

The **Prior Authorization** List

BlueCross BlueShield of South Carolina
BlueChoice® HealthPlan
April 1, 2021



Yellow - Codes being removed from PA (does not imply coverage)

Green - Codes being added to PA

Codes Requiring Prior Authorization

| Procedure Code | Description | PA for 4/1/2021 | PA for 11/1/2021 |
|----------------|---|-----------------|------------------|
| 81120 | IDH1 (isocitrate dehydrogenase 1 [NADP+], soluble) (e.g., glioma), common variants (e.g., R132H, R132C) | Yes | Yes |
| 81121 | IDH2 (isocitrate dehydrogenase 2 [NADP+], mitochondrial) (e.g., glioma), common variants (e.g., R140W, R172M) | Yes | Yes |
| 81161 | DMD (dystrophin) (e.g., Duchenne/Becker muscular dystrophy) deletion analysis, and duplication analysis, if performed | Yes | Yes |
| 81162 | BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis and full duplication/deletion analysis (i.e., detection of large gene rearrangements) | Yes | Yes |
| 81163 | BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis (breast cancer 1 and 2) of full sequence | Yes | Yes |
| 81164 | BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full duplication/deletion analysis (i.e., detection of large gene rearrangements) | Yes | Yes |
| 81165 | BRCA1 (BRCA1, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis | Yes | Yes |
| 81166 | BRCA1 (BRCA1, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full duplication/deletion analysis (i.e., detection of large gene rearrangements) | Yes | Yes |
| 81167 | BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full duplication/deletion analysis (i.e., detection of large gene rearrangements) | Yes | Yes |
| 81168 | CCND1/IGH (t(11;14)) (e.g., mantle cell lymphoma) translocation analysis, major breakpoint, qualitative and quantitative, if performed | Yes | Yes |
| 81170 | ABL1 (ABL proto-oncogene 1, non-receptor tyrosine kinase) (e.g., acquired imatinib tyrosine kinase inhibitor resistance), gene analysis, variants in the kinase domain | Yes | Yes |
| 81171 | AFF2 (AF4/FMR2 family, member 2 [FMR2]) (e.g., fragile X mental retardation 2 [FRAXE]) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |

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| 81172 | AFF2 (AF4/FMR2 family, member 2 [FMR2]) (e.g., fragile X mental retardation 2 [FRAXE]) gene analysis; characterization of alleles (e.g., expanded size and methylation status) | Yes | Yes |
| 81173 | AR (androgen receptor) (e.g., spinal, and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation) gene analysis; full gene sequence | Yes | Yes |
| 81175 | ASXL1 (additional sex combs like 1, transcriptional regulator) (e.g., myelodysplastic syndrome, myeloproliferative neoplasms, chronic myelomonocytic leukemia) gene analysis; full gene sequence | Yes | Yes |
| 81176 | ASXL1 (additional sex combs like 1, transcriptional regulator) (e.g., myelodysplastic syndrome, myeloproliferative neoplasms, chronic myelomonocytic leukemia) gene analysis; targeted sequence analysis (e.g., exon 12) | Yes | Yes |
| 81177 | ATN1 (atrophin 1) (e.g., dentatorubral-pallidoluysian atrophy) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81178 | ATXN1 (ataxin 1) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81179 | ATXN2 (ataxin 2) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) allele | Yes | Yes |
| 81180 | ATXN3 (ataxin 3) (e.g., spinocerebellar ataxia, Machado-Joseph disease) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81181 | ATXN7 (ataxin 7) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81182 | ATXN8OS (ATXN8 opposite strand [non-protein coding]) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81183 | ATXN10 (ataxin 10) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81184 | CACNA1A (calcium voltage-gated channel subunit alpha1 A) (e.g., spinocerebellar ataxia) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81185 | CACNA1A (calcium voltage-gated channel subunit alpha1 A) (e.g., spinocerebellar ataxia) gene analysis; full gene sequence | Yes | Yes |
| 81187 | CNBP (CCHC-type zinc finger nucleic acid binding protein) (e.g., myotonic dystrophy type 2) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |

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| 81188 | CSTB (cystatin B) (e.g., Unverricht-Lundborg disease) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81189 | CSTB (cystatin B) (e.g., Unverricht-Lundborg disease) gene analysis; full gene sequence | Yes | Yes |
| 81191 | NTRK1 (neurotrophic receptor tyrosine kinase 1) (e.g., solid tumors) translocation analysis | Yes | Yes |
| 81192 | NTRK2 (neurotrophic receptor tyrosine kinase 2) (e.g., solid tumors) translocation analysis | Yes | Yes |
| 81193 | NTRK3 (neurotrophic receptor tyrosine kinase 3) (e.g., solid tumors) translocation analysis | Yes | Yes |
| 81194 | NTRK (neurotrophic-tropomyosin receptor tyrosine kinase 1, 2, and 3) (e.g., solid tumors) translocation analysis | Yes | Yes |
| 81200 | ASPA (aspartoacylase) (e.g., Canavan disease) gene analysis, common variants (e.g., E285A, Y231X) (ASPA genetic analysis, CANW, or Canavan disease mutation analysis) | Yes | Yes |
| 81201 | APC (adenomatous polyposis coli) (e.g., familial adenomatous polyposis [FAP], attenuated FAP) gene analysis; full gene sequence | Yes | Yes |
| 81202 | APC (adenomatous polyposis coli) (e.g., familial adenomatous polyposis [FAP], attenuated FAP) gene analysis; known familial variants | Yes | Yes |
| 81203 | APC (adenomatous polyposis coli) (e.g., familial adenomatous polyposis [FAP], attenuated FAP) gene analysis; duplication/deletion variants | Yes | Yes |
| 81204 | AR (androgen receptor) (e.g., spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation) gene analysis; characterization of alleles (e.g., expanded size or methylation status) | Yes | Yes |
| 81205 | BCKDHB (branched-chain keto acid dehydrogenase E1, beta polypeptide) (e.g., Maple syrup urine disease) gene analysis, common variants (e.g., R183P, G278S, E422X) | Yes | Yes |

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| 81206 | BCR/ABL1 (t(9;22)) (e.g., chronic myelogenous leukemia) translocation analysis; major breakpoint, qualitative or quantitative | Yes | Yes |
| 81207 | BCR/ABL1 (t(9;22)) (e.g., chronic myelogenous leukemia) translocation analysis; minor breakpoint qualitative or quantitative | Yes | Yes |
| 81208 | BCR/ABL1 (t(9;22)) (e.g., chronic myelogenous leukemia) translocation analysis; other breakpoint, qualitative or quantitative | Yes | Yes |
| 81209 | BLM (Bloom Syndrome, RecQ helicase-like) (e.g., Bloom Syndrome) gene analysis, 2281del6ins7 variant | Yes | Yes |
| 81210 | BRAF (B-Raf proto-oncogene, serine/threonine kinase) (e.g., colon cancer, melanoma), gene analysis, V600 variants | Yes | Yes |
| 81212 | BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; 185delAG, 5385insC, 6174delT variants | Yes | Yes |
| 81215 | BRCA1 (BRCA1, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; known familial variant | Yes | Yes |
| 81216 | BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis | Yes | Yes |
| 81217 | BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; known familial variant | Yes | Yes |
| 81218 | CEBPA (CCAAT/enhancer binding protein [C/EBP], alpha) (e.g., acute myeloid leukemia), gene analysis, full gene sequence | Yes | Yes |
| 81219 | CALR (calreticulin) (e.g., myeloproliferative disorders), gene analysis, common variants in exon 9 | Yes | Yes |
| 81220 | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; common variants (e.g., ACMG/ACOG guidelines) | Yes | Yes |

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| 81221 | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; known familial variants | Yes | Yes |
| 81222 | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; duplication/deletion variants | Yes | Yes |
| 81223 | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; full gene sequence | Yes | Yes |
| 81224 | CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; intron 8 poly-T analysis (e.g., male infertility) | Yes | Yes |
| 81225 | Cyp2C19 (cytochrome p450, family 2, subfamily c, polypeptide 19) (e.g., drug metabolism), gene analysis, common variants (e.g., *2, *3, *4, *8, *17) | Yes | Yes |
| 81226 | CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) (e.g., drug metabolism), gene analysis, common variants (e.g., *2, *3, *4, *5, *6, *9, *10, *17, *19, *29, *35, *41, *1XN, *2XN, *4XN) | Yes | Yes |
| 81227 | CYP2C9 (cytochrome P450, family 2, subfamily C, polypeptide 9) (e.g., drug metabolism), gene analysis, common variants (e.g., *2, *3, *5, *6) | Yes | Yes |
| 81228 | Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number variants (e.g., bacterial artificial chromosome [BAC] or oligo-based comparative genomic hybridization [CGH] microarray analysis | Yes | Yes |
| 81229 | Cytogenomic constitutional (genome-wide) microarray analysis; Interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities | Yes | Yes |
| 81231 | CYP3A5 (cytochrome P450 family 3 subfamily A member 5) (e.g., drug metabolism), gene analysis, common variants (e.g., *2, *3, *4, *5, *6, *7) | Yes | Yes |

