Local Coverage Determination (LCD) for Cytogenetic Studies (L30487)

Contractor Information
Contractor Name: Wisconsin Physicians Service Insurance Corporation
Contractor Number: 05402
Contractor Type: MAC - Part B

LCD Information
Document Information
LCD ID Number: L30487

Primary Geographic Jurisdiction: Nebraska
Oversight Region: Region X
Revision Effective Date: For services performed on or after 08/20/2012
Revision Ending Date: 08/20/2012

CMS National Coverage Policy
Jurisdiction “8” Notice:
Jurisdiction “8” comprises the states of Indiana and Michigan. WPS is responsible for claims payment and Local Coverage Determination (LCD) development for this jurisdiction. This LCD was created as a part of the legacy transition (7/16/2012 – 8/20/2012); and, is a consolidation of the previous legacy contractors’ policies. Coverage of each LCD begins when the state/contract number combination officially is integrated into the Jurisdiction. On the CMS MCD, this date is known as the Original Effective Date or the Revision Effective Date. The following table details the official effective dates for each state/contract number combination.

<table>
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<tr>
<th>ST</th>
<th>Legacy A Contractor &amp; Contract Number</th>
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<th>J &quot;8&quot; MAC A Contractor &amp; Contract Number</th>
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<th>J &quot;8&quot; Effective Date</th>
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<tr>
<td>IN</td>
<td>NGS: 00630</td>
<td>WPS: 08102</td>
<td>WPS: 08202</td>
<td>08/20/12</td>
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<td>MI</td>
<td>WPS: 00953</td>
<td>WPS: 08202</td>
<td>WPS: 08101</td>
<td>07/16/12</td>
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Title XVIII of the Social Security Act section 1862 (a)(1)(A). This section allows coverage and payment of those services that are considered to be medically reasonable and necessary.

Title XVIII of the Social Security Act section 1862 (a)(7). This section excludes routine physical examinations and services.

Title XVIII of the Social Security Act section 1833 (e). This section prohibits Medicare payment for any claim which lacks the necessary information to process the claim.

Indications and Limitations of Coverage and/or Medical Necessity

Discussion:
Cytogenetics is the study of chromosomes by light or fluorescent microscopy. Cytogenetic testing is used to study an individual's chromosome makeup. The term karyotyping refers to the arrangement of nuclear chromosomes in order from the largest to the smallest to analyze their number and structure. Variations in chromosome number or structure can produce a variety of clinical findings, including abnormalities of growth and intellect, congenital anomalies and, in the case of sex chromosome abnormalities ambiguous gender. Cytogenetic testing determines the number of chromosomes, defines the chromosome and examines the individual chromosomes for structural abnormalities such as deletions, duplications and translocations. Within the last 15 years cytogeneticists have incorporated molecular genetic techniques to identify structural chromosome abnormalities that are not visible using standard microscopy. These techniques include Fluorescence in situ hybridization (FISH), telomere-specific probes, spectral karyotyping, and comparative genomic hybridization. These techniques are used, when clinically indicated, to improve the accuracy and resolution of the standard karyotype. A normal karyotype consists of 22 pairs of autosomal chromosomes (numbered 1-22), and a pair of sex chromosomes: XY for the male and XX for the female. Karyotypes are reported using the International System for Cytogenetic Nomenclature which was last revised in 1995 (ICSN 1995).

Specimens for cytogenetic analysis can be obtained from a variety of tissues that yield cells that divide in culture including: peripheral blood, (lymphocytes; amniotic fluid (amniocytes); trophoblastic cells, chorionic villi; bone marrow; solid tumors, and cultured fibroblasts, usually obtained by skin biopsy. Also, fixed, paraffin embedded tissue and cytology specimens are used for FISH testing. The newer molecular cytogenetic techniques can be used even in non-dividing cells such as buccal cells obtained non-invasively from a cheek swab. Enough cells must be examined so that the chance of missing a cytogenetically distinct cell line (called mosaicism) is statistically low. For most clinical indications, 20 mitoses are examined and counted under direct microscopic visualization, and two are photographed or digitalized and karyotypes are prepared. Observation of aberrations usually prompts more extended scrutiny, and in many cases, further analysis of the original culture.

Indications
Cytogenetic studies may be undertaken to rule out a constitutional or acquired chromosomal abnormality. For most laboratories cytogenetic analyses now include standard G-banded chromosome analyses and/or molecular cytogenetic studies utilizing the method of fluorescence-in-situ-hybridization.

