CYTOGENETICS TEST REQUISITION FORM

GeneDx an OPKO Health Company

PATIENT INFORMATION

First name | Last name

Sex ◯ Male ◯ Female
Gender identification (optional): _____ | Date of birth (mm/dd/yy)

Ancestry ◯ White/Caucasian ◯ Hispanic ◯ Black/African American ◯ Native American ◯ East Asian ◯ South Asian ◯ Middle Eastern ◯ Ashkenazi Jewish ◯ Other: _____

Email

Address

City | State | Zip code

Primary phone | Is this patient deceased? ◯ Yes ◯ No
Deceased date: _____

SAMPLE INFORMATION

Specimen ID | Medical record # | Date sample obtained (mm/dd/yy)

◯ Blood in EDTA (for array CGH; purple top - single tube of 2-5mL)
◯ Blood in sodium heparin (for FISH and chromosome analysis; green top - single tube of 2-5mL)
◯ Products of Conception (POC), specify tissue:_____
◯ Buccal Swab ◯ DNA: tissue source_____ / concentration_____(µg/mL)

Patient has had a blood transfusion ◯ Yes ◯ No Date of last transfusion:_____
(2-4 weeks of wait time is required for some testing)
Patient has had an allogenic bone marrow transplant ◯ Yes ◯ No
Fibroblasts are recommended for patients who had an allogenic bone marrow transplant.
See www.genedx.com/specimen-requirements for details.
◯ Treatment-Related RUSH Date:_____

If other samples submitted:

Relationship to patient | Name | Sample type

Relationship to patient | Name | Sample type

PATIENT CONSENT

By signing this form I acknowledge as the patient that I have read the attached informed consent document and that I authorize GeneDx to perform genetic testing as described. I have been informed that GeneDx may contact me or my healthcare provider about research opportunities in the future. For the insurance bill, I understand and authorize GeneDx to share information with the designated insurance carrier for reimbursement. I understand that GeneDx will attempt to contact me if my estimated out-of-pocket responsibility will be greater than $100 per test. If GeneDx is unsuccessful in its attempts to contact me, it will be my responsibility to contact GeneDx to determine and pay the out-of-pocket cost. More information, including the GeneDx Notice of Privacy Policies, is available on GeneDx's website: www.genedx.com

◯ By checking this box, I confirm that I am a New York state resident, and I give permission for GeneDx to retain any remaining sample longer than 60 days after the completion of testing.

◯ Check this box if you wish to opt out of being contacted for research studies.

Signature of patient (required) **Date**

ACCOUNT INFORMATION

Account number | **Account name**

Phone | Fax

Address | City

State | Zip code | Country

Ordering provider

Name | Role/Title

Phone | NPI

Email address (for report access)

Reporting Preference: ◯ Portal ◯ Fax ◯ Email ◯ Care Evolve If unmarked, we will use the account's default preferences or fax to new clients.

Additional Reporting Providers ◯ Same as ordering provider

Name | Role/Title

Phone | NPI

Email address (for report access)

Additional clinical or laboratory contact (optional)

Name | Email address (for report access)

SEND ADDITIONAL REPORT COPIES TO

Healthcare provider/Acct # | Fax #/Email

STATEMENT OF MEDICAL NECESSITY

By submission of this test requisition and accompanying sample(s), I: (i) authorize and direct GeneDx to perform the testing indicated; (ii) certify that the person listed as the ordering provider is authorized by law to order the test(s) requested; (iii) certify that any custom panel and/or ordered test(s) requested on this test requisition form are reasonable and medically necessary for the diagnosis and/or treatment of a disease, illness, impairment, symptom, syndrome or disorder; (iv) the test results will determine my patient's medical management and treatment decisions of this patient's condition on this date of service; (v) have obtained this patient's and relatives', when applicable, written informed consent to undergo any genetic testing requested; and (vi) that the full and appropriate diagnosis code(s) are indicated to the highest level of specificity.

