CPT	Description	Special Instructions
81161	DMD (dystrophin) (eg, Duchenne/Becker muscular dystrophy) deletion analysis, and duplication analysis, if performed.	
81201	APC (adenomatous polyposis coli) (eg, familial adenomatosis polyposis (FAP), attenuated FAP) gene analysis; full gene sequence	
81202	;known familal variants	
81203	; duplication/deletion variants	
81205	BCKDHB (BRANCHED-CHAIN KETO ACID DEHYDROGENASE E1, BETA POLYPEPTIDE) (EG, MAPLE SYRUP URINE DISEASE) GENE ANALYSIS, COMMON VARIANTS (EG, R183P, G278S, E422X)	
81209	BLM (BLOOM SYNDROME, RECQ HELICASE-LIKE) (EG, BLOOM SYNDROME) GENE ANALYSIS,2281DEL6INS7 VARIANT	
81211	BRCA1, BRCA2 (BREAST CANCER 1 AND 2) (EG, HEREDITARY BREAST AND OVARIAN CANCER) GENE ANALYSIS; FULL SEQUENCE ANALYSIS AND COMMON DUPLICATION/DELETION VARIANTS IN BRCA1 (IE, EXON 13 DEL	
81212	BRCA1, BRCA2 (BREAST CANCER 1 AND 2) (EG, HEREDITARY BREAST AND OVARIAN CANCER) GENE ANALYSIS; 185DELAG, 5385INSC, 6174DELT VARIANTS	
81213	BRCA1, BRCA2 (breast cancer 1 and 2) (eg, hereditary breast and ovarian cancer) gene analysis; uncommnon duplication/deletion variants	
81214	BRCA1 (BREAST CANCER 1) (EG, HEREDITARY BREAST AND OVARIAN CANCER) GENE ANALYSIS; FULL SEQUENCE ANALYSIS AND COMMON DUPLICATION/DELETION VARIANTS (IE, EXON 13 DEL 3.835KB, EXON 13	
81215	BRCA 1 (breast cancer1) (eg, hereditary breast and ovarian cancer) gene analysis; known familial variant)	
81216	BRCA2 (BREAST CANCER 2) (EG, HEREDITARY BREAST AND OVARIAN CANCER) GENE ANALYSIS; FULL SEQUENCE ANALYSIS	
81217	BRCA2 (BREAST CANCER 2) (EG, HEREDITARY BREAST AND OVARIAN CANCER) GENE ANALYSIS; KNOWN FAMILIAL VARIANT	
81220	CFTR (CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR) (EG, CYSTICFIBROSIS) GENE ANALYSIS; COMMON VARIANTS (EG, ACMG/ACOG GUIDELINES)	Yes when service limit of one per lifetime has been met
81221	CFTR (CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR) (EG, CYSTICFIBROSIS) GENE ANALYSIS; KNOWN FAMILIAL VARIANTS	Yes when service limit of one per lifetime has been met
81222	CFTR (CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR) (EG, CYSTICFIBROSIS) GENE ANALYSIS; DUPLICATION/DELETION VARIANTS	Yes when service limit of one per lifetime has been met
81223	CFTR (CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR) (EG, CYSTICFIBROSIS) GENE ANALYSIS; FULL GENE SEQUENCE	

CPT	Description	Special Instructions
81235	EGFR (epidermal growth factor receptor) (eg, non-small cell lung cancer) gene analysis, common variants (eg, exon 19 LREA deletion, L858R, T790M, G719A, G719S, L861Q)	
81240	F2 (PROTHROMBIN, COAGULATION FACTOR II) (EG, /)GENE ANALYSIS, 20210G>A	
81241	F5 (COAGULATION FACTOR V) (EG, HEREDITARY HYPERCOAGULABILITY) GENE ANALYSIS,LEIDEN VARIANT VARIANT	
81242	FANCC (FANCONI ANEMIA, COMPLEMENTATION GROUP C) (EG, FANCONI ANEMIA, TYPE C)GENE ANALYSIS, COMMON VARIANT (EG, IVS4+4A>T)	
81243	FMR1 (FRAGILE X MENTAL RETARDATION 1) (EG, FRAGILE X MENTAL RETARDATION) GENEANALYSIS; EVALUATION TO DETECT ABNORMAL (EG, EXPANDED) ALLELES	
81244	FMR1 (FRAGILE X MENTAL RETARDATION 1) (EG, FRAGILE X MENTAL RETARDATION) GENEANALYSIS; CHARACTERIZATION OF ALLELES (EG, EXPANDED SIZE AND METHYLATION STATUS)	
81245	FLT3 (FMS-RELATED TYROSINE KINASE 3) (EG, ACUTE MYELOID LEUKEMIA), GENE ANALYSIS, INTERNAL TANDEM DUPLICATION (ITD) VARIANTS (IE, EXONS 14, 15)	
81252	GJB2 (gap junction protein, beta 2, 26tkDa; connexin 26) (eg, nonsyndromic hearing loss) gene analysis; full gene sequence	
81253	;known familal variants	
81254	GJB6 (gap junction proten, beta 6, 30kDa, connexin 30) (eg, nonsyndromic hearing loss) gene analysis, common variants (eg, 309kb (del(GJB6-D13S1830)) and 232kb (del(GJB6-D13S1854)))	
81255	HEXA (HEXOSAMINIDASE A [ALPHA POLYPEPTIDE]) (EG, TAY-SACHS DISEASE) GENEANALYSIS, COMMON VARIANTS (EG, 1278INSTATC, 1421+1G>C, G269S)	
