



**THE HOSPITAL FOR
SICK CHILDREN**

**Paediatric
Laboratory Medicine**

555 University Avenue
Room 3416, Roy C. Hill Wing
Toronto, ON, M5G 1X8, Canada
Tel: 416-813-7200 x1
Fax: 416-813-7732
molecular.lab@sickkids.ca

Genome Diagnostics

www.sickkids.ca/dplm

Patient Name: _____
Preferred Name (if different): _____
Date of Birth (DD/MM/YYYY): _____
Legal Sex: Male Female Non-binary/U/X
Sex Assigned at Birth (if different): Male Female Unassigned
Gender Identity: Male Female Non-binary/U/X
MRN: _____
Parent's Name: _____
Address: _____
Telephone #: _____
For Canada Only (Billing section must be completed for all non-OHIP)
Provincial Health Card #: _____ Version: _____
Issuing Province: _____

Testing is provided for medical purposes only and results are not intended for forensic use. The laboratory is not a forensically accredited laboratory.

RNA SEQUENCING

Ordering Physician:

Name: _____
Institution/Facility/Ward/Clinic: _____
Address: _____
Phone _____ Fax _____
Email address: _____
Signature (required) _____

RNA Sequencing submission requirements:

Consent:

The test has been discussed with the patient.

Clinical information:

The following information has been provided for the patient on pages 2-4:

- Phenotypic information (PhenoTips or Clinical data sheet)
- Family history (pedigree)
- Previous testing history
- Relevant clinic note(s) and/or letter(s)

Copy Report To:

Name: _____
Institution: _____
Address: _____
Phone _____ Fax _____

Sample Information:

Date obtained (DD/MM/YYYY): _____ - _____ - _____
Referring laboratory reference #: _____
 Cultured Fibroblast (1-2 T25 flask)
 Cultured Fibroblast (1x 10*6 cells pelleted frozen on dry ice)
 Tissue frozen (-80 C min 5-10 mg required) (Source: _____)
 Other (please contact lab prior to collecting) _____

Bone Marrow Transplant/Transfusion

Has the patient undergone bone marrow transplant? Yes No
Date of bone marrow transplant (DD-MM-YYYY): _____

Testing for patients who have received an allogenic bone marrow transplant must be completed on a pre-transplant sample or a non-hematologic sample

Has the patient received a blood transfusion? Yes No
Date of last transfusion (DD-MM-YYYY): _____

Blood obtained for genetic testing should ideally be collected at least 2-4 weeks after the date of the last transfusion

The specimen should be shipped on a Monday, Tuesday or Wednesday. If there is a delay in the shipping of specimen (i.e. >48 hours), the sample should be placed in the refrigerator and shipped to Genome Diagnostics Laboratory on ice. Please call to inform us when the samples are being sent

Full RNA Sequencing

RNA sequencing for targeted analysis

Complete below and attach a copy of proband's report:

Gene & NM#: _____

Mutation/variant(s): _____

SickKids Laboratory/Order Number: _____

SickKids Pedigree/Family Number: _____

Laboratory Use:

Date (DD/MM/YYYY) | Time Received: _____ h

Order #:

Specimen type, amt & # of tubes: _____

Comments:

Proband name: _____ MRN: _____ DOB: _____

CLINICAL DATA SHEET

Previous genetic testing:

- Single gene/Gene panel (1): _____
Result: _____
Single gene/Gene panel (2): _____
Result: _____
Microarray: _____
Other: _____
Result: _____

Pre/Perinatal History

- Cystic hygroma
Increased nuchal translucency
Intrauterine growth retardation
Nonimmune hydrops fetalis
Oligohydramnios
Polyhydramnios
Prematurity GA: _____
Other: _____

Growth:

- Growth delay
Overgrowth
Failure to thrive
Hemihypertrophy
Short stature
Tall stature

Structural Brain Abnormalities

- Abnormal myelination
Abnormality of basal ganglia
Abnormality of brainstem
Abnormality of periventricular white matter
Abnormality of the corpus callosum
Aplasia/hypoplasia of cerebellar vermis
Aplasia/hypoplasia of cerebellum
Cerebellar atrophy
Chiari malformation
Cortical dysplasia
Encephalocele
Heterotopia
Hemimegalencephaly
Holoprosencephaly
Hydrocephalus
Leukodystrophy
Lissencephaly
Pachygyria
Polymicrogyria
Ventriculomegaly
Other: _____