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| 81232 | DPYD (dihydropyrimidine dehydrogenase) (e.g., 5-fluorouracil/5-FU and capecitabine drug metabolism), gene analysis, common variant(s) (e.g., *2A, *4, *5, *6) | Yes | Yes |
| 81233 | BTK (Bruton's tyrosine kinase) (e.g., chronic lymphocytic leukemia) gene analysis, common variants (e.g., C481S, C481R, C481F) | Yes | Yes |
| 81234 | DMPK (DM1 protein kinase) (e.g., myotonic dystrophy type 1) gene analysis; evaluation to detect abnormal (expanded) alleles | Yes | Yes |
| 81235 | EGFR (epidermal growth factor receptor) (e.g., non-small cell lung cancer) gene analysis, common variants (e.g. exon 19 LREA deletion, L858R, T790M, G719A, G719S, L861Q) | Yes | Yes |
| 81236 | EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (e.g., myelodysplastic syndrome, myeloproliferative neoplasms) gene analysis, full gene sequence | Yes | Yes |
| 81237 | EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (e.g., diffuse large B-cell lymphoma) gene analysis, common variant(s) (e.g., codon 646) | Yes | Yes |
| 81238 | F9 (coagulation factor IX) (e.g. hemophilia B) full gene sequence | Yes | Yes |
| 81239 | DMPK (DM1 protein kinase) (e.g., myotonic dystrophy type 1) gene analysis; characterization of alleles (e.g., expanded size) | Yes | Yes |
| 81240 | F2 (prothrombin, coagulation factor II) (e.g., hereditary hypercoagulability) gene analysis, 20210G>A variant | Yes | Yes |
| 81241 | F5 (coagulation factor V) (e.g., hereditary hypercoagulability) gene analysis, Leiden variant. | Yes | Yes |
| 81242 | FANCC (Fanconi Anemia, complementation group C) (e.g., Fanconi Anemia, type C) gene analysis, common variant (e.g., IVS4+4A>T) | Yes | Yes |
| 81243 | FMR1 (fragile X mental retardation 1) (e.g., fragile X mental retardation) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |

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| 81244 | FMR1 (fragile X mental retardation 1) (e.g., fragile X mental retardation) gene analysis; characterization of alleles (e.g., expanded size and promoter methylation status) | Yes | Yes |
| 81245 | FLT3 (fms-related tyrosine kinase 3) (e.g., acute myeloid leukemia), gene analysis; internal tandem duplication (ITD) variants (i.e., exons 14, 15) | Yes | Yes |
| 81246 | FLT3 (fms-related tyrosine kinase 3) (e.g., acute myeloid leukemia), gene analysis; tyrosine kinase domain (TKD) variants (e.g., D835, I836) | Yes | Yes |
| 81247 | G6PD (glucose-6-phosphate dehydrogenase) (e.g., hemolytic anemia, jaundice) gene analysis; common variant(s) (e.g., A, A) | Yes | Yes |
| 81249 | G6PD (glucose-6-phosphate dehydrogenase) (e.g., hemolytic anemia, jaundice) gene analysis; full gene sequence | Yes | Yes |
| 81250 | G6PD (glucose-6-phosphatase, catalytic subunit) (e.g., Glycogen storage disease, Type 1a, Von Gierke disease) gene analysis, common variants (e.g., R83C, Q347X) | Yes | Yes |
| 81251 | GBA (glucosidase, beta, acid) (e.g., Gaucher disease) gene analysis, common variants (e.g., N370S, 84GG, L444P, IVS2+1G>A) | Yes | Yes |
| 81252 | GJB2 (gap junction protein, beta 2, 26kDa, connexin 26) (e.g., nonsyndromic hearing loss) gene analysis; full gene sequence | Yes | Yes |
| 81254 | GJB6 (gap junction protein, beta 6, 30kDa, connexin 30) (e.g., nonsyndromic hearing loss) gene analysis, common variants (e.g., 309kb [del(GJB6-D13S1830)] and 232 kb [del(GJB6-D13S1854)]) | Yes | Yes |
| 81255 | HEXA (hexosaminidase A [alpha polypeptide]) (e.g., Tay-Sachs disease) gene analysis, common variants (e.g., 1278insTATC, 1421+1G>C, G269S) | Yes | Yes |
| 81256 | HFE (hemochromatosis) (e.g., hereditary hemochromatosis) gene analysis, common variants (e.g., C282Y, H63D) | Yes | Yes |

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| 81257 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (e.g., alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease) gene analysis, for common deletions or variant (e.g., Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2 alpha20.5, Constant Spring) | Yes | Yes |
| 81259 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (e.g., alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis; full gene sequence | Yes | Yes |
| 81260 | IKBKAP (inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein) (e.g., familial dysautonomia) gene analysis, common variants (e.g., 2507+6T>C, R696P) | Yes | Yes |
| 81265 | Comparative analysis using Short Tandem Repeat (STR) makers; patient and comparative specimen (e.g., pre-transplant recipient and donor germline testing, post-transplant non-hematopoietic recipient germline [e.g., buccal swab or other germline tissue sample] and donor testing, twin zygosity testing, or maternal cell contamination of fetal cells) | Yes | Yes |
| 81266 | Comparative analysis using Short Tandem Repeat (STR) markers; each additional specimen) e.g., additional cord blood donor, additional fetal samples from different cultures, or additional zygosity in multiple birth pregnancies) | Yes | Yes |
| 81269 | HBA1/HBA2 (alpha globin 1 and alpha globin 2) (e.g., alpha thalassemia, Hb Bart hydrops fetalis syndrome, HbH disease), gene analysis; duplication/deletion variants | Yes | Yes |
| 81270 | JAK2 (Janus kinase 2) (e.g., myeloproliferative disorder) gene analysis, p.Val617Phe (V617F) variant | Yes | Yes |
| 81271 | HTT (huntingtin) (e.g., Huntington disease) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |

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| 81272 | KIT (v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog) (e.g., gastrointestinal stromal tumor [GIST], acute myeloid leukemia, melanoma), gene analysis, targeted sequence analysis (e.g., exons 8, 11, 13, 17, 18) | Yes | Yes |
| 81273 | KIT (v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog) (e.g., mastocytosis), gene analysis, D816 variant(s) | Yes | Yes |
| 81274 | HTT (huntingtin) (e.g., Huntington disease) gene analysis; characterization of alleles (e.g., expanded size) | Yes | Yes |
| 81275 | KRAS (Kirsten rat sarcoma viral oncogene homolog) (e.g. carcinoma) gene analysis, variants in exon, (e.g., codons 12 and 13) | Yes | Yes |
| 81276 | KRAS (Kirsten rat sarcoma viral oncogene homolog) (e.g., carcinoma) gene analysis; additional variant(s) (e.g., codon 61, codon 146) | Yes | Yes |
| 81277 | Cytogenomic neoplasia (genome-wide) microarray analysis, interrogation of genomic regions for copy number and loss-of-heterozygosity variants for chromosomal abnormalities | Yes | Yes |
| 81278 | IGH@/BCL2 (t(14;18)) (e.g., follicular lymphoma) translocation analysis, major breakpoint region (MBR) and minor cluster region (mcr) breakpoints, qualitative or quantitative | Yes | Yes |
| 81279 | JAK2 (Janus kinase 2) (e.g., myeloproliferative disorder) targeted sequence analysis (e.g., exons 12 and 13) | Yes | Yes |
| 81283 | IFNL3 (interferon, lambda 3) (e.g., drug response), gene analysis, rs12979860 variant | Yes | Yes |
| 81284 | FXN (frataxin) (e.g., Friedreich ataxia) gene analysis; evaluation to detect abnormal (expanded) alleles | Yes | Yes |
| 81285 | FXN (frataxin) (e.g., Friedreich ataxia) gene analysis; characterization of alleles (e.g., expanded size) | Yes | Yes |
| 81286 | FXN (frataxin) (e.g., Friedreich ataxia) gene analysis; full gene sequence | Yes | Yes |