Signature of provider (required) **Date**

ICD-10 codes (required):

Clinical diagnosis: | **Age at initial presentation:**

PATIENT STATUS – ONE MUST BE CHECKED: ◯ **Hospital outpatient** ◯ **Hospital inpatient** **Date of discharge:** _____ ◯ **Not a hospital patient**

PAYMENT OPTIONS

◯ **Insurance Bill** | ◯ Copy of front and back of primary and secondary (if applicable) insurance card(s) included | ◯ **Hold sample for estimated benefit investigation**

Insurance carrier | Referral/Prior authorization number (please attach) | GeneDx benefit investigation #

Insurance ID # | Relationship to insured: ◯ Self ◯ Spouse ◯ Child ◯ Other _____ | Policyholder's name | Policyholder's date of birth

◯ **Patient Bill** | Amount ($):_____

If Patient Bill is selected, I am electing to be treated as a self-pay patient for this testing. I agree that neither GeneDx nor I will submit a claim to my insurance for this testing, if I have insurance. GeneDx will send an invoice to the patient listed above.

◯ **GeneDx Affiliate Code:**

◯ **Institutional Bill**

GeneDx account # | Hospital/Lab name

Place sticker/stamp here

CLINICAL INFORMATION

Account #	Account Name

First Name	Last Name	Date of Birth

CLINICAL INFORMATION (DETAILED MEDICAL RECORDS MUST BE ATTACHED)

Diagnosis: _____

Dysmorphic features: _____

Other medical problems: _____

Suspected syndrome(s): _____

Previous cytogenetics (attach copy): _____

Clinical and family history: _____

Pre/Perinatal History
- ○ Cystic hygroma
- ○ Diaphragmatic hernia
- ○ Encephalocele
- ○ Growth delay
- ○ Increased nuchal translucency
- ○ Intrauterine growth retardation
- ○ Neural tube defect
- ○ Omphalocele

Structural Brain Abnormalities
- ○ Abnormality of the corpus callosum
- ○ Holoprosencephaly
- ○ Hydrocephalus
- ○ Lissencephaly
- ○ Pachygyria

Developmental/Behavioral Findings
- ○ Attention deficit hyperactivity disorder
- ○ Autistic behavior
- ○ Behavioral abnormality
- ○ Delayed fine motor development
- ○ Delayed gross motor development
- ○ Delayed speech & language development
- ○ Developmental regression
- ○ Gait disturbance
- ○ Global developmental delay
- ○ Hyperactivity
- ○ Intellectual disability
- ○ OCD
- ○ Sleep disturbance
- ○ Specific learning disability

Neurological Findings
- ○ Abnormality of nervous system
- ○ Anosmia, congenital
- ○ Ataxia
- ○ Cerebral palsy
- ○ Encephalopathy
- ○ Epileptic encephalopathy
- ○ Peripheral neuropathy
- ○ Seizures
- ○ Spasticity

Craniofacial/Dysmorphism
- ○ Abnormal facial shape (Dysmorphic features)
- ○ Brachycephaly
- ○ Cleft lip
- ○ Cleft palate
- ○ Craniosynostosis
- ○ External ear malformation
- ○ Macrocephaly
- ○ Microcephaly

Eye Defects/ Vision
- ○ Abnormality of vision
- ○ Aniridia
- ○ Coloboma
- ○ Esotropia
- ○ Microphthalmia
- ○ Retinitis pigmentosa

Hearing Impairment
- ○ Conductive hearing impairment/bilateral
- ○ Sensorineural hearing impairment/bilateral

Cardiac Findings
- ○ Abnormal heart morphology
- ○ Atrial septal defect
- ○ Cardiomyopathy
- ○ Coarctation of aorta
- ○ Tetralogy of fallot
- ○ Ventricular septal defect

Gastrointestinal Findings
- ○ Aganglionic megacolon
- ○ Failure to thrive
- ○ Tracheoesophageal fistula

