ONCOLOGY

ClariFind employs next-generation sequencing (NGS) for comprehensive genomic profiling of a patient's tumor sample to identify potential clinically actionable targets and associated therapies.

BAYLOR GENETICS

CLARIFIND™
Comprehensive Somatic Tumor Testing

Provide your cancer patients personalized treatment options with ClariFind

Add clarity to molecular testing with personalized treatment options for cancer patients. Find your answers with ClariFind.

Baylor Genetics believes that the correlation of clinical features with specific drug therapies and clinical trial options, customized to each patient, is crucial in our support of the oncology community. For this reason, our experts developed ClariFind to add clarity to molecular testing with personalized treatment options for cancer patients. ClariFind employs next-generation sequencing (NGS) for comprehensive genomic profiling of a patient's tumor sample to identify potential clinically actionable targets and associated therapies.

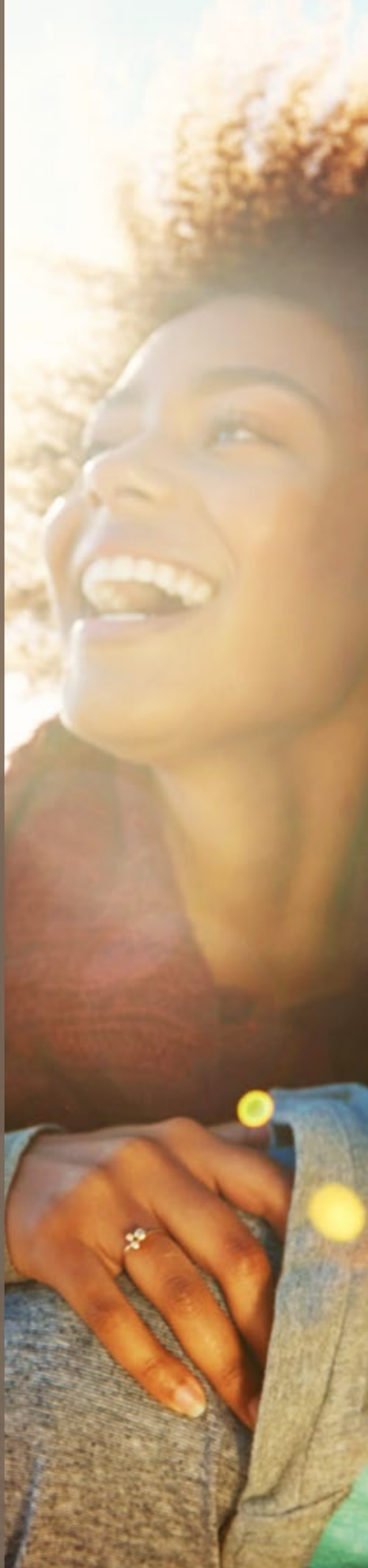
Critical genes for both solid tumor and hematologic malignancies are covered in this single assay.

ClariFind is available for all cancer patients but is strongly recommended for people with metastatic, refractory or recurrent cancers. Concurrent cytogenetics, FISH and chromosomal microarray analysis (CMA) testing can be ordered when appropriate to provide a truly comprehensive tumor profile. Several sample types are accepted for solid tumor and hematologic malignancy testing. Baylor Genetics has the ability to work with small and limited specimens while still providing in-depth results.

METASTATIC CANCER

REFRACTORY CANCER

RECURRENT CANCER



277 KEY CANCER GENES

TEST CODE

20010

TEST DESIGN

ClariFind covers all DNA coding regions (+/- 5-10bp flanking intronic sequences) of 277 key cancer genes for both solid tumors and hematologic malignancies. Through the use of a unique molecular barcoding approach, our assay mitigates PCR duplicates and bias and allows for confident low-level variant detection. Additionally, our chemistry is designed for improved coverage of GC-rich regions in genes such as CEBPA and CCND1.

ALTERATIONS IDENTIFIED

Single nucleotide changes, indels and copy number alterations (reported for 39 genes) are detected.

ANALYSIS AND REPORT

Analysis is performed by a team of in-house board-certified molecular pathologists, curation scientists, and bioinformatics experts. Each ClariFind report provides annotated genomic findings associated targeted therapies and potential clinical trials when available.