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| 81287 | MGMT (O-6-methylguanine-DNA methyltransferase) (e.g., glioblastoma multiforme), methylation analysis | Yes | Yes |
| 81288 | MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; promoter methylation analysis | Yes | Yes |
| 81290 | MCOLN1 (mucolipin 1) (e.g., Mucopolipidosis, type IV) gene analysis, common variants (e.g., IVS3-2A>G, del6, 4kb) | Yes | Yes |
| 81292 | MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81293 | MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants | Yes | Yes |
| 81294 | MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants | Yes | Yes |
| 81295 | MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81296 | MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants | Yes | Yes |
| 81297 | MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants | Yes | Yes |

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| 81298 | MSH6 (mutS homolog 6 [E. Coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81299 | MSH6 (mutS homolog 6 [E. coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants | Yes | Yes |
| 81300 | MSH6 (mutS homolog 6 [E. coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants | Yes | Yes |
| 81301 | Microsatellite instability analysis (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (e.g., BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed | Yes | Yes |
| 81302 | MECP2 (methyl CpG binding protein 2) (e.g., Rett syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81303 | MECP2 (methyl CpG binding protein 2) (e.g., Rett syndrome) gene analysis; known familial variant | Yes | Yes |
| 81304 | Mecp2 (methyl cpg binding protein 2) (e.g., Rett syndrome) gene analysis; duplication/deletion variants | Yes | Yes |
| 81305 | MYD88 (myeloid differentiation primary response 88) (e.g., Waldenstrom's macroglobulinemia, lymphoplasmacytic leukemia) gene analysis, p.Leu265Pro (L265P) variant | Yes | Yes |
| 81306 | NUDT15 (nudix hydrolase 15) (e.g., drug metabolism) gene analysis, common variant(s) (e.g., *2, *3, *4, *5, *6) | Yes | Yes |
| 81307 | PALB2 (partner and localizer of BRCA2) (e.g., breast and pancreatic cancer) gene analysis; full gene sequence | Yes | Yes |
| 81308 | PALB2 (partner and localizer of BRCA2) (e.g., breast and pancreatic cancer) gene analysis; known familial variant | Yes | Yes |

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| 81309 | PIK3CA (phosphatidylinositol-4, 5-biphosphate 3-kinase, catalytic subunit alpha) (e.g., colorectal and breast cancer) gene analysis, targeted sequence analysis (e.g., exons 7, 9, 20) | Yes | Yes |
| 81310 | NPM1 (nucleophosmin) (e.g., acute myeloid leukemia) gene analysis, exon 12 variants | Yes | Yes |
| 81311 | NRAS (neuroblastoma RAS viral [v-ras] oncogene homolog) (e.g., colorectal carcinoma), gene analysis, variants in exon 2 (e.g., codons 12 and 13) and exon 3 (e.g., codon 61) | Yes | Yes |
| 81312 | PABPN1 (poly[A] binding protein nuclear 1) (e.g., oculopharyngeal muscular dystrophy) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81314 | PDGFRA (platelet-derived growth factor receptor, alpha polypeptide) (e.g., gastrointestinal stromal tumor [GIST]), gene analysis, targeted sequence analysis (e.g., exons 12, 18) | Yes | Yes |
| 81315 | PML/RARalpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor alpha) (e.g., promyelocytic leukemia) translocation analysis; common breakpoints (e.g., intron 3 and intron 6), qualitative or quantitative | Yes | Yes |
| 81316 | PML/RARalpha, (t(15;17)), (promyelocytic leukemia/retinoic acid receptor alpha) (e.g., promyelocytic leukemia) translocation analysis; single breakpoint (e.g., intron 3, intron 6 or exon 6), qualitative or quantitative | Yes | Yes |
| 81317 | PMS2 (postmeiotic segregation increased 2 [<i>S. cerevisiae</i>]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81318 | PMS2 (postmeiotic segregation increased 2 [<i>S. cerevisiae</i>]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants | Yes | Yes |

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| 81319 | PMS2 (postmeiotic segregation increased 2 [<i>S. cerevisiae</i>]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants | Yes | Yes |
| 81320 | PLCG2 (phospholipase C gamma 2) (e.g., chronic lymphocytic leukemia) gene analysis, common variants (e.g., R665W, S707F, L845F) | Yes | Yes |
| 81321 | PTEN (phosphatase and tensin homolog) (e.g., Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; full sequence analysis | Yes | Yes |
| 81322 | PTEN (phosphatase and tensin homolog) (e.g., Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; known familial variant | Yes | Yes |
| 81323 | PTEN (phosphatase and tensin homolog) (e.g., Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; duplication/deletion variant | Yes | Yes |
| 81324 | PMP22 (peripheral myelin protein 22) (e.g., Charcot-Marie-Tooth, hereditary neuropathy with liability to pressure palsies) gene analysis; duplication/deletion analysis | Yes | Yes |
| 81325 | PMP22 (peripheral myelin protein 22) (e.g., Charcot-Marie-Tooth, hereditary neuropathy with liability to pressure palsies) gene analysis; full sequence analysis | Yes | Yes |
| 81326 | PMP22 (peripheral myelin protein 22) (e.g., Charcot-Marie-Tooth, hereditary neuropathy with liability to pressure palsies) gene analysis; known familial variant | Yes | Yes |
| 81328 | SLCO1B1 (solute carrier organic anion transporter family, member 1B1) (e.g., adverse drug reaction) gene analysis, common variant(s) (e.g., *5) | Yes | Yes |
| 81329 | SMN1 (survival of motor neuron 1, telomeric) (e.g., spinal muscular atrophy) gene analysis; dosage/deletion analysis (e.g., carrier testing), includes SMN2 (survival of motor neuron 2, centromeric) analysis, if performed | Yes | Yes |

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| 81330 | SMPD1 (sphingomyelin phosphodiesterase 1, acid lysosomal) (e.g., Niemann-Pick disease, Type A) gene analysis, common variants (e.g., R496L, L302P, fsP330) | Yes | Yes |
| 81331 | SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (e.g., Prader-Willi syndrome and/or Angelman syndrome), methylation analysis | Yes | Yes |
| 81333 | TGFBI (transforming growth factor beta-induced) (e.g., corneal dystrophy) gene analysis, common variants (e.g., R124H, R124C, R124L, R555W, R555Q) | Yes | Yes |
| 81334 | RUNX1 (runt related transcription factor 1) (e.g., acute myeloid leukemia, familial platelet disorder with associated myeloid malignancy) gene analysis, targeted sequence analysis (e.g., exons 3-8) | Yes | Yes |
| 81335 | TPMT (thiopurine S-methyltransferase) (e.g., drug metabolism) gene analysis, common variants (e.g., *2, *3) | Yes | Yes |
| 81336 | SMN1 (survival of motor neuron 1, telomeric) (e.g., spinal muscular atrophy) gene analysis; full gene sequence | Yes | Yes |
| 81338 | MPL (MPL proto-oncogene, thrombopoietin receptor) (e.g., myeloproliferative disorder) gene analysis; common variants (e.g., W515A, W515K, W515L, W515R) | Yes | Yes |
| 81339 | MPL (MPL proto-oncogene, thrombopoietin receptor) (e.g., myeloproliferative disorder) gene analysis; sequence analysis, exon 10 | Yes | Yes |
| 81343 | PPP2R2B (protein phosphatase 2 regulatory subunit Bbeta) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81344 | TBP (TATA box binding protein) (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles | Yes | Yes |
| 81345 | TERT (telomerase reverse transcriptase) (e.g., thyroid carcinoma, glioblastoma multiforme) gene analysis, targeted sequence analysis (e.g., promoter region) | Yes | Yes |