Developmental/Behavioral

- Aggressive behavior
ADHD
Anxiety
Autistic Behavior
Autism spectrum disorder
Cognitive impairment
Delayed speech & language development
Developmental regression
Fine motor delay
Gross motor delay
Speech delay
Gait disturbance
Global developmental delay
Hyperactivity
Incoordination
Intellectual disability
Mild
Profound
Moderate
Severe
Learning disability
Memory impairment
Obsessive-compulsive disorder
Sleep disturbance
Stereotypy

Neurological

- Ataxia
Chorea
Cortical Visual Impairment
Dementia
Dysarthria
Dyskinesia
Dysphasia
Dystonia
Encephalopathy
Headaches
Hemiplegia
Infantile Spasms
Migraines
Myoclonus
Myopathic facies
Myopathy
Muscle weakness
Muscle dystrophy
Neuropathy
Motor
Sensory
Sensorimotor
Parkinsonism
Seizures
Spasticity
Tremors

Craniofacial Dysmorphic Features

- Craniosynostosis
Specify: _____
Macrocephaly
Microcephaly
Head shape - Specify: _____
Facies Specify: _____
Forehead Specify: _____
Ears Specify: _____
Eyes Specify: _____
Nose Specify: _____
Cleft lip and/or palate
Coarse facial features
Short neck
Synophrys
Other: _____

Ophthalmological

- Anophthalmia
Cataracts
Coloboma
Corneal opacity
Ectopia lentis
External ophthalmoplegia
Microphthalmia
Myopia
Nystagmus
Optic atrophy
Ptosis
Retinal detachment
Retinitis pigmentosa
Strabismus
Other: _____

Hearing Impairment

- Abnormal Newborn Screen: _____
Conductive hearing impairment
Sensorineural hearing impairment

Hematological or Immunologic

- Anemia
Coagulation disorder
Immunodeficiency
Neutropenia
Pancytopenia
Recurrent infections
Thrombocytopenia
Other: _____

Integumental Skin

- Abnormal blistering of the skin
Anhidrosis
Café-Au-Lait macules
Cutis laxa
Hemangiomas
Hyperpigmentation of the skin
Hypopigmentation of the skin
Ichthyosis
Skin rash
Telangiectasia
Vascular skin abnormality
Other: _____

Hair

- Abnormal texture, distribution, colour, whorls
Specify: _____
Alopecia
Coarse hair
Sparse hair
Other: _____

Dental

- Specify: _____

Nails

- Specify: _____

Proband name: _____ MRN: _____ DOB: _____

CLINICAL DATA SHEET

Cardiac

- Aortic root dilation
- Arrhythmia / Conduction defect
 - Bradycardia
 - Prolonged QTc interval
 - Ventricular tachycardia
- Cardiomyopathy
 - Dilated
 - Hypertrophic
 - Noncompaction
- Congenital heart defect
 - Atrial septal defect
 - Bicuspid aortic valve
 - Coarctation of aorta
 - Hypoplastic left heart
 - Patent ductus arteriosus
 - Patent foramen ovale
 - Tetralogy of Fallot
 - Ventricular septal defect
- Heterotaxy
- Mitral valve prolapse
- Sudden death
- Syncope
- Other: _____

Endocrine

- Early puberty
- Delayed puberty
- Diabetes Insipidus
- Diabetes mellitus
- Hyperparathyroidism
- Hypoparathyroidism
- Hyperthyroidism
- Hypothyroidism
- Hypogonadism
- Hypophosphatemia
- Rickets
- Other: _____

Gastrointestinal

- Chronic intestinal pseudo-obstruction
- Duodenal stenosis/atresia
- Diaphragmatic hernia
- Elevated transaminases
- Exocrine pancreatic insufficiency
- Feeding difficulties
- Gastroesophageal reflux
- Hepatomegaly
- Hepatic failure
- Hirschsprung disease
- Inflammatory bowel disease
- Intrahepatic biliary atresia
- Laryngomalacia Omphalocele
- Pyloric stenosis
- Splenomegaly
- Tracheoesophageal fistula
- Other: _____