81256	HFE (HEMOCHROMATOSIS) (EG, HEREDITARY HEMOCHROMATOSIS) GENE ANALYSIS, COMMON VARIANTS (EG, C282Y, H63D)	
81257	HBA1/HBA2 (ALPHA GLOBIN 1 AND ALPHA GLOBIN 2) (EG, ALPHA THALASSEMIA, HB BARTHYDROPS FETALIS SYNDROME, HBH DISEASE), GENE ANALYSIS, FOR COMMON DELETIONS ORHYDROPS FETALIS SYNDROME, HBH DISEASE), GENE ANALYSIS, FOR COMMON DELETIONS ORVARIANT (EG, SOUTHEAST ASIAN, THAI, FILIPINO, MEDITERRANEAN, ALPHA3.7,ALPHA4.2, ALPHA20.5, AND CONSTANT SPRING)	
81261	IGH (IMMUNOGLOBULIN HEAVY CHAIN LOCUS) (EG, LEUKEMIAS AND LYMPHOMAS, B-CELL),GENE REARRANGEMENT ANALYSIS TO DETECT ABNORMAL CLONAL POPULATION(S); AMPLIFIEDMETHODOLOGY (EG, POLYMERASE CHAIN REACTION)	Yes when service limit of one per lifetime has been met
81262	IGH (IMMUNOGLOBULIN HEAVY CHAIN LOCUS) (EG, LEUKEMIAS AND LYMPHOMAS, B-CELL),GENE REARRANGEMENT ANALYSIS TO DETECT ABNORMAL CLONAL POPULATION(S); DIRECTPROBE METHODOLOGY (EG, SOUTHERN BLOT)	Yes when service limit of one per lifetime has been met

CPT	Description	Special Instructions
81263	IGH (IMMUNOGLOBULIN HEAVY CHAIN LOCUS) (EG, LEUKEMIA AND LYMPHOMA, B-CELL),VARIABLE REGION SOMATIC MUTATION ANALYSIS	Yes when service limit of one per lifetime has been met
81264	IGK (IMMUNOGLOBULIN KAPPA LIGHT CHAIN LOCUS) (EG, LEUKEMIA AND LYMPHOMA,B-CELL), GENE REARRANGEMENT ANALYSIS, EVALUATION TO DETECT ABNORMAL CLONALPOPULATION(S)	Yes when service limit of one per lifetime has been met
81265	COMPARATIVE ANALYSIS USING SHORT TANDEM REPEAT (STR) MARKERS; PATIENT ANDCOMPARATIVE SPECIMEN (EG, PRE-TRANSPLANT RECIPIENT AND DONOR GERMLINE TESTING,POST-TRANSPLANT NON-HEMATOPOIETIC RECIPIENT GERMLINE [EG, BUCCAL SWAB OR OTHERGERMLINE TISSUE SAMPLE] AND DONOR TESTING, TWIN ZYGOSITY TESTING, OR MATERNALCELL CONTAMINATION OF FETAL CELLS)	
81266	COMPARATIVE ANALYSIS USING SHORT TANDEM REPEAT (STR) MARKERS; EACH ADDITIONALSPECIMEN (EG, ADDITIONAL CORD BLOOD DONOR, ADDITIONAL FETAL SAMPLES FROMDIFFERENT CULTURES, OR ADDITIONAL ZYGOSITY IN MULTIPLE BIRTH PREGNANCIES) (LISTSEPARATELY IN ADDITION TO CODE FOR PRIMARY PROCEDURE)	
81267	CHIMERISM (ENGRAFTMENT) ANALYSIS, POST TRANSPLANTATION SPECIMEN (EG,HEMATOPOIETIC STEM CELL), INCLUDES COMPARISON TO PREVIOUSLY PERFORMED BASELINEANALYSES; WITHOUT CELL SELECTION	
81268	CHIMERISM (ENGRAFTMENT) ANALYSIS, POST TRANSPLANTATION SPECIMEN (EG,HEMATOPOIETIC STEM CELL), INCLUDES COMPARISON TO PREVIOUSLY PERFORMED BASELINEANALYSES; WITH CELL SELECTION (EG, CD3, CD33), EACH CELL TYPE	
81270	JAK2 (JANUS KINASE 2) (EG, MYELOPROLIFERATIVE DISORDER) GENE ANALYSIS,P.VAL617PHE (V617F) VARIANT	
81280	LONG QT SYNDROME GENE ANALYSES (EG, KCNQ1, KCNH2, SCN5A, KCNE1, KCNE2, KCNJ2,CACNA1C, CAV3, SCN4B, AKAP, SNTA1, AND ANK2); FULL SEQUENCE ANALYSIS	
81290	MCOLN1 (MUCOLIPIN 1) (EG, MUCOLIPIDOSIS, TYPE IV) GENE ANALYSIS, COMMONVARIANTS (EG, IVS3-2A>G, DEL6.4KB)	
81291	MTHFR (5,10-METHYLENETETRAHYDROFOLATE REDUCTASE) (EG, HEREDITARYHYPERCOAGULABILITY) GENE ANALYSIS, COMMON VARIANTS (EG, 677T, 1298C)	
81292	MLH1 (MUTL HOMOLOG 1, COLON CANCER, NONPOLYPOSIS TYPE 2) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; FULL SEQUENCEANALYSIS	
81293	MLH1 (MUTL HOMOLOG 1, COLON CANCER, NONPOLYPOSIS TYPE 2) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; KNOWN FAMILIAL VARIANTS	
81294	MLH1 (MUTL HOMOLOG 1, COLON CANCER, NONPOLYPOSIS TYPE 2) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS;DUPLICATION/DELETION VARIANTS	

CPT	Description	Special Instructions
81295	MSH2 (MUTS HOMOLOG 2, COLON CANCER, NONPOLYPOSIS TYPE 1) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; FULL SEQUENCEANALYSIS	
81296	MSH2 (MUTS HOMOLOG 2, COLON CANCER, NONPOLYPOSIS TYPE 1) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; KNOWN FAMILIALVARIANTS	