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| 81346 | TYMS (thymidylate synthetase) (e.g., 5-fluorouracil/5-FU drug metabolism), gene analysis, common variant(s) (e.g., tandem repeat variant) | Yes | Yes |
| 81347 | SF3B1 (splicing factor [3b] subunit B1) (e.g., myelodysplastic syndrome/acute myeloid leukemia) gene analysis, common variants (e.g., A672T, E622D, L833F, R625C, R625L) | Yes | Yes |
| 81348 | SRSF2 (serine and arginine-rich splicing factor 2) (e.g., myelodysplastic syndrome, acute myeloid leukemia) gene analysis, common variants (e.g., P95H, P95L) | Yes | Yes |
| 81350 | UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (e.g., drug metabolism, hereditary unconjugated hyperbilirubinemia [Gilbert syndrome]) gene analysis, common variants (e.g., *28, *36, *37) | Yes | Yes |
| 81351 | TP53 (tumor protein 53) (e.g., Li-Fraumeni syndrome) gene analysis; full gene sequence | Yes | Yes |
| 81352 | TP53 (tumor protein 53) (e.g., Li-Fraumeni syndrome) gene analysis; targeted sequence analysis (e.g., 4 oncology) | Yes | Yes |
| 81355 | VKORC1 (vitamin K epoxide reductase complex, subunit 1) (e.g., warfarin metabolism), gene analysis, common variant(s) (e.g., -1639G>A, c.173+1000C>T) | Yes | Yes |
| 81357 | U2AF1 (U2 small nuclear RNA auxiliary factor 1) (e.g., myelodysplastic syndrome, acute myeloid leukemia) gene analysis, common variants (e.g., S34F, S34Y, Q157R, Q157P) | Yes | Yes |
| 81360 | ZRSR2 (zinc finger CCCH-type, RNA binding motif and serine/arginine-rich 2) (e.g., myelodysplastic syndrome, acute myeloid leukemia) gene analysis, common variant(s) (e.g., E65fs, E122fs, R448fs) | Yes | Yes |
| 81361 | HBB (hemoglobin, subunit beta) (e.g., sickle cell anemia, beta thalassemia, hemoglobinopathy); common variant(s) (e.g., HbS, HbC, HbE) | Yes | Yes |

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| 81363 | HBB (hemoglobin, subunit beta) (e.g., sickle cell anemia, beta thalassemia, hemoglobinopathy); duplication/deletions variant(s) | Yes | Yes |
| 81364 | HBB (hemoglobin, subunit beta) (e.g., sickle cell anemia, beta thalassemia, hemoglobinopathy); full gene sequence | Yes | Yes |
| 81381 | HLA Class I typing, high resolution (i.e., alleles or allele groups); one allele or allele group (e.g., B*57:01P), each | Yes | Yes |
| 81400 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 1--These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81401 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 2-- These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81402 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 3-- These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |

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| 81403 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 4--These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81404 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 5-- These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81405 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 6-- These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81406 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 7-- These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |

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| 81407 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 8--These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81408 | MOLECULAR PATHOLOGY PROCEDURE LEVEL 9--These tests are used to analyze nucleic acid for abnormalities that may be indicative of a variety of disorders. Cell lysis, nucleic acid stabilization, extraction, digestion, amplification, and detection are included in the molecular pathology procedure codes. Any procedures prior to cell lysis may be reported separately. Code selection is dependent upon the gene and the specific mutation examined | Yes | Yes |
| 81410 | Aortic dysfunction or dilation (e.g., Marfan syndrome, Loeys Dietz syndrome, Ehler Danlos syndrome type IV, arterial tortuosity syndrome); genomic sequence analysis panel, must include sequencing of at least 9 genes, including FBN1, TGFBR1, TGFBR2, COL3A1, MYH11, ACTA2, SLC2A10, SMAD3, and MYLK | Yes | Yes |
| 81411 | Aortic dysfunction or dilation (e.g., Marfan syndrome, Loeys Dietz syndrome, Ehler Danlos syndrome type IV, arterial tortuosity syndrome); duplication/deletion analysis panel, must include analyses for TGFBR1, TGFBR2, MYH11, and COL3A1 | Yes | Yes |
| 81412 | Ashkenazi Jewish associated disorders (e.g., Bloom syndrome, Canavan disease, cystic fibrosis, familial dysautonomia, Fanconi anemia group C, Gaucher disease, Tay-Sachs disease), genomic sequence analysis panel, must include sequencing of at least 9 genes, including ASPA, BLM, CFTR, FANCC, GBA, HEXA, IKBKAP, MCOLN1, and SMPD1 | Yes | Yes |

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| 81413 | Cardiac ion channelopathies (e.g., Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia); genomic sequence analysis panel, must include at least 10 genes including ANK2, CASQ2, CAV3, KCNE1, KCNE2,, KCNH2, KCNJ2, KCNQ1, RYR2 AND SCN5A | Yes | Yes |
| 81414 | Cardiac ion channelopathies (e.g., Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia); duplication/deletion gene analysis panel must include at least 2 genes, to include KCNH2 and KCNQ1 | Yes | Yes |
| 81415 | Exome (e.g., unexplained constitutional or heritable disorder or syndrome); sequence analysis | Yes | Yes |
| 81416 | Exome (e.g., unexplained constitutional or heritable disorder or syndrome); sequence analysis, each comparator exome (e.g., parents, siblings) (List separately in addition to code for primary procedure) | Yes | Yes |
| 81417 | Exome (e.g., unexplained constitutional or heritable disorder or syndrome); re-evaluation of previously obtained exome sequence (e.g., updated knowledge or unrelated condition/syndrome) | Yes | Yes |
| 81419 | Epilepsy genomic sequence analysis panel, must include analyses for ALDH7A1, CACNA1A, CDKL5, CHD2, GABRG2, GRIN2A, KCNQ2, MECP2, PCDH19, POLG, PRRT2, SCN1A, SCN1B, SCN2A, SCN8A, SLC2A1, SLC9A6, STXBP1, SYNGAP1, TCF4, TPP1, TSC1, TSC2, and ZEB2 | Yes | Yes |
| 81420 | Fetal chromosomal aneuploidy (e.g., trisomy 21, monosomy X) genomic sequence analysis panel, circulating cell-free fetal DNA in maternal blood, must include analysis of chromosomes 13, 18, and 21 | Yes | Yes |

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| 81430 | Hearing loss (e.g., nonsyndromic hearing loss, Usher syndrome, Pendred syndrome); genomic sequence analysis panel, must include sequencing of at least 60 genes, including CDH23, CLRN1, GJB2, GPR98, MTRNR1, MYO7A, MYO15A, PCDH15, OTOF, SLC26A4, TMC1, TMPRSS3, USH1C, USH1G, USH2A, and WFS1 | Yes | Yes |
| 81431 | Hearing loss (e.g., nonsyndromic hearing loss, Usher syndrome, Pendred syndrome); duplication/deletion analysis panel, must include copy number analyses for STRC and DFNB1 deletions in GJB2 and GJB6 genes | Yes | Yes |
| 81432 | Hereditary breast cancer-related disorders (e.g., hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer); genomic sequence analysis panel, must include sequencing of at least 10 genes, including BRCA1, BRCA2, CDH1, MLH1, MSH2, MSH6, PALB2, PTEN, STK11, and TP53 | Yes | Yes |
| 81433 | Hereditary breast cancer-related disorders (e.g., hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer); duplication/deletion analysis panel, must include analyses for BRCA1, BRCA2, MLH1, MSH2, and STK11 | Yes | Yes |
| 81434 | Hereditary retinal disorders (e.g., retinitis pigmentosa, Leber congenital amaurosis, cone-rod dystrophy), genomic sequence analysis panel, must include sequencing of at least 15 genes, including ABCA4, CNGA1, CRB1, EYS, PDE6A, PDE6B, PRPF31, PRPH2, RDH12, RHO, RP1, RP2, RPE65, RPGR, and USH2A | Yes | Yes |
| 81435 | Hereditary colon cancer disorders (e.g., Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatous polyposis); genomic sequence analysis panel, must include sequencing of at least 10 genes, including APC, BMPR1A, CDH1, MLH1, MSH2, MSH6, MUTYH, PTEN, SMAD4, and STK11 | Yes | Yes |

