Cytogenetic Studies (190.3)

Publication Number	Manual Section Number	Manual Section Title
100-3	190.3	Cytogenetic Studies

Version Number	Effective Date of this Version
1	7/16/1998

Benefit Category
Diagnostic Tests (other)

Please Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Item/Service Description
The term cytogenetic studies is used to describe the microscopic examination of the physical appearance of human chromosomes.

Indications and Limitations of Coverage
Medicare covers these tests when they are reasonable and necessary for the diagnosis or treatment of the following conditions:

- Genetic disorders (e.g., mongolism) in a fetus; (See the Medicare Benefit Policy Chapter 15, "Covered Medical and Other Health Services," §20.1)
- Failure of sexual development;
- Chronic myelogenous leukemia;
- Acute leukemias lymphoid (FAB L1-L3), myeloid (FAB M0-M7), and unclassified; or
- Mylodysplasia

Part B	Rule Description Part B	Proposed HCPCS/CPT Part B	Frequency
Part B	MCS and MACs shall edit to allow CPTs/HCPCS for approved Dx.	88230-88291	N/A

Covered ICD-10 Codes.

ICD-10	Descriptor
C91.00	Acute lymphoblastic leukemia not having achieved remission
C91.01	Acute lymphoblastic leukemia, in remission
C91.02	Acute lymphoblastic leukemia, in relapse
C92.00	Acute myeloblastic leukemia, not having achieved remission
C92.01	Acute myeloblastic leukemia, in remission
C92.02	Acute myeloblastic leukemia, in relapse

C92.10	Chronic myeloid leuk, BCR/ABL-positive, not achieve remis
C92.11	Chronic myeloid leukemia, BCR/ABL-positive, in remission
C92.12	Chronic myeloid leukemia, BCR/ABL-positive, in relapse
C92.20	Atyp chronic myeloid leuk, BCR/ABL-neg, not achieve remis
C92.21	Atypical chronic myeloid leukemia, BCR/ABL-neg, in remission
C92.22	Atypical chronic myeloid leukemia, BCR/ABL-neg, in relapse
C92.40	Acute promyelocytic leukemia, not having achieved remission
C92.41	Acute promyelocytic leukemia, in remission
C92.42	Acute promyelocytic leukemia, in relapse
C92.50	Acute myelomonocytic leukemia, not having achieved remission
C92.51	Acute myelomonocytic leukemia, in remission
C92.52	Acute myelomonocytic leukemia, in relapse
C92.60	Acute myeloid leukemia w 11q23-abnormality not achieve remis
C92.61	Acute myeloid leukemia with 11q23-abnormality in remission
C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse
C92.A0	Acute myeloid leuk w multilin dysplasia, not achieve remis
C92.A1	Acute myeloid leukemia w multilin dysplasia, in remission
C92.A2	Acute myeloid leukemia w multilineage dysplasia, in relapse
C93.00	Acute monoblastic/monocytic leukemia, not achieve remission
C93.01	Acute monoblastic/monocytic leukemia, in remission
C93.02	Acute monoblastic/monocytic leukemia, in relapse
C93.10	Chronic myelomonocytic leukemia not achieve remission
C93.11	Chronic myelomonocytic leukemia, in remission
C93.12	Chronic myelomonocytic leukemia, in relapse
C94.00	Acute erythroid leukemia, not having achieved remission
C94.01	Acute erythroid leukemia, in remission
C94.02	Acute erythroid leukemia, in relapse
C94.20	Acute megakaryoblastic leukemia not achieve remission
C94.21	Acute megakaryoblastic leukemia, in remission
C94.22	Acute megakaryoblastic leukemia, in relapse
C95.00	Acute leukemia of unsp cell type not achieve remission
C95.01	Acute leukemia of unspecified cell type, in remission
C95.02	Acute leukemia of unspecified cell type, in relapse
D46.0	Refractory anemia without ring sideroblasts, so stated
D46.1	Refractory anemia with ring sideroblasts
D46.20	Refractory anemia with excess of blasts, unspecified
D46.21	Refractory anemia with excess of blasts 1
D46.22	Refractory anemia with excess of blasts 2
D46.4	Refractory anemia, unspecified
D46.9	Myelodysplastic syndrome, unspecified
D46.A	Refractory cytopenia with multilineage dysplasia
D46.B	Refract cytopenia w multilin dysplasia and ring sideroblasts