For more information on ClariFind, please visit **baylorgenetics.com/ClariFind**.

TURNAROUND TIME

14 CALENDAR DAYS

At Baylor Genetics, we leverage the expertise of leading physicians and scientists in the field of cancer genetics to deliver personalized care.

We are driving cancer genetics by offering innovative tests that deliver clinically actionable results through a combination of advanced technology, deep patient data sets and genetic talent that leads to a more accurate interpretation for your patients. Cancer is not “one size fits all”, which is why we can tailor clinical situations and specimen limitations by also offering a multitude of other clinically-validated molecular approaches.

For more detailed copy number analysis, cytogenetics and translocation detection by FISH, please see additional testing options on the next page.

Additional Cancer Testing Options

CYTOGENETICS / FISH

TEST CODE	TEST NAME
	CLASSICAL CHROMOSOME ANALYSIS
8050	Solid Tumor Chromosome Analysis
8300	Hematologic Cancer Chromosome Analysis
	FISH PANELS
8010	Acute Lymphoblastic Leukemia Panel
8000	Acute Myeloid Leukemia Panel
8040	Chronic Lymphocytic Leukemia Panel
8005	Myelodysplastic Syndromes Panel
8015	Multiple Myeloma Panel
8020	Non-Hodgkin Lymphoma Panel
	SINGLE FISH PROBES
8055	1p/19q Co-deletion
8030	ALK Rearrangement
8725	AML1/ETO(RUNX1/RUNX1T1): t(8;21) [AML]
8775	BCL6 Rearrangement
8750	BCR/ABL: t(9;22) [CML/ALL/AML]
8740	CBFB: inv(16) [AML]
8730	CHIC2: Deleted 4q [Hypereosinophilic Syndrome]
8720	Deletion 20q12 [MDS]
8710	Deletion 5 [MDS]
8715	Deletion 7 [MDS]
8065	DXZ1/DYZ3 FOR SEX MISMATCHED BMT
8035	EGFR
8025	ERBB2 (HER2/neu)
8385	Gain Chromosome 8
8780	IGH Rearrangement
8765	IGH/BCL2: t(14;18) [Follicular Lymphoma]
8770	IGH/CCND1: t(11;14) [Mantle Cell Lymphoma]
8095	MET Amplification
8745	MLL: 11q23
8760	MYC Translocation
8735	PML/RARA: t(15;17) [AML]
8031	RET Rearrangement
8781	ROS1 Rearrangement
8075	SS18 [Synovial Sarcoma]
8080	TCF3/PBX1 [ALL]
8755	TEL/AMLI: t(12;21) [ALL]

For a complete list of targeted molecular tests, please contact a Baylor Genetics representative at 1.800.411.4363 or visit our website at baylorgenetics.com for further details.

HEREDITARY CANCER PANELS

TEST CODE	TEST NAME
22350	BRCA1/BRCA2 Panel
20004	Comprehensive Hereditary Cancer Panel - 61 genes
22304	Hereditary Brain/CNS/PNS Cancer Panel -17 genes
22404	Hereditary Breast/Ovarian/Endometrial Cancer Panel - 23 genes
24000	Hereditary Cancer Panel - 27 genes
22804	Hereditary Colorectal/Gastrointestinal Cancer Panel - 22 genes
22604	Hereditary Endocrine Cancer Panel - 15 genes
22704	Hereditary Leukemia/Lymphoma Panel - 12 genes
22904	Hereditary Melanoma Panel - 4 genes
23304	Hereditary Pancreatic Cancer Panel - 16 genes
23104	Hereditary Paraganglioma/Pheochromocytoma Panel - 9 genes
23404	Hereditary Prostate Cancer Panel - 5 genes
22504	Hereditary Renal Cancer Panel - 12 genes
23000	High Risk Hereditary Breast Cancer Panel - 7 genes
23204	High Risk Hereditary Colorectal Cancer Panel - 12 genes

9505

Cancer Chromosomal Microarray Analysis (180K CGH/SNP Array) is a combined targeted and whole genome array designed by the Cancer Cytogenomics Microarray Consortium. This array contains both oligo probes that detect copy number variations (CNVs) and SNP probes that detect loss of heterozygosity (LOH) and segmental or whole chromosome uniparental isodisomy. This test can be used to detect CNVs and LOH in a variety of **solid tumors** (fresh tissue or FFPE slides / blocks).