81297	MSH2 (MUTS HOMOLOG 2, COLON CANCER, NONPOLYPOSIS TYPE 1) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS;DUPLICATION/DELETION VARIANTS	
81298	MSH6 (MUTS HOMOLOG 6 [E. COLI]) (EG, HEREDITARY NON-POLYPOSIS COLORECTALCANCER, LYNCH SYNDROME) GENE ANALYSIS; FULL SEQUENCE ANALYSIS	
81299	MSH6 (MUTS HOMOLOG 6 [E. COLI]) (EG, HEREDITARY NON-POLYPOSIS COLORECTALCANCER, LYNCH SYNDROME) GENE ANALYSIS; KNOWN FAMILIAL VARIANTS	
81300	MSH6 (MUTS HOMOLOG 6 [E. COLI]) (EG, HEREDITARY NON-POLYPOSIS COLORECTALCANCER, LYNCH SYNDROME) GENE ANALYSIS; DUPLICATION/DELETION VARIANTS	
81301	MICROSATELLITE INSTABILITY ANALYSIS (EG, HEREDITARY NON-POLYPOSIS COLORECTALBAT26), INCLUDES COMPARISON OF NEOPLASTIC AND NORMAL TISSUE, IF PERFORMED	
81310	NPM1 (NUCLEOPHOSMIN) (EG, ACUTE MYELOID LEUKEMIA) GENE ANALYSIS, EXON 12VARIANTS	
81315	PML/RARALPHA, (T(15;17)), (PROMYELOCYTIC LEUKEMIA/RETINOIC ACID RECEPTOR ALPHA) (EG, PROMYELOCYTIC LEUKEMIA) TRANSLOCATION ANALYSIS; COMMON BREAKPOINTS (EG,INTRON 3 AND INTRON 6), QUALITATIVE OR QUANTITATIVE	
81316	PML/RARALPHA, (T(15;17)), (PROMYELOCYTIC LEUKEMIA/RETINOIC ACID RECEPTOR ALPHA)(EG, PROMYELOCYTIC LEUKEMIA) TRANSLOCATION ANALYSIS; SINGLE BREAKPOINT (EG,INTRON 3, INTRON 6 OR EXON 6), QUALITATIVE OR QUANTITATIVE	
81317	PMS2 (POSTMEIOTIC SEGREGATION INCREASED 2 [S. CEREVISIAE]) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; FULL SEQUENCEANALYSIS	
81318	PMS2 (POSTMEIOTIC SEGREGATION INCREASED 2 [S. CEREVISIAE]) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS; KNOWN FAMILIALVARIANTS	
81319	PMS2 (POSTMEIOTIC SEGREGATION INCREASED 2 [S. CEREVISIAE]) (EG, HEREDITARYNON-POLYPOSIS COLORECTAL CANCER, LYNCH SYNDROME) GENE ANALYSIS;DUPLICATION/DELETION VARIANTS	
81321	PTEN (phosphatase and tensin homolog) (eg, Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; full sequence	
81322	;known familal variants	
81323	;duplication/deletion variant	
81324	PMP22 (peripheral myelin protein 22) (eg, Charcot-Marie-Tooth, hereditary neuropthy with liability to pressure palsies) gene analysis; duplication/deletion analysis	

CPT	Description	Special Instructions
81325	; full sequence analysis	
81326	;known familal variants	
81331	SNRPN/UBE3A (SMALL NUCLEAR RIBONUCLEOPROTEIN POLYPEPTIDE N AND UBIQUITINPROTEIN LIGASE E3A) (EG, PRADER-WILLI SYNDROME AND/OR ANGELMAN SYNDROME), METHYLATION ANALYSIS	
81332	SERPINA1 (SERPIN PEPTIDASE INHIBITOR, CLADE A, ALPHA-1 ANTIPROTEINASE,ANTITRYPSIN, MEMBER 1) (EG, ALPHA-1-ANTITRYPSIN DEFICIENCY), GENE ANALYSIS,COMMON VARIANTS (EG, *S AND *Z)	
81370	HLA CLASS I AND II TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); HLA-A, -B, -C, -DRB1/3/4/5, AND -DQB1	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81371	HLA CLASS I AND II TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); HLA-A, -B, AND -DRB1/3/4/5 (EG, VERIFICATION TYPING)	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81372	HLA CLASS I TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); COMPLETE (IE,HLA-A, -B, AND -C)	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81373	HLA CLASS I TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); ONE LOCUS (EG,HLA-A, -B, OR -C), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81374	HLA CLASS I TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); ONE ANTIGENEQUIVALENT (EG, B*27), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81375	HLA CLASS II TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); HLA-DRB1/3/4/5AND -DQB1	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81376	HLA CLASS II TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); ONE LOCUS (EG,HLA-DRB1/3/4/5, -DQB1, -DQA1, -DPB1, OR -DPA1), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81377	HLA CLASS II TYPING, LOW RESOLUTION (EG, ANTIGEN EQUIVALENTS); ONE ANTIGENEQUIVALENT, EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81378	HLA CLASS I AND II TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS),HLA-A, -B, -C, AND -DRB1	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383