Genitourinary

- Ambiguous genitalia
- Cryptorchidism (undescended testes)
- Cystic renal dysplasia
- Horseshoe kidney
- Hydronephrosis
- Hypospadias
- Inguinal hernia
- Infertility
- Micropenis
- Nephrolithiasis
- Polycystic kidney disease
- Renal agenesis or dysgenesis
- Renal tubulopathy
- Other: _____

Musculoskeletal

- Abnormal connective tissue
- Abnormal form of the vertebral bodies
- Abnormality of the digits
 - Arachnodactyly
 - Polydactyly
 - Clinodactyly
 - Syndactyly
 - Ectrodactyly
- Abnormality of the limb(s)
 - Specify:
- Abnormality of the ribs
- Arthralgia
- Arthrogryposis
- Contractures
- Decreased muscle mass
- Exercise intolerance
- Hypertonia
- Hypotonia
- Joint hypermobility
- Myalgia
- Osteoarthritis
- Osteopenia
- Pectus carinatum
- Pectus excavatum
- Recurrent fractures
- Scoliosis
- Skeletal dysplasia
- Other: _____

Respiratory

- Bronchiectasis
- Pneumothorax
- Pulmonary fibrosis
- Respiratory insufficiency
- Other: _____

Tumour / Malignancy

Type: _____
 Location: _____
 Age of onset: _____

Vascular System

- Angioedema
- Aneurysm
- Arterial calcification
- Arterial dissection
- Arterial tortuosity
- Arteriovenous malformation
- Bruising susceptibility
- Epistaxis
- Lymphedema
- Pulmonary hypertension
- Stroke

Metabolic

- Abnormal activity of mitochondrial respiratory chain
- Abnormal Newborn Screen: _____
- Elevated CPK
- Elevated hepatic transaminase
- Hypoammonemia
- Hyperammonemia
- Hypoglycemia
- Hyperglycemia
- Increased serum pyruvate
- Ketosis
- Lactic acidosis
- Rhabdomyolysis
- Plasma AA: _____
- Urine OA: _____
- Other: _____

Other investigations

(Please provide copy or report if possible)

Echo: _____

EEG: _____

EMG: _____

MRI: _____

Muscle biopsy: _____

Ultrasound: _____

X-ray: _____

Additional Clinical Findings: _____

FAMILY HISTORY

Please draw or attach pedigree

- Consanguinity

Requisition and samples must be accompanied by additional clinical notes

Proband name: _____ MRN: _____ DOB: _____

PATIENT SUMMARY (all sections must be completed)

Phenotypic category	Age of onset	Ethnicity (all applicable)	Previous test history (all applicable)
<input type="checkbox"/> Syndromic developmental delay (DD) or intellectual disability (ID)	<input type="checkbox"/> Prenatal	<input type="checkbox"/> Black, African-American, African	<input type="checkbox"/> No previous genetic testing
<input type="checkbox"/> Moderate-severe isolated DD or ID	<input type="checkbox"/> At birth (<12mo)	<input type="checkbox"/> East Asian <input type="checkbox"/> South Asian	<input type="checkbox"/> Chromosome microarray
<input type="checkbox"/> Single system disorder without DD or ID	<input type="checkbox"/> Childhood (1-10yrs)	<input type="checkbox"/> White <input type="checkbox"/> Indigenous	<input type="checkbox"/> Single gene test
<input type="checkbox"/> Multisystem disorder without DD or ID	<input type="checkbox"/> Adolescence (11-17yrs)	<input type="checkbox"/> French-Canadian	<input type="checkbox"/> Gene panel (<100 genes)
<input type="checkbox"/> Multiple congenital anomalies without DD or ID	<input type="checkbox"/> Adulthood (>18)	<input type="checkbox"/> Middle Eastern, North African	<input type="checkbox"/> Gene panel (≥100 genes)
		<input type="checkbox"/> Latino, Hispanic, Spanish	<input type="checkbox"/> Targeted testing (e.g. Prader-Willi)
		<input type="checkbox"/> Unknown <input type="checkbox"/> Other: _____	<input type="checkbox"/> Unknown