Constitutional chromosome abnormalities refer to those present at birth. Constitutional studies may be undertaken prenatally or postnataally:

Prenatal cytogenetic studies are indicated:
1. to rule out the presence of an abnormality in the fetus. Reasons for referral may include advanced maternal age (associated with an increased risk for trisomy), abnormalities observed on ultrasound, family history of a chromosome abnormality that increases risk for the current pregnancy). Cytogenetic studies are also performed on products of conception, to determine whether a chromosome abnormality was responsible for a fetal loss.

Postnatal cytogenetic studies are indicated:
1. to rule out a constitutional chromosome abnormality (present at birth) that may be associated with congenital anomalies, developmental delays, and/or mental retardation, and/or problems in sexual maturation or reproduction. The chromosome abnormalities involved in these disorders may be of number (gain or loss of a chromosome) or structure (e.g. deletions, duplications, derivative chromosomes resulting in both partial losses and gains of chromosomal material, inversions). Recently, with the advent of high resolution cytogenetics and supplemental studies by fluorescence-in-situ-hybridization (FISH) it has been possible to identify very subtle abnormalities that may be associated with neurologic and developmental issues (e.g. autism) rather than the multiple congenital anomalies. Many of these abnormalities represent so-called "microduplications or microdeletions". Specific FISH probes that can evaluate the presence or loss or duplication of specific gene regions involved in these duplications and deletions are now a part of routine cytogenetic practice (e.g. probes for Prader-Willi syndrome, DiGeorge syndrome, Williams's syndrome.)

2. to rule out the presence of a balanced chromosomal rearrangement (e.g. translocation) that puts the individual at risk for having a child with multiple congenital anomalies or for risk of recurrent miscarriage.

3. to rule out the presence of a chromosome instability syndrome that predisposes to development of malignancy (e.g. Fanconi anemia, Bloom syndrome, ataxia telangiectasia)

**Acquired chromosome abnormalities** refer to those that are typically acquired after birth, by a subpopulation of cells that is involved in a premalignant or malignant condition.

1. It is now recognized that the majority of hematologic malignancies are associated with clonal chromosomal abnormalities. Identifying the specific chromosome abnormality is now required for differential diagnosis of many of the lymphoid and myeloid leukemias and myelodysplastic syndromes. Additionally, as many of these chromosome abnormalities have been shown to have independent prognostic significance, identification of these abnormalities has become important for determining therapeutic regimens. For certain abnormalities (e.g. the Philadelphia chromosome and the 15;17 translocation) there are specific therapies targeted to the specific abnormalities.

2. Chromosome abnormalities for diagnosis and therapy decisions have also been identified in solid tumors including lymphomas, the small round blue cell tumors of childhood, and adult solid tumors such as breast and prostate, urinary bladder, lung and brain.

As with the constitutional studies, FISH studies targeted at identifying the specific gene rearrangement associated with the recurring chromosomal abnormality have become routine (e.g. the BCR/ABL fusion generated by the Philadelphia chromosome in CML and acute lymphoblastic leukemia, the PML/RARA fusion of the 15;17 translocation in APL)

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**Coding Information**

**Bill Type Codes:**

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

- 011x Hospital Inpatient (Including Medicare Part A)
- 012x Hospital Inpatient (Medicare Part B only)
- 013x Hospital Outpatient
- 014x Hospital - Laboratory Services Provided to Non-patients
- 071x Clinic - Rural Health
- 073x Clinic - Freestanding
- 085x Critical Access Hospital

**Revenue Codes:**

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Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

Revenue Codes
Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the article services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the article should be assumed to apply equally to all Revenue Codes.

Revenue codes only apply to providers who bill these services to the fiscal intermediary or Part A MAC. Revenue codes do not apply to physicians, other professionals and suppliers who bill these services to the carrier or Part B MAC.

Please note that not all revenue codes apply to every type of bill code. Providers are encouraged to refer to the FISS revenue code file for allowable bill types. Similarly, not all revenue codes apply to each CPT/HCPCS code. Providers are encouraged to refer to the FISS HCPCS file for allowable revenue codes.

All revenue codes billed on the inpatient claim for the dates of service in question may be subject to review.