9515

Cancer Chromosomal Microarray Analysis (CytoScan HD SNP Array) is a combined targeted and whole genome array designed and produced by Affymetrix. It contains ~1,700,000 oligo probes and 750,000 SNP probes that detect copy number variations (CNVs), loss of heterozygosity (LOH), and segmental or whole chromosome uniparental isodisomy. This test can be used to detect CNVs and LOH in a variety of **hematologic malignancies** (blood or bone marrow).

Specimen Requirements

TYPE	REQUIREMENTS	SHIPPING CONDITIONS
FFPE BLOCK OR FFPE SLIDES	• For **FFPE block** please provide paraffin-embedded, formalin-fixed tissue block containing ≥20% tumor nuclei with a minimum tumor surface area of 5 mm x 5 mm (25 mm^2). • For **FFPE slides** please provide 10-15 unstained 5 µm FFPE slides containing ≥20% tumor nuclei with a minimum tumor surface area of 5 mm x 5 mm (25 mm^2). For smaller specimens, 20 or more unstained 5 µm FFPE slides containing ≥20% tumor nuclei should be submitted. • A surgical pathology report MUST be attached for all tissue samples. • Decalcified specimens are not accepted.	Ship at room temperature in an insulated container by overnight courier. If shipping during the summer months, please include a cold-pack to avoid extreme temperatures. Do not heat or freeze.
FRESH FROZEN TISSUE	• 150 mg fresh tissue snap frozen at ≤-20°C. Store at ≤-20°C. • Please send a corresponding representative H&E slide if available. • A surgical pathology report MUST be attached for all tissue samples. Surgical pathology report may be sent later as soon as it becomes available.	Ship on minimum of 10 lbs. of dry ice in an insulated container by overnight courier.
FRESH TISSUE IN MEDIUM	• 0.5-1 cm^3 or more fresh tissue in a sterile, screw-top container filled with tissue culture transport medium. If tissue culture transport medium is not available, collect in plain RPMI, Hanks solution, or saline. • Please send a corresponding representative H&E slide if available. • A surgical pathology report MUST be attached for all tissue samples. Surgical pathology report may be sent later as soon as it becomes available.	Ship at refrigerated or room temperature in an insulated container by overnight courier. Do not heat or freeze. Specimen should arrive in laboratory within 48 hours of collection.
BLOOD OR BONE MARROW	• 3-5 cc (2 yrs-adult), 2-3 cc (newborn-2 yrs) in EDTA (purple-top) tube (molecular testing) or sodium heparin (green-top) tube (cytogenetics and FISH). • Attach clinical notes and concurrent laboratory reports (such as CBC, flow cytometry results, and pathology reports). • Concurrent laboratory reports may be sent later as soon as they become available.	Ship at room or refrigerated temperature in an insulated container by overnight courier. Do not heat or freeze. Specimen should arrive in laboratory within 24-48 hours of collection.
DNA (EXTRACTED)	• At least 100 ng with minimum concentration of 25 ng/µL • Attach clinical notes, concurrent laboratory reports and or/surgical pathology reports, as applicable. • Please send a corresponding representative H&E slide if available. • Extracted DNA/RNA will only be accepted if the isolation of nucleic acids for clinical testing occurs in a CLIA-certified laboratory or a laboratory meeting equivalent requirements as determined by the CAP and/or the CMS.	Ship at room temperature in an insulated container by overnight courier. May also be shipped frozen on minimum of 10 lbs of dry ice in an insulated container by overnight courier.

Prior to ordering the test, please go to baylorgenetics.com or call the lab at 1.800.411.4363 to discuss the sample requirements.