ATTESTATION

Attestation (must meet all items):

YES NO

- I **confirm** that all the following conditions have been met:
- Detailed phenotypic characterization (physical examination, investigations) has been documented
 - Pretest genetic counselling and consent has been completed
 - Chromosomal microarray or other previous genomic testing has been completed and does NOT explain the patient's phenotype
 - Other causative circumstances (e.g. environmental exposures, injury, and infection) do NOT explain the patient's clinical presentation, based on the most complete clinical history

YES NO

- I **confirm** that the patient does NOT have:
- Isolated mild intellectual disability or learning disabilities
 - Isolated non-syndromic autism
 - Isolated neurobehavioural disabilities (e.g. attention deficit disorder)
 - A phenotype highly specific to a known genetic condition for which an optimized genetic panel exists, or for which all known gene-disease associations could be assessed. If so, then the targeted gene panel should be given priority assuming it is more sensitive (e.g. Noonan spectrum disorders)

YES NO

- I **confirm** that I:
- Practice in the area of genetics (as a geneticist/genetics consultant or in a clinic where a genetic counsellor has been integral to the care of the patient)
 - Have expertise in performing a clinical genetics evaluation including family history, genetic-focused medical history and physical examination, and have a critical understanding of the prior genetic evaluations undertaken in the patient
 - Have expertise in determining whether clinical RNA sequencing is the test of choice for the specific clinical indication, prioritizing other available tests as appropriate
 - Have expertise in providing adequate pre-test counselling, including informed consent for primary and incidental findings
 - Have the ability to interpret the results of the clinical RNA sequencing and provide adequate post-test counselling

PROVIDER ATTESTATION

By signing here, I attest that the above the information is an accurate and comprehensive summary of this patient's clinical history.

Ordering physician signature: _____ Date: _____



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(CLIA # 99D1014032)

Patient Name:
Preferred Name (if different):
Date of Birth (DD/MM/YYYY):
Legal Sex: Male Female Non-binary/U/X
Sex Assigned at Birth (if different): Male Female Unassigned
Gender Identity: Male Female Non-binary/U/X
MRN:
Parent's Name:
Address:

For Canada Only
Provincial Health Card #: _____ Version: _____
Issuing Province: _____

Genome Diagnostics

BILLING FORM

The hospital, referring laboratory, or a patient/guardian will be billed for the services rendered.

- Invoices are sent upon completion of each test/service.
- Contact SickKids' Genome Diagnostics Laboratory at 416-813-7200 x1 with billing inquiries.

How to complete the Billing Form:

- Referring Physician completes the appropriate section below to specify billing method.
- Send requisition and completed "Billing Form" with specimen.

Option 1: Complete to have the Healthcare Provider billed:

Your Referring Laboratory's Reference #: _____
Billing address of hospital, referring laboratory:
Name: _____
Address: _____
City: _____ Prov/State: _____
Postal/Zip Code: _____ Country: _____
Contact Name: _____
Contact Telephone #: _____

Option 2: Interim Federal Health Program (IFHP)

Submit a copy of the Interim Federal Health Certificate (Refugee Protection Claimant Document) with the photo and UCI# visible for coverage to be confirmed.

UCI# _____
ICD code (lab use only): _____

Option 2: Complete to have Patient/Guardian billed directly:

If you elect to have patient/guardian billed:

- Patient/Guardian billing information below must be complete; otherwise, the healthcare provider will be billed.
- Please advise the patient/guardian to expect a bill from our laboratory.
- Provide us with patient's valid credit card information.
- Unfortunately, we cannot accept personal checks.
- **In this case, the patient/guardian is solely responsible for the charges.**

Relation to patient (check one): Patient Guardian

Method of Payment (check one): American Express MasterCard Visa

Name as it appears on credit card: _____

Credit card #: _____

Expiry date on credit card: _____

CVS#- found on back of card (Required): _____

Mailing Address of Patient/Guardian (if different from requisition):

Name: _____
Address: _____
Apt. #: _____
City: _____ Prov/State: _____
Postal/Zip Code: _____ Country: _____

Additional Contact Information

Patient's phone # with area code: _____
- or -
Guardian's phone # with area code: _____