0300 Laboratory - General Classification
0309 Laboratory - Other Laboratory
0310 Laboratory Pathology - General Classification
0311 Laboratory Pathology - Cytology
0319 Laboratory Pathology - Other Laboratory Pathology
0971 Professional Fees - Laboratory

CPT/HCPCS Codes
88230 TISSUE CULTURE FOR NON-NEOPLASTIC DISORDERS; LYMPHOCYTE
88233 TISSUE CULTURE FOR NON-NEOPLASTIC DISORDERS; SKIN OR OTHER SOLID TISSUE BIOPSY
88235 TISSUE CULTURE FOR NON-NEOPLASTIC DISORDERS; AMNIOTIC FLUID OR CHORIONIC VILLUS CELLS
88237 TISSUE CULTURE FOR NEOPLASTIC DISORDERS; BONE MARROW, BLOOD CELLS
88239 TISSUE CULTURE FOR NEOPLASTIC DISORDERS; SOLID TUMOR
88240 CRYOPRESERVATION, FREEZING AND STORAGE OF CELLS, EACH CELL LINE
88241 THAWING AND EXPANSION OF FROZEN CELLS, EACH ALIQUOT
88245 CHROMOSOME ANALYSIS FOR BREAKAGE SYNDROMES; BASELINE SISTER CHROMATID EXCHANGE (SCE), 20-25 CELLS
88248 CHROMOSOME ANALYSIS FOR BREAKAGE SYNDROMES; BASELINE BREAKAGE, SCORE 50-100 CELLS, COUNT 20 CELLS, 2 KARYOTYPES (EG, FOR ATAXIA TELANGIECTASIA, FANCONI ANEMIA, FRAGILE X)
88249 CHROMOSOME ANALYSIS FOR BREAKAGE SYNDROMES; SCORE 100 CELLS, CLASTOGEN STRESS (EG, DIEPOXYBUTANE, MITOMYCIN C, IONIZING RADIATION, UV RADIATION)
88261 CHROMOSOME ANALYSIS; COUNT 5 CELLS, 1 KARYOTYPE, WITH BANDING
88262 CHROMOSOME ANALYSIS; COUNT 15-20 CELLS, 2 KARYOTYPES, WITH BANDING
88263 CHROMOSOME ANALYSIS; COUNT 45 CELLS FOR MOSAICISM, 2 KARYOTYPES, WITH BANDING
88264 CHROMOSOME ANALYSIS; ANALYZE 20-25 CELLS
88267 CHROMOSOME ANALYSIS, AMNIOTIC FLUID OR CHORIONIC VILLUS, COUNT 15 CELLS, 1 KARYOTYPE, WITH BANDING
88269 CHROMOSOME ANALYSIS, IN SITU FOR AMNIOTIC FLUID CELLS, COUNT CELLS FROM 6-12 COLONIES, 1 KARYOTYPE, WITH BANDING
88271 MOLECULAR CYTOGENETICS; DNA PROBE, EACH (EG, FISH)
88272 MOLECULAR CYTOGENETICS; CHROMOSOMAL IN SITU HYBRIDIZATION, ANALYZE 3-5 CELLS (EG, FOR DERIVATIVES AND MARKERS)
88273 MOLECULAR CYTOGENETICS; CHROMOSOMAL IN SITU HYBRIDIZATION, ANALYZE 10-30 CELLS (EG, FOR MICRODELETIONS)
88274 MOLECULAR CYTOGENETICS; INTERPHASE IN SITU HYBRIDIZATION, ANALYZE 25-99 CELLS
88275 MOLECULAR CYTOGENETICS; INTERPHASE IN SITU HYBRIDIZATION, ANALYZE 100-300 CELLS
88280 CHROMOSOME ANALYSIS; ADDITIONAL KARYOTYPES, EACH STUDY
88283 CHROMOSOME ANALYSIS; ADDITIONAL SPECIALIZED BANDING TECHNIQUE (EG, NOR, C-BANDING)
ICD-9 Codes that Support Medical Necessity
Note: ICD-9 codes must be coded to the highest level of specificity.

Constitutional Cytogenetic Studies
88230, 88235, 88262, 88267, 88269, 88283, 88289, 88291, 88299