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| 81436 | Hereditary colon cancer disorders (e.g., Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatous polyposis); duplication/deletion analysis panel, must include analysis of at least 5 genes, including MLH1, MSH2, EPCAM, SMAD4, and STK11 | Yes | Yes |
| 81437 | Hereditary neuroendocrine tumor disorders (e.g., medullary thyroid carcinoma, parathyroid carcinoma, malignant pheochromocytoma or paraganglioma); genomic sequence analysis panel, must include sequencing of at least 6 genes, including MAX, SDHB, SDHC, SDHD, TMEM127, and VHL | Yes | Yes |
| 81438 | Hereditary neuroendocrine tumor disorders (e.g., medullary thyroid carcinoma, parathyroid carcinoma, malignant pheochromocytoma or paraganglioma); duplication/deletion analysis panel, must include analyses for SDHB, SDHC, SDHD, and VHL | Yes | Yes |
| 81439 | Hereditary cardiomyopathy (e.g., hypertrophic cardiomyopathy, dilated cardiomyopathy, arrhythmogenic right ventricular cardiomyopathy) genomic sequence analysis panel, must include sequencing of at least 5 genes, (e.g. DSG2, MYBPC3, MYH7, PKP2 and TTN | Yes | Yes |
| 81442 | Noonan spectrum disorders (e.g., Noonan syndrome, cardio-facio-cutaneous syndrome, Costello syndrome, LEOPARD syndrome, Noonan-like syndrome), genomic sequence analysis panel, must include sequencing of at least 12 genes, including BRAF, CBL, HRAS, KRAS, MAP2K1, MAP2K2, NRAS, PTPN11, RAF1, RIT1, SHOC2, and SOS1 | Yes | Yes |

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| 81443 | Genetic testing for severe inherited conditions (e.g., cystic fibrosis, Ashkenazi Jewish-associated disorders [e.g., Bloom syndrome, Canavan disease, Fanconi anemia type C, mucopolidosis type VI, Gaucher disease, Tay-Sachs disease], beta hemoglobinopathies, phenylketonuria, galactosemia), genomic sequence analysis panel, must include sequencing of at least 15 genes (e.g., ACADM, ARSA, ASPA, ATP7B, BCKDHA, BCKDHB, BLM, CFTR, DHCR7, FANCC, G6PC, GAA, GALT, GBA, GBE1, HBB, HEXA, IKBKAP, MCOLN1, PAH) | Yes | Yes |
| 81445 | Targeted genomic sequence analysis panel, solid organ neoplasm, DNA analysis, and RNA analysis when performed, 5-50 genes (e.g., ALK, BRAF, CDKN2A, EGFR, ERBB2, KIT, KRAS, NRAS, MET, PDGFRA, PDGFRB, PGR, PIK3CA, PTEN, RET), interrogation for sequence variants and copy number variants or rearrangements, if performed | Yes | Yes |
| 81448 | Hereditary peripheral neuropathies panel (e.g., Charcot-Marie-Tooth, spastic paraplegia), genomic sequence analysis panel, must include sequencing of at least 5 peripheral neuropathy-related genes (e.g., BSCL2, GJB1, MFN2, MPZ, REEP1, SPAST, SPG11, and SPTLC1) | Yes | Yes |
| 81450 | Targeted genomic sequence analysis panel, hematolymphoid neoplasm or disorder, DNA analysis, and RNA analysis when performed, 5-50 genes (e.g., BRAF, CEBPA, DNMT3A, EZH2, FLT3, IDH1, IDH2, JAK2, KRAS, KIT, MLL, NRAS, NPM1, NOTCH1), interrogation for sequence variants, and copy number variants or rearrangements, or isoform expression or mRNA expression levels, if performed | Yes | Yes |

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| 81455 | Targeted genomic sequence analysis panel, solid organ or hematolymphoid neoplasm, DNA analysis, and RNA analysis when performed, 51 or greater genes (e.g., ALK, BRAF, CDKN2A, CEBPA, DNMT3A, EGFR, ERBB2, EZH2, FLT3, IDH1, IDH2, JAK2, KIT, KRAS, MLL, NPM1, NRAS, MET, NOTCH1, PDGFRA, PDGFRB, PGR, PIK3CA, PTEN, RET), interrogation for sequence variants and copy number variants or rearrangements, if performed | Yes | Yes |
| 81460 | Whole mitochondrial genome (e.g., Leigh syndrome, mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes [MELAS], myoclonic epilepsy with ragged-red fibers [MERFF], neuropathy, ataxia, and retinitis pigmentosa [NARP], Leber hereditary optic neuropathy [LHON]), genomic sequence, must include sequence analysis of entire mitochondrial genome with heteroplasmy detection | Yes | Yes |
| 81465 | Whole mitochondrial genome large deletion analysis panel (e.g., Kearns-Sayre syndrome, chronic progressive external ophthalmoplegia), including heteroplasmy detection, if performed | Yes | Yes |
| 81479 | Unlisted molecular pathology procedure | Yes | Yes |
| 81507 | Fetal aneuploidy (trisomy 21, 18, and 13) DNA sequence analysis of selected regions using maternal plasma, algorithm reported as a risk score for each trisomy Proprietary test: Harmony™ Prenatal Test Lab/Manufacturer: Ariosa Diagnostics | Yes | Yes |
| 81518 | Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 11 genes (7 content and 4 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithms reported as percentage risk for metastatic recurrence and likelihood of benefit from extended endocrine therapy Proprietary test: Breast Cancer Index Lab/manufacturer: Biotheranostics, Inc | Yes | Yes |

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| 81519 | <p>Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 21 genes, utilizing formalin-fixed paraffin embedded tissue, algorithm reported as recurrence score Proprietary test: Oncotype DX® Lab/manufacturer: Genomic Health</p> | Yes | Yes |
| 81520 | <p>Oncology (breast), mRNA gene expression profiling by hybrid capture of 58 genes (50 content and 8 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a recurrence risk score Proprietary test: Prosigna® Breast Cancer Assay Lab/manufacturer: NanoString Technologies, Inc</p> | Yes | Yes |
| 81521 | <p>Oncology (breast), mRNA, microarray gene expression profiling of 70 content genes and 465 housekeeping genes, utilizing fresh frozen or formalin-fixed paraffin-embedded tissue, algorithm reported as index related to risk of distant metastasis Proprietary test: MammaPrint® Lab/Manufacturer: Agendia, Inc</p> | Yes | Yes |
| 81522 | <p>Oncology (breast), mRNA, gene expression profiling by RT-PCR of 12 genes (8 content and 4 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as recurrence risk score Proprietary test: EndoPredict® Lab/Manufacturer: Myriad Genetic Laboratories, Inc</p> | Yes | Yes |
| 81541 | <p>Oncology (prostate), mRNA gene expression profiling by realtime RT-PCR of 46 genes (31 content and 15 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a disease-specific mortality risk score Proprietary test: Prolaris®</p> | Yes | Yes |

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| 81542 | Oncology (prostate), mRNA, microarray gene expression profiling of 22 content genes, utilizing formalin-fixed paraffinembedded tissue, algorithm reported as metastasis risk score Proprietary test: Decipher® Prostate Lab/Manufacturer: Biosciences | Yes | Yes |
| 81546 | Oncology (thyroid), mRNA, gene expression analysis of 10,196 genes, utilizing fine needle aspirate, algorithm reported as a categorical result (e.g., benign or suspicious) | Yes | Yes |
| 81552 | Oncology (uveal melanoma), mRNA, gene expression profiling by real-time RT-PCR of 15 genes (12 content and 3 housekeeping), utilizing fine needle aspirate or formalin-fixed paraffin-embedded tissue, algorithm reported as risk of metastasis Proprietary test: DecisionDx® -UM test Lab/Manufacturer: Castle Biosciences, Inc | Yes | Yes |
| 81595 | Cardiology (heart transplant), mRNA, gene expression profiling by real-time quantitative PCR of 20 genes (11 content and 9 housekeeping), utilizing subfraction of peripheral blood, algorithm reported as a rejection risk score. Proprietary test: AlloMap® Lab/Manufacturer: CareDx, Inc | Yes | Yes |
| 81599 | Unlisted multianalyte assay with algorithmic analysis | Yes | Yes |
| 84999 | Unlisted chemistry panel | Yes | Yes |
| 86849 | Unlisted immunology procedure | Yes | Yes |
| 87999 | Unlisted microbiology pathology procedure | Yes | Yes |
| 88240 | Cryopreservation, freezing and storage of cells, each cell line | Yes | Yes |
| 88241 | Thawing and expansion of frozen cells, each aliquot | Yes | Yes |
| 88245 | Chromosome analysis for breakage syndrome; baseline Sister Chromatid Exchange (SCE), 20-25 cells | Yes | Yes |
| 88248 | Chromosome analysis for breakage syndromes; baseline breakage, score 50-100 cells, count 20 cells, 2 karyotypes (e.g., for ataxia telangiectasia, Fanconi anemia, Fragile X | Yes | Yes |

