The **Prior Authorization** List

For BlueCross BlueShield of South Carolina and BlueChoice HealthPlan

(July 1, 2020)

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About Prior Authorization

BlueCross Blue Shield of South Carolina and BlueChoice HealthPlan have delegated prior authorization (PA) for outpatient lab services to Avalon Healthcare Solutions (Avalon). Avalon is an independent company that performs outpatient lab services on behalf of BlueCross and BlueChoice®. Avalon does not review requests for services provided in an emergency room, surgery center or hospital inpatient place of service.

Avalon, BlueCross and BlueChoice have determined that certain lab services require prior authorization and require that you request that Avalon review these services prior to performing the services. You may submit requests for prior authorization to Avalon by fax (888-791-2181), by phone (844-227-5769), or online using Avalon's Prior Authorization System, 8 a.m. – 8 p.m., Eastern Time. Once Avalon receives your request, it will be reviewed by Avalon's clinical staff and they will notify you of their determination.

An authorization does not guarantee payment. As always, payment is subject to the member's plan coverage and benefits at the time the service is performed.

2018 Code Revision Legend

Yellow – Existing codes that will no longer require PA, not intended to imply coverage

Green – Codes added to the PA list

Codes Requiring Prior Authorization

Procedure Code	Description	PA for 11/1/2019	
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

Procedure Code	Description	PA for 11/1/2019	
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
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
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	No	Yes
81185	CACNA1A (calcium voltage-gated channel subunit alpha1 A) (e.g., spinocerebellar ataxia) gene analysis; full gene sequence	No	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

Procedure Code	Description	PA for 11/1/2019	
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
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
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
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
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

Procedure Code	Description	PA for 11/1/2019	
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)	No	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)	No	Yes
81232	DPYD (dihydropyrimidine dehydrogenase) (eg, 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 (eg, 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) (eg, myelodysplastic syndrome, myeloproliferative neoplasms) gene analysis, full gene sequence	Yes	Yes
81237	EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit) (eg, diffuse large B-cell lymphoma) gene analysis, common variant(s) (eg, codon 646)	Yes	Yes
81238	F9 (coagulation factor IX) (e.g. hemophilia B) full gene sequence	Yes	Yes
81239	DMPK (DM1 protein kinase) (eg, myotonic dystrophy type 1) gene analysis; characterization of alleles (eg, expanded size)	Yes	Yes
81240	F2 (prothrombin, coagulation factor II) (e.g., hereditary hypercoagulability) gene analysis, 20210G>A variant	No	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

Procedure Code	Description	PA for 11/1/2019	
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
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
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
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

Procedure Code	Description	PA for 11/1/2019	
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
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	
81277	Cytogenomic neoplasia (genome-wide) microarray analysis, interrogation of genomic regions for copy number and loss-of-heterozygosity variants for chromosomal abnormalities	No	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
81287	MGMT (0-6-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., Mucolipidosis, 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

Procedure Code	Description	PA for 11/1/2019	
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
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) (eg, drug metabolism) gene analysis, common variant(s) (e.g., *2, *3, *4, *5, *6)	No	Yes
81307	PALB2 (partner and localizer of BRCA2) (e.g., breast and pancreatic cancer) gene analysis; full gene sequence	No	Yes
81308	PALB2 (partner and localizer of BRCA2) (e.g., breast and pancreatic cancer) gene analysis; known familial variant	No	Yes
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)	No	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

Procedure Code	Description	PA for 11/1/2019	
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)	No	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 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis	Yes	Yes
81318	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants	Yes	Yes
81319	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (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

Procedure Code	Description	PA for 11/1/2019	
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
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) (eg, thyroid carcinoma, glioblastoma multiforme) gene analysis, targeted sequence analysis (eg, promoter region)	Yes	Yes
81346	TYMS (thymidylate synthetase) (eg, 5-fluorouracil/5-FU drug metabolism), gene analysis, common variant(s) (eg, tandem repeat variant)	Yes	Yes
81350	UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (e.g., irinotecan metabolism), gene analysis, common variants (e.g., *28, *36, *37)	Yes	Yes
81355	VKORC1 (vitamin K epoxide reductase complex, subunit 1) (eg, warfarin metabolism), gene analysis, common variant(s) (eg, -1639G>A, c.173+1000C>T)	No	Yes
81361	HBB (hemoglobin, subunit beta) (e.g., sickle cell anemia, beta thalassemia, hemoglobinopathy); common variant(s) (e.g., HbS, HbC, HbE)	Yes	Yes
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

Procedure Code	Description	PA for 11/1/2019	
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
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

Procedure Code	Description	PA for 11/1/2019	
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
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	No	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	No	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
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