228.1 LYMHPHANGIOMA ANY SITE
256.39 OTHER OVARIAN FAILURE
257.8 OTHER TESTICULAR DYSFUNCTION
259.0 DELAY IN SEXUAL DEVELOPMENT AND PUBERTY NOT ELSEWHERE CLASSIFIED
289.81 PRIMARY HYPERCOAGULABLE STATE
289.83 MYELOFIBROSIS
299.00 - 299.11 AUTISTIC DISORDER, CURRENT OR ACTIVE STATE - CHILDHOOD DISINTEGRATIVE DISORDER, RESIDUAL STATE
317 - 319 MILD INTELLECTUAL DISABILITIES - UNSPECIFIED INTELLECTUAL DISABILITIES
334.8 OTHER SPINOCEREBELLAR DISEASES
388.5 DISORDERS OF ACOUSTIC NERVE
606.0 AZOOSPERMIA
606.1 OLIGOSPERMIA
611.1 HYPERTROPHY OF BREAST
628.9 INFERTILITY FEMALE OF UNSPECIFIED ORIGIN
630 - 631.8 HYDATIDIFORM MOLE - OTHER ABNORMAL PRODUCTS OF CONCEPTION
632 MISSED ABORTION
634 - 634.92 SPONTANEOUS ABORTION UNSPECIFIED COMPlicated BY GENITAL TRACT AND PELVIC INFECTION - SPONTANEOUS ABORTION COMPLETE WITHOUT COMPLICATION
646.33 RECURENT PREGNANCY LOSS, ANTEPARTUM CONDITION OR COMPLICATION
646.70 OTHER FETAL ABNORMALITY CAUSING DISPROPORTION UNSPECIFIED AS TO EPISODE OF CARE
646.71 OTHER FETAL ABNORMALITY CAUSING DISPROPORTION DELIVERED
646.73 OTHER FETAL ABNORMALITY CAUSING DISPROPORTION ANTEPARTUM
655.10 - 655.13 CHROMOSOMAL ABNORMALITY IN FETUS AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM - CHROMOSOMAL ABNORMALITY IN FETUS AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM
655.20 - 655.23 HEREDITARY DISEASE IN FAMILY POSSIBLY AFFECTING FETUS AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM CONDITION OR COMPLICATION
656.40 INTRAUTERINE DEATH AFFECTING MANAGEMENT OF MOTHER UNSPECIFIED AS TO EPISODE OF CARE
656.41 INTRAUTERINE DEATH AFFECTING MANAGEMENT OF MOTHER DELIVERED
656.43 INTRAUTERINE DEATH AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM
656.50 POOR FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER UNSPECIFIED AS TO EPISODE OF CARE
656.51 POOR FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER DELIVERED
656.53 POOR FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM CONDITION OR COMPLICATION
656.60 EXCESSIVE FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER UNSPECIFIED AS TO EPISODE OF CARE
656.61 EXCESSIVE FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER DELIVERED
656.63 EXCESSIVE FETAL GROWTH AFFECTING MANAGEMENT OF MOTHER ANTEPARTUM
657.00 - 657.03 POLYHYDRAMNIOS UNSPECIFIED AS TO EPISODE OF CARE - POLYHYDRAMNIOS ANTÉPARTUM COMPLICATION

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OLIGOHYDRAMNIOS UNSPECIFIED AS TO EPISODE OF CARE - OLIGOHYDRAMNIOS ANTEPARTUM

ELDERLY PRIMIGRAVIDA UNSPECIFIED AS TO EPISODE OF CARE - OTHER ADVANCED MATERNAL AGE ANTEPARTUM CONDITION OR COMPLICATION

ANENCEPHALUS - CONGENITAL ANOMALY UNSPECIFIED

FETAL GROWTH RETARDATION UNSPECIFIED WEIGHT - FETAL GROWTH RETARDATION 2500 GRAMS AND OVER

UNSPECIFIED CONDITION ORIGINATING IN THE PERINATAL PERIOD

UNSPECIFIED LACK OF NORMAL PHYSIOLOGICAL DEVELOPMENT

FAILURE TO THRIVE

DELAYED MILESTONES

SHORT STATURE

NONSPECIFIC ABNORMAL FINDINGS IN AMNIOTIC FLUID

ABNORMAL FINDING ON ANTENATAL SCREENING

PERSONAL HISTORY OF (CORRECTED) HYPOSPADIAS - PERSONAL HISTORY OF OTHER (CORRECTED) CONGENITAL MALFORMATIONS

FAMILY HISTORY OF INTELLECTUAL DISABILITIES

FAMILY HISTORY, COLONIC POLYPS

FAMILY HISTORY OF POLYCYSTIC KIDNEY

FAMILY HISTORY, GENETIC DISEASE CARRIER

SUPERVISION OF HIGH-RISK PREGNANCY WITH HISTORY OF ABORTION

SUPERVISION OF HIGH-RISK PREGNANCY WITH ELDERLY PRIMIGRAVIDA - SUPERVISION OF HIGH-RISK PREGNANCY WITH ELDERLY MULTIGRAVIDA