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| 88249 | Chromosome analysis for breakage syndromes; score 100 cells, clastogen stress (e.g., diepoxybutane, mitomycin C, ionizing radiation, UV radiation) | Yes | Yes |
| 88261 | Chromosome analysis; count 5 cells, 1 karyotype, with banding | Yes | Yes |
| 88262 | Chromosome analysis; count 15-20 cells, 2 karyotypes, with banding | Yes | Yes |
| 88263 | Chromosome analysis; count 45 cells, 2 karyotypes, with banding | Yes | Yes |
| 88264 | Chromosome analysis; analyze 20-25 cells | Yes | Yes |
| 88267 | Chromosome analysis, amniotic fluid or chorionic villus, count 15 cells, 1 karyotype, with banding | Yes | Yes |
| 88269 | Chromosome analysis, in situ for amniotic fluid cells, count cells from 6-12 colonies, 1 karotype with banding | Yes | Yes |
| 88271 | Molecular cytogenetics; DNA probe, each (e.g., FISH) | Yes | Yes |
| 88272 | Molecular cytogenetics; chromosomal in situ hybridization, analyze 3-5 cells (e.g., for derivatives and markers) | Yes | Yes |
| 88273 | Molecular cytogenetics; chromosomal in situ hybridization, analyze 10-30 cells (e.g., for microdeletions) | Yes | Yes |
| 88274 | Molecular cytogenetics; interphase in situ hybridization, analyze 25-99 cells | Yes | Yes |
| 88275 | Molecular cytogenetics; interphase in situ hybridization, analyze 100-300 cells | Yes | Yes |
| 88280 | Chromosome analysis; additional karyotypes, each study | Yes | Yes |
| 88283 | Chromosome analysis; additional specialized banding technique (e.g., NOR, C-banding) | Yes | Yes |
| 88285 | Chromosome analysis; additional cell counted, each study | Yes | Yes |
| 88289 | Chromosome analysis; additional high-resolution study | Yes | Yes |
| 88291 | Cytogenetics and molecular cytogenetics, interpretation and report | Yes | Yes |
| 88363 | Examination and selection of retrieval archival (i.e.: previously diagnosed) tissue(s) for molecular analysis (e.g.: KRAS mutational analysis) | Yes | Yes |
| 88399 | Unlisted surgical pathology procedure | Yes | Yes |

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| 89240 | Unlisted miscellaneous pathology test | Yes | Yes |
| 0001U | Red blood cell antigen typing, DNA, human erythrocyte antigen gene analysis of 35 antigens from 11 blood groups, utilizing whole blood, common RBC alleles reported Proprietary test: PreciseType® HEA Test Lab/Manufacturer: Immucor, Inc. | Yes | Yes |
| 0005U | Oncology (prostate) gene expression profile by real-time RT-PCR of 3 genes (ERG, PCA3, and SPDEF), urine, algorithm reported as risk score Proprietary test: ExosomeDx® Prostate (IntelliScore) Lab/manufacturer: Exosome Diagnostics, Inc. | Yes | Yes |
| 0016U | Oncology (hematolymphoid neoplasia), RNA, BCR/ABL1 major and minor breakpoint fusion transcripts, quantitative PCR amplification, blood or bone marrow, report of fusion not detected or detected with quantitation Proprietary test: BCR-ABL1 major and minor breakpoint fusion transcripts Lab/Manufacturer: University of Iowa, Department of Pathology / Asuragen | Yes | Yes |
| 0017U | Oncology (hematolymphoid neoplasia), JAK2 mutation, DNA, PCR amplification of exons 12-14 and sequence analysis, blood or bone marrow, report of JAK2 mutation not detected or detected Proprietary test: JAK2 Mutation Lab/Manufacturer: University of Iowa, Department of Pathology / Laboratory Developed Test | Yes | Yes |
| 0022U | Targeted genomic sequence analysis panel, non-small cell lung neoplasia, DNA and RNA analysis, 23 genes, interrogation for sequence variants and rearrangements, reported as presence/absence of variants and associated therapy(ies) to consider Proprietary test: Oncomine™ Dx Target Test Lab/Manufacturer: Thermo Fisher Scientific | Yes | Yes |

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| 0023U | <p>Oncology (acute myelogenous leukemia), DNA, genotyping of internal tandem duplication, p.D835, p.I836, using mononuclear cells, reported as detection or non-detection of FLT3 mutation and indication for or against the use of midostaurin Proprietary test: LeukoStrat® CDx FLT3 Mutation Assay Lab/Manufacturer: LabPMM LLC/Invivoscribe Technologies, Inc.</p> | Yes | Yes |
| 0026U | <p>Oncology (thyroid), DNA and mRNA of 112 genes, next-generation sequencing, fine needle aspirate of thyroid nodule, algorithmic analysis reported as a categorical result ("Positive, high probability of malignancy" or "Negative, low probability of malignancy") Proprietary test: Thyroseq Genomic Classifier Lab/Manufacturer: CBLPath, Inc / University of Pittsburgh Medical Center</p> | Yes | Yes |
| 0027U | <p>JAK2 (Janus kinase 2) (e.g., myeloproliferative disorder) gene analysis, targeted sequence analysis exons 12-15 Proprietary test: JAK2 Exons 12 to 15 Sequencing Lab/Manufacturer: Mayo Clinic / Laboratory Developed Test</p> | Yes | Yes |
| 0030U | <p>Drug metabolism (warfarin drug response), targeted sequence analysis (i.e., CYP2C9, CYP4F2, VKORC1, rs12777823) Proprietary test: Warfarin Response Genotype Lab/Manufacturer: Mayo Clinic</p> | Yes | Yes |

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| 0034U | <p>TPMT (thiopurine S-methyltransferase), NUDT15 (nudix hydroxylase 15)(e.g., thiopurine metabolism) gene analysis, common variants (i.e., TPMT *2, *3A, *3B, *3C, *4, *5, *6, *8, *12; NUDT15 *3, *4, *5)</p> <p>Proprietary test: Thiopurine Methyltransferase (TPMT) and Nudix Hydrolase (NUDT15) Genotyping</p> <p>Lab/Manufacturer: Mayo Clinic / Laboratory Developed Test</p> | Yes | Yes |
| 0040U | <p>BCR/ABL1 (t(9;22)) (e.g., chronic myelogenous leukemia) translocation analysis, major breakpoint, quantitative</p> <p>Proprietary test: MRDx BCR-ABL Test</p> <p>Lab/Manufacturer: MolecularMD</p> | Yes | Yes |
| 0046U | <p>FLT3 (fms-related tyrosine kinase 3) (e.g., acute myeloid leukemia) internal tandem duplication (ITD) variants, quantitative</p> <p>Proprietary test: FLT3 ITD MRD by NGS</p> <p>Lab/Manufacturer: LabPMM LLC/Invivoscribe Technologies, Inc.</p> | Yes | Yes |
| 0047U | <p>Oncology (prostate), mRNA, gene expression profiling by realtime RT-PCR of 17 genes (12 content and 5 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as a risk score</p> <p>Proprietary test: Oncotype DX® Genomic Prostate Score™</p> | Yes | Yes |
| 0049U | <p>NPM1 (nucleophosmin) (e.g., acute myeloid leukemia) gene analysis, quantitative</p> <p>Proprietary test: NPM1 MRD by NGS</p> <p>Lab/Manufacturer: LabPMM LLC/Invivoscribe Technologies, Inc.</p> | Yes | Yes |
| 0084U | <p>Red blood cell antigen typing, DNA, genotyping of 10 blood groups with phenotype prediction of 37 red blood cell antigens</p> <p>Proprietary test: BLOODchip®ID CORE XT™ test</p> <p>Lab/Manufacturer: Grifols Diagnostic Solutions Inc.</p> | Yes | Yes |