1.800.411.4363
BAYLORGENETICS.COM

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05.08.18

ClariFind Gene List

BAYLOR GENETICS

CLARIFIND™ DNA PANEL 277 GENES

ABL1[1,2]
ACVR1B[2]
ALK[*1,2]
AMER1
AKT1[2]
AKT2[*2]
AKT3[2]
APC[2]
AR[*2]
ARID1A[2]
ARID1B
ARID2
ASXL1[2]
ATM[*2]
ATR[2]
ATRX[2]
AURKA
AURKB
AURKC
AXIN1[2]
AXIN2
B2M
BAP1[2]
BCL2[2]
BCL2L1 (BCLXL)
BCL6[2]
BCOR
BCORL1
BCR
BIRC3 (C-IAP2)[2]
BLM[2]
BRAF[*1,2]
BRCA1[1,2]
BRCA2[1,2]
BRIP1[2]
BTK[2]
CALR
CARD11
CBL
CBLB
CBLC
CCND1[*2]
CCND3[2]
CCNE1[*2]
CD274 (PD-L1)
CD79A
CD79B
CDC73
CDH1 (E-cadherin)
CDK4[*2]
CDK12[2]
CDK6[*2]
CDKN2A (p16INK4a)[*2]
CDKN2B (p15INK4b)[2]
CDKN2C (p18INK4c)[2]
CEBPA[2]
CHEK1[2]
CHEK2 (RAD53)[2]
CIC
CREBBP (CBP)
CRLF2 (TSLPR)[2]
CSF1R[2]
CSF3R (GM-CSFR)
CTCF
CTNNA1[2]
CTNNB1 (beta-catenin)[2]
CUX1
CXCR4[2]
CYLD[2]
DAXX
DDR1
DDR2[2]
DICER1[2]
DNM2
DNMT3A[2]
DOT1L
EED
EGFR (ERBB1)[*1,2]
EGLN1
EP300
EPAS1
EPHA3
EPHA5
ERBB2 (HER2/neu)[*1,2]
ERBB3[*2]
ERBB4[2]
ERG
ESR1 (ER-alpha)[*1,2]
ETNK1
ETV6[2]
EXO1[2]
EZH2[2]
FAM175A
FAM46C
FANCA[2]
FANCC[2]
FANCD2[2]
FANCE[2]
FANCF[2]
FANCG[2]
FAS (TNFRSF6)
FBXW7[2]
FGF4[2]
FGF6[2]
FGFR1[*2]
FGFR2[*2]
FGFR3[*2]
FGFR4[*2]
FH[2]
FLCN[2]
FLT3[*1,2]
FLT4 (VEGFR2)[2]
FOXL2
FUBP1
GALNT12
GATA1
GATA2
GATA3[2]
GEN1
GNA11[2]
GNAQ[2]
GNAS
GREM1
GRIN2A
H3F3A[2]
HGF
HIST1H3B
HNF1A
HOXB13
HRAS[2]
HSP90AA1
ID3
IDH1[2]
IDH2[1,2]
IGF1R[*]
IKZF1[2]
IKZF3
IL7R[2]
INHBA
IRF4
JAK1[2]
JAK2[*2]
JAK3[2]
KAT6A (MYST3)
KDM5C
KDM6A[2]
KDR (VEGFR3)[2]
KEAP1[2]
KIT (CD117)[*1,2]
KMT2A[2]
KMT2B
KMT2C
KMT2D[2]
KRAS[*1,2]
MAP2K1 (MEK1)[2]
MAP2K2 (MEK2)[2]
MAP2K4 (MKK4, JNKK1)[2]
MAP3K1 (MEKK1)[2]
MAP3K14
MAPK1 (ERK2)[2]
MCL1
MDM2[*2]
MDM4[*2]
MED12[2]
MEF2B
MEN1[2]
MET[*2]
MITF
MLH1[1,2]
MPL
MRE11A
MSH2[1,2]
MSH6[1,2]
MTOR[2]
MUTYH[2]
MYC[*2]
MYCL[*]
MYCN[*2]
MYD88[2]
NF1[*2]
NF2[2]
NFE2L2[2]
NFKBIA (IKB-alpha, MAD3)
NKX2-1
NOTCH1[2]
NOTCH2[2]
NOTCH3[2]
NPM1[2]
NRAS[*1,2]
NSD1[2]
NTRK1 (TRKA)[2]
NTRK2[2]
NTRK3[2]
PAK3
PALB2[2]
PAX5
PBRM1
PDGFRA[*2]
PDGFRB[*2]
PHF6
PIK3CA (p110-alpha)[*2]
PIK3R1 (p85-alpha)[2]
PIK3R2[2]
PIM1
PLCG1
PMS1[2]
PMS2[1,2]
POLD1[2]
POLE[2]
PPM1D
PPP2R1A[2]
PRDM1
PRKAR1A
PRKDC[2]
PRSS1
PTCH1[2]
PTEN[*2]
PTPN11[2]
RAC1
RAD21
RAD50[2]
RAD51[2]
RAF1[2]
RB1[*2]
RET[*2]
RHEB
RHOA
RIT1
RNF43[2]
ROS1[1,2]
RUNX1 (AML1)[2]
SDHB[2]
SETBP1
SETD2 (MADH2)[2]
SF3B1[2]
SMAD2
SMAD4 (MADH4)
SMARCA4[1]
SMARCB1[1]
SMC1A (SMC1L1)
SMC3
SMO[2]
SOCS1
SOX2
SOX9[2]
SPOP
SRC[2]
SRSF2[2]
STAG2[2]
STAT3[2]
STK11 (LKB1)[*2]
SUFU
SUZ12
TAL1
TCF3[2]
TERT (including promoter region)[2]
TET2[2]
TGFBR2
TNFAIP3
TNFRSF14
TP53 (p53)[*2]
TRAF3
TSC1[2]
TSC2[2]
TSHR
U2AF1[2]
U2AF2
VHL[2]
WHSC1
WT1[2]
XPO1[2]
XRCC2
XRCC3
ZNF217
ZRSR2[2]