ANTENATAL SCREENING FOR CHROMOSOMAL ANOMALIES BY AMNIOCENTESIS - ANTENATAL SCREENING FOR FETAL GROWTH RETARDATION USING ULTRASONICS

ASYMPTOMATIC HEMOPHILIA A CARRIER

SYMPTOMATIC HEMOPHILIA A CARRIER

CYSTIC FIBROSIS GENE CARRIER

OTHER GENETIC CARRIER STATUS

88230, 88245, 88248, 88249, 88283

284.01 CONSTITUTIONAL RED BLOOD CELL APLASIA

284.09 OTHER CONSTITUTIONAL APLASTIC ANEMIA

334.8 OTHER SPINOCEREBELLAR DISEASES

757.39 OTHER SPECIFIED CONGENITAL ANOMALIES OF SKIN

759.89 OTHER SPECIFIED CONGENITAL ANOMALIES

MALIGNANT NEOPLASM OF GUM UNSPECIFIED

MALIGNANT NEOPLASM OF JEJUNUM - MALIGNANT NEOPLASM OF OTHER SPECIFIED SITES OF SMALL INTESTINE

MALIGNANT NEOPLASM OF RETROPERITONEUM

MALIGNANT NEOPLASM OF TRACHEA - MALIGNANT NEOPLASM OF ILL-DEFINED SITES WITHIN THE RESPIRATORY SYSTEM

MALIGNANT NEOPLASM OF BONES OF SKULL AND FACE EXCEPT MANDIBLE - MALIGNANT NEOPLASM OF BONE AND ARTICULAR CARTILAGE SITE UNSPECIFIED

MALIGNANT NEOPLASM OF CONNECTIVE AND OTHER SOFT TISSUE OF HEAD FACE AND NECK - MALIGNANT NEOPLASM OF CONNECTIVE AND OTHER SOFT TISSUE SITE UNSPECIFIED