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| 0087U | <p>Cardiology (heart transplant), mRNA gene expression profiling by microarray of 1283 genes, transplant biopsy tissue, allograft rejection and injury algorithm reported as a probability score.</p> <p>Proprietary test: Molecular Microscope® MMDx-Heart. Lab/Manufacturer: Kashi Clinical Laboratories</p> | Yes | Yes |
| 0101U | <p>Hereditary colon cancer disorders (e.g., Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis), genomic sequence analysis panel utilizing a combination of NGS, Sanger, MLPA, and array CGH, with MRNA analytics to resolve variants of unknown significance when indicated (15 genes [sequencing and deletion/duplication], EPCAM and GREM1 [deletion/duplication only])</p> <p>Proprietary test: ColoNext®, Ambry Genetics® Lab/Manufacturer: Ambry Genetics®</p> | Yes | Yes |
| 0102U | <p>Hereditary breast cancer-related disorders (e.g., hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer), genomic sequence analysis panel utilizing a combination of NGS, Sanger, MLPA, and array CGH, with MRNA analytics to resolve variants of unknown significance when indicated (17 genes [sequencing and deletion/duplication])</p> <p>Proprietary test: BreastNext®, Ambry Genetics® Lab/Manufacturer: Ambry Genetics®</p> | Yes | Yes |

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| 0103U | <p>Hereditary ovarian cancer (e.g., hereditary ovarian cancer, hereditary endometrial cancer), genomic sequence analysis panel utilizing a combination of NGS, Sanger, MLPA, and array CGH, with MRNA analytics to resolve variants of unknown significance when indicated (24 genes [sequencing and deletion/duplication], EPCAM [deletion/duplication only])</p> <p>Proprietary test: OvaNext®, Ambry Genetics®</p> <p>Lab/Manufacturer: Ambry Genetics®</p> | Yes | Yes |
| 0111U | <p>Oncology (colon cancer), targeted KRAS (codons 12, 13, and 61) and NRAS (codons 12, 13, and 61) gene analysis utilizing formalin-fixed paraffin-embedded tissue</p> <p>Proprietary test: Praxis™ Extended RAS Panel</p> <p>Lab/Manufacturer: Illumina</p> | Yes | Yes |
| 0118U | <p>Transplantation medicine, quantification of donor-derived cell-free DNA using whole genome next-generation sequencing, plasma, reported as percentage of donor-derived cell-free DNA in the total cell-free DNA.</p> <p>Proprietary test: Viracor TRAC™ dd-cfDNA</p> <p>Lab/Manufacturer: Viracor Eurofins</p> | Yes | Yes |
| 0129U | <p>Hereditary breast cancer–related disorders (e.g., hereditary breast cancer, hereditary ovarian cancer, hereditary endometrial cancer), genomic sequence analysis and deletion/duplication analysis panel (ATM, BRCA1, BRCA2, CDH1, CHEK2, PALB2, PTEN, and TP53)</p> <p>Proprietary test: BRCAplus</p> <p>Lab/Manufacturer: Ambry Genetics</p> | Yes | Yes |

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| 0155U | <p>Oncology (breast cancer), DNA, PIK3CA (phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha) (e.g., breast cancer) gene analysis (i.e., p.C420R, p.E542K, p.E545A, p.E545D [g.1635G>T only], p.E545G, p.E545K, p.Q546E, p.Q546R, p.H1047L, p.H1047R, p.H1047Y), utilizing formalin-fixed paraffin-embedded breast tumor tissue, reported as PIK3CA gene mutation status Proprietary test: theascreen® PIK3CA RGQ PCR Kit Lab/Manufacturer: QIAGEN</p> | Yes | Yes |
| 0169U | <p>NUDT15 (nudix hydrolase 15) and TPMT (thiopurine S-methyltransferase) (e.g., drug metabolism) gene analysis, common variants Proprietary test: NT (NUDT15 and TPMT) genotyping panel Lab/Manufacturer: RPRD Diagnostics</p> | Yes | Yes |
| 0171U | <p>Targeted genomic sequence analysis panel, acute myeloid leukemia, myelodysplastic syndrome, and myeloproliferative neoplasms, DNA analysis, 23 genes, interrogation for sequence variants, rearrangements and minimal residual disease, reported as presence/absence Proprietary test: MyMRD® NGS Panel Lab/Manufacturer: Laboratory for Personalized Molecular Medicine</p> | Yes | Yes |
| 0172U | <p>Oncology (solid tumor as indicated by the label), somatic mutation analysis of BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) and analysis of homologous recombination deficiency pathways, DNA, formalin-fixed paraffin-embedded tissue, algorithm quantifying tumor genomic instability score</p> | Yes | Yes |

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| 0177U | Oncology (breast cancer), DNA, PIK3CA (phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha) gene analysis of 11 gene variants utilizing plasma, reported as PIK3CA gene mutation status Proprietary test: theascreen® PIK3CA RGQ PCR Kit Lab/Manufacturer: QIAGEN | Yes | Yes |
| 0179U | Oncology (non-small cell lung cancer), cell-free DNA, targeted sequence analysis of 23 genes (single nucleotide variations, insertions and deletions, fusions without prior knowledge of partner/breakpoint, copy number variations), with report of significant mutation(s) Proprietary test: Resolution ctDx Lung™ Lab/Manufacturer: Resolution Bioscience | Yes | Yes |
| 0180U | Red cell antigen (ABO blood group) genotyping (ABO), gene analysis Sanger/chain termination/conventional sequencing, ABO (ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase) gene, including subtyping, 7 exons Proprietary test: Navigator ABO Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0181U | Red cell antigen (Colton blood group) genotyping (CO), gene analysis, AQP1 (aquaporin 1 [Colton blood group]) exon 1 Proprietary test: Navigator CO Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0182U | Red cell antigen (Cromer blood group) genotyping (CROM), gene analysis, CD55 (CD55 molecule [Cromer blood group]) exons 1-10 Proprietary test: Navigator CROM Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |

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| 0183U | Red cell antigen (Diego blood group) genotyping (DI), gene analysis, SLC4A1 (solute carrier family 4 member 1 [Diego blood group]) exon 19 Proprietary test: Red cell antigen (Cromer blood group) genotyping (CROM), gene analysis, CD55 (CD55 molecule [Cromer blood group]) exons 1-10 Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0184U | Red cell antigen (Dombrock blood group) genotyping (DO), gene analysis, ART4 (ADP-ribosyltransferase 4 [Dombrock blood group]) exon 2 Proprietary test: Navigator DO Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0185U | Red cell antigen (H blood group) genotyping (FUT1), gene analysis, FUT1 (fucosyltransferase 1 [H blood group]) exon 4 Proprietary test: Navigator FUT1 Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0186U | Red cell antigen (H blood group) genotyping (FUT2), gene analysis, FUT2 (fucosyltransferase 2) exon 2 Proprietary test: Navigator FUT2 Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0187U | Red cell antigen (Duffy blood group) genotyping (FY), gene analysis, ACKR1 (atypical chemokine receptor 1 [Duffy blood group]) exons 1-2 Proprietary test: Navigator FY Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |

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| 0188U | <p>Red cell antigen (Gerbich blood group) genotyping (GE), gene analysis, GYPC (glycophorin C [Gerbich blood group]) exons 1-4 Proprietary test: Navigator GE Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0189U | <p>Red cell antigen (MNS blood group) genotyping (GYPA), gene analysis, GYPA (glycophorin A [MNS blood group]) introns 1, 5, exon 2 Proprietary test: Navigator GYPA Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0190U | <p>Red cell antigen (MNS blood group) genotyping (GYPB), gene analysis, GYPB (glycophorin B [MNS blood group]) introns 1, 5, pseudoexon 3 Proprietary test: Navigator GYPB Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0191U | <p>Red cell antigen (Indian blood group) genotyping (IN), gene analysis, CD44 (CD44 molecule [Indian blood group]) exons 2, 3, 6 Proprietary test: Navigator IN Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0192U | <p>Red cell antigen (Kidd blood group) genotyping (JK), gene analysis, SLC14A1 (solute carrier family 14 member 1 [Kidd blood group]) gene promoter, exon 9 Proprietary test: Navigator JK Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |

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| 0193U | Red cell antigen (JR blood group) genotyping (JR), gene analysis, ABCG2 (ATP binding cassette subfamily G member 2 [Junior blood group]) exons 2-26 Proprietary test: Navigator JR Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0194U | Red cell antigen (Kell blood group) genotyping (KEL), gene analysis, KEL (Kell metallo-endopeptidase [Kell blood group]) exon 8 Proprietary test: Navigator KEL Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0195U | KLF1 (Kruppel-like factor 1), targeted sequencing (i.e., exon 13) Proprietary test: Navigator KLF1 Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0196U | Red cell antigen (Lutheran blood group) genotyping (LU), gene analysis, BCAM (basal cell adhesion molecule [Lutheran blood group]) exon 3 Proprietary test: Navigator LU Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |
| 0197U | Red cell antigen (Landsteiner-Wiener blood group) genotyping (LW), gene analysis, ICAM4 (intercellular adhesion molecule 4 [Landsteiner-Wiener blood group]) exon 1 Proprietary test: Navigator LW Sequencing test Lab/Manufacturer: Grifols Immunohematology Center | Yes | Yes |