Musculoskeletal Findings
- ○ Clinodactyly
- ○ Craniosynostosis
- ○ Hemihypertrophy
- ○ Hypertonia
- ○ Hypotonia
- ○ Pectus excavatum
- ○ Polydactyly
- ○ Scoliosis
- ○ Short stature
- ○ Syndactyly
- ○ Talipes equinovarus
- ○ Tall stature

Skin/Hair Findings
- ○ Café-au-lait macules
- ○ Cutis laxa
- ○ Hyperpigmentation of the skin
- ○ Hypopigmentation of the skin
- ○ Ichthyosis
- ○ Sparse hair

Genitourinary Findings
- ○ Ambiguous genitalia
- ○ Cryptorchidism
- ○ Horseshoe kidney
- ○ Hydronephrosis
- ○ Hypospadias
- ○ Polycystic kidney disease

Metabolic Issues/Mito
(Attach relevant lab reports/values)
- ○ Elevated CPK_____

Endocrine Findings
- ○ Delayed puberty

_____
Signature of provider (required) Date

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EXPEDITED TESTING

I would like expedited testing for the following reason: ○ Pregnancy (gestational age:_____weeks) ○ Transplantation ○ Other:_____

TEST MENU

TEST CODE	TEST NAME
○ 910	GenomeDx: Whole-Genome Chromosomal Microarray (CMA)
○ 905	Known Familial Deletion/Duplication Testing
○ 725	Parental follow up testing for copy number variant(s) (for eligible VUS identified by GenomeDx)
○ J542	FISH Follow-up after GenomeDx (Test 910) Please specify chromosomal region: 1:_____ 2:_____
○ 336	FISH Please specify chromosomal region: 1:_____ 2:_____
○ 0559	Chromosome Analysis, Peripheral blood (routine study)
○ T982	Rule out Mosaicism Chromosome Analysis, Peripheral blood (Must indicate suspected mosaic chromosomal abnormality)

VARIANT INFORMATION (CNV(s) require coordinates and genome build or transcript # and exon #)

Variant(s): _____

Genome Build:_____ Coordinates: _____

Gene:_____ Exon #: _____ Transcript #:_____

Proband Name: _____

Relationship to Proband: _____

Proband GeneDx Accession #: _____

PROBAND TESTED AT ANOTHER LABORATORY

○ Positive control included/will be sent - **Positive control is recommended if previous test was performed at another lab.**

○ Positive control not available (Caveat language will be included on a negative report)

○ Family member test report included (recommended if previous test was performed at another lab)

INFORMED CONSENT

Account #	Account Name

First Name	Last Name	Date of Birth

General Information About Genetic Testing

What is genetic testing?

DNA provides instructions for our body's growth and development. Genes are distinct sequences of DNA, and are arranged on chromosomes. The DNA in a gene contains instructions for making proteins, which determine things like growth and metabolism as well as traits like eye color and blood type. Genetic disorders are caused by certain changes in DNA affecting the structure or number of chromosomes. Genetic testing is a laboratory test that tries to identify these changes in chromosomes or the DNA. Genetic testing can be a diagnostic test, which is used to identify or rule out a specific genetic condition. Genetic screening tests are used to assess the chance for a person to develop or have a child with a genetic condition. Genetic screening tests are not typically diagnostic and results may require additional testing.

The purpose of this test is to see if I, or my child, may have a genetic variant or chromosome rearrangement causing a genetic disorder or to determine the chance that I, or my child, will develop or pass on a genetic disorder in the future. 'My child' can also mean my unborn child, for the purposes of this consent.

If I/my child already know the specific gene variant(s) or chromosome rearrangement that causes the genetic disorder in my family, I will inform the laboratory of this information.

What could I learn from this genetic test?

The following describes the possible results from the test:

1) Positive: A positive result indicates that a genetic variant has been identified that explains the cause of my/my child's genetic disorder or indicates that I/my child am at increased risk to develop the disorder in the future. It is possible to test positive for more than one genetic variant.

2) Negative: A negative result indicates that no disease-causing genetic variant was identified by the test performed. It does not guarantee that I/my child will be healthy or free from genetic disorders or medical conditions. If I/my child test negative for a variant known to cause the genetic disorder in other members of my/my child's family, this result rules out a diagnosis of the same genetic disorder in me/my child due to this specific change.