[*] *Copy number alterations reported*

[1] FDA APPROVED *Alterations in gene associated with targeted FDA-approved drug(s)*

[2] *Alterations in gene associated with investigational drug(s) and/or help meet criteria for clinical trial inclusion*

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BAYLOR GENETICS

CLARIFIND™ DNA PANEL 277 GENES

GENES ASSOCIATED PRIMARILY WITH **SOLID TUMORS** (82 GENES)

ACVR1B[2]
AKT1[2]
AKT2[*2]
AKT3[2]
AR[*2]
ARID1B
ATRX[2]
AURKC
AXIN2
BCL2L1 (BCLXL)
BRCA1[1,2]
BRCA2[1,2]
BRIP1[2]
CBLC
CDH1 (E-cadherin)
CDK12[2]
CDK6[*2]
CHEK2 (RAD53)[2]
CTNNB1 (beta-catenin)[2]
CYLD[2]
DAXX
DDR1
DDR2[2]
DICER1[2]
EGLN1
EPAS1
ERBB3[*2]
ERBB4[2]
ESR1 (ER-alpha)[*1,2]
EXO1[2]
FAM175A
FGFR1[*2]
FGFR2[*2]
FH[2]
FLT4 (VEGFR2)[2]
FOXL2
FUBP1
GALNT12
GEN1
GNAS
GREM1
H3F3A[2]
HIST1H3B
HOXB13
HRAS[2]
KDM5C
KEAP1[2]
MAP2K1 (MEK1)[2]
MAP2K2 (MEK2)[2]
MCL1
MET[*2]
MTOR[2]
NF2[2]
NFE2L2[2]
NOTCH3[2]
NTRK1 (TRKA)[2]
NTRK2[2]
PALB2[2]
PBRM1
PMS2[1,2]
POLD1[2]
POLE[2]
PRSS1
RAC1
RAF1[2]
RET[*2]
RHEB
RIT1
SETD2 (MADH2)[2]
SMAD2
SMAD4 (MADH4)
SMARCA4[1]
SMARCB1[1]
SOCS1
STK11 (LKB1)[*2]
TAL1
TGFBR2
TSC1[2]
TSC2[2]
VHL[2]
XRCC2
XRCC3

GENES ASSOCIATED PRIMARILY WITH **HEMATOLOGIC MALIGNANCIES** (21 GENES)

B2M
BIRC3 (C-IAP2)[2]
CALR
CSF3R (GM-CSFR)
CUX1
CXCR4[2]
EED
ETNK1
ETV6[2]
ID3
IKZF3
MAP3K14
MAPK1 (ERK2)[2]
RHOA
SETBP1
SMC1A (SMC1L1)
SMC3
SRSF2[2]
TRAF3
U2AF2
WHSC1