Syndromes that predispose to malignancy

Acquired (cancer) chromosome studies

88230, 88237, 88239, 88262, 88271, 88273, 88274, 88275, 88283

143.9

152.1 - 152.8 opens in new window

158.0

162.0 - 165.9 opens in new window

170.0 - 170.9 opens in new window

171.0 - 171.9 opens in new window

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<td>173.00 - 173.99</td>
<td>MALIGNANT NEOPLASM OF SKIN OF LIP - OTHER SPECIFIED MALIGNANT NEOPLASM OF SKIN, SITE UNSPECIFIED</td>
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<tr>
<td>174.0 - 174.99</td>
<td>MALIGNANT NEOPLASM OF NIPPLE AND AREOLA OF FEMALE BREAST - MALIGNANT NEOPLASM OF BREAST (FEMALE) UNSPECIFIED SITE</td>
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<td>175.0 - 175.99</td>
<td>MALIGNANT NEOPLASM OF NIPPLE AND AREOLA OF MALE BREAST - MALIGNANT NEOPLASM OF OTHER AND UNSPECIFIED SITES OF MALE BREAST</td>
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<td>MALIGNANT NEOPLASM OF TRIGONE OF URINARY BLADDER - MALIGNANT NEOPLASM OF BLADDER PART UNSPECIFIED</td>
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<td>189.0 - 189.99</td>
<td>MALIGNANT NEOPLASM OF KIDNEY EXCEPT PELVIS - MALIGNANT NEOPLASM OF URINARY ORGAN SITE UNSPECIFIED</td>
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<td>190.1</td>
<td>MALIGNANT NEOPLASM OF ORBIT</td>
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<td>191.0 - 191.99</td>
<td>MALIGNANT NEOPLASM OF CEREBRUM EXCEPT LOBES AND VENTRICLES - MALIGNANT NEOPLASM OF BRAIN UNSPECIFIED SITE</td>
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<tr>
<td>192.3</td>
<td>MALIGNANT NEOPLASM OF SPINAL MENINGES</td>
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<tr>
<td>197.0 - 197.8</td>
<td>SECONDARY MALIGNANT NEOPLASM OF LUNG - SECONDARY MALIGNANT NEOPLASM OF OTHER DIGESTIVE ORGANS AND SPLEEN</td>
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<tr>
<td>198.0 - 198.89</td>
<td>RETICULOSARCOMA UNSPECIFIED SITE - OTHER AND UNSPECIFIED MALIGNANT NEOPLASMS OF LYMPHOID AND HISTIOCYTIC TISSUE INVOLVING LYMPH NODES OF MULTIPLE SITES</td>
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<td>MALIGNANT NEOPLASM OF TRIGONE OF URINARY BLADDER - MALIGNANT NEOPLASM OF BLADDER PART UNSPECIFIED</td>
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<td>MALIGNANT NEOPLASM OF ORBIT</td>
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<tr>
<td>203.10 - 203.12</td>
<td>MALIGNANT NEOPLASM OF CEREBRUM EXCEPT LOBES AND VENTRICLES - MALIGNANT NEOPLASM OF BRAIN UNSPECIFIED SITE</td>
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<td>203.80 - 203.82</td>
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<td>204.00 - 204.02</td>
<td>ACUTE LYMPHOID LEUKEMIA, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - ACUTE LYMPHOID LEUKEMIA, IN RELAPSE</td>
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<tr>
<td>204.10 - 204.12</td>
<td>CHRONIC LYMPHOID LEUKEMIA, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - CHRONIC LYMPHOID LEUKEMIA, IN RELAPSE</td>
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<td>204.20 - 204.22</td>
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<tr>
<td>204.80 - 204.82</td>
<td>OTHER LYMPHOID LEUKEMIA, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - OTHER LYMPHOID LEUKEMIA, IN RELAPSE</td>
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<tr>
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<td>206.00 - 206.92</td>
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<tr>
<td>207.00 - 207.82</td>
<td>ACUTE ERYTHREMIA AND ERYTHROLEUKEMIA, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - OTHER SPECIFIED LEUKEMIA, IN RELAPSE</td>
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<tr>
<td>208.00 - 208.02</td>
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<tr>
<td>208.10 - 208.12</td>
<td>CHRONIC LEUKEMIA OF UNSPECIFIED CELL TYPE, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - CHRONIC LEUKEMIA OF UNSPECIFIED CELL TYPE, IN RELAPSE</td>
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<td>208.20 - 208.22</td>
<td>SUBACUTE LEUKEMIA OF UNSPECIFIED CELL TYPE, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - SUBACUTE LEUKEMIA OF UNSPECIFIED CELL TYPE, IN RELAPSE</td>
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<tr>
<td>208.80 - 208.82</td>
<td>OTHER LEUKEMIA OF UNSPECIFIED CELL TYPE, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - OTHER LEUKEMIA OF UNSPECIFIED CELL TYPE, IN RELAPSE</td>
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<tr>
<td>208.90 - 208.92</td>
<td>UNSPECIFIED LEUKEMIA, WITHOUT MENTION OF HAVING ACHIEVED REMISSION - UNSPECIFIED LEUKEMIA, IN RELAPSE</td>
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<tr>
<td>209.00 - 209.69</td>
<td>MALIGNANT CARCINOID TUMOR OF THE SMALL INTESTINE, UNSPECIFIED PORTION - BENIGN CARCINOID TUMOR OF OTHER SITES</td>
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<tr>
<td>223.3</td>
<td>BENIGN NEOPLASM OF BLADDER</td>
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<tr>
<td>225.2</td>
<td>BENIGN NEOPLASM OF CEREBRAL MENINGES</td>
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<tr>
<td>230.0</td>
<td>CARCINOMA IN SITU OF LIP ORAL CAVITY AND PHARYNX</td>
</tr>
<tr>
<td>231.0</td>
<td>CARCINOMA IN SITU OF LARYNX</td>
</tr>
<tr>
<td>232.9</td>
<td>CARCINOMA IN SITU OF SKIN SITE UNSPECIFIED</td>
</tr>
<tr>
<td>233.0</td>
<td>CARCINOMA IN SITU OF BREAST</td>
</tr>
<tr>
<td>233.30 - 233.39</td>
<td>CARCINOMA IN SITU, UNSPECIFIED FEMALE GENITAL ORGAN - CARCINOMA IN SITU, OTHER FEMALE GENITAL ORGAN</td>
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</tbody>
</table>
Diagnoses that Support Medical Necessity

There are no specific codes for the following syndromes. Use code 758.5, other conditions due to autosomal anomalies, to indicate these conditions.

Microdeletion and other chromosomal syndromes:
- Angelman syndrome (associated with deletion of 15q11.2).
- Williams syndrome (associated with deletion of 7q11.3).
- Smith Magenis Syndrome: (deletion of 17p11.2): Mental retardation, dysmorphism, severe
- Miller Dieker and isolated lissencephaly (deletion of 17p13)

For the microdeletion syndromes listed above, the clinical referral is typically to:

Rule out Prader Willi or Angelmen, etc.