3) Inconclusive/Variant of Uncertain Significance (VUS): A finding of a variant of uncertain significance indicates that a genetic change was detected, but it is currently unknown whether that change is associated with a genetic disorder either now or in the future. A variant of uncertain significance is not the same as a positive result and does not clarify whether I/my child is at increased risk to develop a genetic disorder. The change could be a normal genetic variant or it could be disease-causing. Further analysis may be recommended, including testing parents and other family members. Detailed medical records or information from other family members also may be needed to help clarify results.

4) Unexpected results: In rare instances, this test may reveal an important genetic change that is not directly related to the reason for ordering this test. For example, this test may tell me about the risk for another genetic condition I/my child is not aware of or it may indicate differences in the number or rearrangement of sex chromosomes. This information may be disclosed to the ordering health care provider if it likely impacts medical care.

Result interpretation is based on currently available information in the medical literature, research and scientific databases. Because the literature, medical and scientific knowledge are constantly changing, new information that becomes available in the future may replace or add to the information GeneDx used to interpret my/my child's results. Providers can contact GeneDx at any time to discuss the classification of an identified variant. In addition, I or my/my child's health care providers may monitor publicly available resources used by the medical community, such as ClinVar (www.clinvar.com), to find current information about the clinical interpretation of my/my child's variant(s).

For tests that evaluate data from multiple family members, my spouse, or partner concurrently, results may be included in a single comprehensive report.

What are the risks and limitations of this genetic test?

- Genetic testing is an important part of the diagnostic process. However, genetic tests may not always give a definitive answer. In some cases, testing may not identify a genetic variant even though one exists. This may be due to limitations in current medical knowledge or testing technology.
- Accurate interpretation of test results may require knowing the true biological relationships in a family. Failing to accurately state the biological relationships in my/my child's family may result in incorrect interpretation of results, incorrect diagnoses, and/or inconclusive test results. In some cases, genetic testing can reveal that the true biological relationships in a family are not as they were reported. This includes non-paternity (the stated father of an individual is not the biological father) and consanguinity (the parents of an individual are related by blood). It may be necessary to report these findings to the health care provider who ordered the test.
- Genetic testing is highly accurate. Rarely, inaccurate results may occur for various reasons. These reasons include, but are not limited to: mislabeled samples, inaccurate reporting of clinical/medical information, rare technical errors, or unusual circumstances such as bone marrow transplantation, or the presence of change(s) in such a small percentage of cells that the change(s) may not be detectable by the test (mosaicism).
- This test does not have the ability to detect all of the long-term medical risks that I/my child might experience. The result of this test does not guarantee my health or the health of my child/fetus. Other diagnostic tests may still need to be done, especially when only a genetic screening test has been performed previously.
- Occasionally, an additional sample may be needed if the initial specimen is not adequate.

Patient Confidentiality and Genetic Counseling

It is recommended that I receive genetic counseling before and after having this genetic test. I can find a genetic counselor in my area here: www.nsgc.org. Further testing or additional consultations with a health care provider may be necessary.

To maintain confidentiality, the test results will only be released to the referring health care provider, to the ordering laboratory, to me, to other health care providers involved in my/my child's diagnosis and treatment, or to others as entitled by law. The United States Federal Government has enacted several laws that prohibit discrimination based on genetic test results by health insurance companies and employers. In addition, these laws prohibit unauthorized disclosure of this information. For more information, I understand that I can visit www.genome.gov/10002077.

International Specimens

If I/my child reside outside the United States, I attest that by providing a sample for testing, I am not knowingly violating any export ban or other legal restriction in the country of my/my child's residence.

Additional information about the specific test being ordered is available from my health care provider or I can go to the GeneDx website, www.genedx.com.This information includes the complete gene lists, the specific types of genetic disorders that can be identified by the genetic test, the likelihood of a positive result, the limitations of genetic testing, as well as information about how specimens and information are stored and used.