D46.C	Myelodysplastic syndrome w isolated del(5q) chromsoml abnlt
D46.Z	Other myelodysplastic syndromes
D72.0	Genetic anomalies of leukocytes
E28.39	Other primary ovarian failure
E28.8	Other ovarian dysfunction
E28.9	Ovarian dysfunction, unspecified
E29.1	Testicular hypofunction
E29.8	Other testicular dysfunction
E29.9	Testicular dysfunction, unspecified
E30.0	Delayed puberty
O28.5	Abn chromsoml and genetic find on antenat screen of mother
O35.1XX0	Maternal care for chromosomal abnormality in fetus, unsp
O35.1XX1	Maternal care for chromosomal abnormality in fetus, fetus 1
O35.1XX2	Maternal care for chromosomal abnormality in fetus, fetus 2
O35.1XX3	Maternal care for chromosomal abnormality in fetus, fetus 3
O35.1XX4	Maternal care for chromosomal abnormality in fetus, fetus 4
O35.1XX5	Maternal care for chromosomal abnormality in fetus, fetus 5
O35.1XX9	Maternal care for chromosomal abnormality in fetus, oth
Q50.32	Ovarian streak
Q55.4	Oth congen malform of vas def,epidid, semnl vescl & prostate
Q90.0	Trisomy 21, nonmosaicism (meiotic nondisjunction)
Q90.1	Trisomy 21, mosaicism (mitotic nondisjunction)
Q90.2	Trisomy 21, translocation
Q90.9	Down syndrome, unspecified
Q91.0	Trisomy 18, nonmosaicism (meiotic nondisjunction)
Q91.1	Trisomy 18, mosaicism (mitotic nondisjunction)
Q91.2	Trisomy 18, translocation
Q91.3	Trisomy 18, unspecified
Q91.4	Trisomy 13, nonmosaicism (meiotic nondisjunction)
Q91.5	Trisomy 13, mosaicism (mitotic nondisjunction)
Q91.6	Trisomy 13, translocation
Q91.7	Trisomy 13, unspecified
Q92.0	Whole chromosome trisomy, nonmosaic (meiotic nondisjunction)
Q92.1	Whole chromosome trisomy, mosaicism (mitotic nondisjunction)
Q92.2	Partial trisomy
Q92.5	Duplications with other complex rearrangements
Q92.61	Marker chromosomes in normal individual
Q92.62	Marker chromosomes in abnormal individual
Q92.7	Triploidy and polyploidy
Q92.8	Other specified trisomies and partial trisomies of autosomes
Q92.9	Trisomy and partial trisomy of autosomes, unspecified
Q93.0	Whole chromosome monosomy,nonmosaic (meiotic nondisjunction)

Q93.1	Whole chromosome monosomy, mosaic (mitotic nondisjunction)
Q93.2	Chromosome replaced with ring, dicentric or isochromosome
Q93.3	Deletion of short arm of chromosome 4
Q93.4	Deletion of short arm of chromosome 5
Q93.5	Other deletions of part of a chromosome
Q93.7	Deletions with other complex rearrangements
Q93.81	Velo-cardio-facial syndrome
Q93.88	Other microdeletions
Q93.89	Other deletions from the autosomes
Q93.9	Deletion from autosomes, unspecified
Q95.0	Balanced translocation and insertion in normal individual
Q95.1	Chromosome inversion in normal individual
Q95.2	Balanced autosomal rearrangement in abnormal individual
Q95.3	Balanced sex/autosomal rearrangement in abnormal individual
Q95.5	Individual with autosomal fragile site
Q95.8	Other balanced rearrangements and structural markers
Q95.9	Balanced rearrangement and structural marker, unspecified
Q96.0	Karyotype 45, X
Q96.1	Karyotype 46, X iso (Xq)
Q96.2	Karyotype 46, X w abnormal sex chromosome, except iso (Xq)
Q96.3	Mosaicism, 45, X/46, XX or XY
Q96.4	Mosaic, 45, X/other cell line(s) w abnormal sex chromosome
Q96.8	Other variants of Turner's syndrome
Q96.9	Turner's syndrome, unspecified
Q97.0	Karyotype 47, XXX
Q97.1	Female with more than three X chromosomes
Q97.2	Mosaicism, lines with various numbers of X chromosomes
Q97.3	Female with 46, XY karyotype
Q97.8	Oth sex chromosome abnormalities, female phenotype
Q97.9	Sex chromosome abnormality, female phenotype, unspecified
Q98.0	Klinefelter syndrome karyotype 47, XXY
Q98.1	Klinefelter syndrome, male with more than two X chromosomes
Q98.3	Other male with 46, XX karyotype
Q98.4	Klinefelter syndrome, unspecified
Q98.5	Karyotype 47, XYY
Q98.6	Male with structurally abnormal sex chromosome
Q98.7	Male with sex chromosome mosaicism
Q98.8	Other specified sex chromosome abnormalities, male phenotype
Q98.9	Sex chromosome abnormality, male phenotype, unspecified
Q99.0	Chimera 46, XX/46, XY
Q99.1	46, XX true hermaphrodite
Q99.2	Fragile X chromosome

Q99.8	Other specified chromosome abnormalities
Q99.9	Chromosomal abnormality, unspecified
Z13.71	Encntr for nonprocreat screen for genetic dis carrier status
Z13.79	Encntr for oth screening for genetic and chromsoml anomalies
Z14.8	Genetic carrier of other disease
Z15.01	Genetic susceptibility to malignant neoplasm of breast
Z15.02	Genetic susceptibility to malignant neoplasm of ovary
Z15.03	Genetic susceptibility to malignant neoplasm of prostate
Z15.04	Genetic susceptibility to malignant neoplasm of endometrium
Z15.09	Genetic susceptibility to other malignant neoplasm
Z15.81	Genetic susceptibility to multiple endocrine neoplasia [MEN]
Z15.89	Genetic susceptibility to other disease
Z31.430	Encntr fem for test for genetc dis carrier stat for pro mgmt
Z31.438	Encounter for oth genetic testing of female for pro mgmt
Z31.440	Encntr male test for genetic dis carrier status for pro mgmt
Z31.448	Encounter for oth genetic testing of male for pro mgmt
Z31.5	Encounter for genetic counseling