCND3, CCNE1, CD274, CD79A, CD79B, CDC73, CDHI, CDK12, CDK4, CDK6, CDKN2A, CDKN2B, CDKN2C, CEBPA, CHEK1, CHEK2, CIC, CREBBP, CRLF2, CSF1R, CSF3R, CTCF, CTNNA1, CTNBN1, CUX1, CXCR4, CYLD, DAXX, DDR2, DICER1, DNM2, DNMT3A, DOT1, EED, EGFR, EGLN1, EP300, EPAS, EPHA3, EPHA5, ERBB2, ERBB3, ERBB4, ERG, ESR1, ETV6, EXO1, EZH2, FAMI75A, FAM46C, FANCA, FANCC, FANCD2, FANCE, FANCF, FANCG, FAS, FBXW7, FGF4, FGF6, FGFR1, FGFR2, FGFR3, FGFR4, FH, FLCN, FLT3, FLT4, FOXL2, FUBP1, GALNT12, GATA1, GATA2, GATA3, GEN1, GNAI1, GNAQ, GNAS, GREM1, GRIN2A, H3F3A, HGF, HIST1H3B, HNF1A, HOXB13, HRAS, HSP90AA1, ID3, IDH1, IDH2, IGF1R, IKZF1, IKZF3, IL7R, INHBA, IRF4, JAK1, JAK2, JAK3, KAT6A, KDM5C, KDM6A, KDR, KEAP1, KIT, KMT2A, KMT2B, KMT2C, KMT2D, KRAS, LRP1B, MAP2K1, MAP2K2, MAP2K4, MAP3K1, MAP3K14, MAPK1, MCL1, MDM2, MDM4, MED12, MEF2B, MEN1, MET, MTF, MLH1, MPL, MRE11A, MSH2, MSH6, MTOR, MUTYH, MYC, MYCL, MYCN, MYD88, NF1, NF2, NFE2L2, NFKBIA, NKX2-1, NOTCH1, NOTCH2, NOTCH3, NPM1, NRAS, NSD1, NTRK1, NTRK2, NTRK3, PAK3, PALB2, PAX5, PBRM1, PDGFRA, PDGFRB, PHF6, PIK3CA, PIK3R1, PIK3R2, PIMI, PLCG1, PMS1, PMS2, POLD1, POLE, PPMID, PPP2R1A, PRDMI, PRKARIA, PRKDC, PRSSI, PTCH1, PTEN, PTPN11, RAC1, RAD21, RAD50, RAD51, RAF1, RB1, RET, RHEB, RHOA, RIT1, RNF43, ROS1, RUNX1, SDHB, SETBP1, SETD2, SF3B1, SMAD2, SMAD4, SMARCA4, SMARCB1, SMC1A, SMC3, SMO, SOCS1, SOX2, SOX9, SPOP, SRC, SRSF2, STAG2, STAT3, STK11, SUFU, SUZ12, TAL1, TCF3, TERT, TET2, TGFBR2, TNFAIP3, TNFRSF14, TP53, TRAF3, TSC1, TSC2, TSHR, U2AF1, U2AF2, VHL, WHSC1, WT1, XPO1, XRCC2, XRCC3, ZNF217, ZRSR2</i>

Colon- Panel (DNA)	
DNA Genmutationsanalyse - 71 Gene	<i>ACVR1B, AKT1, APC, ATM, ATP6V0D2, AXIN2, BAX, BLM, BMPR1A, BRAF, BRCA1, BRCA2, BUB1B, CASP8, CDC27, CDH1, CDK4, CDKN2A, CHEK2, CTNNA1, CTNNB1, DCC, DMD, EGFR, ENG, EP300, EPCAM, ERBB2, FBXW7, FGFR3, FLCN, FZD3, GALNT12, GPC6, GREM1, KIT, KRAS, MAP2K4, MAP7, MET, MIER3, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, MYO1B, NRAS, PALB2, PIK3CA, PIK3R1, PMS1, PMS2, POLD1, POLE, PTEN, PTPN12, RET, RPS20, SCG5, SLC9A9, SMAD2, SMAD4, SRC, STK11, TCERG1, TCF7L2, TGFB2, TP53, WBSCR17</i>

Actionable – Panel (DNA)	
DNA Genmutationsanalyse - 22 Gene	<p><u>Exons:</u> <i>BRAF, EGFR (ERBB1), KIT (CD117), KRAS, NRAS, PDGFRA.</i></p> <p><u>Hotspots:</u> <i>AKT1, ALK, CTNNB1, ERBB3, ESR1 (ERα), FOXL2, GNA11, GNAQ, IDH1, IDH2, MET, RAF1, RET.</i></p> <p><u>Whole Coding Region:</u> <i>ERBB2 (HER-2, NEU), PIK3CA (p110-alpha), TP53 (p53).</i></p>

ESR1- Panel	
DNA Genmutationsanalyse	<i>ESR1</i>