Procedure Code	Description	PA for 11/1/2019	
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 (eg, updated knowledge or unrelated condition/syndrome)	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
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 ATM, BRCA1, BRCA2, BRIP1, CDH1, MLH1, MSH2, MSH6, NBN, PALB2, PTEN, RAD51C, 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
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

Procedure Code	Description	PA for 11/1/2019	
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
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, mucolipidosis type VI, Gaucher disease, Tay-Sachs disease], beta hemoglobinopathies, phenylketonuria, galactosemia), genomic sequence analysis panel, must include sequencing of at least 15 genes (eg, 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
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

Procedure Code	Description	PA for 11/1/2019	
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	Yes	Yes
81519	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	Yes	Yes
81520	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	Yes	Yes
81521	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	Yes	Yes
81522	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	No	Yes
81541	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®	No	Yes
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	No	Yes
81545	Oncology (thyroid), gene expression analysis of 142 genes, utilizing fine needle aspirate, algorithm reported as a categorical result (e.g., benign or suspicious)	Yes	Yes

Procedure Code	Description	PA for 11/1/2019	
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	No	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
87901	Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1 reverse transcriptase and protease regions	Yes	Yes
87903	Infectious agent phenotype analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, HIV1; first through 10 drugs tested	Yes	Yes
87904	Infectious agent, phenotypic analysis by nucleic acid (DNA or RNA) with drug resistance tissue culture analysis, each additional drug tested *(list separately in addition to code for primary procedure)*, used to report assays that help identify HIV antiviral drug resistance	Yes	Yes
87906	Infectious agent genotype, analysis by nucleic acid (DNA or RNA); HIV-1 other region (e.g., integrase, fusion), A line probe assay (LiPA) of HCV genotypes 1 through 6 and subtypes 1a and 1b is utilized to determine the efficacy, dose, and duration or treatment with common HCV drugs.	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
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

Procedure Code	Description	PA for 11/1/2019	
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
89240	Unlisted miscellaneous pathology test	Yes	Yes
G9143	Warfarin responsiveness testing by genetic technique using any method, any number of specimen(s)	No	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
S3870	Comparative genomic hybridization (CGH) microarray testing for developmental delay, autism spectrum disorder, intellectual disability and/or mental retardation	Yes	Yes

Procedure Code	Description	PA for 11/1/2019	
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
0026U	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	Yes	Yes
0027U	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	Yes	Yes
0030U	Drug metabolism (warfarin drug response), targeted sequence analysis (i.e., CYP2C9, CYP4F2, VKORC1, rs12777823) Proprietary test: Warfarin Response Genotype Lab/Manufacturer: Mayo Clinic	No	Yes
0034U	TPMT (thiopurine S-methyltransferase), NUDT15 (nudix hydroxylase 15)(eg, thiopurine metabolism) gene analysis, common variants (ie, TPMT *2, *3A, *3B, *3C, *4, *5, *6, *8, *12; NUDT15 *3, *4, *5) Proprietary test: Thiopurine Methyltransferase (TPMT) and Nudix Hydrolase (NUDT15) Genotyping Lab/Manufacturer: Mayo Clinic / Laboratory Developed Test	Yes	Yes
0040U	BCR/ABL1 (t(9;22)) (eg, chronic myelogenous leukemia) translocation analysis, major breakpoint, quantitative Proprietary test: MRDx BCR-ABL Test Lab/Manufacturer: MolecularMD	Yes	Yes
0047U	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 Proprietary test: Oncotype DX® Genomic Prostate Score™	No	Yes

Procedure Code	Description	PA for 11/1/2019	
0087U	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. Proprietary test: Molecular Microscope® MMDx-Heart. Lab/Manufacturer: Kashi Clinical Laboratories	Yes	Yes
0101U	Hereditary colon cancer disorders (eg, 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]) Proprietary test: ColoNext®, Ambry Genetics® Lab/Manufacturer: Ambry Genetics®	Yes	Yes
0102U	Hereditary breast cancer-related disorders (eg, 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]) Proprietary test: BreastNext®, Ambry Genetics® Lab/Manufacturer: Ambry Genetics®	Yes	Yes
0103U	Hereditary ovarian cancer (eg, 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]) Proprietary test: OvaNext®, Ambry Genetics® Lab/Manufacturer: Ambry Genetics®	Yes	Yes
0118U	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. Proprietary test: Viracor TRAC™ dd-cfDNA Lab/Manufacturer: Viracor Eurofins	Yes	Yes
0169U	NUDT15 (nudix hydrolase 15) and TPMT (thiopurine S-methyltransferase) (eg, drug metabolism) gene analysis, common variants Proprietary test: NT (NUDT15 and TPMT) genotyping panel Lab/Manufacturer: RPRD Diagnostics	No	Yes

* 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.**