CPT	Description	Special Instructions
81379	HLA CLASS I TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS); COMPLETE (IE, HLA-A, -B, AND -C)	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81380	HLA CLASS I TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS); ONE LOCUS(EG, HLA-A, -B, OR -C), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81381	HLA CLASS I TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS); ONE ALLELEOR ALLELE GROUP (EG, B*57:01P), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81382	HLA CLASS II TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS); ONE LOCUS(EG, HLA-DRB1, -DRB3, -DRB4, -DRB5, -DQB1, -DQA1, -DPB1, OR -DPA1), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
81383	HLA CLASS II TYPING, HIGH RESOLUTION (IE, ALLELES OR ALLELE GROUPS); ONE ALLELEOR ALLELE GROUP (EG, HLA-DQB1*06:02P), EACH	Yes when service limit of one per lifetime has been met. Accumulate with 81370-81383
86711	Antibody; JC (John Cunningham) virus	
86828	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, flow cytometry); qualitative assessment of the presence or absence of antibody(ies) to HLA Class I and Class II HLA antigens	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86829	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); qualitative assessment of the presence or absence of antibody(ies) to HLA Class I or Class II HLA antigens	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86830	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); antibody identification by qualitative panel using complete HLA phenotypes, HLA Class I	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86831	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); antibody identification by qualitative panel using complete HLA phenotypes, HLA Class II	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86832	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); high definition qualitative panel for identification of antibody specificities (eg, individual antigen per bead methodology), HLA Class I	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.

CPT	Description	Special Instructions
86833	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); high definition qualitative panel for identification of antibody specificities (eg, individual antigen per bead methodology), HLA Class II	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86834	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); semi-quantitative panel (eg, titer), HLA Class I	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
86835	Antibody to human leukocyte antigens (HLA), solid phase assays (eg, microspheres or beads, ELISA, Flow cytometry); semi-quantitative panel (eg, titer), HLA Class II	Yes when the service limit of one per lifetime has been met. Accumulate 86828-86835 together.
87999	Unlisted microbiology procedure- when used for Trofile Testing	Trofile testing requires prior authorization. Contact Rational Drug Therapy Program (RDTP) at 1-800-847-3859 for prior approval. If approved, include the Prior Authorization number provided by RDTP on the claim upon submission for payment. A description of the service indicating Trofile Testing must be included on the claim as well.
S3854	Gene expression profiling panel for use in the management of breast cancer treatment, used for Oncotype DX.	Requires documentation and prior authorization. Please contact UMC for more information.