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| 0198U | <p>Red cell antigen (RH blood group) genotyping (RHD and RHCE), gene analysis Sanger/chain termination/conventional sequencing, RHD (Rh blood group D antigen) exons 1-10 and RHCE (Rh blood group CcEe antigens) exon 5 Proprietary test: Navigator RHD/CE Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0199U | <p>Red cell antigen (Scianna blood group) genotyping (SC), gene analysis, ERMAP (erythroblast membrane associated protein [Scianna blood group]) exons 4, 12 Proprietary test: Navigator SC Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0200U | <p>Red cell antigen (Kx blood group) genotyping (XK), gene analysis, XK (X-linked Kx blood group) exons 1-3 Proprietary test: Navigator XK Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0201U | <p>Red cell antigen (Yt blood group) genotyping (YT), gene analysis, ACHE (acetylcholinesterase [Cartwright blood group]) exon 2 Proprietary test: Navigator YT Sequencing test Lab/Manufacturer: Grifols Immunohematology Center</p> | Yes | Yes |
| 0204U | <p>Oncology (thyroid), mRNA, gene expression analysis of 593 genes (including BRAF, RAS, RET, PAX8, and NTRK) for sequence variants and rearrangements, utilizing fine needle aspirate, reported as detected or not detected Proprietary test: Afirma Xpression Atlas Lab/Manufacturer: Veracyte, Inc</p> | Yes | Yes |

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| 0208U | <p>Oncology (medullary thyroid carcinoma), mRNA, gene expression analysis of 108 genes, utilizing fine needle aspirate, algorithm reported as positive or negative for medullary thyroid carcinoma</p> <p>Proprietary test: Afirma Medullary Thyroid Carcinoma (MTC) Classifier</p> <p>Lab/Manufacturer: Veracyte, Inc</p> | Yes | Yes |
| 0221U | <p>Red cell antigen (ABO blood group) genotyping (ABO), gene analysis, next-generation sequencing, ABO (ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase) gene</p> <p>Proprietary test: Navigator ABO Blood Group NGS</p> <p>Lab/Manufacturer: Grifols Immunohematology Center</p> | No | Yes |
| 0222U | <p>Red cell antigen (RH blood group) genotyping (RHD and RHCE), gene analysis, next-generation sequencing, RH proximal promoter, exons 1-10, portions of introns 2-3</p> <p>Proprietary test: Navigator Rh Blood Group NGS</p> <p>Lab/Manufacturer: Grifols Immunohematology Cen</p> | No | Yes |
| 0230U | <p>AR (androgen receptor) (e.g., spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation), full sequence analysis, including small sequence changes in exonic and intronic regions, deletions, duplications, short tandem repeat (STR) expansions, mobile element insertions, and variants in non-uniquely mappable regions</p> <p>Proprietary test: Genomic Unity® AR Analysis</p> <p>Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |

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| 0232U | <p>CSTB (cystatin B) (e.g., progressive myoclonic epilepsy type 1A, Unverricht-Lundborg disease), full gene analysis, including small sequence changes in exonic and intronic regions, deletions, duplications, short tandem repeat (STR) expansions, mobile element insertions, and variants in non-uniquely mappable regions Proprietary test: Genomic Unity® CSTB Analysis Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |
| 0234U | <p>MECP2 (methyl CpG binding protein 2) (e.g., Rett syndrome), full gene analysis, including small sequence changes in exonic and intronic regions, deletions, duplications, mobile element insertions, and variants in non-uniquely mappable regions Proprietary test: Genomic Unity® MECP2 Analysis Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |
| 0235U | <p>PTEN (phosphatase and tensin homolog) (e.g., Cowden syndrome, PTEN hamartoma tumor syndrome), full gene analysis, including small sequence changes in exonic and intronic regions, deletions, duplications, mobile element insertions, and variants in non-uniquely mappable regions Proprietary test: Genomic Unity® PTEN Analysis Lab/Manufacturer: Variantyx Inc</p> | No | Yes |
| 0236U | <p>SMN1 (survival of motor neuron 1, telomeric) and SMN2 (survival of motor neuron 2, centromeric) (e.g., spinal muscular atrophy) full gene analysis, including small sequence changes in exonic and intronic regions, duplications and deletions, and mobile element insertions Proprietary test: Genomic Unity® SMN1/2 Analysis Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |

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| 0237U | <p>Cardiac ion channelopathies (e.g., Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia), genomic sequence analysis panel including ANK2, CASQ2, CAV3, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, RYR2, and SCN5A, including small sequence changes in exonic and intronic regions, deletions, duplications, mobile element insertions, and variants in non-uniquely mappable regions</p> <p>Proprietary test: Genomic Unity® Cardiac Ion Channelopathies Analysis Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |
| 0238U | <p>Oncology (Lynch syndrome), genomic DNA sequence analysis of MLH1, MSH2, MSH6, PMS2, and EPCAM, including small sequence changes in exonic and intronic regions, deletions, duplications, mobile element insertions, and variants in non-uniquely mappable regions</p> <p>Proprietary test: Genomic Unity® Lynch Syndrome Analysis Lab/Manufacturer: Variantyx Inc</p> | Yes | Yes |
| 0245U | <p>Oncology (thyroid), mutation analysis of 10 genes and 37 RNA fusions and expression of 4 mRNA markers using next-generation sequencing, fine needle aspirate, report includes associated risk of malignancy expressed as a percentage</p> <p>Proprietary test: ThyGeNEXT® Thyroid Oncogene Panel Lab/Manufacturer: Interpace Diagnostics</p> | Yes | Yes |
| 0246U | <p>Red blood cell antigen typing, DNA, genotyping of at least 16 blood groups with phenotype prediction of at least 51 red blood cell antigens</p> <p>Proprietary test: PrecisionBlood™ Lab/Manufacturer: San Diego Blood Bank</p> | No | Yes |

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| 0252U | Fetal aneuploidy short tandem-repeat comparative analysis, fetal DNA from products of conception, reported as normal (euploidy), monosomy, trisomy, or partial deletion/duplications, mosaicism, and segmental aneuploidy Proprietary test: POC (Products of Conception) Lab/Manufacturer: Igenomix® | No | Yes |
| G9143 | Warfarin responsiveness testing by genetic technique using any method, any number of specimen(s) | Yes | Yes |
| S3800 | Genetic testing for amyotrophic lateral sclerosis (ALS) | Yes | Yes |
| S3840 | DNA analysis for germline mutations of the RET proto-oncogene for susceptibility to multiple endocrine neoplasia type 2 | Yes | Yes |
| S3841 | Genetic testing for retinoblastoma | Yes | Yes |
| S3842 | Genetic testing for Von Hippel-Lindau disease | Yes | Yes |
| S3844 | DNA analysis of the connexin 26 gene (GJB2) for susceptibility to congenital, profound deafness | Yes | Yes |
| S3845 | Genetic testing for alpha thalassemia | Yes | Yes |
| S3846 | Genetic testing for hemoglobin E beta-thalassemia | Yes | Yes |
| S3849 | Genetic testing for Niemann-Pick disease | Yes | Yes |
| S3850 | Genetic testing for sickle cell anemia | Yes | Yes |
| S3853 | Genetic testing for muscular dystrophy | Yes | Yes |
| S3854 | Gene expression profiling panel for use in the management of breast cancer treatment | Yes | Yes |
| S3861 | Genetic testing, sodium channel, voltage-gated, type V, alpha subunit (SCN5A) and variants for suspected Brugada Syndrome | Yes | Yes |
| S3865 | Comprehensive gene sequence analysis for hypertrophic cardiomyopathy | Yes | Yes |
| S3866 | Genetic analysis for a specific gene mutation for hypertrophic cardiomyopathy (HCM) in an individual with a known HCM mutation in the family | Yes | Yes |

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| S3870 | Comparative genomic hybridization (CGH) microarray testing for developmental delay, autism spectrum disorder, intellectual disability and/or mental retardation | Yes | Yes |
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* Current Procedural Terminology© American Medical Association

Corporate Office Location

Avalon’s corporate headquarters is located in Tampa, Florida. For more information about Avalon, go to the Avalon web site: www.Avalonhcs.com.