Solid tumors:
Cytogenetic studies may be useful in the following cancer types or to determine if a cancer fits into one of these types. (Medicare does not use the M codes for billing purposes). See the list of icd-9 codes for solid tumors listed above to bill for these types of cancer.

M9260/3 Ewing sarcoma
M8910/3 Embryonal rhabdomyosarcoma
M8920/3 Alveolar rhabdomyosarcoma
M9040/3 Alveolar soft part sarcoma
M9500/3 Neuroblastoma
M9391/3 Ependymoma
M940/3 Glioblastoma
M9390/3 Glioma
M9380/3 Gliosarcoma
M9470/3 Medulloblastoma
M9040 Synovial sarcoma

The following are referred for Her2Neu
M8500/3 Ductal carcinoma
M8541/3 Ductal carcinoma with Paget's disease
M8489/3 Collid/Mucinous carcinoma
M8500/2 Intraductal carcinoma
M8510/3 Lobular carcinoma
M8510/3 Medullary carcinoma

The following are for prostate related FISH:
M8120/2-3 Urothelial carcinoma
M8130/3 Transitional carcinoma

ICD-9 Codes that DO NOT Support Medical Necessity

ICD-9 Codes that DO NOT Support Medical Necessity Asterisk Explanation

Diagnoses that DO NOT Support Medical Necessity

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**General Information**

**Documentations Requirements**

**Documentation Requirements**

- Documentation supporting the medical necessity of this item, such as ICD-9 codes, must be submitted with each claim. Claims submitted without such evidence will be denied as being not medically necessary.

- Medical record documentation maintained by the ordering/referring physician must indicate the medical necessity for performing the test. Additionally, a copy of the test results should be maintained in the medical records. This information is usually found in the history and physical, office/progress notes, and/or laboratory results.

- If the provider of the service is other than the ordering/referring physician, that provider must maintain hard copy documentation of the test results and interpretation, along with copies of the ordering/referring physician's order for the studies.

- The physician must state the clinical indication/medical necessity for the study in his order for the test.

**Appendices**

Utilization Guidelines Genetic disorders and failure of sexual development involve chromosomal abnormalities that are stable over time, and, accordingly, payment for cytogenetic studies for these abnormalities will be allowed once per lifetime.

This is in contrast to the malignancies, where repeat cytogenetic studies may be appropriate.

If a new technique (e.g., fluorescence in-situ hybridization) becomes available that was not available at the time of initial diagnosis, or if a supplemental study is able to be performed at a higher level of resolution and this increase the chances of detecting a chromosome abnormality, the follow-up study will be considered.

**Sources of Information and Basis for Decision**

**Sources of Information and Basis for Decision**


For the Acquired Chromosome Studies:
For the Constitutional Chromosome Studies:

Advisory Committee Meeting Notes Advisory Committee Meeting Notes
Meeting Date:
Wisconsin: 09/25/2009
Illinois: 09/16/2009
Minnesota: 09/24/2009
Iowa, Kansas, Missouri, Nebraska 10/08/2009
Jurisdictional Open Meeting 08/19/2009

Any Carrier Advisory Committee (CAC) related information, including Start Date and End Date of Comment Period, reflects the last time this LCD passed through the Comment and Notice process. Formal comment is not required for LCDs being adopted as part of the MAC transition.

Start Date of Comment Period 10/08/2009
End Date of Comment Period 11/23/2009
Start Date of Notice Period 06/01/2012

Revision History Number X

Revision History Explanation 08/20/2012: This LCD was revised to add the Jurisdiction 8 (J-8) Indiana Part B MAC Contract Number 08102. The CMS Statement of Work for the J8 Medicare Administrative Contract (MAC) requires that the contractor retain the most clinically appropriate LCD within the jurisdiction. This WPS policy is being promulgated to the J8 MAC as the most clinically appropriate LCD within this jurisdiction. No coverage changes were made to this LCD for this revision.

07/23/2012: This LCD was revised to add the Jurisdiction 8 (J-8) Indiana and Michigan Part A MAC Contract Numbers 08101 and 08201. The CMS Statement of Work for the J8 Medicare Administrative Contract (MAC) requires that the contractor retain the most clinically appropriate LCD within the jurisdiction. This WPS policy is being promulgated to the J8 MAC as the most clinically appropriate LCD within this jurisdiction. No coverage changes were made to this LCD for this revision.