GENES ASSOCIATED WITH **SOLID TUMORS + HEMATOLOGIC MALIGNANCIES** (174 GENES)

ABL1[1,2]
ALK[*1,2]
AMER1
APC[2]
ARAF[2]
ARID1A[2]
ARID2
ASXL1[2]
ATM[*2]
ATR[2]
AURKA
AURKB
AXIN1[2]
BAP1[2]
BCL2[2]
BCL6[2]
BCOR
BCORL1
BCR
BLM[2]
BRAF[*1,2]
BTK[2]
CARD11
CBL
CBLB
CCND1[*2]
CCND3[2]
CCNE1[*2]
CD274 (PD-L1)
CD79A
CD79B
CDC73
CDK4[*2]
CDKN2A (p16INK4a)[*2]
CDKN2B (p15INK4b)[2]
CDKN2C (p18INK4c)[2]
CEBPA[2]
CHEK1[2]
CIC
CREBBP (CBP)
CRLF2 (TSLPR)[2]
CSF1R[2]
CTCF
CTNNA1[2]
DNM2
DNMT3A[2]
DOT1L
EGFR (ERBB1)[*1,2]
EP300
EPHA3
EPHA5
ERBB2 (HER2/neu)[*1,2]
ERG
EZH2[2]
FAM46C
FANCA[2]
FANCC[2]
FANCD2[2]
FANCE[2]
FANCF[2]
FANCG[2]
FAS (TNFRSF6)
FBXW7[2]
FGF4[2]
FGF6[2]
FGFR3[*2]
FGFR4[*2]
FLCN[2]
FLT3[*1,2]
GATA1
GATA2
GATA3[2]
GNA11[2]
GNAQ[2]
GRIN2A
HGF
HNF1A
HSP90AA1
IDH1[2]
IDH2[1,2]
IGF1R[*]
IKZF1[2]
IL7R[2]
INHBA
IRF4
JAK1[2]
JAK2[*2]
JAK3[2]
KAT6A (MYST3)
KDM6A[2]
KDR (VEGFR3)[2]
KIT (CD117)[*1,2]
KMT2A[2]
KMT2B
KMT2C
KMT2D[2]
KRAS[*1,2]
LRP1B
MAP2K4 (MKK4, JNKK1)[2]
MAP3K1 (MEKK1)[2]
MDM2[*2]
MDM4[*2]
MED12[2]
MEF2B
MEN1[2]
MITF
MLH1[1,2]
MPL
MRE11A
MSH2[1,2]
MSH6[1,2]
MUTYH[2]
MYC[*2]
MYCL[*]
MYCN[*2]
MYD88[2]
NF1[*2]
NFKBIA (IKB-alpha, MAD3)
NKX2-1
NOTCH1[2]
NOTCH2[2]
NPM1[2]
NRAS[*1,2]
NSD1[2]
NTRK3[2]
PAK3
PAX5
PDGFRA[*2]
PDGFRB[*2]
PHF6
PIK3CA (p110-alpha)[*2]
PIK3R1 (p85-alpha)[2]
PIK3R2[2]
PIM1
PLCG1
PMS1[2]
PPM1D
PPP2R1A[2]
PRDM1
PRKAR1A
PRKDC[2]
PTCH1[2]
PTEN[*2]
PTPN11[2]
RAD21
RAD50[2]
RAD51[2]
RB1[*2]
RNF43[2]
ROS1[1,2]
RUNX1 (AML1)[2]
SDHB[2]
SF3B1[2]
SMO[2]
SOX2
SOX9[2]
SPOP
SRC[2]
STAG2[2]
STAT3[2]
SUFU
SUZ12
TCF3[2]
TERT (including promoter region)[2]
TET2[2]
TNFAIP3
TNFRSF14
TP53 (p53)[*2]
TSHR
U2AF1[2]
WT1[2]
XPO1[2]
ZNF217
ZRSR2[2]

[*] *Copy number alterations reported*

[1] FDA APPROVED *Alterations in gene associated with targeted FDA-approved drug(s)*

[2] *Alterations in gene associated with investigational drug(s) and/or help meet criteria for clinical trial inclusion*

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