07/16/2012: This LCD was revised to add the Jurisdiction 8 (J-8) Michigan Part B MAC Contract Number 08202 and remove the legacy Michigan Part B Carrier Contract Number 00953. The CMS Statement of Work for the J8 Medicare Administrative Contract (MAC) requires that the contractor retain the most clinically appropriate LCD within the jurisdiction. This WPS policy is being promulgated to the J8 MAC as the most clinically appropriate LCD within this jurisdiction. No coverage changes were made to this LCD for this revision.

3/7/2010 - The description for Bill Type Code 73 was changed
04/19/2010—In accordance with Section 911 of the Medicare Modernization Act of 2003, the states of American Somoa, California, Guam, Hawaii, Nevada and Northern Mariana Islands were removed from this LCD because claims processing for those states are transitioning from FI Contractor Wisconsin Physician Services (WPS - 52280) to MAC Part A Contractor Palmetto.

8/1/2010 - The description for Bill Type Code 11 was changed
8/1/2010 - The description for Bill Type Code 12 was changed
8/1/2010 - The description for Bill Type Code 13 was changed
8/1/2010 - The description for Bill Type Code 14 was changed
8/1/2010 - The description for Bill Type Code 71 was changed
8/1/2010 - The description for Bill Type Code 73 was changed
8/1/2010 - The description for Bill Type Code 85 was changed

8/1/2010 - The description for Revenue code 0300 was changed
8/1/2010 - The description for Revenue code 0309 was changed
8/1/2010 - The description for Revenue code 0310 was changed
8/1/2010 - The description for Revenue code 0311 was changed
8/1/2010 - The description for Revenue code 0319 was changed
8/1/2010 - The description for Revenue code 0971 was changed

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09/06/2010 - This policy was updated by the ICD-9 2010-2011 Annual Update.

10/18/2010 - In accordance with Section 911 of the Medicare Modernization Act of 2003, the states of Colorado, New Mexico, Oklahoma and Texas were removed from this LCD because claims processing for these states are transitioning from FI Wisconsin Physician Service (WPS 52280) to MAC Part A contractor Trailblazers (04901).

11/21/2010 - For the following CPT/HCPCS codes either the short description and/or the long description was changed. Depending on which description is used in this LCD, there may not be any change in how the code displays in the document:
- 88230 descriptor was changed in Group 1
- 88233 descriptor was changed in Group 1
- 88235 descriptor was changed in Group 1
- 88237 descriptor was changed in Group 1
- 88239 descriptor was changed in Group 1
- 88245 descriptor was changed in Group 1
- 88248 descriptor was changed in Group 1
- 88249 descriptor was changed in Group 1
- 88261 descriptor was changed in Group 1
- 88262 descriptor was changed in Group 1
- 88263 descriptor was changed in Group 1
- 88264 descriptor was changed in Group 1
- 88267 descriptor was changed in Group 1
- 88269 descriptor was changed in Group 1
- 88271 descriptor was changed in Group 1
- 88272 descriptor was changed in Group 1
- 88273 descriptor was changed in Group 1
- 88274 descriptor was changed in Group 1
- 88275 descriptor was changed in Group 1
- 88285 descriptor was changed in Group 1
- 88289 descriptor was changed in Group 1

02/01/2011, Added code 88230 to the ICD-9 section, Constitutional Cytogenetic Studies retroactive to 03/18/2010

02/21/2011 — In accordance with Section 911 of the Medicare Modernization Act of 2003, the states of Delaware, District of Columbia, Maryland, New Jersey and Pennsylvania were removed from this LCD because claims processing for these states are transitioning from FI Wisconsin Physician Service (WPS 52280) to MAC Part A contractor Highmark (12901).

08/27/2011 - This policy was updated by the ICD-9 2011-2012 Annual Update.

10/01/2011 ICD-9 update

Reason for Change Other

Related Documents
This LCD has no Related Documents.

LCD Attachments
Coding & Billing Guidelines 6/1/12 opens in new window (PDF - 77 KB )

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All Versions
Updated on 08/03/2012 with effective dates 08/20/2012 - N/A
Updated on 08/03/2012 with effective dates 07/23/2012 - 08/19/2012
Updated on 05/31/2012 with effective dates 07/16/2012 - 07/22/2012
Updated on 05/12/2012 with effective dates 07/16/2012 - N/A
Updated on 05/12/2012 with effective dates 07/16/2012 - N/A
Updated on 05/11/2012 with effective dates 07/16/2012 - N/A

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